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GUIDE TO USE OF THE ENCYCLOPEDIA

Structure of the Encyclopedia

The material in the Encyclopedia is arranged as a series of articles in alphabetical order.

There are four features to help you easily find the topic you’re interested in: an alphabetical contents list, a subject classification index, cross references and a full subject index.

1. Alphabetical Contents List

The alphabetical contents list, which appears at the front of the first volume, lists the entries in the order that they appear in the Encyclopedia. It includes both the volume number and the page number of each entry.

2. Subject Classification Index

This index appears at the start of Volume 1 and groups entries under subject headings that reflect the broad themes of Human Geography. This index is useful for making quick connections between entries and locating the relevant entry for a topic that is covered in more than one article.

3. Cross-references

All of the entries in the Encyclopedia have been extensively cross referenced. The cross references which appear at the end of an entry, serve three different functions:

i. To indicate if a topic is discussed in greater detail elsewhere

ii. To draw the readers attention to parallel discussions in other entries

iii. To indicate material that broadens the discussion

Example

The following list of cross references appears at the end of the entry IMPERIALISM, CULTURAL

See also Colonialism I; Colonialism II; Dependency; First World; Globalization, Cultural; Hegemony; Imperialistic Geographies; Neocolonialism; Orientalism; Postcolonialism/Postcolonial Geographies; Poststructuralism/Poststructuralist Geographies, Third World.

Here you will find examples of all three functions of the cross reference list: a topic discussed in greater detail elsewhere (e.g., Orientalism), parallel discussion in other entries (Imperialistic Geographies) and reference to entries that broaden the discussion (e.g. Postcolonialism/Postcolonial Geographies).

4. Index

The index includes page numbers for quick reference to the information you’re looking for. The index entries differentiate between references to a whole entry, a part of an entry, and a table or figure.

5. Contributors

At the start of each volume there is list of the authors who contributed to that volume.
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Concentrated Deconcentration
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Corridor and Axis Development
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De Industrialization
De Localization
Edge Cities
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Greenfield Development
Growth Poles, Growth Centers
Hinterland Development
Industrial Districts
Industrial Parks
Informalization
Island Development
Labor Markets, Regional
Learning Regions
Local Development
Métropole d’équilibre
Network Regions
New Regionalism
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Regional Competition, Regional Dumping
Regional Connectivity
Regional Development and Noneconomic Factors
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Regional Integration
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Housing, Rural
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Body, The
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Child Labor
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Citizenship
Civil Society
Community
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Crime/Fear of Crime
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Cultural Geography
Cultural Materialism
Cultural Politics
Cultural Studies and Human Geography
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**TRANSPORT GEOGRAPHY**

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Urban Modeling
Urban Morphologies, Historical
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Urban Policy
Urban Regimes
Urban Representation/Imagination
Urban Village
Urban–Rural Continuum
Utopian Cities
Waterfront Development
World/Global Cities
We should reflect more on the increasingly interconnected and interdependent world we live in. Places that a century ago would have taken months to reach by boat can be reached in hours on a plane and at a price affordable to many more people. Changes in financial markets on one side of the globe instantly ricochet around the planet. Decisions taken in one country or at a supra national scale can affect jobs and well being in another. This is the world we have inherited sixty years after the adoption of the Universal Declaration of Human Rights, which reminds us of the work still needed to implement those shared values.

For while the Earth seems to be getting smaller in space and time, the relative differences between places are often growing apace. The situation in many developing countries is currently regressing with falling life expectancy, rising national debts, and weakening economies. In the developed North there continue to be large differences in the standards of living between rich and poor, core and periphery, rural and urban areas. Consequently, the mobility of people is increasing around the globe with millions of labour migrants and refugees on the move, seeking better lives elsewhere. In addition, humanity is beginning to recognise and address the significant global challenge of climate change which is in part created by the processes of development and globalisation, but will require to be addressed with principles of climate justice.

The International Encyclopedia of Human Geography documents and explains all of these issues, and many more besides. Focused through the spatial lens of a modern geography sensitive to how social, economic, political, cultural or environmental processes work within and between places, the entries cover the full spectrum of issues facing humanity today across the planet. Together the essays provide a fascinating overview of the diverse, complex and sometimes paradoxical relationships between people, places and environments, written in a style accessible to students and interested parties. As well, the vast array of methodologies and theories employed by geographers and others is documented, to make sense of the developments now occurring. Indeed, in the very fact that it contains 914 essays, written by 844 contributors from over 40 countries, it is itself a product of the way in which the geography of communication and cooperation has rapidly evolved in recent years!

The challenges facing all of us, whether they concern the present global economic downturn, survival in a country at war, managing environmental change, and a host of other pressing issues, require a broad and deep knowledge of the fundamental processes shaping our future. The International Encyclopedia of Human Geography provides a comprehensive overview of that knowledge and points to the tools needed to build planetary citizenship and to think through a more ethical version of globalisation. I hope that it will be used extensively by present and future generations so that, as the planet seemingly shrinks in size, so the problems we face and the differences between us shrink too.

Mary Robinson
President of Realizing Rights: The Ethical Globalisation Initiative
Honorary President of Oxfam International
President of Ireland, 1990–1997
Over the past 100 hundred years or so, human geography has grown into one of the most vibrant university disciplines around the world. Expanding from its origins in the colonial pursuit of geographic knowledge, modern human geography has developed into a diverse collection of sophisticated, spatially inflected knowledges underpinned by a refined set of theoretical concepts and methodological tools. As a result, defining contemporary human geography is not an easy task, not least because what passes for geographic theory and praxis varies across time and space. For us, what marks the discipline from other social and natural sciences is its focus on the relationship between people and the world they inhabit, its core metaconcepts (such as space, place, landscape, nature, mobility, environment, and scale), and its use of geographically sensitive methods of data generation and analysis. Human geography, as the contents list of this encyclopedia amply demonstrates, focuses on key issues of the day, and opens up new and vital perspectives on questions that affect our everyday lives. It engages with and problematizes apparently unequivocal statements such as:

- the planet is large;
- the planet teems with life; and
- the planet is under threat.

Through the lens of human geography, these statements are revealed as equivocal and often paradoxical. What do we mean by ‘large’ in a period in which we keep discovering more of it in more and more unlikely places, while scientific and cultural changes are continually expanding our definition of what ‘life’ consists of? What do we mean by ‘threat’ when we are unable to agree on the nature of a threat, let alone a solution, when technologies that offer the promise of salvation all too often create new problems and when increasing populations offer new resources as well as consume them?

Human geography seeks to answer such questions not only in order to understand the world but also to make practical interventions. Unlike many disciplines, it is built on unsure foundations without much in the way of a canon. Some might say that that is its attraction; that it has perennially been driven by the changing world around it. The discipline is willing to go where other disciplines fear to tread because its history is loosely connected, more like a conglomerate than a series of well defined strata – it has not been wed to a single or limited theoretical approach but rather it has explored and drawn together all manner of approaches in order to address issues geographically. Equally though, it is born out of a longing for a planetary citizenship, with that longing sitting alongside a radical appreciation of how all the differences that make up the discipline both compromise and strengthen that goal. Whatever might be the case, at the heart of this endeavor has been the notion that geography matters – the spatial configuration of events is not a mere add on to other somehow deeper, more abstract aspatial processes, but rather is central to how the processes unfold.

These tensions between a discipline organized around understanding the world and a discipline consisting of and defined by its own approaches, are manifest in how geography tells its own history (and how one might organize an encyclopedia). One way would be to trace the changing approaches, epistemologies, and concerns of the discipline.
Thus one could track the multiple interpretations of the writing of Alexander von Humboldt, often cited as one of the key disciplinary ancestors. Alternately, one could chart the intellectual genealogies of ‘key’ texts, concepts, and places to provide counterpoints to more traditional chronological histories of various theoretical schools. Or, one could create accounts that organize the discipline via key processes and events in the world. To take other examples, there are presently attempts to write about differences in more satisfying and nuanced ways, ways that can bring about new means of living and experiencing the world through reinventing familiar categories like gender, race, and sexuality, categories that have their own complex geographies which are a very part of the process of reinvention. There are efforts to reconceive cities taking account of the affective, the mundane, the ongoing incompleteness, fuzziness, and unpredictability that make up urban life, and there are attempts to reimagine the economic as thoroughly infused with the cultural. Sometimes clumsy and awkward, some times plain inspired, these kinds of developments are surely worth following in a world too often characterized by division and despair. And follow them, this encyclopedia does.

The Encyclopedia

The International Encyclopedia of Human Geography is a multinational attempt to capture and trace the state of human geography as a discipline and as a description of the world as it exists today and as it changes its shape in the future. Its ambition, in other words, is to provide a major and continually updated resource that provides an always temporary but hopefully authoritative means of answering questions of the sort posed above, and many others like them. This it does by taking on the venerable format of an encyclopedia which we can understand both in its original meaning as a course of education – in this case with the description ‘human geography’ – or in its more modern meaning as treating a particular branch of knowledge comprehensively through the medium of articles arranged alphabetically, by subject.

Of course, producing an encyclopedia provides real opportunities, most especially the ability to stretch out explanations in a way not available in the more common dictionary form. Thus, our aim has not been to produce a portable, condensed summary or bite sized definitions of concepts, but rather clear, authoritative statements that set out the evolution and implications of geographic thought. Such an endeavor also produces some inevitable challenges. We want to use these challenges to explore how this encyclopedia has been put together, understanding that such challenges do not have to be understood just as undesirable or unpleasant choices between alternatives. They can equally well be understood as producing the means to fuel productive encounters.

The first challenge is an obvious one. There is an inevitable degree of arbitrariness about what is included and what is not. We have made an honest attempt to cover the whole range of what can possibly be treated as human geography in terms of issues on the ground and traditions within the discipline. This has been achieved through an intensive, iterative process involving all the editors, worked through at face to face meetings, conference phone calls, and e mail. Inevitably, there will be topics, methods, and thinkers considered important by some that we felt did not justify a stand alone entry. Moreover, we fully expect that as some issues grow or decline in importance – to the world and/or the discipline – we shall have occasion in the future to expand or contract the coverage in different fields. This dilemma of selecting what to cover brings with it other issues too. Foremost among these has been how to shape the coverage of each entry and title each entry in an informative yet pithy way. There are many bodies of conceptual and substantive knowledge that cannot easily be encompassed by a single term or phrase. The result is that some of the entries have somewhat contrived titles. Better that, though, than titles that are vague or oblique, especially in these days of voluminous information accessible across the Internet.

The second challenge is an authorial one. It was a guiding principle of this encyclopedia that we would attempt to extend authorship beyond the ‘charmed circle’ of Anglophone/Western geographers, both as a response to postcolonial critiques and as a response to the critiques of scholars from outside the Euro American zone who felt disenfranchised by what is possible to perceive as an Anglophone/Western ascendency. We have then been attentive to the geographies of the discipline of geography, not least since scholars in diverse locales see the world differently in terms of what processes seem most important and what traditions of interpretation they use. We have not always been successful in achieving our goal of wide international authorship, partly because the geographical establishment is simply larger in some countries than others and partly because human geography still bears some of the marks of its own history; not least as a colonial enterprise. Inevitably perhaps, the historical geography of geography kept coming home to roost. Moreover, scholars from different locales had varying abilities to contribute due to issues of time, access to resources, and language. As a result, we have not been able to include some topics and perspectives. That said, entries have been solicited from 844 scholars located in over 40 countries around the world working within different traditions and we have managed to describe the different ideas and practices of geography in many countries/language groups. Again, this is a project that will be added to, over the coming years.

The third challenge was to draw on the expertise of the human geographical community in ways that ensured...
some degree of diversity. In particular, we are proud that we have been able to balance the voices of established scholars with those of younger writers. This has had salutary effects. For example, we have been able to trace the history of philosophical ideas in geography both from the point of view of those that have been deeply involved in the explosion of different conceptual possibilities that took place in the discipline from the late 1960s onward, as well as the point of view of younger scholars who have set out quite different agendas.

The fourth challenge was to ensure a relatively consistent standard of scholarship for each entry and to provide a balanced content with respect to ideas and geographical coverage. To that end, each entry was initially refereed by a section editor who had overall responsibility for a selection of related entries (e.g., political, urban, regional development, quantitative methods, people) and a senior editor. Each senior editor oversaw three sections in order to ensure sections were approximately commensurate in style, content, and length. To provide breadth as well as depth, authors were asked to draw on examples and traditions from around the world and not simply rely on charting an issue with respect to their own local circumstance.

The fifth challenge was to use the Internet in productive ways. One of the motivations for this encyclopedia was the production of a platform upon which we might then build a future memory for human geography. It is an attempt to begin to produce a living, breathing archive which will gradually evolve, by using the powers of the Internet. Though in this first edition, both print and Internet editions exist side by side, in later editions the Internet edition will exist singly, opening the way to a vision of geography which is in keeping with the age in which we now live. Since the articles are on the web, it will be possible to update them on a regular, rolling basis without having to wait for the revision of every other article. Equally, they will have all kinds of extra resources associated with them – illustrations of all types, including more and more videos as well as maps and diagrams, ‘active’ reference links that will take the reader straight to the listed journal article, and so on. Then, more articles will be added at regular intervals, both filling in gaps and supplementing existing articles. All articles will be left in situ – old articles will not be deleted – so that, in time, we will be able to produce a ‘timeline’ for many subjects, making it possible to see how thinking has evolved, thereby producing a real sense of historical accretion. Over time, we hope that the encyclopedia will become an institutionalized memory of human geography.

The sixth challenge was to produce an encyclopedia of human geography that was relevant to issues that must concern us all. We sought an encyclopedia that espoused responsibility to the planet and its people certainly. But we also became, however awkwardly and unsuccessfully, involved in thinking what that responsibility might mean. A difficult but ultimately productive instance of what this might entail – and how difficult it can be to think through – was provided by the proposed boycott of the encyclopedia by some authors concerned at Reed International’s (a sister company to Elsevier) involvement in the arms trade, an affair settled when Reed withdrew from these activities. Here, we saw the same concerns being aired by many participants but radically different solutions being put on offer. We hope that the encyclopedia mirrors this diversity of response.

Bringing these six, and especially the last three, points together we hope and trust that this encyclopedia will be counted as a contribution to the global commons of knowledge. The production of a discipline depends on the goodwill of many who labor over ideas, who disseminate, review, and rework them. We are painfully aware that in the current global climate of academia, when what counts as valued academic practices is narrowing, writing authoritative and scholarly articles for publications such as this venture provides few rewards and attracts little institutional support. However, it is a vital component in the reproduction and development of a discipline. Rather than simply being understood as the creation of canonical knowledge by authorial communities we would like to thank all those who have written and reviewed material here for an activity that may be deemed a professional service but is one that, sadly, is seen as subverting the institutional priorities of a number of universities.

By Way of Conclusion

This encyclopedia is an attempt to summarize knowledge of the discipline using the encyclopedia format. In time, we hope that this encyclopedia will build into a comprehensive resource which constitutes both an archive of the discipline and, of course, of what it knows about the world. That knowledge, what facts are assigned to the discipline and, of course, of what it knows about the world, is a means of making it credible, is, of course, a movable feast. Think of the notion of the ‘world’, which it is easy to demonstrate has changed its form many times over the course of history, as the development of the map shows all too well as Denis Cosgrove noted:

There is no single map of the world, but a vast range of images that present different facets of the globe and its contents. ... A map of the world is a global cultural artefact, an extraordinary human accomplishment, produced by contributions from many cultures. It is a highly sophisticated scientific achievement, and each advance in the various technologies that coalesce within it renders it more detailed, flexible, and widely available. Google Earth is certainly not the last stage in its evolution.
Yet even a cursory survey of world mapping reveals that science and technology are only a part of the story. Of equal importance are such affective aspects as imagination, faith, fear, and desire. We spot them immediately in the world maps of nonmodern cultures, and even in early examples of the modern world map. For us humans, the earth is always more than its physical form and nature; it is, indeed, a world. … Today that world seems wholly visible, even transparent. … Yet today’s world maps are as hued by the contingencies of our own times as any previous ones, and we are ‘mapped’ into them as surely as Xiuhtechitli was mapped into the fifteenth century Mesoamerican world. Because every ‘world’ is social and imaginative as much as it is material, our own world maps will in due course come to seem as quaint as Jain mandalas or medieval mappae mundi seem to us today. (Denis Cosgrove, 2007: 112 113)

Or, indeed, consider the idea of the encyclopedia itself. Encyclopedias are often thought to be an invention of the West. Specifically, the general purpose, widely distributed, printed encyclopedia is usually considered to have been conceived in eighteenth century Europe with Chambers’ Cyclopaedia, or Universal Dictionary of Arts and Sciences (1728), and the Encyclopédie of Diderot and D’Alembert (1751 onward). These volumes are often considered to be the first to take on a recognizably modern form, with a comprehensive list of topics, discussed in depth and organized in what we would consider a systematic way. But, once we take a broader view in which places and times are not necessarily weighted by particular prejudices, a very different account hoves into view in which all manner of authors in different parts of the world revealed an encyclopedic instinct, and from much earlier on. For example, a tradition of encyclopedia like volumes can be found in China from the eleventh century onward, and these were often massive undertakings involving as many as a thousand volumes.

The point that these two examples make is that all we can be certain of is that the contours of knowledge will constantly change. There can be no absolute certainty about what will be included in and what will be excluded from human geography in times to come. But with this encyclopedia, we believe we now have a tool that will be able to trace this evolution as it happens.

Rob Kitchin and Nigel Thrift

Further Reading
Introduction

Oceania refers to the region comprised of the subregions of Melanesia, Polynesia, and Micronesia (see Figure 1). From time to time, Oceania is referred to as the Pacific Island region, or on occasion the South Pacific Islands. The former is too broad to be meaningful, and the latter is misleading as many of the nation states, territories, and other entities that comprise Oceania are, in fact, found north of the equator. Oceania sometimes also refers to the region of Australasia, defined here as Australia and New Zealand. Although New Zealand is sometimes considered an Oceanic nation, given that the indigenous Maori and Moriori are Polynesians, New Zealand is considered for purposes here to be part of the region of Australasia.

Here, Oceania is defined as comprised of 22 territories, of differing political status, and spanning the three regions of the Pacific. These include Melanesian territories of Fiji, New Caledonia, Papua New Guinea (PNG), Solomon Islands, and Vanuatu; the Polynesian territories of American Samoa, Cook Islands, French Polynesia, Niue, Pitcairn Islands, Samoa, Tokelau,
Tonga, Tuvalu, Wallis, and Fatuana; and the Micronesian territories of Federated States of Micronesia, Guam, Kiribati, Marshall Islands, Nauru, Northern Mariana Islands, and Palau. Arguably, Hawaii, a full state in the USA, can also be included, as can Rapa Nui (Easter Island) most recently colonized by Chile.

Oceania is both the largest and the smallest region on the Earth depending on how it is measured. In terms of territorial area it stretches across much of the expanse of the Pacific Ocean. In terms of the landmass of those is lands that inhabit the region, it is small by global standards. The sea (measured in terms of the size of the relevant exclusive economic zone (EEZ)) to land ratio of the various territories and countries is as high as 29,000 in the case of Tokelau, for example, and most countries’ territorial jurisdictions are over 99% water (see Table 1). This combination of small landmasses scattered across a massive ocean gives the region a very special geography, which yields unique and often challenging geographical problems in physical, economic, and political senses.

The total population of the 22 territories of Oceania as defined above was estimated as approximately 9.2 million in mid 2006 (see Table 2). Of the subregions, Melanesia is the most populous with close to 8 million inhabitants, the majority of these located in PNG with a population of approximately 6.2 million. Micronesia and Polynesia have estimated populations of 542,000 and 648,000, respectively. The figures hide significant variations ranging from the larger countries such as PNG, Fiji (830,000), Solomon Islands (490,000), and French Polynesia (260,000), to territories such as Niue (1600), Tokelau (1400), and Pitcairn (50). Population densities also vary widely, being relatively low in Melanesian territories, and generally very high by global standards in Micronesia and parts of Polynesia. Nauru and Tuvalu stand out in the latter regard with densities of 482 and 371 per km², respectively, in 2006. Population growth rates are highest in Melanesia due largely to high rates of natural increase, between 2006 and 2010, for example, the annual rate of growth is projected at 2.0%, representing a doubling time of approximately 35 years. In the more densely populated territories, growth is generally lower. This is partly due to out migration, although this is not a simple function of density pressure, and turns on the access of entry to Pacific Rim countries where Polynesians and Micronesians might seek to move. In the case of Niue, Tokelau, and Cook Islands, for example, with institutional links with New Zealand mean that migration is unrestricted. This is quite different in the case of the territories governed in association with the USA, where migration intake is closely rationed.

Despite its relatively small population and territorial area – or perhaps because of it – it is enormously complex in terms of human geography, history, economy, culture, and politics. For convenience it is often divided into the three subregions already mentioned – Micronesia, Polynesia, and Melanesia. These subregional classifications often hide more than they reveal, placing together a large range of cultures, histories, and societies. Although those in Polynesia, and to a lesser direct extent, Melanesia can be demonstrably linked in ethnic terms, this is much less than the case in Micronesia. Coined by a French navigator D’Urville in the early nineteenth century, together with the term Oceania, the subregional ideas are Western imaginaries used only since colonial times in order to classify and order these vast and diverse spaces.

### Table 1
**Land and sea areas in selected territories of Oceania**

<table>
<thead>
<tr>
<th>Territory</th>
<th>Land mass (km²)</th>
<th>EEZ (million km²)</th>
<th>Sea to land ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cook Islands</td>
<td>236</td>
<td>1.8</td>
<td>7267 (99.98%)</td>
</tr>
<tr>
<td>Fiji</td>
<td>18,722</td>
<td>1.3</td>
<td>71 (98.594%)</td>
</tr>
<tr>
<td>FSM</td>
<td>702</td>
<td>3</td>
<td>4274 (99.977%)</td>
</tr>
<tr>
<td>Kiribati</td>
<td>762</td>
<td>3.5</td>
<td>4821 (99.979%)</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>181</td>
<td>2.1</td>
<td>11,602 (99.991%)</td>
</tr>
<tr>
<td>Nauru</td>
<td>21</td>
<td>0.3</td>
<td>14,286 (99.993%)</td>
</tr>
<tr>
<td>Niue</td>
<td>259</td>
<td>0.39</td>
<td>1506 (99.934%)</td>
</tr>
<tr>
<td>Palau</td>
<td>488</td>
<td>0.629</td>
<td>1289 (99.925%)</td>
</tr>
<tr>
<td>PNG</td>
<td>462,840</td>
<td>3.1</td>
<td>7 (85.070%)</td>
</tr>
<tr>
<td>Samoa</td>
<td>2857</td>
<td>0.1</td>
<td>35 (97.143%)</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>29,785</td>
<td>0.6</td>
<td>20 (95%)</td>
</tr>
<tr>
<td>Tokelau</td>
<td>10</td>
<td>0.29</td>
<td>29,000 (99.997%)</td>
</tr>
<tr>
<td>Tonga</td>
<td>747</td>
<td>0.7</td>
<td>937 (99.853%)</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>26</td>
<td>0.7</td>
<td>26,923 (99.996%)</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>12,200</td>
<td>0.6</td>
<td>49 (97.9%)</td>
</tr>
</tbody>
</table>


### Unique Geography and Distinctive Challenges

The physical geographical differences between the subregions have partly determined cultural outcomes. Comparatively, elsewhere the region, Melanesia is comprised of relatively high volcanic islands with rugged terrain, leading to a situation where historically small groups of people settled in relative isolation from each other. Thus, the dispersal of migrants across the subregion was relatively slow. As such, Melanesian culture is significantly internally heterogeneous with, for example, hundreds of mutually unintelligible languages and dialects. The Polynesian landscape in contrast is comprised of smaller volcanic islands and low lying atolls. The former tend to be fertile and have supported relatively large and prosperous cultures (as in Samoa and Tonga for example). In the case of the latter, however, relatively rapid out migrations in the face of scarcity appear to...
have characterized historic settlement patterns. Thus, Polynesian culture is much more internally homogeneous due to rapid dispersal made possible by astounding maritime prowess, given the low level of technology available. It is possible, for example, for a Rapa Nui speaker (i.e., from Easter Island) to understand New Zealand Maori, for example, despite the thousands of kilometers that separate their territories. The relationship between environment and culture in Oceania remains little understood, though most now agree that the environment, while not determining cultural outcomes, has always tended to set distinct limits on the possibilities.

The region’s unique geography creates special challenges in terms of the interaction with the markets, politics, and societies of the world beyond. There are at least five geographical challenges that relate to the interface of the physical and human geography of the area.

**Territorial**

The territories of the Oceania region are isolated; this raises particular problems for economic development related to the frictional effects of distance. Although technology exists to make trade rapid and efficient, in such circumstances it is often expensive, and thus weighs against the small island territories. Most air traffic in the Oceania region flies over the islands, and there are, in a relative sense, very few direct flights in and out of the zone, compared to those that fly around and over it.

**Environmental**

The Oceania region is highly vulnerable to both extreme climatic conditions and climate change. In the case of the former, many of the territories lie within the cyclone belt and run the risk of being devastated by hurricane force weather systems. When such systems actually touch the ground they have the capacity to cause absolute economic havoc as evidenced by the almost total destruction of national infrastructure and agricultural crops on the island of Niue following Hurricane Heta of 2004. In many ways the small island nations and territories of the Pacific are paying the ultimate price for the consumption activity of the West. Rising sea levels are causing potentially major problems across the region—especially on the low lying atoll island groups, such as Kiribati and Tokelau. Floods, salinization, and the increased incidence of cyclone activity are all consequences of increased sea temperature and sea level rise.

**Political**

Given the relatively small size of the national economies and polities, the Oceanic nation states and territories generally have low bargaining power internationally.

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### Table 2: Population in Oceania, 2006-2015

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Melanesia</td>
<td>7,965,061</td>
<td>15</td>
<td>2.0</td>
<td>9,496,691</td>
</tr>
<tr>
<td>Fiji</td>
<td>831,263</td>
<td>45</td>
<td>0.7</td>
<td>891,729</td>
</tr>
<tr>
<td>New Caledonia</td>
<td>238,035</td>
<td>13</td>
<td>1.5</td>
<td>270,456</td>
</tr>
<tr>
<td>PNG</td>
<td>6,187,108</td>
<td>13</td>
<td>2.1</td>
<td>7,461,903</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>487,237</td>
<td>17</td>
<td>2.4</td>
<td>594,945</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>221,417</td>
<td>18</td>
<td>2.6</td>
<td>278,059</td>
</tr>
<tr>
<td>Micronesia</td>
<td>541,937</td>
<td>169</td>
<td>1.4</td>
<td>610,878</td>
</tr>
<tr>
<td>FSM</td>
<td>110,218</td>
<td>157</td>
<td>0.5</td>
<td>116,071</td>
</tr>
<tr>
<td>Guam</td>
<td>167,371</td>
<td>309</td>
<td>1.1</td>
<td>183,609</td>
</tr>
<tr>
<td>Kiribati</td>
<td>93,706</td>
<td>116</td>
<td>1.9</td>
<td>110,499</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>55,981</td>
<td>309</td>
<td>1.0</td>
<td>60,149</td>
</tr>
<tr>
<td>Nauru</td>
<td>10,131</td>
<td>482</td>
<td>0.9</td>
<td>10,585</td>
</tr>
<tr>
<td>Northern Marianas</td>
<td>84,487</td>
<td>179</td>
<td>3.2</td>
<td>108,939</td>
</tr>
<tr>
<td>Palau</td>
<td>20,044</td>
<td>41</td>
<td>0.5</td>
<td>21,027</td>
</tr>
<tr>
<td>Polynesia</td>
<td>648,073</td>
<td>81</td>
<td>0.9</td>
<td>700,435</td>
</tr>
<tr>
<td>American Samoa</td>
<td>63,308</td>
<td>197</td>
<td>1.4</td>
<td>72,118</td>
</tr>
<tr>
<td>Cook Islands</td>
<td>13,572</td>
<td>57</td>
<td>2.0</td>
<td>11,543</td>
</tr>
<tr>
<td>French Polynesia</td>
<td>258,709</td>
<td>73</td>
<td>1.2</td>
<td>285,977</td>
</tr>
<tr>
<td>Niue</td>
<td>1,591</td>
<td>6</td>
<td>2.3</td>
<td>1,367</td>
</tr>
<tr>
<td>Pitcairn Islands</td>
<td>50</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Samoa</td>
<td>185,234</td>
<td>63</td>
<td>0.8</td>
<td>199,037</td>
</tr>
<tr>
<td>Tokelau</td>
<td>139,8</td>
<td>117</td>
<td>0.5</td>
<td>137,37</td>
</tr>
<tr>
<td>Tonga</td>
<td>99,296</td>
<td>153</td>
<td>0.3</td>
<td>102,834</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>965</td>
<td>371</td>
<td>0.1</td>
<td>968,1</td>
</tr>
<tr>
<td>Wallis and Futuna</td>
<td>15,260</td>
<td>107</td>
<td>0.6</td>
<td>16,066</td>
</tr>
<tr>
<td>Total</td>
<td>9,155,070</td>
<td>17</td>
<td>1.9</td>
<td>10,808,004</td>
</tr>
</tbody>
</table>

There have been numerous attempts at regional cooperation, such as the formation of the Pacific Community in 1947 in order to get around this article. Consensus has been rare and even with success the total size of the bargaining unit would be low. Notwithstanding, the Oceanic nations do control vast amounts of territories and in some cases natural resources that have been used in order to win allegiance and political favor. High levels of aid from Taiwan and China recently can be explained in terms of access to fishing rights. Furthermore, given that Oceanic nations have voting rights in the United Nations and other for it has often been the case that the islands have been courted in order to win political concessions and votes – as evidenced in the recent diplomatic and aid assault undertaken by Japan in order to win ‘yes’ votes in the international whaling commission.

During the Cold War, the island nations had a particular geopolitical comparative advantage, and aid from the allies of the US was pronounced. Following the end of the Cold War, the US withdrew from the region largely, even pulling out the Peace Corp. In more recent times the larger neighbors on the rim have begun to engage politically with the island nations again, but this time in pursuit of free markets and democratic reform – although this has been occasionally dressed up as ‘security’ or ‘counter terrorist’ interaction. Notwithstanding this, the Oceanic territories have been policy takers rather than makers and this is direct result of the colonial legacy and diminutive size among other things.

Factor Endowment

As already mentioned, there are limited land based resources on many of the islands. In Melanesia, which due to the volcanic geomorphic roots is largely comprised of large, raised islands and there are mineral deposits and significant land area for agricultural production. As such, mining and plantation agriculture has taken place in some of these areas. However, the outcomes of resource endowment of this nature have not always been positive, and particularly in the cases of PNG and Solomon Islands, with respect to gold and copper mining, it is possible to discern something of a resource curse in terms of social, economic, and environmental outcomes. In the low lying atoll islands the problem is most certainly the reverse in that there are no land based resources. In all cases there are significant ocean resources, although the technology does not always exist to exploit these.

While the constraints of territorial geography are being altered, and in some cases eroded, these geographical factors most certainly collude to present a significant challenge to the Oceania region. Some have argued that given these intrinsic factors the problems of the islands are insurmountable. Right wing commentators have also added the ‘problems’ of traditionalism and communalism to the list of Pacific characteristics, which they argue make economic development tantamount impossible. However, it is the region’s role at the margins of the global political economy and the nature of its insertion into globalizing processes, and the conflict that this has often perpetuated that explains the poor relative position of the region in terms of welfare and development prospects. This peripheral role was cemented through colonialism and many of the processes that have taken place since have further marginalized the area. This is not to say that the source of all of the region’s problems is external – this is far from the case, internal conflict and ineffective governance have also played a major role – but it is the case that the root of these problems can often be traced back to the marginal
position that the region and its constituent territories occupy in the global political economy. It is the relation of the region to the unfolding of globalization that is the major explanatory factor – an unashamedly structuralist view on the way that the region has fitted into the wider world over time and how this has conditioned outcomes on the ground in the Oceania region. This is considered below in terms of the various waves of globalization that have washed across the region.

### Historical Geography – From Indigenous Settlement to PostColonialism

Of all the regions on Earth, Oceania is one of the least understood. It is often not visible in atlases of the world and is left out in discussions concerning the ‘Asia–Pacific’ region. To many outsiders, then, it is often constructed as a paradise and has been ‘orientalized’ in the Western imagination. It is thus often assumed that the Pacific – derived from the Latin word for peace named by the explorer Magellan as he entered the unusually calm waters off the west coast of the Cape Horn – is a haven of tranquillity, little touched by the troubles of the outside world and processes that comprise economic and political globalization. This could not be further from the truth – the region has been shaped by interaction with the ‘outside’ over centuries and its interaction with the outside world has altered it immeasurably.

The origins of human settlement in the Pacific region, and the subsequent patterns of dispersal are sources of considerable debate. It is known that a first cohort of non-Austronesian speaking peoples arrived around 33,000 before the present (BP) in what is now Australia and PNG from Southeast Asia. A group of Austronesians are believed to have moved across to what is now known as Melanesia some 4000 BP, arriving in Fiji approximately 3000 BP. Around this time others joined those from further north on the Pacific Rim in the settlement of Micronesia – evidence suggests that parts of Micronesia were populated in part from the north around 5000 BP. Another group began the population of what became Polynesia, arriving in Rapa Nui around 2500 BP and Hawaii approximately 1500 BP. It is believed by some that Polynesians may have crossed to South America. Polynesians arrived in the Cook Islands around 1200 BP and Aotearoa/New Zealand approximately 1000 BP – their final destination. European contact was initiated in the early sixteenth century, but was sporadic. The period of direct interaction, involving missionaries, traders, and whalers, began in the late 1700s. European colonization and administration did not begin until after the mid 1800s. Although settlement by Europeans in numerical terms was relatively insignificant, they did bring relatively large populations of other ethnicities to work in the islands, most notably indentured Indian labor to Fiji. As we explore below, however, the sociocultural, economic, and environmental impacts of the European influence were profound.

### Waves of Globalization

The colonial history of the Oceania can be divided into two waves of globalization with a further more inward oriented period in between. In this sense globalization is understood to refer to the expansion of capitalism from the Western core. Arguably, the pre European waves of colonization by the Melanesians and Polynesians in particular represented precapitalist forms of globalization. Here, however, it is argued that it is the insertion of the region into capitalist circuits that has largely determined the broad political economic history of the region subsequently. As is the case everywhere, ‘local’ characteristics have interacted with wider global forces to produce a unique outcome. Nonetheless, Pacific economic underdevelopment is best understood through an analysis of the way the island region fits into the wider, and increasingly internationalized and globalized, world:

1. **Colonial globalization** – the first wave (1830s–1960s);
2. migration, aid, remittance, and government employment bureaucracy (MIRAB; 1960s–1980s); and
3. **postcolonial globalization** – the second wave.

### Colonial globalization

Colonialism came relatively late to the Pacific Islands compared with much of Asia and Latin America, for example. Contact with Europeans in the years leading up to the early 1800s had been largely through missionaries, whalers, and traders. This initiated the roll out of certain Western concepts and early constructs of progress and civilization, including the use of money and Christianity. The South Pacific became an important geopolitical area given the competition among maritime powers toward the end of the 1700s and during the early 1800s. Rivalry was especially fierce between France and Great Britain and this was played out in the ocean. Early European involvement in the region then was based on some economic possibilities but became strategic as time went on. Formal colonization began sometimes in the mid 1800s (see **Table 3**), as there were calls for law and order in the region. This was not a simple case of European power taking possession of well defined lands in terms of ownership, in some cases, different indigenous groups played each other off through their allegiances to the Europeans. In the case of Fiji, for example, Ratu Cakobau ceded the crown in order to gain protection from the French and in order to gain backing in his conflict with...
other chiefs of Fiji. Largely, the colonial territories were not settled extensively and were governed from capital cities in Europe. This first wave of globalization brought the Oceanic countries into the circuits of capital dominated by mercantilist forces as very much peripheral territories. Firth has argued:

(G)lobalisation when combined with colonial rule, meant incorporation into the global economy on terms that suited the interests of the colonial powers. . . . The place of the tropical world in the first globalisation was to be subordinate to the temperate and developed world. (S. Firth, 2000: 182)

The colonial era lasted into the 1960s in the region – although many territories are either full colonies or under some other arrangement of governance at a distance. Independence did arrive later than in other peripheral regions for two reasons. First, the diminutive size of the territories and colonies that were created under colonialism made some potential countries economically nonviable, many were simply not willing to cut ties without assurances that transfers, protections, and rights that were afforded were maintained. Second, during the Cold War the region played an important strategic role, once again the interactions between the superpowers of the time. Thus, the US and its allies maintained the strategic location of bases and other military activities in the Pacific. The French carried out, from 1960 to 1996, almost 200 nuclear tests in their territory in Polynesia and explaining – among other reasons – their great reticence to cede control to a growing wave of calls from both inside and outside French Polynesia to allow independence.

### The MIRAB phase

Following the independence of some of the Oceanic territories, the economic model that was first espoused was that of import substitution industrialization (ISI). This largely failed in all of the cases although it was only ever half heartedly applied. Aid from the former colonial powers often funded these attempts at modernization. A major social revolution occurred in the 1960s and 1970s in those countries that were newly independent, involving the migration of large numbers of Pacific Islanders to cities on the Pacific Rim – especially those in Table 3: Colonization and independence in Oceania

<table>
<thead>
<tr>
<th>Colonial power</th>
<th>Incorporated into colonial power&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Dependent colony/ territory</th>
<th>Self-governing in free association</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Norfolk Island (c1788)</td>
<td></td>
<td>Nauru (c1920, i1968)</td>
<td>Papua New Guinea (c1884, i1975)</td>
</tr>
<tr>
<td>Chile</td>
<td>Rapa Nui (Easter Island) (in 1888)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>French Polynesia (c1904) New Caledonia (c1853) Wallis and Futuna (c1842)</td>
<td></td>
<td>Cook Islands (c1901, sg1965) Niue (c1901, sg1974)</td>
<td>Samoa (c1960, i1962)</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Tokelau (c1916)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK and France</td>
<td>Pitcairn (c1838)</td>
<td></td>
<td>Vanuatu (c1906, i1980) Fiji (c1874, i1970) Tonga (i1970)&lt;sup&gt;b&lt;/sup&gt; Tuvalu (c1916, i1978)&lt;sup&gt;b&lt;/sup&gt; Solomon Islands (c1920, i1978)&lt;sup&gt;b&lt;/sup&gt; Kiribati (c1916, i1979)&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>Hawaii (c1898, in 1959)  American Samoa (c1899) Marshall Is (c1885, sg1986) Guam (c1898) FSM (c1885, sg1986) Palau (c1885, sg1994)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Tonga was a protectorate of the United Kingdom from 1901, not a fully fledged colony.

<sup>b</sup> These countries were protectorates for approximately 20 years before formal colonialism. In many cases the colonial power changed hands once or twice (especially after WW1 when Germany lost its possessions) the latest colonial power is reported here.

Source: Adapted from Murray (2006). (i1970) = date of independence. (c1874) = date of colonization. (sg1986) = date of self government. (in 1888) = date of incorporation.
New Zealand and Australia and also in the USA. This led to the establishment of proportionally highly significant flows of remittances from the new homes back to the islands. This combination of factors led to the development of what have been termed MIRAB economies.

The acronym MIRAB was coined to refer to countries where migration (M), aid (A), remittance (R), and government employment (bureaucracy) play a major role. It was first applied to the Oceanic region in study from 1985 which noted that living standards in the Pacific Island region were much higher than productive economic measure predicted. It was argued that the post-colonial migration of large numbers of islanders established transnational corporations of kin through which remittances flowed. These remittances, as sub-sequently argued, show little tendency to deteriorate even in third or fourth generation migrants – as such the attachment to home (sometimes among people who had ever actually been to such territories) was considered large. Aid was also large in some economies (although the relative importance of aid and remittances was seen to vary between countries and subregions) and this was initially the case for strategic reason but latterly due to postcolonial obligations. The government sector often became the major employer and small island nations had inherited colonial bureaucracies, and there was a minimum efficient scale for governmental functions. The model varies in its applicability across the region and there is fierce debate as to whether it applies today.

Today, it is certainly the case that remittances and aid maintain their roles. In Niue, for example, over 50% of gross national produce (GNP) is in the form of aid. Remittances account for up to 40% of Samoan income, and in Fiji remittances are now the single largest foreign exchange earner, above both tourism and sugar. Indeed, there is little evidence for any long term downward trend in remittances – in fact during times of conflict and natural disasters, which arguably characterizes the present, they have tended to rise. Notwithstanding, there is no doubt that until recently at least aid levels have been rationalized – and there has been a downward trend with a general shift to project, tied and targeted rather than budgetary aid. Migration controls, especially in the USA and also in Australia and New Zealand have tightened. The neoliberal models that regional trustees are seeking to apply to the region have insisted on governmental reform which reduces the bureaucracy (B) in MIRAB. Having said this, recent work has shown that the model still remains robust in many places although patterns continue to shift. Most notable, some have added a T for tourism to the acronym, making TOURAB. Proponents of the MIRAB analysis insist that it still represents a rational and sustainable method of obtaining development.

Postcolonial globalization

Across the region since the mid 1980s there has been a paradigmatic shift to neoliberalism – albeit applied in different ways in different places. It is most certainly the case that the financial donors and lenders to the Oceanic region do not see the MIRAB structure as something that is capable of delivering self-sustaining economic growth. Particularly since the end of the Cold War the nature of loans and, increasingly, aid has become conditional upon free market reforms as is the case elsewhere in the periphery. Thus, downsizing the public sector, outward orientation, and reduction in subsidies have been insisted upon.

Oceanic countries and territories have found it difficult to compete in the global economy since the end of the colonial period. The period of decolonization took place just before the global shift to neoliberal policy and although the Oceania region adopted such policy relatively late, it has had a profound impact. It is highly debatable whether such policies suit the very particular political and economic condition that the Oceanic nations find themselves as price and policy takers. Notwithstanding, the adoption of pure free market reform has not been as extensively pursued in the region, as say in Latin America where reforms have been purer – albeit partially reversed over recent years.

The adoption of neoliberalism in the region was led by Fiji following the coup of 1987. Seeking international favor the government agreed to market reforms in order to gain finance, and therefore, export processing zones were established as the economy was opened to overseas investors, where it was formerly relatively closed and characterized by ISI. Recently, however, the pace of neoliberal reform has gathered speed and virtually all Oceanic nations are subject to structural adjustment type agreements for their aid or loan funds.

In terms of aid, for example, not only has its delivery become increasingly contingent on reforms, but also has increasingly been allocated to projects that seek to stimulate capitalist development. Since the early 2000s, there has been a shift in aid focus by Oceania’s neighbors, New Zealand and Australia, toward promoting good governance and reducing poverty – which indeed mirrors shifts in aid priorities across the world. Though ostensibly laudable, such goals have been criticized by some as merely delivering free market reform dressed up in other ways. Poverty reduction strategies are, more often than not, aimed at stimulating outward oriented development and good governance, and at stimulating the downsizing of the state and western style democracy. Since 2001, Australia in particular has been quite aggressive in pursuing neoliberal reform in the region arguing that such a shift will promote security and reduce potential terrorism. In the face of such pressure, some Oceanic nations are turning to China and other Asian nations for less conditional aid.
In adopting such models the Oceanic nations have had little choice. Firth argues that the Pacific Island countries (PICs) have little choice.

Just as the place of the Pacific Islands in the first globalization was to be sub ordinate to the temperate, developed world, so their place in the second globalization is also to be subordinate, this time to a set of inter national institutions that have set the rules of the global economy. The new globalization, now combined with independent sovereign rule, means incorporation into the global economy on terms that suit the interests of the financial markets, the aid donors, and those relatively few Pacific Islanders who are in a position to benefit from the new situation. (S. Firth, 2000: 186)

The impacts of the shift to free markets have been controversial. There is evidence to suggest deleterious consequences across a number of sectors and parts of society. Neoliberal thinkers argue that such things have come about precisely because of the failure of the region to grasp free market reform, wean themselves off aid, and adopt models of good governance (i.e., western de mocracy) as political systems, most of which are based in democracy to varying degrees, but which are perceived by right wing thinkers on the outside as corrupt and ineffective. Where western systems exist, they are often combined with chiefly and traditional systems, as is the case in Fiji. Some recent studies have found evidence of impacts in the following areas: the evolution of un sustainable agro export systems; rising urban unemploy ment and marginality due to the erosion of traditional networks; the reduced role of Oceanic countries them selves in making policy as outside powers became in creasingly deterministic; a sharp rise in poverty in urban and rural areas affecting women and children the most; scandals in the public sector; the development of enclave tourism economies; and pressures to introduce privatized communal land structures despite their enormous wel fare implications. Whether neoliberalism is directly re sponsible for this is unclear. What is clear, however, is that something is wrong in the region and neoliberal policies are not addressing this.

Contemporary Welfare and Development in Oceania

Living standards are relatively low in the Oceania region – although this varies considerably internally. Welfare measured in terms of the human development index (HDI) is particularly low in Melanesia and Micronesia (see Table 4). In the case of the former, recent political instability has greatly exacerbated this relative depri vation, and places such as Vanuatu, Solomon Islands, and PNG lie at the bottom of the HDI ladder, although in all cases there has been some improvement between 1998 and 2006. Generally speaking, there is a negative correlation between political freedom and living standards at the regional level and the highest HDI measures are found in territories in free association and other semi independent island groupings. The Cook Islands and Niue rank highly in the HDI measure, despite a marginal worsening between 1998 and 2006. This is largely due to the role of official transfers in aid that characterize such territories. In some full colonies, living standards measured in this way are higher still. French Polynesia, for example, has particularly high income per capita sustained in this way. Within the relatively better off territories, however, income inequality is often pronounced with the indigenous population being higher still. French Polynesia, for example, has particularly high income per capita sustained in this way. In some full colonies, living standards measured in this way are higher still. French Polynesia, for example, has particularly high income per capita sustained in this way. Within the relatively better off territories, however, in come inequality is often pronounced with the indigenous population being higher still. French Polynesia, for example, has particularly high income per capita sustained in this way. Within the relatively better off territories, however, income inequality is often pronounced with the indigenous population being higher still. French Polynesia, for example, has particularly high income per capita sustained in this way.

Table 4  The human development index (HDI) Oceania, 1998 and 2006

<table>
<thead>
<tr>
<th>Country</th>
<th>HDI 2006</th>
<th>HDI 1998</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cook Islands</td>
<td>0.789</td>
<td>0.822</td>
<td>↓</td>
</tr>
<tr>
<td>Palau</td>
<td>0.774</td>
<td>0.861</td>
<td>↓</td>
</tr>
<tr>
<td>Niue</td>
<td>0.741</td>
<td>0.774</td>
<td>↓</td>
</tr>
<tr>
<td>Samoa</td>
<td>0.731</td>
<td>0.590</td>
<td>↑</td>
</tr>
<tr>
<td>Tonga</td>
<td>0.718</td>
<td>0.647</td>
<td>↑</td>
</tr>
<tr>
<td>Tokelau</td>
<td>0.679</td>
<td></td>
<td>↑</td>
</tr>
<tr>
<td>FSM</td>
<td>0.678</td>
<td>0.569</td>
<td>↑</td>
</tr>
<tr>
<td>Fiji</td>
<td>0.667</td>
<td>0.667</td>
<td>↑</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>0.665</td>
<td>0.563</td>
<td>↑</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>0.653</td>
<td>0.583</td>
<td>↑</td>
</tr>
<tr>
<td>Nauru</td>
<td>0.652</td>
<td>0.663</td>
<td>↑</td>
</tr>
<tr>
<td>Kiribati</td>
<td>0.592</td>
<td>0.515</td>
<td>↑</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>0.586</td>
<td>0.425</td>
<td>↑</td>
</tr>
<tr>
<td>PNG</td>
<td>0.414</td>
<td>0.314</td>
<td>↑</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>0.410</td>
<td>0.371</td>
<td>↑</td>
</tr>
</tbody>
</table>

Source: Adapted from SPC 2007.

If one looks at progress in the millennium development goals in the region since their implementation it is clear that the record is mixed. Poverty is rising, and primary school enrolment is generally good but quality is poor, there has been some progress in gender equality, and infant mortality is declining but is still high, espe cially in Melanesia (see Table 5) mothers in rural areas are still at risk, HIV is rising, environmental agreements have been developed but not implemented, and aid – although high – is declining, and has a mixed record of reducing import dependence. As Table 5 shows, life expectancy is particularly low in Melanesia, falling as low as 53.7 in PNG. However, the lowest in the Pacific is Nauru, which, since the depletion of phosphate, has suffered dire developmental consequences. Infant mor tality in some Oceanic territories, such as Solomon Islands, ranks among the worst in the world.

Partly driving this poor human development per formance is the relatively poor economic performance of
the Oceanic countries. It has been difficult for the small island nations to compete as independent economic entities in a globalizing world, which is evident in terms of growing trade deficits across the region. In 2005, for example, in 18 of the 22 territories, trade deficits grew, with many of these representing a significant proportion of total national income. In many cases, as already noted, these trade gaps are plugged by aid, remittances, or a combination of these, and to an extent, tourism. Gross domestic product (GDP) per capita varies across the region markedly as illustrated in Table 6, which ranks the territories in descending order. Guam, an unincorporated territory of the US receives extensive military transfers as well as substantial tourism receipts. New Caledonia and French Polynesia receive extensive transfers from mainland France. The independent nations, particularly of Melanesia, fare the worst with levels of per capita GDP that place among the worst in the world. Economic growth over the last 10 years has been poor across the region.

Levels of poverty are high by international standards in the Oceania region (see Table 7). Assessing poverty is plagued by poor access to data and Table 7 presents a snapshot of the trends in various parts of the region. It is, by any measure, high in the Melanesian countries with,

Table 5 Selected development indicators for Oceania 2006

<table>
<thead>
<tr>
<th>Country/subregion</th>
<th>Life expectancy (male)</th>
<th>Life expectancy (female)</th>
<th>Infant mortality</th>
<th>Urban population</th>
<th>Urban population growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melanesia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiji</td>
<td>65.4</td>
<td>68.7</td>
<td>22.0</td>
<td>46</td>
<td>2.6</td>
</tr>
<tr>
<td>New Caledonia</td>
<td>69.9</td>
<td>77.6</td>
<td>6.9</td>
<td>60</td>
<td>2.8</td>
</tr>
<tr>
<td>PNG</td>
<td>53.7</td>
<td>54.8</td>
<td>64.0</td>
<td>13</td>
<td>2.6</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>60.6</td>
<td>61.6</td>
<td>66.0</td>
<td>16</td>
<td>4.3</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>65.6</td>
<td>69.0</td>
<td>27.0</td>
<td>21</td>
<td>4.2</td>
</tr>
<tr>
<td>Micronesia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSM</td>
<td>66.6</td>
<td>67.5</td>
<td>40.0</td>
<td>21</td>
<td>2.4</td>
</tr>
<tr>
<td>Guam</td>
<td>74.5</td>
<td>80.8</td>
<td>9.0</td>
<td>93</td>
<td>n.a.</td>
</tr>
<tr>
<td>Kiribati</td>
<td>61.2</td>
<td>66.9</td>
<td>44.0</td>
<td>43</td>
<td>5.2</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>65.7</td>
<td>69.4</td>
<td>37.0</td>
<td>65</td>
<td>1.6</td>
</tr>
<tr>
<td>Nauru</td>
<td>52.5</td>
<td>56.2</td>
<td>42.3</td>
<td>100</td>
<td>0.3</td>
</tr>
<tr>
<td>Northern</td>
<td>72.5</td>
<td>77.9</td>
<td>5.0</td>
<td>90</td>
<td>3.4</td>
</tr>
<tr>
<td>Marianas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palau</td>
<td>65.5</td>
<td>71.9</td>
<td>17.0</td>
<td>81</td>
<td>2.2</td>
</tr>
<tr>
<td>Polynesia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Samoa</td>
<td>69.0</td>
<td>76.0</td>
<td>8.5</td>
<td>66</td>
<td>3.7</td>
</tr>
<tr>
<td>Cook Islands</td>
<td>68.0</td>
<td>74.3</td>
<td>21.0</td>
<td>68.0</td>
<td>1.9</td>
</tr>
<tr>
<td>French Polynesia</td>
<td>69.2</td>
<td>74.1</td>
<td>6.9</td>
<td>52</td>
<td>1.6</td>
</tr>
<tr>
<td>Niue</td>
<td>68.8</td>
<td>71.2</td>
<td>29.4</td>
<td>34</td>
<td>4.3</td>
</tr>
<tr>
<td>Pitcairn Islands</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Samoa</td>
<td>71.7</td>
<td>74.2</td>
<td>19.1</td>
<td>22</td>
<td>1.3</td>
</tr>
<tr>
<td>Tokelau</td>
<td>68.4</td>
<td>71.3</td>
<td>33.0</td>
<td>0</td>
<td>n.a.</td>
</tr>
<tr>
<td>Tonga</td>
<td>69.8</td>
<td>71.8</td>
<td>12.0</td>
<td>32</td>
<td>0.8</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>61.7</td>
<td>65.1</td>
<td>35.0</td>
<td>47</td>
<td>1.4</td>
</tr>
<tr>
<td>Wallis and Futuna</td>
<td>70.2</td>
<td>74.3</td>
<td>7.4</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>23</td>
</tr>
</tbody>
</table>


Table 6 Economic indicators for selected territories in Oceania 2006

<table>
<thead>
<tr>
<th>Country/subregion</th>
<th>GDP Per capita (various years)</th>
<th>Total GDP (millions of US$) (various years)</th>
<th>Total GDP per capita growth 1995-2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guam</td>
<td>22 118</td>
<td>3420</td>
<td></td>
</tr>
<tr>
<td>New Caledonia</td>
<td>17 436</td>
<td>3620</td>
<td></td>
</tr>
<tr>
<td>French Polynesia</td>
<td>15 637</td>
<td>3777</td>
<td></td>
</tr>
<tr>
<td>Cook Islands</td>
<td>8 563</td>
<td>174</td>
<td>6.5</td>
</tr>
<tr>
<td>American Samoa</td>
<td>7 821</td>
<td>444</td>
<td></td>
</tr>
<tr>
<td>Niue</td>
<td>5 854</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Palau</td>
<td>5 808</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>Nauru</td>
<td>3 450</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>2 362</td>
<td>131</td>
<td>4.6</td>
</tr>
<tr>
<td>FSM</td>
<td>2 113</td>
<td>228</td>
<td>0.6</td>
</tr>
<tr>
<td>Samoa</td>
<td>2 108</td>
<td>374</td>
<td>3.1</td>
</tr>
<tr>
<td>Fiji</td>
<td>1 926</td>
<td>1591</td>
<td>1.6</td>
</tr>
<tr>
<td>Tonga</td>
<td>1 893</td>
<td>190</td>
<td>1.7</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>1 563</td>
<td>15</td>
<td>2.0</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>1 558</td>
<td>308</td>
<td>1.8</td>
</tr>
<tr>
<td>PNG</td>
<td>796</td>
<td>4060</td>
<td></td>
</tr>
<tr>
<td>Kiribati</td>
<td>613</td>
<td>53</td>
<td>2.3</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>521</td>
<td>232</td>
<td>3.5</td>
</tr>
</tbody>
</table>

for example, approximately 40% of people in Vanuatu and PNG living below the basic needs measure of poverty. This figure is likely to be very high in the Solomon Islands given the conflict there, which in part explains why the figures are not available. It is also rising in Fiji given 10 years of unrest. Poverty is also particularly high in Kiribati and parts of Polynesia, including Samoa and Tonga. In ditions are that levels have risen over the previous 10 years in most territories. As the final column in Table 7 shows, income distribution is regressive across the region.

In the past, poverty, as measured in Western terms, has been argued to be offset by subsistence affluence – traditional access to plentiful coastal, or forest resources historically. This concept can be questioned on a number of fronts. It is debatable, for example, whether such abundance and security ever actually existed outside of an idealizing Western imaginary. Conditions in Oceania – though varying from place to place – have always been challenging with the prospect of natural disasters – such as cyclones and tsunami, ever present. While it is certainly true that, in some parts of Oceania, resources for daily human consumption are plentiful, this has been largely a function of the scarcity of population and patterns of resource consumption that are relatively nonintensive. As populations expand – they are set to double over the next 30 years overall – and social consumption patterns change, and as a consequence pressure mounts. Other practices associated with modernization are having deleterious impacts on subsistence and semi subsistence livelihoods; for example, coastal tourism has in many cases taken up fertile fishing grounds and has had negative implications for reef ecosystems, Forestry in the interior parts of some islands has also impacted dietary patterns. Particularly in the Melanesian countries, deforestation has become a major problem as for eign exchange is sought in return for precious hardwoods. In some cases, the drive for exports in fish stocks, or sugarcane production, to use just two examples, has led to the monocultural exploitation of sea and land in ways that undermine biological and economic diversity, and thus exacerbate the vulnerability of subsistence and small scale commercial livelihoods. Despite the myths, economic and social processes associated with modernization and more latterly neoliberalism make daily living in Oceania as difficult as anywhere in the global periphery.

Table 7 Poverty Indicators for Oceania

<table>
<thead>
<tr>
<th>Country</th>
<th>% less than $1 a day</th>
<th>% below basic needs poverty line</th>
<th>% underweight children below age 5</th>
<th>Income share of poorest 20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cook Islands</td>
<td>12</td>
<td>10</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Fiji</td>
<td>26</td>
<td>25.5</td>
<td>15</td>
<td>5.2</td>
</tr>
<tr>
<td>FSM</td>
<td>38</td>
<td>27.9</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Kiribati</td>
<td>20</td>
<td>20</td>
<td>27</td>
<td>3.3</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>30</td>
<td>20.3</td>
<td>24.9</td>
<td>4.5</td>
</tr>
<tr>
<td>Niue</td>
<td>4</td>
<td>22.3</td>
<td>2</td>
<td>4.9</td>
</tr>
<tr>
<td>PNG</td>
<td>6</td>
<td>20.3</td>
<td>1.9</td>
<td>6.2</td>
</tr>
<tr>
<td>Samoa</td>
<td>4</td>
<td>22.3</td>
<td>2</td>
<td>4.9</td>
</tr>
<tr>
<td>Tonga</td>
<td>17</td>
<td>29.3</td>
<td>2</td>
<td>7.4</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>26</td>
<td>40.6</td>
<td>12.1</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Source: Collated from UN and SPC, 2005.

Table 8 Urbanization in Oceania, 2006

<table>
<thead>
<tr>
<th>Country/ subregion</th>
<th>Urban population (%)</th>
<th>Urban population growth 2000 05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melanesia</td>
<td>19</td>
<td>2.9</td>
</tr>
<tr>
<td>Fiji</td>
<td>46</td>
<td>2.6</td>
</tr>
<tr>
<td>New Caledonia</td>
<td>60</td>
<td>2.8</td>
</tr>
<tr>
<td>PNG</td>
<td>13</td>
<td>2.8</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>16</td>
<td>4.3</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>21</td>
<td>4.2</td>
</tr>
<tr>
<td>Micronesia</td>
<td>65</td>
<td>1.6</td>
</tr>
<tr>
<td>FSM</td>
<td>21</td>
<td>2.4</td>
</tr>
<tr>
<td>Guam</td>
<td>93</td>
<td>n.a</td>
</tr>
<tr>
<td>Kiribati</td>
<td>43</td>
<td>5.2</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>65</td>
<td>1.6</td>
</tr>
<tr>
<td>Nauru</td>
<td>100</td>
<td>0.3</td>
</tr>
<tr>
<td>Northern</td>
<td>90</td>
<td>3.4</td>
</tr>
<tr>
<td>Marianas</td>
<td>81</td>
<td>2.2</td>
</tr>
<tr>
<td>Palau</td>
<td>41</td>
<td>1.4</td>
</tr>
<tr>
<td>Polynesia</td>
<td>66</td>
<td>3.7</td>
</tr>
<tr>
<td>American Samoa</td>
<td>68.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Cook Islands</td>
<td>52</td>
<td>1.6</td>
</tr>
<tr>
<td>French Polynesia</td>
<td>34</td>
<td>4.3</td>
</tr>
<tr>
<td>Niue</td>
<td>22</td>
<td>1.3</td>
</tr>
<tr>
<td>Pitcairn Islands</td>
<td>0</td>
<td>n.a</td>
</tr>
<tr>
<td>Samoa</td>
<td>47</td>
<td>1.4</td>
</tr>
<tr>
<td>Tokelau</td>
<td>0</td>
<td>0.8</td>
</tr>
<tr>
<td>Tonga</td>
<td>47</td>
<td>1.4</td>
</tr>
<tr>
<td>Wallis and Futuna</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from SPC 2007.
Urbanization is a process that is leading to significant environmental pressure in terms of access to traditional nutritional resources and therefore patterns of subsistence affluence or otherwise. The Oceanic region is one of the most rapidly urbanizing areas on the Earth (Table 8), the pressure on peri urban land has – in some cases such as Suva, Fiji – spiralled out of control. The large rural populations of Vanuatu, the Solomon Islands, and PNG mean that overall statistics seem to suggest that most Oceanic dwellers are rural. In just under half of the territories in the region, more than 50% of people live in urban areas, and this is rising overall at a rate of over 3% per annum across the regional as a whole. Growth figures are highest in Kiribati, and in the Melanesian countries. In the past, urban areas were of sufficiently low density to be able to supply many residents with urban food supplies on local communal land, in individual gardens, and in some cases, on state land. In the case of the former, such demand was relatively inconsequential and the authorities did not always discourage the use of land in this way. As population densities increase and absolute numbers swell in the cities people increasingly have reduced access to such gardens. As a consequence, many have to rely on imported – often inferior foodstuffs such as mutton flaps – and dietary health has been shown to suffer as a consequence. The future of the Oceania region is undoubtedly an urban one and design meeting the social, economic, and infrastructural needs that accompany this will prove a major challenge. Already sights that are familiar in urban areas across the periphery, such as shantytown evolution and the rise of the informal sector, are becoming prevalent across the larger urban centers of the Pacific, such as Suva, Honiara, Port Vila, South Tarawa, Nuku’alofa, and Apia.

One factor that sets apart Oceania from other regions in the global periphery is land tenure. In most territories, land is held in some form of communal ownership and this has bode well for access. Although income distribution is skewed and probably worsening access to land has remained relatively equal until recently. The traditional form of ownership has placed pressure in some areas which have come into conflict with more westernized pressure – as is evident in the case of Fiji’s sugar cane land. Generally, however, it has helped protect welfare. As urbanization increases, however, access to land is reduced, and, in some cases, traditional lands are left uncultivated. In places such as Tonga, reduced access to land in the countryside partly drives urbanization. Given the hereditary nature of the land holding system there, as time goes on, sons become entitled to ever smaller plots of land, which in many cases are too small to farm. Maintaining communal ownership of land is an essential component of ensuring sustainable livelihoods across the region.

### Political Conflict

Some have linked growing political conflict in the region (see Table 9) to the rise of neoliberalism. It is most certainly the case that the inequalities produced through new economic models have fueled conflict in Tonga, Vanuatu, and Fiji. Furthermore, the obsessive pursuit of export oriented growth has precipitated conflicts over natural resource in the Solomon Islands as well as PNG. To others outside the region, the escalation in conflict in the Pacific region is difficult to imagine, given its idealization. But hot spots of conflict have arisen across the region and show few signs of disappearing. The focus on hot conflict also greatly underestimates simmering unrest across the region – there is the potential for open conflict bubbling under the surface in French Polynesia, New Caledonia, Tonga, Samoa, and Vanuatu, based largely on issues of self determination as well as inequality and poverty. This has seen outside powers take a much greater interest in regional affairs, citing security concerns, and playing a role in peacekeeping and other intervention activity. Recently where conflict has occurred, outsiders have labeled it as evidence of failed or weak states.

<table>
<thead>
<tr>
<th>Country</th>
<th>Type of conflict</th>
<th>Year(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiji</td>
<td>Military coups (two)</td>
<td>1987</td>
</tr>
<tr>
<td></td>
<td>Civilian coup and hostage crisis</td>
<td>2000</td>
</tr>
<tr>
<td></td>
<td>Military mutiny</td>
<td>2001</td>
</tr>
<tr>
<td></td>
<td>Political crisis</td>
<td>2004-06</td>
</tr>
<tr>
<td></td>
<td>Military coup</td>
<td>2007</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>Civil conflict (c. 30,000 lives lost)</td>
<td>2000</td>
</tr>
<tr>
<td></td>
<td>Armed civilian coup</td>
<td>2000</td>
</tr>
<tr>
<td></td>
<td>Intervention of NZ and Australian military and police</td>
<td>2003</td>
</tr>
<tr>
<td></td>
<td>Urban riots, Honiara</td>
<td>2005</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>Urban land riots, Port Vila</td>
<td>1988</td>
</tr>
<tr>
<td></td>
<td>Kidnap of President</td>
<td>1996</td>
</tr>
<tr>
<td></td>
<td>State of emergency after riots in Port Vila</td>
<td>1998</td>
</tr>
<tr>
<td>PNG</td>
<td>Civil war (Bougainville) (c. 20,000 lives lost)</td>
<td>1988-97</td>
</tr>
<tr>
<td></td>
<td>Continuing transborder disputes with Indonesia</td>
<td>2005-06</td>
</tr>
<tr>
<td></td>
<td>and cessation conflict</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bougainville</td>
<td></td>
</tr>
<tr>
<td>Tonga</td>
<td>Pro-democracy urban riots,</td>
<td>2006</td>
</tr>
<tr>
<td></td>
<td>Nuku’alofa, foreign police deployed</td>
<td></td>
</tr>
</tbody>
</table>
As Table 9 shows that most of the open conflict is found in Melanesia – forming an ‘arch of instability’ running from Fiji to East Timor (which as an observer at the Pacific Islands Forum could be considered part of Oceania). There has however been increasing unrest in Polynesia too. For example, years of frustration on the part of the pro-democracy movement led to unprecedented rioting when the King of Tonga died in 2006 and his son (and heir) refused to enact reform. The anger became focused on the immigrant Chinese community which plays a central role in the economic affairs of the capital, Nuku'alofa. The episode was portrayed by the global media as an interethic affair. This has often been the case, the conflict in Fiji, for example, has often been cast by nonregional media as ‘ethnic tension’ between Indo Fijians and indigenous Fijians. In reality, it is far more complex than this and reflects pressure between different confederacy groupings of ethnic Fijians, tension over land access, and basic inequality and poverty. The recent conflict in the Solomon Islands was also portrayed as another example of Balkanization when in reality its roots were much more deep seated in a political and economic sense.

Given such misrepresentations, the intervention of outside power can sometimes illustrate very little understanding of the fundamental factors driving conflict in the region and in some cases can exacerbate it. The 2007 coup in Fiji has proven very difficult for New Zealand and Australian governments to grasp as its leader, Commander Bainimarama – currently the self-appointed prime minister – himself an ethnic Fijian, ostensibly undertook it in order to protect Indo Fijians from what he described as dangerous ethno-nationalists. Whatever the particular reasons for the most recent military coup in the region, the pertinent issue here is that conflict is rarely simple and the intervention some times not well informed, despite generally good intentions.

Regionalism in Oceania

In order to tackle the problems associated with isolation and diminutive political and economic power, as well as face recent issues of conflict, there have been numerous attempts since World War II, and especially since independence to foster regionalism. The South Pacific Commission was formed in 1947 and is today known as the Pacific Community. In 1971, this body held the first South Pacific Forum (now known as the Pacific Islands’ Forum) in New Zealand, an event that has been held annually ever since. In the early days, it was preoccupied with issues of the transition to independence and collective diplomacy. Today it deals with a broad range of issues with trade, aid, and security at the forefront. Sixteen countries, including Australia and New Zealand, are members and New Caledonia and French Polynesia are associate members and Tokelau and east Timor are the observers. Conversely, the current head of the Forum is an Australian, a move which some view cynically given the overriding concerns of the Howard administration to push regional antiterror reform and free market policies. It has also been argued that the political weight of the group’s two largest economies is already great enough.

There have been two major declarations over the last decade made by the Forum. The Bikitawa Declaration made in Kiribati in 2000 paved the way for the involvement of peacekeeping forces in the crisis of Bougainville, Solomon Islands, and Tonga. The Auckland declaration of 2004 laid out the Pacific Plan, which is the most comprehensive statement yet toward the union of political and economic interests across the region with the vision statement that Oceania be a “region of peace, harmony, security and economic prosperity...in which its cultures traditions and religious beliefs are valued, honoured and developed” (PIF, 2004: 1). The four pillars of economic growth, sustainable development, good governance, and security formed the core of this document that has paved the way for further integration. For example, The PACER (Pacific Agreement of Closer Economic Relations) and the PICTA (Pacific Island Free trade Agreement) build on the plan and are evolving to complement other trade based moves, such as the Melanesian Spearhead Group and SPARTECA (South Pacific Regional Trade and Economic Co-operation Agreement). Aside from these essentially centralized agreements, there is also a range of decentralized regional cooperative institutions, including the University of the South Pacific and South Pacific Regional Environment Programme. But the course of regional cooperation is not always smooth and the challenges facing Oceania will require increasing vigor in this area for their successful resolution.

The End of Isolation – Managing Internal External Challenges

The rolling out of modernization in Oceania has caused both economic and cultural tensions as Western systems clash with indigenous or traditional ones (however these are defined). Political governance systems, for example, based in some countries and territories on highly hierarchically chiefly systems have come into conflict with democratic agendas. Resource management has shifted from the traditional to the modern leading to environmental conflict and the free market has replaced the reciprocal systems of previous times. Cultures are
shifting rapidly, especially in urban areas, where the young increasingly mimic European influences. In short, the coming of the West in Oceania has been highly problematic and the consequences of this are felt in the daily lives of the population.

In terms of interpreting the recent history of development in Oceania, then, there exists a familiar divide between neoliberal and structuralist type accounts. The former tends to blame Oceanic peoples themselves, citing corruption and poor market performance. The latter tend to see the problem as inherited from colonialism relations of power, which have perpetuated inequality and underdevelopment. The truth lies somewhere between the two. What is certain is that isolation in the islands has now ended and solutions to the existing problems need to take into account both internal and external factors. It is impossible to turn back globalization in the ocean region, but it will need to be managed and resisted through collective international developmental efforts, the pursuit of inclusive democracy, regional collaboration, and the design of sustainable environmental, and economic systems if it is to deliver anything but increased fragility for these already vulnerable territories.

Acknowledgments

Many thanks to Teresia Teaiwa for comments on an earlier draft and Conway Pene for supplying the figure.

See also: Aid; Australasia; Neoliberalism; Postcolonialism/Postcolonial Geographies; Regionalism.

Further Reading

Oceanographic Mapping

D. M. Lawrence, Virginia State University and Virginia Union University, Richmond, VA, USA
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Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bathymetry</td>
<td>The measurement of water depths and analysis of the undersea features those data reveal.</td>
</tr>
<tr>
<td>Contour Map</td>
<td>A map that illustrates topography (or bathymetry) with the aid of lines that connect points of equal elevation (or depth).</td>
</tr>
<tr>
<td>Fathom</td>
<td>A measure of the depth of water equivalent to 6 feet.</td>
</tr>
<tr>
<td>Fathometer</td>
<td>An instrument that measures the depth of water by sound.</td>
</tr>
<tr>
<td>Panoramic Map</td>
<td>A map that illustrates topography as viewed from above.</td>
</tr>
<tr>
<td>Physiography</td>
<td>The study of the structure of the Earth's surface.</td>
</tr>
<tr>
<td>Sonar</td>
<td>A technology used to detect ships or underwater obstacles through the use of sound waves that echo off the target.</td>
</tr>
<tr>
<td>Sounding</td>
<td>Measurement of the depth of a body of water.</td>
</tr>
</tbody>
</table>

Introduction

The oceans are arguably the most challenging mapping environment on Earth, maybe even the Solar System. The land can be surveyed by teams on the surface, or mapped using imagery obtained from higher elevations, or via aerial or satellite based platforms. The surface of many planets, planetoids, and moons can be observed via Earth based telescopes, spacecraft, or satellites. The oceans, until recently, were quite another matter.

The first challenge to mapping the oceans is their size. Seventy percent of the Earth's surface is covered by the oceans. The second is the depth. The average depth of the oceans is 3.8 km – the maximum depth is more than 10.9 km.

Except in the shallowest areas, the bottoms of the oceans are impossible to observe directly without specialized equipment. Humans cannot breathe underwater, and must either transport the oxygen they need for survival in self contained underwater breathing apparatus (SCUBA), or else bring a breathable atmosphere with them in underwater vehicles such as submarines or submersibles.

Shallow areas of the oceans can be mapped with scuba divers using more or less traditional surveying techniques, albeit with equipment capable of surviving the harsh marine environment. Marine archaeologists do this fairly routinely when mapping shallow water wrecks. But over most of the oceans, anyone attempting to map the depths using scuba gear runs into another significant problem – pressure.

Water, unlike air, is not a compressible fluid; thus, pressure changes rapidly with depth – about 1 atm for every 10 m of depth. Thus, the pressure of the deepest areas of the oceans adds up to more than 1000 atm. Aside from wreaking havoc on human physiology, water pressure can be devastating to surveying and sampling equipment.

In traditional mapping, humans survey what they can see – this is impossible in most of the ocean basins, as sunlight penetrates only 100 or 200 m beneath the surface (sometimes less, depending on the clarity of the water). Some wavelengths, such as reds and yellows, are absorbed quickly, affecting the visible colors within the photic (sunlit) zone. Even when artificial illumination is available, only a limited area is visible.

Obtaining Data

Despite all the challenges, the oceans needed to be mapped. As maritime commerce developed in ancient times, mariners quickly found the need to record the locations of reefs, sandbars, currents, and other navigational hazards. Mariners needed to ensure that the water was deeper than the draft of their ships. They needed to know the characteristics of the bottom, such as whether it was muddy, sandy, or rocky. So how were the early maps of the ocean made? By feel.

Early soundings were obtained using poles or weights suspended from a rope. Stick the pole in the water, drop the weighted line; when the bottom is felt, or when the line halts its descent, measure the length of the pole or rope pulled out – that is the depth. This technology was not improved upon for thousands of years, and may still be in use today. The first evidence of such methods dates to about 3500 years ago to Egyptian bas reliefs and paintings depicting the use of both sounding poles and weighted lines.

The first written account of using a weighted line to determine water depth dates to about 2500 years ago to a description of sounding the Mediterranean near the mouth of the Nile by the Greek historian Herodotus. Herodotus noted that the bottom consisted of a yellowish mud similar to that deposited by the Nile along its banks. One of the deepest soundings obtained from the
Mediterranean during that time period was described by the Greek geographer Strabo – 1000 fathoms in the vicinity of Sardinia. That record sounding, obtained by Posidonius about 100 BC, was not equaled for nearly 2000 years.

Sounding is referred to at some length in the New Testament book Acts of the Apostles – in the passage that describes the shipwreck of St. Paul on the island of Malta. The ship was caught in a storm, and one night, as the sailors suspected the ship was near land, took soundings that confirmed the approaching shore. They anchored in 15 fathoms of water and survived the night, but grounded the ship on a shoal the next day.

As can be imagined, the depths that could be measured with a sounding pole were quite limited. Ideally, such poles should not be any longer than the hull itself. They should not be heavier than what could be readily handled at sea by a man.

Weighted ropes could be used to measure much greater depths, but they were not without challenges of their own. For one, it could be difficult to know whether or not the bottom was reached. Usually, mariners relied on some indication that the line has stopped or slowed its descent. The downward momentum created by the weight of the deployed line itself could pull more line overboard with little noticeable decrease in velocity.

To prove that the bottom had been reached, John Mercer Brooke, a midshipman working for Commander Matthew Fontaine Maury at the US Navy’s Depot of Charts and Instruments, devised a system consisting of a sampling tube that passed through the center of a weight – usually a cannonball with a hole drilled through it. Upon contact with the bottom, a mechanism would release the weight, meanwhile, the sampling tube would be driven into the sediment. Thus, as the sounding line was retrieved, some of the benthic material could be brought up for examination.

Brooke’s device was first tested on 7 July 1853, on a cruise of the USS Dolphin, commanded by Lieutenant Otway H. Berryman, in the North Atlantic. A midshipman, J.G. Mitchell, deployed the device from a small boat at 1:20 p.m. It took him 6 h to retrieve the device – from 2000 fathoms of water. The bottom had clearly been reached, the sampling tube containing sediments full of diatoms and foraminifera.

Sometimes the bottom was never reached. This could happen for a variety of reasons: maybe the weight at the end of the line was insufficient to pull it to the bottom; maybe it was too much, causing the line to snap. On other occasions, the weight of the line alone proved too much, resulting in a break. Regardless of the problem, the line would pay out and pay out – drifting with subsurface currents – giving the impression of a bottomless abyss.

Even if a sounding effort went as planned, the ropes typically absorbed water, thus gaining more weight. This phenomenon, in the days before a steam winch was developed, meant more backbreaking work for the sailors cranking whatever device was being used to retrieve the line. Even after steam driven winches were developed, the weight of sounding lines posed a problem.

A logical next step was to use lines made of material that would not absorb water – namely lines or cables made of metal. The first recorded attempts to use wire for sounding the sea was on the United States Exploring Expedition (1838–42) led by Lieutenant Charles Wilkes. He chose copper wire, which did not work too well, and he reverted to using rope.

The US Navy, under the direction of Maury, experimented with piano wire on the USS Tangy expedition, commanded by Lieutenant Joseph C. Walsh, to the North Atlantic in 1849–50. In order to get sufficient length, segments of wire were spliced together. The sounding wires repeatedly parted at the junctions. The use of wire or cable was eventually perfected – several decades later.

Soundings in the deep sea took a long time when muscle power was required to raise the sounding lines. Nevertheless, even with steam or diesel powered winches available, raising the sounding lines took a long time. For example, HMS Challenger was equipped with a steam powered winch on its famous voyage circumnavigating the world, but sounding and other deep water sampling took hours. From December 1872 through May 1876, the Challenger took little more than 350 soundings.

A more rapid way of obtaining depth data was needed. The answer was something known of at least as far back as Aristotle: sound. (Actually, humans have probably known that sound could be heard in water since the time they have been swimming, but Aristotle is the first to record that fact.) In more modern times, Leonardo da Vinci wrote of his successful attempts to listen to distant ships via a tube immersed in water.

The use of sound waves in water to determine distance and depth was proposed in 1807 by Dominique François Jean Arago, a physicist and future prime minister of France. Arago, a polymath, had many other interests – such as helping to develop the wave theory of light – and thus failed to follow up on his proposal. A number of researchers determined the speed of sound in various aquatic settings; others, such as Maury, proposed specific techniques to measure depth of water using sound, but inadequate listening devices rendered the proposals fruitless.

A number of inventors began working on electronic devices that measured depth of or distance in water by sending and receiving echoes at the beginning of the twentieth century. The effort was given even greater impetus after the sinking of the ‘unsinkable’ RMS Titanic following its collision with an iceberg on the night of April 14 and 15, 1912.
Reginald Fessenden, a Canadian inventor working for Submarine Signal Company, had been developing an oscillator that sent a clear, penetrating sound through water for the company, which had been seeking an underwater warning system to help ships avoid collisions or running aground. They implemented an effective bell type device on board a number of lightships, but even tually they wanted something with greater capacity to send and receive messages underwater. The bells were less than ideal.

Fessenden’s oscillator, however, was promising. Fessenden and Submarine Signal – motivated by the Titanic disaster as well as a collision of the liners Republic and Florida off Nantucket in 1909 – refocused their efforts, seeking a way to detect obstacles, such as icebergs, as well as measure the depth of the bottom. Fessenden further improved his oscillator that sent out a clear ‘ping’ sound as well as a receiver that could detect the echo of the sound as it bounced off another object.

On 27 April 1914, a seasick Fessenden and a seasick crew on board the US Coast Guard cutter Miami finally caught enough of a break in the dreary, unsettled North Atlantic weather to test the efficacy of the device in detecting icebergs. A terse telegram sent to Boston announced the results: “Bottom one mile. Berg two miles.”

Submarine Signal focused on marketing Fessenden’s device as a means of underwater communications. Little thought of using it to measure depth on a routine basis occurred until 1922, when Submarine Signal asked engineers R. L. Williams and Herbert Grove Dorsey to work on improving it for depth measurement. Fessenden’s oscillator required an operator to listen for echoes using headphones. Their contribution was in developing an apparatus that could detect echoes automatically. All the operator had to do was to read the depth on a lighted scale. Dorsey named the instrument the fathometer. Similar devices were called echo sounders.

Early versions of the fathometer were not capable of accurate depth measurement in very shallow waters, or while a ship was underway. While Williams and Dorsey continued Fessenden’s efforts to improve the Submarine Signal device, others worked to develop similar instruments.

Paul Langevin, a French physicist, and Constantin Chilowiski, an expatriate Russian electrical engineer living in Switzerland, collaborated on an instrument that used supersonic frequencies. Their echo sounder was the first to be used in a practical application – a survey of a route for an undersea cable crossing the Mediterranean from Marseilles to Philippeville, Algeria, in 1922. The British, under Robert Boyle, developed their own system – primarily for use in antisubmarine warfare.

Back in the United States, Harvey C. Hayes of the Naval Research Laboratory developed what he called a ‘sonic depth finder’ that could rapidly and accurately measure depth, even while a ship was steaming rapidly across the open ocean. Hayes tested his device, first on the battleship USS Ohio on a short run between Annapolis, Maryland, and New York City in February 1922.

Hayes’ sonic depth finder was then transferred to the destroyer USS Stewart prior to its departure to the Philippines via Gibraltar and the Suez Canal the following June. The Stewart, departing from Providence, Rhode Island, acquired more than 900 soundings in the 9 days it took to reach Gibraltar. The achievement, in comparison with the 350 soundings made by the HMS Challenger in the 3 years it took to circumnavigate the world, was set to revolutionize oceanographic mapping. By 1924, it was already revealing errors in depth measurements made by traditional weighted line methods.

Despite the profusion of work in echo sounding the depths in the years after 1914, Fessenden was not forgotten. He was awarded Scientific American’s Gold Medal in 1929 for his invention of the fathometer.

Fathometers were limited to measuring the depth of the ocean at a single point at a given time; thus, a ship could only record a single line of data as it traversed the oceans. An ideal next step would be to record data from several lines – beams – at once. Developments along those lines began with a failed attempt by General Instrument Corporation to develop an instrument for radar based mapping using the Mills Cross technique.

Named for a radio telescope in New South Wales, Australia, the Mills Cross technique uses a perpendicular array of instruments to collect data from a wide swath of space – in both the astronomical and geographical senses. For a radio telescope, the perpendicular arrangement of sensors allows precise determination of the location of a radio source. The General Instrument engineers hoped to adapt the technique to radar based mapping, by designing a system where an array of radar emitters was perpendicular to an array of radar receivers, allowing for multiple steered beams that could precisely determine distances to multiple points simultaneously with each ping.

While the effort to obtain the radar mapping contract failed, they contacted three engineers, Harold Farr, Paul Frelich, and Richard Curtis, in a sister division – the Harris Ant Submarine Warfare Division – to see if the sonar group could benefit from the idea. If it worked, it would allow high resolution images, analogous to contour maps, of the ocean floor. The idea worked. By 1963, the three had developed and installed a multibeam sonar system on the USNS Compass Island. By 1968, they had begun development of a commercial system called Sea Beam. The first operational Sea Beam system was in stalled on the French research vessel Jean Charcot and used on the Vema II cruise in 1977. Instead of just a single line, ships equipped with multibeam sonar can map
thousands of square kilometers of ocean floor in a single cruise.

Even with multibeam sonar systems, the extent of the ocean floor mapped was limited to regions traversed by survey vessels. Another method was needed to map areas that had not been visited by ships. Just such a method arose from the study of the topography of the ocean surface.

Sea level is not level – even when the effects of wind and waves are taken into account. The sea surface is analogous to a rolling landscape consisting of hills and valleys deviating as much as 100 m from average sea level. The height anomalies are caused by the gravitational effects of the features of the ocean bottom. Geophysicists had long recognized this, and beginning in the nineteenth century had sought ways to measure the strength of the force of gravity at the ocean surface. At the time, gravity was measured with a variety of devices, such as a type of gravity barometer, but most methods were not of sufficient precision to use in geophysical research. Pendulum devices were best for measuring gravity, but ship motions on the surface rendered most such devices useless at sea.

Felix Andries Vening Meinesz devised a multiple pendulum device effective in measuring gravity in the soft, shifting soils of his native Netherlands, and adapted it for use at sea in the 1920s. He still needed a stable platform for taking the measurements at sea, and found what he needed in submarines. Vening Meinesz, a big man, squeezed himself into the small submarines of his day and, over a span of 15 years, from 1924 to 1939, traveled more than 125,000 miles and took more than 800 gravity observations at sea – nearly doubling the total at the time. After World War II, several thousand more gravity observations were made on submarine cruises until the mid 1950s when Anton Graf and Lucien LaCoste independently developed spring gravimeters accurate and stable enough to be used on surface ships.

The relationship between gravity and sea surface height is not what it may seem at first glance. Gravity is an attractive force which, according to Isaac Newton, is largely a function of the masses of the objects involved and the distance between them. (Gravity is better explained by the general theory of relativity than by Newton’s ‘laws’ of gravity, but the ‘laws’ are still useful approximations in most cases.) Thus, it would seem that a massive object that rises from the ocean bottom to near the surface would create a depression in the ocean surface; conversely, a depression in the ocean bottom, such as a deep sea trench, would create a rise in the ocean surface.

A seamount does pull water toward its slopes, but because the force of gravity acts perpendicular to the surfaces involved, the overall effect is to squeeze water toward the surface above the summit, creating a bulge instead of a dip. Conversely, the gravitational attraction along the walls of a depression in the sea floor pulls water away from the surface, creating a depression on the surface.

The work of Vening Meinesz and others established the relationship between gravity anomalies and irregularities in the elevation of sea level. Surface based measurements, however, were limited in their coverage of the world’s oceans. What was needed was a method of measuring gravity anomalies on a global scale.

The space race between the United States and the Soviet Union triggered the development of just such a method. The US National Aeronautics and Space Administration initiated a series of Earth observing satellites in the 1960s and 1970s. Skylab, launched in 1972, was fitted with an early radar altimeter to measure the height of the ocean surface. A satellite, Geodetic and Earth Observing Satellite 3 (GEOS 3; 1975–78), was equipped with a better altimeter. SEASAT (1978) was specifically designed for observing the Earth’s oceans. Fitted with a radar altimeter that could measure the height of the ocean to within five centimeters, SEASAT held great promise, but its batteries failed within 3 months. Still, it logged more than 100 million km of tracks across the Earth’s surface, far more than most ships could cover in a century. newer satellites have since been launched to continue the work of GEOS 3 and SEASAT.

William Maurice Ewing, a young geophysicist professor at Lehigh University (and future founder of Lamont Geological Observatory, now Lamont Doherty Earth Observatory), further revolutionized oceanographic mapping by applying seismic techniques that he had learned in the oilfields of Texas to studies of the geology of the ocean floor.

Making Maps

Because of the dearth of depth measurements, much less accurate depth measurements, the first attempts to map ocean basins were doomed to be suspect. Matthew Fontaine Maury made the first serious attempt to map an ocean basin in 1854, producing the Bathymetrical Map of the North Atlantic Basin with Contour Lines Drawn in at 1,000, 2,000, and 4,000 Fathoms. The map, made with only about 200 soundings, proved that the ocean floor was far from a flat, featureless plain it was once thought to be, but it could not reveal the features that were there in much detail. The most prominent feature he called the Dolphin Rise — an apparently broad plateau in the middle of the North Atlantic. The plateau is actually not so broad. It is a relatively narrow, often rugged mountain range now known as the Mid Atlantic Ridge.

The Challenger expedition generated so much data that original reports based on its results were published for
decades after the ship returned to England in 1876. Sir John Murray, who began as a young naturalist on the expedition and who took over as editor of the expedition’s reports following the death of chief scientist Charles Wyville Thomson in 1882, made a fortune from mining phosphate rich guano deposits he discovered afterward on Christmas Island in the Indian Ocean. Much of the money he spent on scientific research – such as underwriting the publication of later volumes of the *Challenger* report, but some of it was spent on other endeavors, such as mapping the ocean basins using new data coming in every year. His maps show a progressive improvement in resolution, such that the Mid Atlantic Ridge looks like a ridge in his North Atlantic map of 1911.

Some of the best early maps of individual basins were prepared by Alexander Agassiz, son of naturalist Louis Agassiz, from data collected on three cruises of the US Coast and Geodetic Survey steamer *Blake* in the Gulf of Mexico, Caribbean, and the Western Atlantic between 1877 and 1880. Agassiz’s maps, each based on hundreds of soundings, stand up fairly well today, even though they were published in 1888.

The next great advance in oceanographic mapping came with the advent of echo sounders. One of the premier expeditions in the early part of the twentieth century was that of the German research vessel *Meteor* from 1925 to 1927. The *Meteor* zigzagged across the Atlantic – primarily the South Atlantic – taking paired echo soundings at about 30,000 stations and following up with several hundred wire soundings for further verification. Scientists on board *Meteor* also measured physical characteristics of the water such as temperature at depth. The ocean basin maps based on that data were a vast improvement over earlier work, including Murray’s, in the Atlantic. For example, both sounding and temperature at depth data were used to prepare one map of the Atlantic Basin showing the Mid Atlantic Ridge snaking through the oceans roughly mid way between North America, Europe, and Africa. There is a hint of an extension into the Indian Ocean.

From Maury through the *Meteor*, maps of ocean basins had typically been drafted as contour maps. The vast amounts of data available made much better maps possible. But when oceanographer Bruce Charles Heezen and his geologist/cartographer partner Marie Tharp of what is now Lamont Doherty Earth Observatory embarked upon an effort to map the world’s ocean floors in 1952, however, those maps of ocean basins would look like if all the water had been drained – in the style of cartographer Armin Karl Lobek. While making transatlantic profiles working with the *Stewart’s* soundings, Tharp discovered a notch in the Mid Atlantic Ridge, a rift valley, which meant the Earth’s crust was splitting along those cracks. The discovery, along with ensuing research tracing the location of the rift with a combined use of sounding data and earthquake epicenter locations, showed the mid ocean ridge systems extended for tens of thousands of kilometers around the surface of the Earth.

Heezen and Tharp began working on a series of ocean basin maps, beginning with that of the North Atlantic in 1957. They completed work on the South Atlantic in 1961. The pair originally planned to map the Mediterranean next, but the oncoming International Indian Ocean Expedition prompted them to map that basin next. All this time, Tharp, who plotted thousands and thousands of measurements by hand, and Heezen, filled in areas in between sounding tracks by educated surmises as to what lay between. This method – the best anyone could do with the limited data of the time – caused problems in the Indian Ocean, however. No one had yet envisioned triple junctions – where three tectonic plates come together – so their map omits the triple junction now known to be there.

The Indian Ocean map did get the attention of the editors of *National Geographic Magazine*, however. Those editors teamed Heezen and Tharp with Heinrich Caesar Berann, an Austrian artist who pioneered the modern panoramic map, for a series of full color maps of the ocean basins. The team worked well together. After completing the series for *National Geographic*, they began preparing a world ocean floor map. That work, under written by the Office of Naval Research, was published in 1977. Both a map and a work of art, it remains an iconic presence in earth science departments three decades later (Figure 1).

Heezen, unfortunately, never saw the finished project. Shortly after approving the proofs and sending the map to the printer, he died of a heart attack while preparing for a dive on the Reykjanes Ridge aboard the US Navy’s research submarine *NR 1* on 21 June 1977.

A problem that plagued Heezen, Tharp, and other mappers of the ocean floor was the uneven availability of sounding data. The Space Age, however, offered a solution in the form of eyes in the sky. William F. Haxby, a graduate student at Cornell University, was asked by his advisor, Donald L. Turcotte, to take a look at some *GEOS 3* radar altimetry data that Turcotte was given while attending a NASA meeting in 1976. Haxby could do little with that, but the 3 months of *SEASAT* data was another matter.

Haxby, intending to produce a map of gravitational anomalies, realized, as Felix Andries Vening Meinesz
had, that the anomalies also revealed ocean floor topology. By 1982, he had produced a map of the world's ocean floor using satellite data alone. The map, 'Gravity Field of World's Ocean (Color Map)' was published by the US National Geophysical Data Center in 1985.

Even with the global reach of satellites, techniques such as Haxby's suffered from errors as well as insufficient resolution when applied to smaller areas or in areas of complex terrain. Walter H.F. Smith of the US National Oceanic and Atmospheric Administration and David T. Sandwell of Scripps Institution of Oceanography combined radar altimetry data with traditional sounding data where available. The result was a higher resolution, more accurate map of the world's ocean basins, published in 1997.

Accomplishments and Future Prospects

The efforts to map the world's ocean floors have revealed many secrets of the deep. Among the most important discoveries was the finding that the ocean floors were as topographically complex as any landscape above the ocean surface. The mapping effort revealed the composition and structure of tectonic plates as well as evidence for many of the processes involved in tectonic activity. The work has revealed many secrets of the Earth's past, and has led to the opening of vast areas of the Earth's surface to mineral exploitation.

As with all things, no single oceanographic mapping technique is adequate in all occasions. Modern hydrographers use every method at their disposal to get the quality data they need for their research. The focus is on mapping individual ocean basin and smaller regions in greater detail, although world ocean floor maps will continue to be improved as more data come in.

See also: Art and Cartography; Cold War; Exploration; Geodesy; Mapping; Topographic; Maps; Natural Resources; Oceania; Oceans; Surveying.

Further Reading


Glossary

Containerization A series of practices that are associated with the use of shipping containers, large steel metal boxes that hold commodities on ships and that can seamlessly be moved to truck or railroad once a ship reaches its destination port.

Exclusive Economic Zone (EEZ) Established by the 1982 United Nations Convention on the Law of the Sea, a country’s EEZ includes areas of the ocean that are between 12 and 200 nautical miles from its coastline and areas of the seabed between 12 nautical miles and the limits of the continental shelf (in instances where the continental shelf extends beyond 200 nautical miles from shore). A country retains exclusive rights to the living and nonliving resources of its EEZ, although for all other purpose high-seas freedoms prevail.

Flag of Convenience A national ship registry that is sought out because of low registration costs and/or lax safety and labor regulations. The owners of a ship flying under a flag of convenience typically have no material relationship with the registry state.

High Seas The area of the ocean that is beyond the territory of a coastal state. Although, according to the 1982 United Nations Convention on the Law of the Sea, the high seas begin 12 nautical miles from shore; in practice, many high-seas freedoms begin only at 200 nautical miles from shore because of the overlapping EEZ regime.

Manganese Nodules Potato-sized clumps of manganese, nickel, cobalt, copper, and other minerals that are found on the surface of the seabed in certain locations beyond the continental shelf.

Nautical Mile 1.15 statute miles, or 1.852 kilometers.

Territorial Waters The area of the ocean that is within the territory of a coastal state, defined in the 1982 United Nations Convention on the Law of the Sea as an area extending to 12 nautical miles from shore.

The Forgotten 71%

Oceans cover 71% of the Earth’s surface and contain 97% of the planet’s water. Over 20% of the world’s petroleum is derived from offshore sources and 95% of world trade by weight, or two thirds by value, is carried by ship. Eighty percent of the world’s fish catch comes from the ocean, supporting the livelihoods of 140 million people. Economists have calculated that the world’s oceans provide services to humanity valued at US$21 trillion, as opposed to only US$12 trillion provided by land.

Geographers have long urged that attention be drawn to this space. Reflecting on Strabo’s comment some 2000 years ago that “we are in a certain sense amphibious, not exclusively connected with the land, but with the sea as well,” Ellen Churchill Semple noted in 1911, “Our school textbooks in geography present a deplorable hiatus, because they fail to make a definitive study of the oceans over which man explores and colonizes and trades, as well as the land on which he plants and builds and sleeps” (Semple, 1911). Forty years later, Richard Hartshorne (1953) declared that “the fundamental error in popular geographic thought” (Hartshorne, 1953: 382–393) was the tendency to view the ocean as simply a barrier rather than as a space of human society. Nonetheless, few geographers have heeded their call.

The ocean has failed to attract attention from more than a handful of human geographers for three likely reasons: first, despite the fact that geographers have long critiqued the idealization of the state as a naturally occurring, organic entity, geographers (and, more generally, social scientists) still have tended to conceive of the world as a universe of state territories. As a space that lies primarily external to the territory or sovereign authority of individual states, the ocean thus has appeared as a space that is external to the space creating processes of society.

Second, human geographers (and, again, social scientists more generally) have tended to view societies as occurring in place. Key social activities, such as production, reproduction, and consumption, as well as the cultural forms that support these activities, traditionally, have been associated with discrete places or territories. Movement typically has been viewed as a derivative activity that occurs simply because an individual or a commodity requires relocation from one society place to another, and little attention, therefore, has been directed toward the spaces across which this movement occurs. Thus, notwithstanding the ocean’s substantial economic value as the space across which the bulk of the world’s commerce flows, it has received little attention from human geographers.

Third, human geographers traditionally have viewed nature as ontologically distinct from society. Although
geographers have long focused on the intersection between nature and society (examining, for instance, the way in which a place's nature and its society impact each other), this emphasis on the intersection between nature and society has tended to direct human geographers' attention away from spaces of nature that fail to display a clear human presence. Thus, as a space that is without permanent human habitation and that long was thought to be immune to human impact, the ocean typically has escaped the attention of human geographers who study nature–society relations.

A Sea Change in Epistemology

In recent decades, each of these barriers to human geographic research on the ocean has been challenged by broad reaching shifts in social thought. Turning first to the barrier of state centrisim, since the 1970s the rise of globalization studies has led to the emergence of a number of perspectives that challenge the prevailing view of the world as a set of states that interact with each other. Instead, the world increasingly is being conceived of as one integrated (albeit differentiated) social system. This shift is significant for the ocean, because if, for example, one thinks of the world as consisting of 190 odd state societies, then the 71% of the planet's surface that is not in any of those 190 state societies is, by implication, beyond society: If, on the other hand, one thinks of the world as consisting of one society, with many constituent varieties of spaces, then it would be logical to include the ocean as one of those spaces of society. Hence, the ocean shifts from being conceived of as an external space between the world's societies to being conceived of as an integral space of society.

Similarly, the prevailing notion of society as the actions of people in place has been challenged by a range of perspectives associated with post structuralism, post colonialism, and transnationalism. These perspectives all attempt to destabilize the concept of essential, place based identity, instead directing attention to hybrid formations that emerge through interaction and movement. Border areas, including spaces of movement like the ocean, which formerly had been viewed as in between spaces that were not worthy of attention, are now recast as the spaces wherein social processes and identities are constructed (and are continually reconstructed), and they increasingly are foregrounded in social analysis.

Third, a growing number of human geographers have been interrogating the concept of nature. These geographers range from those who argue that nature is socially constructed to those who deny that there is any basis for making an ontological distinction between the social (or human) and the natural (or nonhuman). Once one subjects nature to a critique along these lines, it becomes impossible to dismiss the ocean as a space of nature that is beyond the concern of human geographers.

Emergent Geographies of the Sea

These epistemological shifts, in turn, have led to new areas of research in the human geography of the ocean. In the remainder of this section, four areas of human geography are reviewed: political, cultural, environmental, and economic geographies of the sea.

Political Geographies of the Sea

Historically, when human geographers have studied the ocean, they most often have looked to the sea as a space of politics and, in particular, as an arena for geopolitical conflict. The ocean has been viewed as a space in which the forces of land based states meet as each attempts to control crucial areas of the sea (e.g., choke points on shipping lanes or particularly productive fishing grounds) or to use the ocean as a platform from which power can be projected onto land. Increasingly, however, political geographers (especially those who associate themselves with the critical geopolitics movement) are criticizing this model of the world as one in which states with unambiguously bounded interests interact with each other on a preexisting (and presocial) spatial platform. Instead, the discursive bounding of states and the construction of the world as a universe of mutually exclusive territorial states is seen as an act of politics that itself is worthy of study. It follows from this critique that there is no a priori distinction between a state's 'inside' (its territory) and its 'outside' (space that is outside state territory). Thus, the ocean, historically viewed by political geographers as a space wherein political actors battle each other, is now recognized as a space in which politics (and political territories) are created.

Some of the work in this area queries the division of the sea into three distinct zones that is enshrined in the 1982 United Nations Convention on the Law of the Sea: the territorial sea (which extends to 12 nautical miles from shore), in which states have complete territorial authority except that they must allow free passage to foreign ships that are deemed to have 'innocent' intentions; the high seas (the area beyond 200 nautical miles from shore), in which coastal states have no authority and in which state authority is limited to the power that a state has over ships that are flying its flag; and the exclusive economic zone (EEZ, roughly the space between territorial waters and the high seas), in which high seas freedoms of the sea prevail except that coastal states have exclusive rights to marine and seabed resources. While the implementation of this regime can be traced to the power politics of global treaty negotiations, it can also be traced to structural
contradictions within the spatiality of capitalism: the need to invent new investment sites (expressed in the territorial seas regime), the need to move capital and commodities at ever greater speeds (expressed in the high seas regime), and the need to steward nature so as to forestall capitalism’s tendency to exploit it at an unsustainable rate (expressed in the EEZ regime).

The interplay of these forces not only constructs these three distinct legal zones but it also constructs other sociospatial patterns that reflect and reproduce the unevenness of political power and nature in the marine environment. Consider, for instance, the ease with which Japan (driven by domestic considerations) is able to use its economic leverage over cash poor but whale rich countries to win their votes in the International Whaling Commission. The resulting whaling regulations both reflect and transform relations of power and distributions of nature, at sea and on land. When viewed from this perspective, the ocean is seen not simply as an arena wherein political actors compete with each other but rather as a space within which the political structures of the world system are constructed.

In a similar vein, historical geographers of empire have begun turning to the sea in their attempts at understanding the relationship between the ordering of space and the ordering of peoples. If the ideology of ocean crossing has a special role in the discourses of global reach that have characterized modern empires (and perhaps ancient ones as well), then the ocean is itself a constructed space of politics. In particular, the British Empire with its strong ideological emphasis on sea power, has been subject to examination by Anglo-American human geographers. Like the empire’s colonies, the ocean was not only constructed as a space that was of the empire but that was also conceived of as one step removed from the essential space and character of the British (or English) nation. Thus, ocean space, like colonial space, not only in the British Empire, but also in others – particularly the Portuguese – was constructed through an ideology that combined elements of both universalism (or cosmopolitanism) and particularism (or chauvinism).

Finally, the recognition of the ocean as a space wherein politics is not only enacted but also constructed has led some to direct their attention to political actors in ocean space who directly challenge the norms of terresiral politics. Thus, the ocean is both a workspace and a living space, it is both self-sufficient and open ended, and a ship is both a temporary and a long term residence, because it is simultaneously mobile and stable, it is both a workspace and a living space, it is both self-contained and open ended, and a ship is both an insular community and one that typically brings people of many different and cultural backgrounds together. Again, work in this area has been aided by advances outside the discipline, especially from anthropology, history, literature, and cultural studies. This turn to the sea – and to the ocean as a space of culture – perhaps emerged first in the discipline of history. Fernand Braudel’s The Mediterranean and the Mediterranean World in the Age of Philip II demonstrated that the ocean, far from being an empty space between cultures, was in fact a space of interaction in which cultures (and nature) were formed and transformed. This perspective, which directly challenged prevailing ideas in cultural ecology (as well as in history and anthropology) about culture being rooted in place, was soon taken up by other historians who started new ocean basin based organizations of history (most notably Atlantic history). In the 1990s, this work on the history of ocean regions began to be joined with work emerging from cultural studies (and, increasingly, cultural geography) on diasporas, hybrid identities, and transnationalism. Broadly, scholars associated with this school of thought stress the ways in which cultures are continually reproduced through movement and consumption rather than through stasis in place. A key motivational book for integrating the ocean within this line of thinking was Paul Gilroy’s The Black Atlantic. Although Gilroy only indirectly considers the ocean as a material space of society, the book, which has been highly influential in cultural studies, suggests the power of oceanic metaphors, and, by association, oceanic spaces, in inter preting cultural formations.

To ground Gilroy’s metaphors, some geographers have turned their attention to shipboard life. Shipboard life provides a unique environment for geographic research, because it is simultaneously mobile and stable, it is both a workspace and a living space, it is both self-contained and open ended, and a ship is both an insular community and one that typically brings people of many different backgrounds and nationalities together. Again, work in this area has been aided by advances outside the
discipline, in particular by social historians who have researched the role of the eighteenth and nineteenth century seamen, pirates, and whalers in constructing modern norms and disciplines of nation, class, gender, sexuality, and labor.

Within geography, the interdisciplinary Oceans Con nect project, based at Duke University in the late 1990s, sought to reinfuse regional geography with an ocean basin based perspective that privileged interaction and transformation over insularity and stasis. These ocean basin based reconceptualizations of the region may be most effective when undertaken together with small scale, place based studies. The foregrounding of the ocean as a space of connection, after all, should not lead one to forget that, for many littoral dwellers, the ocean is perceived as fundamentally local: as a set of distinct, known sites whose integration into everyday life is con ditioned by place based traditions. However, by focusing on the ocean as a space of society and culture, one can come to appreciate that even these highly lo calized systems exist within contexts of connection and interaction. Thus, for instance, scholars of islands (which were long considered by biologists and anthropologists as paradigmatic laboratories of homogeneity and isolation) increasingly use the ocean to reposition islands as nodes amidst channels of movement.

In other words, the ocean is being turned to by two groups of cultural geographers. Some have turned to the ocean to expand their understanding of the spaces of local life worlds. Others, attracted by the ocean’s char acter as a literal and metaphorical space of movement, have turned to the ocean in an attempt to decenter fixed ideas of nation, state, territory, and culture. These two perspectives, however, are by no means incompatible, and much future work in marine cultural geography will likely lie at their intersection.

Environmental Geographies of the Sea

Just as historically there has been little cultural geography of the sea, similarly few human geographers until recently have focused on the ocean as a space of nature. To some extent, this likely is because, until recently, it was believed that humans could do little to influence the condition of the marine environment or the status of marine resources. Prior to the series of United Nations conferences that culminated in the 1982 United Nations Convention on the Law of the Sea, the customary law of the sea that had guided state practice was based on the belief that the ocean was immune to overfishing as well as to environmental degradation from the inflow of pollutants. For the most part, the ocean also historically has been resistant to Western style agriculture. Thus, to the extent that environmental geographers, in the wake of the early twentieth century backlash against environmental determinism, were seeking to study the mutually im pacting relationship between nature and society (i.e., ‘man’s’ impact on the ‘land’ as well as the ‘land’s’ impact on ‘man’), the ocean was a space of little interest.

Recently, this situation has changed, for a number of reasons. Political ecologists increasingly have become attentive to the ways in which the Western model of constructing nature through taming it, controlling it, and ‘improving’ it (i.e., the agricultural model) is just one way among many in which societies productively interact with nature. The turn to recognize alternative environmental management, common property resource management, and tenure systems has led a number of geographers to the ocean, where management systems frequently diverge greatly from the Western model.

Additionally, the marine environment has received increased attention because of technological develop ments: technologies both have revealed the myriad ways in which humans have long impacted marine nature, and they have allowed for this alteration to occur at an ever greater rate. The ocean has now joined environmental topics like atmospheric pollution, climate change, and the world’s water supply as a transboundary problem that requires study and action on the global scale, and a series of multilateral treaties have been signed to address this issue.

Since marine nature is now recognized as a global issue, its study has come to intersect with the study of other global issues. In addition to its inclusion within the constellation of global environmental issues, geographers increasingly are finding that of this space of global nature must be studied in the context of global social phenomena, including the rise of global economic flows, the hegemony of transnational corporations, and the as cendancy of neoliberal ideologies that govern the stewardship of nature. Furthermore, because of the high cost of oceanographic research, work in this area almost al ways requires governmental funding, which raises further issues for human geographers interested in the relation ships between states, science, and nature. Thus, issues in the understanding and management of the marine en vironment relate to bigger questions regarding the global management (or construction) of nature and the rela tionship between global economic-environmental pro cesses and the ways in which nation states claim control over territory and scientific knowledge.

The role of the ocean as a space for integrating human geography with the sociology of science is further en hanced by its position between two apparently contra dictory trends in knowledge creation. On the one hand, the ocean, now more than ever, is the domain of expert knowledge. On the other hand, the ocean is increasingly a space of Romanticism, as fewer and fewer individuals are directly experiencing the ocean as a space of everyday
life and labor, and instead are turning to the sea as a space of relaxation, exploration, and escape. Thus, lying at the intersection of increasingly intense tendencies toward both scientific rationalism and nonrational Ro
tanticism, the ocean serves as a laboratory for scholars who are attempting to explore the (in)compatibility of these two perspectives.

Economic Geographies of the Sea

Finally, economic geographers as well are beginning to direct their attention to the ocean. Countless local and national economies are driven by the tourism sector and, within the tourism sector, a wide range of activities in volve tourists embracing the ocean, whether from the shore, a ship, the surface, or beneath the waves. Economic gain is also constructed in the ocean through the ex
traction of living and nonliving resources. The greatest source of economic value in the ocean, however, is de
erived from the fact that it serves as a surface for trade. The tremendous growth in the quantity (and value) of goods shipped across ocean space (increasing from 996 million tons in 1959 to 6760 million tons in 2005) has been accompanied by the advent of containerization, a technological innovation that has had far reaching im
plications not just for the shipping industry but also for urban form and hierarchy. Containerization has led to
port consolidation and the establishment of mechanized megaports that typically are in areas removed from his
toric harbor fronts. This transformation, in turn, has led to urban decay in some areas and opened up new op
portunities for heritage tourism and/or gentrification in others, while the port management industry itself has
attracted the attention of economic geographers who focus on the way in which this industry fuses investment in place with the development of transoceanic corporate networks.

Additionally, as economic geographers (and national economies) have turned away from the production and consumption of manufactured, tangible commodities to intangible services that produce value, trade (and the space across which trade occurs) has become more cen
tral to economic geographic research. This shift in focus among economic geographers has received additional impetus from the prominence of a group of economists who call themselves ‘new economic geographers’. While many geographers have criticized the conceptualization of space utilized by the new economic geographers, a central message that the group has been bringing to their fellow economists is that the spaces within which goods are produced and transported are significant factors in economic processes and cannot simply be written off as transaction costs. It may be fitting that a favorite mod
eling device of the new economic geographers is the

iceberg function, a distance coefficient that metaphoric ally refers to the temporality, nature, and spatial textur ing of the marine environment within which so much economic activity takes place.

Oceans of Conflict and Imagination

Overriding these turns to the ocean across the various subdisciplines of human geography are two increasingly prevalent geographies of the ocean: the construction of the ocean as a site of conflict and its construction as a space of imagination.

The rise of the ocean as a site of conflict is a direct result of its dominant management paradigm, wherein specific zones of the ocean are dedicated to different functions. The viability of this paradigm, which has its origins in beliefs about the ocean’s vastness and in a strict separation between coastal and deep sea ocean uses, is being questioned today. At the global scale, the frailty of this paradigm was evidenced during the de
bate in the 1970s and 1980s over the establishment of a regime for extracting manganese nodules from the seabed beneath the high seas, as the United Nations struggled to develop a universally acceptable set of institutions and norms for an activity that would re
quire state like territoriality in a portion of the ocean that historically had been exempted from territorial control. At the meso scale, the limits of the paradigm can be seen in efforts to regulate the harvesting of fish that swim between national EEZs and between these zones and the high seas. At the local scale, numerous coastal communities are attempting to manage the ac

tivities of competing local users, including those en
gaged in subsistence fishing, commercial fishing, sport fishing, scuba diving, shipping, and mineral and pet
roleum extraction.

Amidst these conflicts (and in the wake of past at
tempts to solve them through the spatial fix of single use zonation), the ocean is a space that leads one to question the efficacy of rationalist planning paradigms. It likely is no coincidence that two of the works of geophilosophy most frequently cited by human geog
raphers make reference to the ocean as a space of alternative sociospatial formations. In One Thousand Plateaus, Gilles Deleuze and Felix Guattari (1988) write, “The sea is a smooth space par excellence,” (Deleuze and Guattari, 1988) while Michel Foucault (1986), in Of Other Spaces, writes, “The ship is the het erotopia par excellence” (Foucault, 1986: 22–27). In both cases, the allusions to the ocean as a space of alternate ordering are metaphorical, but, like all metaphors, they gain some of their power because they resonate with what is known about the material con
ditions of the entity being referenced.
Thus, for human geographers, the ocean, long ignored or, at best, viewed as an arena within which social actors encounter one another or nature, now is seen as a space of society, and, as a space of society, the ocean has come into its own in human geography as a space that one can ‘think with’ as one attempts to understand broader structures, processes, and potentialities – on and off shore.

See also: Cultural Geography; Economic Geography; Geopolitics; Hybridity; Land Change Science; Military Geographies; Mobility; Place; Political Ecology; Political Geography; Poststructuralism/Poststructuralist Geographies; Space II.

Further Reading


Relevant Websites

http://aag coma.hometead.com
Coastal and Marine Geography Specialty Group of the Association of American Geographers.
http://www.fao.org/fishery
Fisheries and Aquaculture Department of the Food and Agriculture Organization of the United Nations.
http://www.imo.org
International Maritime Organization.
http://www.unctad.org/TemplatePages/Page.asp?intItemID=2618&lang=1
Review of Maritime Transport (annual publication), United Nations Conference on Trade and Development.
Glossary

**Cartographical Reason** To form and operate with concepts of abstraction in accordance with a geometric rationality and a logic of mapping.

**Geography of the Invisible** Unlike a traditional geography which has the representation of the visible Earth as original object, the aim here is to map phenomena without physical extensionality, like the world of human thought and imagination.

**Human Interaction** A broader term for interaction between humans resulting in common worlds than spatial interaction, which denotes interdependence between geographical areas.

**Invisible Maps** Relations in language that although they cannot be seen provide points, lines, and planes as orientations of and for thought.

**Ontological Transformation** To change what something is into something else, like when a physical object appears as a linguistic sign or a city plan turns into buildings and roads.

**Taken-for-Granted** Things and relations as unaware premises for thought and action.

**Thought-and-Action** A term that highlights that in the medium of language thought and action are internally and inseparably related.

Olsson, Gunnar (1935–)

Gunnar Olsson is a Swedish geographer and author of numerous books and articles (Figure 1). He was born in a small village in the county of Värmland (Sweden) where his mother was a local midwife and his father had a business in the timber and building trade. Since the mid-1970s he has been living in Uppsala (Sweden) with his wife Birgitta. Together they have two daughters, both with children on their own.

In 1957 Olsson began his academic studies at Uppsala University where, since 2000, he has been professor emeritus in the department of social and economic geography. In between he has been on a lifelong journey of self-conscious reevaluations, pursuing his core theme of human interaction in search of its geographical essences. Marked by a refusal to limit himself to the study of visible things, and a desire to be abstract enough, Olsson has continued to develop his geography of the human territory of language, meaning, power, and imagination—an original yet consistent contribution to one of the most fundamental domains of human geography (i.e., a theory of humans as geographical and cartographical creatures).

In 1960 Olsson received his bachelor’s degree in human geography, economic history, and political science and was awarded a 2-year fellowship by the Faculty of Social Sciences in Sweden, which would lead to several visits and stays at geography departments in the USA. Knowing that he wanted to use a quantitative approach, Olsson became deeply involved with theoretical developments within spatial science, especially attempts to translate earthly human behavior, such as migration, into the abstract language of distance and human interaction. Technicalities aside, his work with his licentiate and doctoral theses in the 1960s suggested that spatial interaction models designed to catch distance and migration in fact revealed more about the spatial distribution of opportunities than about human interaction per se. At stake was the classic geographic inference problem between form and process, that is, how one should conceive the relations between a spatial pattern and its...
generative processes. According to Olsson, both his own studies and spatial science more generally had shown that the same spatial form can be generated through drastically different processes. Even the most perfect description of a spatial pattern cannot be used as the basis for inferences about how and why it came about. Although it is sometimes possible to reason from process to form, the opposite is never appropriate. The conclusion was as inevitable for Olsson as it was devastating for human geography as spatial science: in principle it was not valid to draw inferences about human behavior from a mapped distribution, to reason from form to process.

For Olsson, applied geography (founded on the utopian vision that a better and more just society could be constructed on the basis of exact scientific knowledge of human spatial behavior) therefore involved a faulty reasoning. According to the principles of utilitarian ethics, purposeful action should be judged in terms of its consequences, but according to the principles of causal theory the consequences of actions based on observed autocorrelations cannot be foreseen. Of importance for Olsson were examples of planning in Sweden during the 1960s and 1970s that were based on a practical application of the gravity model but which, due to its internal language and contrary to political intention, conserved instead of alleviated existing inequalities in terms of access to welfare resources. For Olsson, this was an example of planning (a special case of human thought and action) as ‘Greek tragedy’. For him, this was a case of good intentions turning into tragic results, but with no one to blame because during the journey all actors had merely remained faithful to their own internal reasoning.

In 1966 Olsson was appointed by the University of Michigan, USA, and was soon promoted to full professor (a sign of how his work in spatial science was valued because this was actually before he had completed his doctoral thesis in Sweden in 1968). In what was going to be 10 years at the department of geography at Ann Arbor, he continued to investigate the relations between theory, model, and reality through in-depth engagements with theories of science, language, alternative logics, dialectics, epistemology, ontology, ethics, esthetics, and other philosophical issues. The seemingly objective methodologies of spatial science, including correlation and regression techniques, were in fact underpinned by a host of philosophical assumptions. Quite famously, he came to claim that allegedly objective analyses usually reveal more about the language they are written in than the phenomena they are supposed to speak ‘about’. For example, formal scientific language tends to privilege truth preservation, to make us assume that propositions are either true or false. However, in the language of practical reasoning the opposite is often the case: in this realm, meaning varies and changes with context, and we can make false what is true.

As a runaway spatial scientist in the 1970s, Olsson was one of the very first geographers to engage in depth with questions of language and thus made contributions to the development of humanistic geography. His early engagement with thinkers such as Jacques Derrida and Jacques Lacan was later to appear as deconstruction and post structuralism in the hands of a younger generation of (post)modern geographers. But Olsson, having reached the conclusion that there is no point of understanding outside of language, refused to side either with certainty or with ambiguity. Accepting that the human condition is a constant struggle between opposites and ultimately he became a practicing dialectician, seeking to place himself – like the God Janus – in the excluded middle where he wrestled with paradoxes and performed experiments with on, and at the limits of language.

In 1977 Olsson moved from Ann Arbor to Stockholm, where he was appointed to the chair of economic geography and planning at the Nordic Institute in Urban and Regional Planning (NORDPLAN). During the 20 years he carried out the responsibility for an ambitious doctoral program, with students from the Nordic countries. As always, his work continued to be intimately related to his teaching and extensive lecturing. No surprises, then, that for a decade or so questions of ideology, socialization, politics, power, and planning came to the fore.

During the 1990s he made more explicit attempts to foreshadow a cartography of thought, to explore how humans manage to find their way not just in the land spaces of physical existences but of mental subsistence. Even though we automatically know how to speak and think, we do not know how to explicate the reasoning rules which govern that thinking and speaking. Hence, Olsson’s oft repeated question: “How do I know the difference between you and me and how do we share our beliefs in the same?” The challenge was to be abstract enough and to draw maps of this invisible realm in such a way that they were not about something, but that something itself. Thus, Olsson’s short answer: “we find our way in our world of language and imagination, always filled with power, by drawing on invisible maps of the invisible.”

Among the premises that were to guide Olsson’s mapping expeditions are that human beings are semiotic animals living in the border between the five senses of the body and the sixth sense of culture. In that abyss humans are held simultaneously together and apart by their usage of signs that enable and involve ontological transformations between material and immaterial realms. Expressed in a minimalist rendering characteristic of Olsson, human knowledge takes the translational form of \( a \equiv b \). Telling the truth is both to say that something is something else and to be believed by others. By using the epistemo logical operator of ‘as if’, humans are able to treat also their untouchable world of reasoning as if it was like the
touchable. Their logical and rhetorical reasoning also involves a geometric bias, which means that they tend to privilege such reasoning.

So what finally unfolds, then, is geography as geometry with names and Olsson’s understanding of modern reason as a form of cartographical reason (a term first coined by the Italian geographer Franco Farinelli). At least behind Western and European thinkers and philosophies, so Olsson claims, there has been a taken for granted geometric coordinate net of lines, points, and planes which implicitly has enabled them to cartographically capture and create their worlds by merging mapping with stories about what it means to be human in particular ways. Hence his most recent work, a minimalist guide into what he imagines to be the landscape of Western culture. Starting with the key geographical coordinates – above, below, here, and there – he eventually constructs an atlas of crucial events where the boundaries of human territory have been created and delimited between the outer limits of mindscape and rockscape.

Within such later works are the old themes which Olsson never left (i.e., human interaction) but now in the form of a cartographical reason which is becoming increasingly outdated. Yet, it is likely to continue to haunt us every now and then, here and there. En trench ed as this reason is in the practice of ‘thingification’, the Olssonian challenge for geographers remains: to be abstract enough.

See also: Applied Geography; Cartography; History of; Critical Geography; Culture; Deconstruction; Dialectical Reasoning and Dialectical Materialism; Geographically Weighted Regression; Humanism/Humanistic Geography; Mapping, Philosophy; Maps; Philosophy and Human Geography; Positivism/Positivist Geography; Postmodernism/Postmodern Geography; Poststructuralism/Poststructuralist Geographies; Quantitative Methodologies; Quantitative Revolution; Space-Time Modeling; Spatial Analysis; Critical; Spatial Autocorrelation; Spatial Interaction Models; Spatial Ontologies; Spatial Science; Translation.

Further Reading


Oral History
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Glossary

Archive A repository holding information and data about past events and people but often organized, stylized, and presented according to the motivations, aspirations, resourcing, and politics of the archivist.

Life History A method of collecting, analyzing, and presenting self-reflective commentary on the biography of a person over his/her life course, prioritizing how that biography is characterized and accounted for.

Oral History A method of collecting, analyzing, and presenting first-hand testimonies from those who have lived through both dramatic historical events and more prosaic everyday pasts, with a view to enriching and enlivening knowledge produced by traditional historiographical methods.

Oral History Archive A repository holding transcripts, tapes, or films of oral history interviews largely unmediated by the archivist and often in itself a valuable ‘raw’ community resource.

Social Memory The idea that memory is far from a mental or cognitive process operating ‘under the skull’ and instead is better thought of as bearing the stamp of the social, political, economic, and cultural conditions in which recollection takes place.

Introduction

Geographical research is often interested in describing and explaining events which occurred in the past. But how can one come to know the past? In common with the discipline of history, much of the recent focus has been on the challenges surrounding the use of official documents organized, classified, and packaged in the form of public and private archives. But geographers make use of a number of other tools and methods of historical enquiry including chemical dating techniques, landscape interpretation, archeological and anthropological excavation, and photographs and other visual sources. Today the value of unearthing past events through the soliciting of oral histories from participants in those events is also being explored. Where these oral histories have focused upon the biographies of participants they have often been referred to as life histories. The data produced through the deployment of the oral history method has served to augment, enrich, consolidate, develop, and critique findings which would otherwise have been produced through orthodox techniques of historical retrieval.

This article seeks to introduce the oral history method to those who might be interested in collecting such histories to enliven geographical research. It is structured around two themes; the practice of oral history and oral history as a social practice. Oral history is often thought of as a valiant attempt to recover the voice of marginalized and powerless groups written out of ‘professional’ or ‘official’ histories. Its value lies in its ability to unearth histories ‘from below’. In the first instance some illustrations of the ways in which oral histories have been used to better understand past events will be provided. Attention will be given to the issues researchers need to be aware of when ‘doing’ oral history. The status of the knowledge produced by the oral history method however has recently been open to question and the method has entered a new interpretive phase. In the final section, it will be contended that oral history produces as much as gathers memories; it is more interpretive than reconstructive. As such it needs to be thought of as a situated social practice.

The Practice of Oral History

The archive serves as a key method through which historical geographers secure knowledge about past events and processes. But the archive is clearly limited as a search tool. The range of voices it includes is out of necessity restricted and most commonly it is the powerful, the elite, the bourgeoisie, the dominant, and the privileged who get to speak. And of course it is the same powerful, elite, bourgeois, dominant, and privileged who get to classify, order, file, and control access to the official record. What stands as professional history then is in fact often a version of the past produced, circulated, policed, and consumed by and for select strata of society.

It is from this point of departure that advocates of the oral history method begin. As a method of data collection, oral history has a rich lineage within historiography and indeed more generally within the social sciences. While the basic approach can be found in nineteenth century historical manuscripts, and the phrase itself can be traced to professional historical research conducted in the United States in the 1940s, it has only been over the past 30 years that the method has taken flight. A cursory glance at its development reveals the breadth of historical phenomena that oral histories are now being used to help illuminate. These include childhood, popular culture, religion, entertainment, leisure, education, the workplace, the home and domestic life, family and sexual relations,
communities and change, politics, biographies, human and natural disasters, and migration.

Oral history, it is argued, has a role to play in prising open a more rounded social history of the past, recovering the unfolding of historical events from the vantage point of those normally excluded from the record. The collection of first hand testimonies from those who lived through and experienced both dramatic and mundane pasts adds a richness to historiography that has hitherto been lacking. Not only does oral history provide a ‘history from below’, it brings emotions, feelings, attitudes, ideology, and opinions to bear on otherwise dry and arid historical narratives. Moreover it can scale memory to finer levels of resolution; the trials and tribulations of everyday life can be excavated.

Consider for instance the case of research interested in understanding the migration of people from Pakistan to the United Kingdom in the 1960s. Public and private archives would clearly provide some insight into such a migration flow; the numbers of migrants could be counted and their socioeconomic characteristics profiled, the location of origin and destination chronicled, the welfare benefits, housing characteristics and domestic facilities accrued revealed, health inequalities mapped, the levels of assault, violent attack, and crime migrants are both subjected to and culpable off, and so on. But such a historiography would only capture what official records at a particular point in space and a particular point in time perceived as being worthy of noting.

Oral history provides a potential means of enriching understanding of this migration flow. Interviews with first and second generation Pakistani migrants who settled in the United Kingdom might provide insights into a whole new range of research themes. What conditions prevailed in Pakistan prior to departure? Why was flight necessary? What calculations were made in terms of where to go and how to get there? What did it feel like to leave? What happened during the transit? What fears, frustrations, hopes, and aspirations did migrants carry? How did they cope? What were their feelings toward the United Kingdom on arrival? How did they encounter the official systems? How easy was it for successful applicants to settle into the United Kingdom? Did settlement experiences vary by age, gender, class, sexuality, and according to place of settlement? How do they now feel about home? What trans national networks did they establish and how did these evolve through time? What happened to those who were refused entry? How did their lives turn out? Where did they go?

Doubted for its rigor and often thought of as a poor relation to professional history, oral history has become preoccupied by questions of objectivity, accuracy, and representativeness. The practice of collecting, analyzing, and presenting oral histories has demanded that rigor be applied when deciding upon sampling strategies; compiling questionnaire; recruiting and preparing respondents; conducting the interview; recording, transcribing, and storing the interview; resolving ethical issues; and using the product:

1. Sampling strategies – Which sample is to be focused upon? What biases might the selection of this sample imply? Is breadth and representativeness to be prioritized or is qualitative insight and understanding of greater import?
2. Questionnaire design – Is a questionnaire to be used at all? Which kinds of questions are appropriate? How might one avoid asking loaded questions? How open should interviews be and how much latitude should be given if discussion wanders off message?
3. Recruiting and preparing respondents – How is the sample to be approached and solicited? Who might broker this access? How can trust be built up with participants? How might access issues affect who is to be included in the sample? Are financial or other inducements to be offered? How much should participants be told about the project in advance?
4. Conducting the interview – Where should interviews be held? Who should be present? What difference does location make to the conduct of interviews and the quality of insights generated? Should interviews always be held in the most comfortable environment for the interviewee?
5. Technology – What technology is best equipped to record, store, display, and transcribe testimonies? Should visual and oral technologies be used? How detailed should transcripts be and how are nonverbal communications prompts to be recorded? Where and how should interviews be stored?
6. Ethics – Oral histories tend to divulge more intimate and personal details than other methods. What ethical challenges does the method pose? How far should participants be invited to amend or review or develop existing transcripts? How far should transcripts and published accounts be anonymized?
7. Using the product – How should oral history testimonies be analyzed? How should the data be presented? If deployed in film, radio, theatre, or textual outputs, ought one to adjust the method of analyses and presentation and if so how?

Oral History as a Social Practice

More recently, oral history has entered into a more interpretative mode and new questions are being asked of it. How is the information generated through oral histories to be valued? What status is to be afforded it? Do oral histories really serve as a heroic means of recovering the
past as lived and experienced by the powerless and the marginal? Are they of necessity biased, mediating the past by their very existence? Should we even be talking about the truth, validity, and representativeness of the testimonies solicited?

One response to this question is to lament the presence of ‘faulty memory’ in oral testimonies. It is un realistic for people to recount a faithful representation of what happened on a particular day or week or month or year – especially many years after the event took place. Retrospective accounts will be plagued by re orderings of memory, lapses of memory, nostalgia, repression, and possibly even outright amnesia. Cognitive failure is in evitable with age and the truthfulness and therefore value of oral histories needs to be severely questioned. They are simply not objective enough to be taken seriously by professional historiographers.

The phenomenon of ‘faulty memory’ however requires more detailed investigation. Over the past decade, scholar arship in a variety of disciplines has sought to critique orthodox conceptions of memory developed in mainstream psychology. In contrast to what might be referred to as ‘cognitivist’ approaches to memory, which privileges and indeed take for granted the concept of ‘Cartesian memory’, recent work has sought to draw attention to the social structuring of memory. Oral histories cannot be treated as an objective account of past events, not because cerebral failures and cognitive impairment operate under the skull to frustrate faithful recollection of the truth but because the oral history method is itself a situated social practice.

How can something so private as memory be conceived as a social activity? Recent developments in the conception of the social foundations of memory have pointed to the role of cultural repertoires – languages and more generally semiotic systems – in the appropriation of the past. Cultural repertoires furnish populations with a ‘vocabulary’ through which past events can be remembered and as such mediate between peoples and their past. Social memory in this context would refer to the ways in which populations, socialized into different cultures, possess different techniques of historical recovery. These techniques prove to be both enabling and constraining insofar as they furnish a competence to re member but only within certain conceptual schemes. From the most subtle everyday accounting practices to more organized commemorative practices, such as theatre, museums, folklore, music, poetry, literature, photography, marching, and parades, cultural repertoires present populations with a grid through which temporality can be tamed and understood.

But the limits imposed upon memory by different forms of commemorative practice is only part of the story. Maurice Halbwachs (1951), one of the earliest theorists of social memory, invites readers to log the number of memories recalled during a day which are the product of questions put by others, or preparations made by readers in anticipation of requests from others. In response to this rhetorical question, he argues that it is indeed primarily through negotiation with others that memories are affirmed (remembered), rejected (forgotten), or reshaped. Furthermore, and crucially, the shaping of memory through conversation needs, he argues, to be situated within its proper social context. In Halbwachs’ study, for instance, memories are seen to be incited principally in relation to participation in certain social groups (those of kin, religion, and class). Since the bulk of memory work is of this sort – what he calls ‘remembering together’ – Halbwachs argues that it is meaningless to think of memory as being the possession of an individual as such. Instead, it is better conceived as a ‘social practice’.

Memory can be said to be a social practice in so far as it performs certain kinds of functions in relation to present conditions. Questions about the status of knowledge produced through oral history interviews then must proceed by questioning what this particular act of memory gathering, negotiation, production, reproduction, and ordering accomplishes at different points in time and space. Here, the social relationships which exist between interviewer and interviewee, mediated by social class, gender, age, ethnicity, disability, cultural capital, and so on, would need teasing out. The location of the interview and the agenda behind the interview would need reflecting upon. The embeddedness of the practice within the university setting and the discipline of history or geography would emerge as important. And of course the prevailing political, economic, social, and cultural conditions in which the discussion is situated would need critical inspection.

Instead of enquiring into how accurate oral histories are or how faithful they recount past events, it is necessary to ask what function the practice of oral history performs, given the social context in which this practice takes place. Oral histories do not capture past events, rather they reveal the current platforms from which memory takes place. The oral history interview is generative – co authoring memories – rather than forming as a ventilator – neutrally bringing preexisting memories to the surface. It is at root a ‘political practice’. The oral history method itself and not the memories, testimonies, or accounts it generates becomes the object of reflection, critique, and deconstruction. This commemorative practice tells us as much about the politics of how pasts are remembered as it does about the truth of those pasts.

To return to the example outlined above then, oral history interviews with Pakistani migrants who moved to the United Kingdom in the 1960s according to this framework cannot be thought of as accessing some truth about what it was actually like to make this move. Instead, these interviews need to be approached as a proactive
sifting, sorting, filtering, and reconstitution of memories which bear the stamp of the moment. They tell us more about how the ongoing war on terror and tensions between the West and the Islamic world, the experiences of integration and socioeconomic advancement in different parts of the United Kingdom, the age, sex, ethnicity, religion, and nationality of the interviewer, the location of the interview, and the funding of research projects. In other words, prevailing social, cultural, economic, and political conditions cultivate certain ways of remembering and forms of recollection. The interview is not a passive vessel innocently communicating memories but instead betrays the social, cultural, political, and economic climate of the day.

See also: Archives; Historical Geography; Memory; Phenomenology/Phenomenological Geography.

Further Reading


**Glossary**

**Ethnobotany** The collection of local or traditional knowledge of plant names and qualities. Most often used in research projects in the tropics or other places where the flora is not well known. Researchers gather information on plants from local experts and compare it to scientific understandings.

**Key Informants** Research participants who are considered to have expert or in-depth knowledge on the subject of the research. Often they are community leaders or otherwise recognized as experts by other community members. Less commonly, key informants refer to research participants who have a particularly good relationship with the research team, and thus the quality of their interviews is considered very high.

**Taxonomy** The system of nomenclature used for the classification of plant and animal species. Scientific taxonomies use a standardized Latin systems, whereas ethno-botany seeks to produce new taxonomies based on local languages and knowledge.

**Traditional Ecological Knowledge** Knowledge of the natural world held within local traditions, including myths, daily practices, and beliefs. Often traditional ecological knowledge is based upon daily experience of living within or working with a particular ecosystem or species. Researchers working in less-developed contexts have become particularly interested in the knowledge local people can provide on their ecosystems that may not be known to science. While traditional ecological knowledge is often assumed to rest on historical observations and beliefs, it does not necessarily need to have a historical aspect.

**Ecological Oral History**

Ecological oral history is a type of oral history that seeks to document knowledge about the natural world that is held within people’s memories and cultural beliefs. The methodology is used by researchers exploring traditional ecological knowledge (TEK), ethno botanists interested in local plant taxonomies, and by those who investigate competing claims about environmental change. Most often ecological oral histories are collected from key informants or local people considered to be experts about a particular species, habitat, or place. They have been used in geography, anthropology, and related subjects to document what are often seen to be threatened systems of knowledge.

Ecological oral histories are similar to other types of oral history in that they generally document knowledge and traditions that by definition are not written down. As a result, they have been used extensively in the developing world where local people are believed to carry nonwritten knowledge of their ecosystems, based upon long experience and observation of that place, rather than scientific investigation. Oral histories can be a powerful tool to gather information about these knowledge systems. The distinction between traditional knowledge and scientific knowledge is contested, however, as it implies that traditional or local ecological knowledge is not systematic or based on careful observation. On the contrary, many ecological oral histories have revealed local knowledge about the natural world that is highly systematic and differs only from scientific knowledge in the theoretical assumptions (or beliefs) behind them. Therefore, many studies that employ ecological oral histories are based upon the notion that local knowledges are of equal value to scientific knowledges. Importantly, many traditional systems of knowledge do not draw the same boundaries between human culture and the natural world. Australian Aborigines, for example, do not distinguish between Dream Time and the present, thus populating the landscape with ancestors and other spirits making their view of the environment radically different from scientific views. Thus, ecological oral histories can provide insight into local cultures as well as alternative ways of viewing and managing the environment. It is these insights that researchers hope to document through using oral history methods.

**Local Systems of Ecological Knowledge**

It is important to distinguish between ecological oral histories that seek to document knowledge of ecosystems that is considered to be general, and the ecological oral histories that seek to understand how a particular person or group of persons view their environment. While the distinction may seem subtle, in practice, the methodo logical and theoretical implications are significant. Projects that aim to document general systems of knowledge assume that it is something independent of the person conveying it. The researcher would therefore seek to gather information from the most knowledgeable people in the community. This kind of research in particular is often concerned with providing an alternative to
scientific understandings of environments and to document traditional systems before they are lost. The worry is that with increasing contact from the outside world, indigenous cultures are losing their traditional knowledge. Methodologically, the researcher would thus interview a few key informants and attempt to rectify any inconsistencies.

Oral histories that gather general knowledge are therefore rarely personalized. Instead, the traditions are ascribed to the entire community or group of people believed to hold those beliefs. There has been a great deal of concern over the past 30 years that many traditional knowledge systems are being lost as people come into contact with Western societies. There is evidence from all over the world that people are forgetting or dismissing traditional understandings of environments and as a consequence this local knowledge is no longer passed onto the next generation. Researchers have therefore used oral histories as a way to document and preserve these traditional knowledge systems. This type of ecological oral history is used both for general information about ecosystem processes and also to collect ethno botanical information. Ethno botanists document the local names and uses of plants with a focus on discovering new plants and new uses of plants not previously known. This kind of research assumes that a system of knowledge exists at the local level that is different from a standardized scientific one and importantly that the local knowledge can inform science.

Personalized Ecological Oral Histories

Research that seeks to gather more personalized knowledge, however, is less concerned with demonstrating the existence of a nonscientific logic to local knowledge, but rather to understand how different people interact with and view their environment. The theoretical assumption is that knowledge is produced in context and therefore an abstract, general system of knowledge will not necessarily be found. Most research of this kind does not refute the existence of local knowledges, but rather sees them as dynamic processes dependent on context. In these kinds of oral histories, it is often more important to explore why people might tell different narratives about their environments than it is to look for consistencies in them. Methodologically, in this type of project a researcher would gather oral histories from a wide variety of people and analyze them both for their overlap and their gaps. Key informants would not be sufficient in this kind of project since local disagreements over aspects of the environment are important. These kinds of research projects are less concerned with documenting a fading traditional knowledge base but rather want to understand the social politics within which knowledge is produced and contested. Ecological oral histories in this context can be very useful for understanding the basis of different claims to land and landscapes. They are also useful for understanding the rhetorical and symbolic ways that local people resist the modernizing influence of development.

Methods of Ecological Oral History

Ecological oral histories thus can be used for a wide variety of research projects. Data collection techniques often follow those used for other kinds of oral histories, although some novel methods are used as well. Many ecological oral histories follow techniques used in oral history and therefore use in depth, semistructured interviews. In this type of interview, the researcher develops a set of questions to be asked, but does not specify the order in which they will be asked. Rather, the researcher strives to create a conversation with the participant(s) and asks questions where relevant or as a prompt to begin or redirect the interview. Unlike oral histories, however, ecological oral histories often utilize more interactive methods. Interactive methods include ambulatory interviews, mapping, and discussion of photographs. In ambulatory interviews, the researcher and informant or a small group of informants walk through a piece of land and identify plants or discuss changes and other features of the landscape. These kinds of interviews are often very effective and yield information not only on the landscape, but also on the relationship between the participants and the environment (i.e., nature–society interactions). They are used extensively in studies seeking to document TEK and also in research seeking to understand the social–political dynamics of land use. Other forms of interactive interviews use mapping or photographs of places. Participatory mapping is often considered a separate research technique in its own right and is used in nature–society studies or land use planning research projects in addition to ecological oral histories. In these interviews, researchers ask people to draw a map of a place and then discuss what is included. Mapping provides a unique picture of landscape as seen from the perspective of the research participants. It can also illuminate important information on landscape features that may not be obvious to the researchers or the relative importance of particular resources. Photos of places are similarly used to invite discussion. Researchers either use photographs they have obtained or give participants cameras to take photographs of places or objects of importance to them. The researcher then discusses the photographs with the participants in order to lend a focus to the discussion. All these types of interviews can be done with groups as well as individuals. Group interviews are useful for obtaining accurate information on plant names and other aspects of shared knowledge of ecosystems, but they are equally
useful for gathering information on the social politics of environments. A group context can help to illuminate which inconsistencies in oral histories are based on a lack of knowledge and which are based on competing claims. Members of the group correct each other or arrive at a consensus through discussion, helping to ensure accuracy as well as illuminating other dynamics that may be useful to the research.

Studies That Have Used Ecological Oral Histories

A number of studies in political ecology and related subdisciplines in geography have used ecological oral histories. For example, a study in western Nepal used ecological oral histories in order to explore past ecological conditions and forest management practices. As such, the aim was both to gather TEK and to explore the social politics of forest management. Individual semi-structured and ambulatory interviews were both important in generating a picture of the forest historically and in triangulating accounts on past management. Both individual and group oral histories were done and the data gathered from them was triangulated with other types of data in several different ways reflecting the aims. The oral histories thus asked questions both about conditions in the forest past and present and about how it was managed. There are no other sources of information on the forest for that part of the country so the ecological oral histories provided one way of gaining some sense of forest change. Similarly, the accounts of past management were surprisingly consistent providing a rich and accurate picture of historical practices.

In this study, the ecological oral histories were also used to help understand current management struggles. In most of the interviews, people compared past management to the present and evaluated how they were better or worse. For some people, the present system is better, whereas others lamented the loss of a system they thought was fairer. Analysis of group interviews was particularly useful for this research question, as people debated important aspects of both systems and argued about what had improved. Ambulatory interviews were an especially effective context for group interviews and helped expose areas of the forest that were contested and helped expose areas of the forest that were contested and boundaries that were perhaps not as fixed as they appeared on the official map.

Participatory mapping was tried in this study but was not successful due to the association between literacy, power, and the ability to draw. Illiterate participants asked others to draw maps for them, undermining the point of the exercise which was to collect people’s different perceptions of the landscape. Other studies, however, have used mapping with excellent results. A study in Africa used mapping to understand land use patterns by having different groups of women draw maps in the dirt using sticks, stones, and other objects. The maps were used as a focus for discussion and also as evidence of different kinds of land use. In this context, the mapping exercise yielded rich insights and also provided a way to give back to the participants. The women found the process of making maps empowering and gave them a helpful way to think about their land use practices. In both of these studies, map making was used to understand the landscape as well as the politics of knowledge about the landscape. The map making process revealed much about conflicts over particular pieces of land, knowledge of different species, and qualities of the landscape, as well as the power relations inherent in drawing a map. They are good examples of how geographers have used oral histories and participatory methods in research on nature–society questions.

See also: Environment, Historical Geography of; Oral History; Participatory Action Research; Triangulation.

Further Reading


Relevant Websites

http://www.ohs.org.uk
Oral History Society.
http://www.bli.uk
The British Library, The world’s knowledge.
Orientalism

Orientalism has three distinct meanings. First, it refers to a specific esthetic movement, especially in painting and also more generally within the eighteenth and nineteenth century artwork, which after the French conquest of Egypt sought inspiration in ‘Oriental’ motives and themes, often using them in highly eclectic and idiosyncratic ways (see Figure 1). Second, it refers more broadly to the study of countries and regions in ‘the Orient’. During the period of colonial conquest, several European states set up institutions for dealing specifically with the Orient in trade and scientific study and by the nineteenth century ‘Oriental Studies’ was a well established discipline. Third, Orientalism refers to a particular discourse of knowledge about the Orient produced by the colonial powers of Europe (and North America) from the nineteenth century onward; a discourse still prevalent in popular understandings of ‘oriental culture’, foreign policy strategies, and interventions directed toward Muslim countries in the Middle East, and, more generally, cultural encounters with people and cultures originating from these countries. This meaning of the concept of Orientalism has been coined by the Palestinian American intellectual and cultural critic Edward Said (1935–2003; see Figure 2). Rooted in a poststructuralist approach partly inspired by the work of French philosopher Michel Foucault (1926–84), Said coined the notion of Orientalism as a term comprising the whole of European (and later US) ideas, thoughts, cultural depictions, military reports, and claims to superiority over the Middle East, in particular the Arab/Muslim countries of Northern Africa and the Mediterranean. In this article, the concept of the Orient refers to the construction of people and places in the Middle East and North Africa; however, in a broader general parlance as well as within the concept of ‘Oriental Studies’, Central, South, and East Asia are also included. Later work by both Said as well as several authors engaged in geography, literature, cultural studies, anthropology, development studies, social science, and so on have sought to broaden the concept, applying it to a variety of other historical geographical contexts and phenomena.

It is almost impossible to underestimate the significance of Said’s concept of Orientalism within human geography and this significance is reflected in the dominance of Said’s concept in this article. The article begins

Figure 1 The Snake Charmer by Jean-Léon Gerôme (1889) illustrates very well the idiosyncratic, eclectic, and Eurocentric mode of representation that characterized the Oriental movement. The picture, which also was on the front cover of the first edition of Said’s book Orientalism, in 1978, depicts a young naked boy performing his act with a snake before an emblematic, oriental despot. In depicting this alleged typical oriental scene with all its exotic, seductive, and repulsive connotations, the painting mixes ornamental styles from India, the Ottoman Empire, and Arab culture to produce this particular imaginative geography of an Orient staged, through the intervention of the painter, for the Western colonial subject.
by outlining the context for Edward Said’s notion of Orientalism, especially emphasizing the central inspiration he drew from post structuralism and especially the work of Michel Foucault and his concept of ‘discourse’. It then summarizes some of the main features of Said’s notion of Orientalism and how the concept is developed in his seminal book *Orientalism*. After this, the key notion of ‘imaginative geographies’ and the way this particular discourse produces and legitimizes Western hegemony is presented. Fourth, this article traces some of the most significant impacts the idea of Orientalism has had on studies of cultural encounters between the West and ‘non Western’ cultures, postcolonial theory, and human geography. Fifth, some of the main critiques of the concept of Orientalism, as well as Said’s own responses to these, are briefly examined. Sixth and finally, this article suggests some of the reasons why the concept of Orientalism has recently gained new relevance, especially in human geography.

**Background: The Foucauldian Legacy**

Orientalism refers to the construction of the Orient by European colonial powers in the nineteenth century and onward. As a Western means of dominating and gaining authority over the Orient it is, in Said’s words, a style of ‘thought’ based on an ontological and epistemological distinction between the Orient and the Occident. Said describes how this style of thought, in literature and academic studies, produced the image of the Orient, for example, the Middle East and Islam, as a threatening, inferior, and underdeveloped ‘other’. The critical discussion of Orientalism and the distorted view of Islam in which, as Said says, the image of Arabs in the popular mind is that of camel riding terrorists, arose with the decolonization of the Middle East. Together with the critique of Western hegemony and the stereotypical Eurocentric idea that Europe is superior to its ‘others’, Abdel Malek, an Egyptian intellectual, argued that the collapse of colonialism exposed the fallacies of Orientalism. By questioning the central idea of Orientalism, namely, that the Orient and Orientals could be objects of academic study stamped with their timeless otherness, Abdel Malek was, with a post structuralist approach, criticizing the essentialist conception of the Orient in Oriental Studies.

The linguistic turn in literature and social science marked the beginning of a new way of understanding the unequal relationship between the colonizer and the colonized. Inspired by Michel Foucault’s analysis of knowledge and power, and the insight that language makes the world rather than mirroring it, Said suggested that while the Orient is an integral part of European material civilization, Orientalism expresses and represents that aspect culturally and ideologically, as a mode of discourse. Said drew his inspiration from Michel Foucault’s notion of how the articulation of words, speech, and images produce discourse. Discourse, according to Foucault, arises through regimes of truth, for example, academic institutions that hold the power and the authority to be able to articulate truth, and the power to internalize this truth in the subject. Echoing Foucault, Said emphasizes that the Orient is not a free subject of action and thought, but rather, a created and imaginary geographical entity constructed in the context of colonialism and Western dominance.

Taking the late eighteenth century as a starting point, Said, in a Foucauldian framework of analysis, argued that other empirical contexts.
the Western discursive system of dominance and au-
thority in the unequal relationship between the Orient
and the Occident can be understood as a regime of
knowledge – a disciplined system of power – that not
only describes, teaches, and rules, but also ‘produces’ the
Orient. Said’s argument is that the complex of ideas, images, representations, and academic writings about
the Orient actually ‘creates’, rather than describes, the
Orient or, as he suggested, the Orient was ‘Orientalized’;
it was ‘made’ oriental. This does not mean that Orien-
talism is an airy Western fantasy about the Orient, but rather a comprehensive archive of diverse texts,
theories, practices, and knowledge about the Orient. In
the framework of colonialism and Western hegemony,
the complex Orient emerged as a suitable subject for study in
the academy; in anthropology, sociology, economics,
biology, and development studies, as well as in linguistic,
racial, and historical theses. Said’s important point is that
Orientalism is not a false knowledge construction, but a
power relationship with political implications. Oriental-
ism as discourse was not just an innocent attachment to
colonialism; it was politically useful when colonial
powers, such as Britain and France, were conquering
their colonies. From this constructionist perspective,
Said’s argument, then, is that Orientalism is a system of
knowledge and a configuration of power that actively
made colonization possible by legitimizing colonial rule.

Said does not follow Michel Foucault strictly, and it is
not always consistent or clear whether Said is taking a
constructive or a more realistic ontological position. In at
least one sense, Said takes a more humanistic approach to
discourse analysis. Unlike Foucault, he believed that
the individual writer or text contributed toward the
construction of the Orient, especially empirically, in the
case of Orientalism. Said, therefore, employs a very close
textual reading to reveal the dialectics between
the author and the collective cultural apparatus, which,
over time, created the powerful idea and image of the
Orient.

Imaginative Geographies of the Orient

The concept of imaginative geography was first intro-
duced by Edward Said in his critical discussion of
Orientalism, in 1978. According to Said, the orientalist
practices and constructions create a familiar space in our
minds which is ‘ours’, and an unfamiliar space beyond
‘ours’ which is ‘theirs’. Imaginative geography works by
producing contradictions between East and West, be-
 tween ‘us’ and ‘them’, both in terms of mentality and
territoriality. Inspired by Gaston Bachelard’s concept of
the poetics of space, Said argues that space is not an
objective phenomenon, but is converted into meaning in
a poetic process with imaginative and figurative values
related to naming and emotions. In the context of im-
aginative geography, the Orient is an idea which has a
history and a tradition of imagery and vocabulary that has
established a presence for it in the West.

Said describes how the Orient, as a field of knowledge
produced in Europe and America, was represented as a
kind of theatrical stage to the distant European audience.
This oriental stage was peopled with a range of repre-
sentative figures or tropes: stereotypical characters such
as braggart, miser, and gluttons and a whole cultural
repertoire of monsters, devils, heroes, terrors, pleasures,
and desires. Said’s argument is that the staged Orient was
imagined as an enclosed space representing the whole of
the East, and that it, in a very powerful way, shaped the
perception and modes of encounter between East and
West. Imaginative geography became a rigorous system of
morality and a disciplined regime of truth, represented
and produced through a network of corporate insti-
tutions. It was the institutionalized Western knowledge of
the Orient that created the background for an almost
mythical representation of the Orient, or as Said puts it, a
latent Orientalism: a powerful ‘fantasy’ in which the
Orient existed as a place isolated from European
progress.

Imaginative geography works by dramatizing geo-
 graphical distance and difference between what is close
and what is far away. The artificial lines between East and
West, between ‘us’ and ‘them’, are symbolic, and opposi-
tion is fabricated through the reproduction of a double
discursive system. The ‘other’ (Orient) is often imagined in
the negative as primitive, barbaric, and wild in contrast to
the European self, which is pictured as civilized, advanced,
rational, and modern. The Middle East and Islam, in
particular, have always represented a trauma in the
Western imagination as something that is religious, hys-
terical, strange, and dangerous. But imaginative geography
also has a material foundation in colonialism, imperialism,
and the Western interests in the Middle East. It works
through spatialization, turning distance into difference,
and producing two spaces by drawing a line between two
continents. It has real and very visible material con
sequences. In Derek Gregory’s words, ‘Orientalism pro-
duces the effect that it names’ (Gregory, 2004).

The configuration of power or force that Orientalism
imposes on the Orient is, according to Said, a three way
relationship between the Orient, the Orientalist, and
the Western consumer. First of all, the Orient is pene-
trated, converted, and produced as something outside the
boundaries of Europe or ‘our’ world. The Orient
is Orientalized and transformed from a free floating object
into a unity of knowledge. Second, it forces and directs
the Western reader to receive and accept the Western
constructed image as being the true Orient. Third, it
creates its own kind of truth in oriental studies, in a
closed system that operates as learned judgment.
In many ways, imaginative geography and the invention of the Orient stabilized the unity and homogeneity of 'the West' by placing Europe in a hegemonic and superior position in which European culture gained in strength and identity by contrasting itself to the Orient as a kind of surrogate or even underground self, as Said puts it. The manufactured self image of the West as the in verse of the Orient placed Europe in a historical position in which it could imagine itself to be progressive, civilized, and rational (see Table 1).

<table>
<thead>
<tr>
<th>Binaries constituting the Occident versus the Orient</th>
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<tbody>
<tr>
<td>Positive/presence</td>
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<tr>
<td>Masculine</td>
</tr>
<tr>
<td>Rational</td>
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<tr>
<td>Democratic</td>
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<td>Progressive</td>
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**Table 1** In Orientalism Said argued that the differences between the West (Occident) and East (Orient) were produced by (rather than producing) a dichotomy: a binary discourse constituting a specific imaginative geography of western superiority over 'The Orient' and its people. Thus, it was the emergence of this binary discourse that made it possible for 'the West' to imagine itself as rational, democratic and mature as opposed to the irrational, despotic and childlike character of 'Orientals'.


With its notion of imaginative geography, Orientalism still persists in disciplinary practices as well as being deeply embedded both in tourists' perceptions and performances of the Orient (historically as well as contemporary) and, more recently, in how the media, popular culture, and politics deal with the Muslim Middle East as part of the 'Global War on Terror' launched by the US after the attacks on New York and Pentagon in 2001. Thus, while Gregory's *Geo graphical Imagination*, in 1994, showed the persistence of Orientalism as a regime of knowledge, it continues to inform disciplinary work within geography (and other social sciences) *The Colonial Present*, in 2004, shows in great detail how Orientalist discourse informs how the peoples of the Middle East are being depicted and represented as potential enemies of the West, and how this discourse choreographs particular performances of dance, hostility, and warfare toward them.

Orientalism and Its ‘Others’

Said's book immediately got widespread attention when it was first published and, together with other work demonstrating how national and territorial identities were invented and constructed, his book became central for subsequent studies of how non European cultures and territories, such as India and the Caribbean, were constructed and produced by the Western imagination and by Western colonial, cultural, and scholarly institutions. Said's ideas have also been translated to many other empirical settings to trace how processes of 'othering' and struggles for superiority and exclusion have been part of the internal colonialization of Europe – for example, in tracing the construction of Ireland to English colonial imaginations of Ireland as a colonial backyard for the British Empire. Many of these studies have had a textual orientation focusing predominantly on the discursive construction of places and people and not so much on the institutionalized power regimes installed and performed through such discourses. An example of the latter is T. Mitchell's *Colonizing Egypt* which shows how Orientalist discourse was crucial to the colonial regime and its dealing with native inhabitants, organizations, and political struggles in Egypt in detail. Mitchell's work has also, together with Said's notion of imaginative geography, been a key source of inspiration for the work of human geographer Derek Gregory in his interrogations of geographical imaginations and colonial domination.

Within human geography, Derek Gregory has insistently shown how Orientalism still persists in disciplinary practices as well as being deeply embedded both in tourists' perceptions and performances of the Orient and in how the media, popular culture, and politics deal with the Muslim Middle East as part of the 'Global War on Terror' launched by the US after the attacks on New York and Pentagon in 2001. Thus, while Gregory's *Geographical Imagination*, in 1994, showed the persistence of Orientalism as a regime of knowledge, it continues to inform disciplinary work within geography (and other social sciences) *The Colonial Present*, in 2004, shows in great detail how Orientalist discourse informs how the peoples of the Middle East are being depicted and represented as potential enemies of the West, and how this discourse choreographs particular performances of dance, hostility, and warfare toward them.

Said's work is often seen as foundational to the group of writings in social and cultural studies often categorized as postcolonial theory. This rather heterogeneous group of writings comprising contributions from authors such as Fanon, Cesaire, Spivak, and Bhabha all point to the contingent yet crucial and power ridden role of identity formation in the relations between Western and non-Western cultures and people. What ties Said to this group of writers is, first and foremost, his insistence that the act of representation is not innocent but always contextual and political. Following this reading, cultural studies of postcolonialism inspired by Said have tended to pay more attention to difference in representation and the construction of identity, for example, by gendering accounts of the Orient by pointing out differences between female travelers to the Orient and Said's male subjects of the colonial apparatus. Similarly, the concept of Orientalism has also been extended to dealing with the 'internal' Orientalism at work in many Western societies following immigration flows and the emergence of non-Western diasporas in these countries. Similarly, some writers have pointed to the necessity of extending the focus from textual and representational aspects to the embodied, nonrepresentational, and habitual perform ances of 'practical' Orientalism in everyday life encounters and multiculturalism.

In addition to these writings, other studies have sought to trace out the construction of 'the West' within non-Western cultures. These studies of 'reverse' Orientalism or Occidentalism clearly draw their inspiration from Said; however, it must be emphasized that, in Said's perspective, Occidentalism and Orientalism cannot be conceived of as standing on an equal footing as it seems to be assumed in, for example, Buruma and Margalit's book *Occidentalism:*
The West in the Eye of Its Enemies. Abstracting the processes of representations of an ‘other’, from the networks of power which shape the colonial context for the production of such imaginative geographies reduces the postcolonial encounter to simply being cultural constructions, rather than elements in power struggles also over economic, political, and military hegemony and control.

Beyond Orientalism?

Many writers have sought to frame the problematic of Orientalism as a matter of moving ‘beyond Orientalism’. While it is certainly important to reflect on the power relations reproduced through the Orientalist regime of knowledge, in order to move beyond the exercise of colonial power relations in academia, everyday life, and politics, the dismissal of Orientalism should, however, not be premature.

From the outset, Said’s notion of Orientalism was welcomed as an important and necessary contribution to the study of Western colonial rule. However, it also gave rise to a number of friendly as well as not so friendly critiques. Among the latter was, not surprisingly, the response of the then (and now) leading Orientalist Bernard Lewis who was also the main target of Said’s own critique of Orientalism Now in his book. He and other conservative academics working within the disciplinary traditions of Orientalist studies, by and large, dismissed Said’s work and main points as overtly polemic, not empirical grounded, and based on an eclectic choice of sources neglecting vast parts of oriental studies. More sympathetic academics with a background in oriental studies pointed out that Said’s polemics and political engagement seemed to weaken his strictly analytical points. Said’s own response to that sort of critique has generally been that they avoid his point and that they exhibit a remarkable unwillingness to discuss the problems of Orientalism in the political or ethical or even epistemological contexts proper to it. Furthermore, he has argued that the points made in Orientalism should be read not only as an attack on Western culture but rather as a way of facilitating a fuller, more nuanced, inter pretation of canonical literary work; a task Said himself embarked on in his essays on Culture and Imperialism, in 1993, which in significant ways generalizes and nuances the analysis of Orientalism begun in his 1978 book. Culture and Imperialism includes dense and detailed in terpretations of the nineteenth and twentieth century European culture and literature, and in the book Said shows how Orientalism is not only an important back drop to cultural works with obvious Orientalist themes, such as Guiseppe Verdi’s opera Aida, but is also, in more subtle ways, in play in literary works of European high culture, such as Jane Austen’s Mansfield Park and in the formation of postcolonial literature in the twentieth century. In doing this, he shows how cultural and scien tific institutions of Europe continuously reproduce the superiority of ‘the West’ over its colonial hinterlands.

Some critics of Said have pointed to his slightly am bivalent relation to Foucault and post structuralism, trying to fuse the post structuralist Foucauldian discourse analysis with a humanist standpoint. Furthermore, it has been argued that Said does not leave much room for the subaltern to speak back, but leaves the voices of ‘the other’ to be represented by Western intellectuals, academics, and bureaucrats, and that his focus on pro ducts of high culture and textual representations tends to underplay the significance of everyday life. Said’s own response to these friendly critics has been, first, to emphasize his humanist standpoint, and the fact that he aims to integrate what he finds useful in Foucault’s work into this perspective, and second, to point out that the neglect of everyday practices and ‘oriental’ representations is not a matter of principle but rather empirical focus. In add ition to this, the publication of Culture and Imperialism surely makes up for the accused neglect of ‘other’ voices in Said’s earlier work, and demonstrates that the value of the concept of Orientalism precisely lies in acknowleding its persistent imprint on works of culture, everyday life, and politics.

Orientalism Today

A key idea in Orientalism is that this particular regime of knowledge seems persistently to be recycled and repro duced on a multiplicity of scales. Thus, both con temporary and historical studies of tourism and leisure have pointed out how images of the exotic and seductive Orient continually fuel the imagination of the tourists as well as the marketing material of the global tourist in dustry applying the Orientalist mode of representation not only to Said’s Middle East ‘Orient’ but also to the Far East, the Caribbean, and so on. More dismal representations of the Orient’s imaginative geography can be found in the worldviews underpinning the US led global war on terror. Thus it has been argued that media cov erage and US (and its allies) politics in the Middle East indicate a continual ‘colonial present’ in contemporary international relations. In 1993, the controversial Ameri can political scientist Samuel Huntington revived the idea of a ‘clash of civilizations’ as a potential heir to the ten sions of the Cold War. Huntington conceived of these civilizations as clearly (religiously rooted) cultural, or ganic entities with their own spatiality. The idea of an inevitable conflict, primarily between Muslim and West ern culture was, however, pronounced 3 years earlier in an essay by none other than Said’s fierce opponent Bernard Lewis on ‘The roots of Muslim rage’. Later, Lewis
developed his argument in *What Went Wrong? Western Impact and Middle Eastern Response*, in 2002. Here, he traces the roots of political Islam to the failed developments of science and culture during Ottoman rule. From a Saidian perspective, we may understand this postulate as yet another recycling of the idea of the Orient as an antithetical and internal homogeneous, irrational and potentially threatening ‘other’ to Western civilization. This is also the way Said himself addressed US politics toward the Middle East following 11 September 2001. Furthermore, Said’s argument has been that precisely in emphasizing Muslim virtue and invoking the idea of an Arab Muslim community political Islam is not challenging the superiority of the West but merely mirroring the basic features of Orientalism: The Orient and the Occident as two internally homogeneous entities standing in dichotomous relation to each other without being able to bridge, bond, or blend.

**Summary**

For a cultural critique, Said and his concept of Orientalism has had an enormous impact within social and cultural studies. This is particularly due to the light his work puts on the construction of reality rather than the mirroring of it and, following from this, his continuous insistence on the importance of the power relations and institutional bodies that produce our conception of social ‘reality’. In contrast to other proponents of constructionism, Said has insisted that the production of distorted conceptions, such as the ones Said treats in *Orientalism*, are a matter of moral, intellectual, and political choice. Here Said takes a more humanistic stance than most post structuralists, and in stead of limiting his analysis, he consistently attempts to reveal the dialectics between the author and the collective cultural apparatus in his work. Among his most influential notions (not least within the discipline of geography) has been that of ‘imaginative geography’, a discursive construct that produces and legitimates Western hegemony over ‘the Orient’. This idea has since been applied to numerous other historical and contemporary settings. While most of Said’s own work on Orientalism and the numerous studies inspired by his work have had a distinctly historical character, more contemporary work on the workings of Orientalism has begun to emerge. Thus, both the US led war on terror as well as current debates and struggles related to multiculturalism (especially in Europe) have provided room for new encounters in social science and geography with the notion of Orientalism. In this way, the concept of Orientalism as coined by Said in 1978 is, 30 years later, perhaps even more central and urgent in social analysis than ever before.

See also: Colonialism I; Colonialism II; Discourse Analysis; Humanism/Humanistic Geography; Multiculturalism; Postcolonialism/Postcolonial Geographies; Representation, Politics of.

**Further Reading**


Other/Otherness

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Glossary

Ethnocentrism The propensity of a group (in-group) to consider its members and values as superior to the members and values of other groups (out-groups).

Exotic Belonging to a faraway, foreign country or civilization and thus demarcated from the norms established in and by the West.

Exoticism A taste for exotic objects/places/people.

Exotism Characteristic of exotic things/places/people.

In-Group A group to which the speaker, the person spoken of, etc., belongs.

Other Member of a dominated out-group, whose identity is considered lacking and who may be subject to discrimination by the in-group.

Othering Transforming a difference into otherness so as to create an in-group and an out-group.

Otherness Characteristic of the Other.

Out-Group A group to which the speaker, person spoken of, etc., does not belong.

A New Geographical Issue

The questions of the other and otherness took the geographical world by storm beginning in the 1980s. Of course, geographers were interested in the elsewhere before that date. Homer enchanted us with his description of faraway, dreamlike lands; Herodotus was fascinated by Persian society; Hippocrates sought to explain societal diversity through the environment’s influence. Renaissance era explorers were amazed by the peculiarities of the civilizations they discovered. Starting with the end of the nineteenth century and the institutionalization of colonial geography in Europe, geographers sought to document the particularity of the physical environment and tropical societies.

All of these approaches seek to explain the spatial heterogeneity of societies. Although they claim to be more or less objective, they seek to demonstrate that Western civilization is superior to others and to explain why this is so.

Beginning with the development of radical geography and then feminist geography in the 1960s, geographers took an interest in minority groups who, here, distinguish themselves from the (white, male) norm. But this has more to do with denouncing systems of oppression than with inquiring into the otherness of these minority groups. It was not until the development of postmodern, postcolonial, and queer analyses that otherness became a geographical issue. In order to reach this point, geographers had to ask questions about the diversity of groups in terms of socio discursive construction rather than in terms of supposed objective difference, as had been done until then.

Definitions

Otherness is the result of a discursive process by which a dominant in group (‘Us’, the Self) constructs one or many dominated out groups (‘Them’, Other) by stigma tizing a difference – real or imagined – presented as a negation of identity and thus a motive for potential dis crimination. To state it natively, difference belongs to the realm of fact and otherness belongs to the realm of dis course. Thus, biological sex is difference, whereas gender is otherness.

The creation of otherness (also called ‘othering’) consists of applying a principle that allows individuals to be classified into two hierarchical groups: them and us. The out group is only coherent as a group as a result of its opposition to the in group and its lack of identity. This lack is based upon stereotypes that are largely stigma tizing and obviously simplistic. The in group constructs one or more others, setting itself apart and giving itself an identity. Otherness and identity are two inseparable sides of the same coin. The Other only exists relative to the Self, and vice versa.

The asymmetry in power relationships is central to the construction of otherness. Only the dominant group is in a position to impose the value of its particularity (its identity) and to devalue the particularity of others (their otherness) while imposing corresponding discriminatory measures. Therefore, if the Other of Man is Woman, and if the Other of the White Man is the Black Man, the opposite is not true. Dominated out groups are Others precisely because they are subject to the categories and practices of the dominant in group and because they are unable to prescribe their own norms. Out groups cease to be Others when they manage to escape the oppression forced upon them by in groups, in other words, when they succeed in conferring upon themselves a positive, autonomous identity (‘black is beautiful’), and in calling for discursive legitimacy and a policy to establish norms, eventually constructing and devaluing their own out groups.

The power at stake is discursive: it depends on the ability of a discourse to impose its categories. But this ability does not depend solely upon the logical power of
the discourse, and also upon the (political, social, and economic) power of those who speak it.

The West and Others

The ethnocentric bias that creates otherness is doubt lessly an anthropological constant. All groups tend to value themselves and distinguish themselves from others whom they devalue. For instance, according to Lévy Strauss, many autoethonyms (such as Inuit or Bantu) refer to ‘the people’ or to ‘the human beings’, considering more or less the out groups as nonhuman.

On the other hand, the forms of this ethnocentrism are varied and have been constructed by discourse and practice throughout history. Certain constructs are specific to certain societies (such as the heterosexual/homosexual dichotomy), and others seem universal (such as the male/female dichotomy). All societies, then, create the self and the other with their own set of categories. Western society, however, stands out for two reasons.

First, otherness and identity are based on binary logic. Western thought, whose logic has been attached to the principle of identity, the law of noncontradiction, and the law of the excluded middle since the time of Aristotle, has produced a number of binaries that oppose a positively connoted term and a negatively connoted term and thus lends itself well to the construction of the self and the other. Many such dichotomies exist: male/female, Homo/animal, believer/nonbeliever, healthy/ill, heterosexual/homosexual, White/Black, adult/child, etc.

Second, colonization allowed the West to export its values and have them acknowledged almost everywhere through more or less efficient processes of cultural integration. Western categories of identity and otherness, transmitted through the universalist claims of religion and science and forcibly imposed through colonization, have thus become pertinent far beyond the boundaries of the West.

Although this article only discusses Western constructions of otherness, this does not mean that other societies are unaware of the process. Rather, their particular categories of the self and the other have been less widely diffused than those of the West. Therefore, the system of races, although very recent and Western, has been imposed everywhere as a framework to conceive of human diversity, while the older caste system, belonging to the Indian world, has not.

Geographical Others

We, here, are the Self; they, there, are the Other. How and why do we think that those who are far away are radically different, to the point of being Others? How can other ness be essentially geographical?

In ancient Greece, the geographical form of otherness opposed Greek speakers and Barbarians. A Barbarian was a person who did not speak Greek and thus had not mastered the logos (and was not familiar with democracy). His culture was lacking and he belonged to another civilization. If this otherness comprises a geographical dimension, it is because cultural surfaces are divided into supposedly homogeneous spatial blocs (countries, zones, continents, etc.). This construction of otherness is based on a hierarchy of civilizations and requires the use of a universal criterion that allows their comparison. Language and political systems fulfilled this role until the advent of Christianity and Islam, and then religion replaced them to oppose Us (believers) and Them (nonbelievers). The Renaissance and the discovery of new civilizations, especially in America, brought the issue back to the forefront, paving the way for Westerners to search for the means to classify societies. The idea of universal progress, or a chronology that is valid for all societies, allows societies to be organized into a hierarchy from the most primitive (Hottentots, Kanaks, Bushmen, Pygmies, etc.) to the most civilized (Europeans). From the end of the nineteenth century onward, anthropology, ethnology, and geography (still poorly differentiated) sought to give scientific basis to a typology of peoples and societies, a typology that is more or less explicitly a hierarchy. Darwin’s theory of evolution offers a coherent scientific framework to explain species’ diversity through the diversity of the environments where natural selection takes place and through the relative isolation of these environments, which makes them favorable to the development of differentiated species. In order for it to ‘justify’ the otherness of man, Darwin’s theory needs only to be transposed to human societies, with the development of a hierarchy of different environments and societies and the implementation of certain differences as principles for exclusion. Therefore, Europe’s climate and natural resources would explain the fact that (one of?) the world’s most advanced societies developed there, while the extreme climates and lack (or abundance, that works equally as well) of natural resources characteristic of all other parts of the world would lock humanity there into a prior and primitive evolutionary stage.

Obviously, thinking of civilizations as different like Others justifies the supremacy of Ours and legitimizes its propensity to dominate them. The Greeks must go to war with the Persians, believers with nonbelievers, Europeans with indigenous peoples. At worst, this is extermination or enslavement; at best, it spreads the Good Word, civilization, and progress.

The second geographical form of otherness does not oppose civilizations. Rather, it opposes civilized (meaning fully human) humanity and humanity still out in nature (or almost animal). It is the Savage, etymologically the ‘man of the forest’, opposed with man from cities and
fields. This figure stigmatizes the Man who has not (yet) left his natural state. Folklore, if not European reality, is overflowing with these Woodsmen. Hairy and violent, they threaten villagers (especially the women of the village). But the figure of the Savage imposes itself as the descriptor of those who would constitute a lesser form of humanity during the Renaissance and the great explorations of Africa and, especially, America. It is thought that they go naked, cannot talk, engage in cannibalism, etc. They are even more worthy of extermination than the Barbarians because their ability to integrate into Humanity is called into question. This form of otherness has a spatial component because civilization is seen as being diffused from a central location (Jerusalem, the city, Europe), and savages are in faraway zones (Australia) or the interstices (our forests).

Carving humanity into races and the world into continents is the third and most recent template that Europe has used to create a spatial form of otherness. This template still uses the figures of the barbarian and the savage but puts a new criterion into place that allows us, White Men, to be opposed to them, Men of Color. Skin color and certain secondary signs that physical anthropology has helped to identify are used to distinguish White Men, the 'superior' phase of humanity, from 'inferior' races. Each race has a corresponding continent, a natural birthplace from which it can flourish. The anthropological fiction of races and the geographical fiction of continents allow these categories to be reified and naturalized by giving them a supposedly geographical legitimacy and a false sense of evidence ('it's obvious'). They feed off of each other to justify colonial policy and the domination of one race and continent over others. Looking beyond the many races, it is actually a binary form of otherness: the opposition of colonist/native or White/of Color.

Orientalism, as analyzed by E. Said, encompasses all of these components. The Oriental is characterized by his barbarity, his savageness, and his race. The Orient is the geographical fiction that gives him geographical basis. Orientalism is the discourse through which the West constructs the otherness of the Turks, Moroccans, Persians, Indians, Japanese, etc., all reduced to the same stigmatizing stereotypes, and thus gives itself an identity in opposition to them. The West thereby gains the right, if not the duty, to dominate the Orient, to save it from despotism, superstitious practices, and confirm the dominant group's sense of superiority. The ghetto creates otherness. In addition to 'pure' forms of ghettos created by law, there exist less clearly defined forms of segregation that are maintained by the land market and/or the symbolic or material violence of the dominant groups. There again, the in group and the out group derive part of their identity and their otherness from the more or less stigmatizing space prescribed to them (e.g., the inner city or the suburbs).

On a smaller scale, the constructs confining the insane or the condemned in asylums and prisons fit the same logic. Their confinement sets them apart, worsens their condition, and confirms their particularity. They derive part of their identity—or rather, their otherness—from their prison. The domestic confinement of women can be analyzed in the same terms: by forbidding them access to public spaces and reducing the woman to her domestic role, patriarchal society creates and reproduces gender inequality. Female otherness is created not only by discourse but also by spatial practices and constructs.

Territorial constructions also fit the same logic, except that their effect is less to separate preexisting groups than to confer geographical identities on one another, creating an in group of those on this side of the border and an out group of those on the other side. This process works on all scales from gangs who occupy different urban neighborhoods to nations separated by interstate borders. A material and symbolic affectation is added to linguistic,
religious, ethnic, and other oppositions: people think that they owe their identity and superiority to those of their territory, and they ascribe to others the faults of their respective territories. B. Anderson has shown how discursive and spatial processes participate in the construction of national, imagined communities and, thus, in the construction of figures of otherness against which these communities define themselves.

Exotism

Exotism constitutes the most directly geographical form of otherness, in that it opposes the abnormality of else where with the normality of here. Exotism is not, of course, an attribute of the exotic place, object, or person. It is the result of a discursive process that consists of superimposing symbolic and material distance, mixing the foreign and the foreigner, and it only makes sense from one, exterior, point of view. As a construction of otherness, exotism is characterized by the asymmetry of its power relationships: it is Westerners who, during the phases of exploration and then colonization, defined elsewhere and delimited exotism. The word exotic has become a synonym of tropical or even colonial. It is out of the question to describe Europe as exotic until minds and words are decolonized.

Exotism is characterized by giving value to the other, contrary to ethnocentric bias. From Homer’s fascination with faraway, more or less imaginary peoples to J. J. Rousseau’s nostalgia for the noble savage, from the Romantic Orientalism of nineteenth century writers and painters to the primitivism of a Gauguin painting, from curiosity for ethnic tourism to the recognition of specific rights for first peoples, the West celebrates the Other and even proclaims its superiority through multiple forms (that are not always unambiguous).

The taste for exotica was established in the eighteenth century when exotic turquerie, chinoiserie, japonaiserie, etc., came into fashion. It became commonplace in the nineteenth century with colonization and spread to the tropical world. Up to that point, it was essentially charcterized by the import of exotic products, by their pastiches, and by travel books and then colonial literature. Only certain privileged persons, well to do aristocrats or explorers, traveled to experience the pleasures of exotic lands. The development of mass tourism in the 1960s leveled the playing field and made their exoticism a major resource for many countries.

According to V. Segalen, exotism is the pleasure of a sensation that, worn down by habit, is excited by novelty. But Segalen notes that from the end of the nineteenth century onward, everything has been seen, and radical exotism – the exotism experienced by the first explorers – is dead. In fact, T. Todorov demonstrates that it is paradoxical to value or desire something that is unknown. Exoticism consists more of showing enthusiasm for what has already been seen, said, or painted: what has been marked elsewhere as picturesque and been reproduced as such. The otherness of the exotic is not the brute and brutal otherness of the first encounter; it is the bland otherness, staged and transformed into merchandise, of the colonial world offered up as a spectacle, as in orientalist paintings, human zoo – and exotic dance. Exoticism is less the pleasure of confronting otherness than the pleasure of having the satisfaction of experiencing the sight of a reassuring version of this confrontation, true to our fantasies, that comforts us in our identity and superiority.

Conclusion

Geography is an remarkably effective producer of otherness. On the one hand, certain spatial patterns are very efficient, albeit discrete, in constructing and maintaining alterity. On the other hand, geography, like physical anthropology or history, has in the past proposed and continues to provide tales that form the basis of discursive constructions of a number of expressions of otherness. Yet these tales, rather than being taken for what they truly are – that is to say, fictions delegitimized by their links to colonial regimes – have acquired a veneer of inevitability by grounding themselves in ap parent scientific rationality.

For instance, one of the most common arguments against Turkey’s recent claim to being integrated into the European Union is that this country does not belong to the European continent. Legitimized by the so called evidence of (physical) geography, this tautological statement seems not refutable, unless one acknowledges that continents are geographical fictions produced and used by colonial ideology.

Since alterity is consubstantial to relations of power and processes of oppression, geographers concerned by these must take personal responsibility in identifying and studying the spatial patterns that ground these. A critical and reflexive perspective thus necessarily implies identifying and deconstructing that various more or less learned and so called scientific geographical representations that serve as discursive bedrock for oppression.

See also: Cultural Politics; Ghettoes; Postcolonialism/Postcolonial Geographies; Psychoanalytic Theory/Psychoanalytic Geographies; Race; Segregation; Self-Other.

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Introduction

Studying where things are and why they are there is at the heart of geographic analysis. Maps serve as one primary tool to collect and analyze geographic information. Maps are generally organized collections of geographic features that emphasize location. Although we do not think of daily map use as an analytical process, the cartographer certainly was aware of that and wanted to design the map so that the information could be read by the intended user. If we look at a typical road map or online location service map (Google/Yahoo/MapQuest) we may find that cities are represented by points of varying size depending on their population. Similarly, roads may be found represented as lines of varying thickness depending on the type of road; interstate, state, or local route. Looking at the map we can easily figure out where cities and roads are located, which roads are connected to each other, and where a certain road leads to and from. Thus, through simultaneous display of very different real world features, for example, roads and cities, a good map delivers a whole that is far more than its constituent parts. This is the primary objective of overlay analysis.

Historically this more analytical aspect of map use followed naturally from geography’s pre 1800s emphasis on exploration and mapping to document discoveries. With access to mapped information on vegetation, geology, climate, and cultures, scholars such as Alexander von Humboldt and Karl Ritter followed in the footsteps of Bernhard Varenius and started to systematize and look at the world as a whole, trying to integrate the separate and specialized studies of nature, humans, and society. During this ‘classical period’ of geography, spatial location became essential to compare and suggest relations between geographic phenomena, for example, the relationship between latitude, elevation, and vegetation portrayed in Berghaus’ Physicalischer Schul Atlas. During the next 100 years or so there were several efforts at map based synthesis of geographic elements, albeit separated into either natural or social sciences, for example, Herbertson’s work on ‘The major natural regions: An essay in systematic geography’.

One of the first documented and analytically tractable overlay processes was carried out during the 1930s by Homer Hoyt at the Federal Housing Administration as part of the administration’s effort to “guide the development of housing and the creation of a sound mortgage market” (Hoyt, 1939). The study ‘The structure and growth of residential neighborhoods in American cities’ used detailed, city block maps of characteristics considered indicative of housing conditions such as average rental, percentage of owner occupied units, race, and so forth. The report demonstrated with a collection of map transparencies how these factors can be used to produce a spatial summary of factors that indicate, for example, poor housing conditions. Figure 1 illustrates an overlay of four separate maps. Each map contains areas selected on the basis of some characteristics that were held to be indicative of poor housing conditions at the time. The four characteristics in this overlay are: population other than white exceed 60%, more than 25% of the buildings need major repairs, the majority of houses are 35 years or older, average rent is less than $20. The power of this new geographic technique is evidenced by the many indications that it was used up until the 1970s as a tool for lending institutions to ‘redline’ areas, and then to implement discriminatory practices by avoiding mortgage loans to homeowners in those neighborhoods.

Obviously many powerful technologies can be used for both good and bad purposes, and the overlay technique is no exception. With the arrival of computers in the 1950s and 1960s, the overlay process could turn into a digital process where data layers could be numerically integrated, offering a wider array of possibilities, both in terms of the amount of data that can be analyzed and the different logics that could be applied to the integration. During this period the landscape architect Ian McHarg, published his book ‘Design with nature’ that brought back a more holistic view on the overlay analysis, in line with the work of Humboldt and Ritter. He proposed how
carefully designed overlays could be used to find optimal solutions for future development that balances natural and social values. The technical implementation was still based on transparent map sheets but was soon to be followed by computer implementations where criteria and enumeration rules could be accurately defined and calculated. This strand of research has ultimately led to the development of contemporary, geographic

Figure 1 Overlay of factors indicative of poor housing in Richmond, Virginia, following the study by Hoyt (1939). The separate factors add a shade of gray and several co-occurring factors are perceived as darker shades. From Hoyt, H. (1939). The structure and growth of residential neighborhoods in American cities. Washington, DC: U.S. Federal Housing Administration.
information system (GIS) based spatial decision support systems.

**General Procedure**

Generally the overlay process uses a spatially indexed collection of different types of information that is then interpreted based on a question at hand. In its simplest form the overlay operation is merely a stack of map layers that show where things co-occur, similar to the housing condition example described previously. In its most advanced form the overlay analysis is able to express causal relationships where temporal sequences also can be an integral part. Regardless of technical implementation – either undertaken as a manual overlay of transparent map sheets or through digital overlay of spatial data, a basic requirement is a common spatial frame of reference and accurate geocoding.

In the previous example of Richmond housing conditions, it should be obvious that each layer needs to be produced at the same scale. Putting a world map on top of the Richmond map would not make much sense. Moreover, since we are dealing with map sheets there are issues related to the projection of a spherical Earth onto a flat plane. We cannot take a world population density map in the Mercator projection and overlay that with a birth rate map in the Robinson projection. Even at smaller scales a common projection is necessary to guarantee an accurate match between the layers. Lastly, each layer needs to have a high level of geocoding accuracy, so that mismatches because of spatial errors are minimized. This issue can be demonstrated by the Richmond map overlay where we can see at a closer inspection that the separate layers do not line up perfectly with each other, creating small ‘sliver’ polygons that are an artifact caused by the manual digitizing of separate data sources (Figure 2).

This problem can be mitigated by using accurate cross checking techniques during data entry or through postoverlay processing that removes tiny polygons below a specified threshold. The occurrence of sliver polygons may also be due to difficulties in accurately outlining objects with inherently vague boundaries. In these cases the removal of sliver polygons is probably not an appropriate practice since it removes areas that may be contested or otherwise uncertain.

**GIS Implementation**

Having illustrated the manual overlay process with transparent map sheets above, we will now look at the digital implementation of overlay analysis, typically performed in a GIS. Digital map data is commonly represented in a raster or vector data set. These are usually geocoded at a certain scale and resolution but can be modified numerically so that data collected at different scales can be analyzed together. It is important to note here that although it is technically possible to overlay data produced at vastly different scales, this is typically not recommended.

In Figure 3, two data sets have been prepared for overlay, one representing an evaluation of flood risk and the other showing census block enumeration units. In the first geometric stage, the two maps are put on top of each
other to form intersecting areas. The associated table illustrates how these new areas, N1–N5, are made up of combinations of the original areas and subareas. Information associated with the original areas can now be associated with the newly formed areas as well.

With raster data this geometric stage is really resolved in the preparatory geocoding stage where not just scale and projection is determined but also the pixel resolution is set for the data. Once that is completed, each raster pixel is its own spatial unit and all pixels should be perfectly aligned with the pixels in the other data layers. Again, when the geometric overlay is performed all spatially corresponding pixels will form a new pixel that can be associated with information from the source layers (Figure 4).

Analysis Alternatives

Once the geometric stage is complete various forms of analyses can be performed on the information that is associated with each new spatial unit. From the most simple to more complex tasks we can separate between descriptive, deductive, and inductive overlay analysis.

Descriptive Overlay

Many times the spatial combination of layers is of most interest, such as if and to what extent certain characteristics intersect or overlap in space. This is simply a description of the results from the first geometric stage. Figure 5 illustrates three examples of such questions that can be answered by descriptive overlay analysis.

Figure 5a illustrates a situation where the user is interested in whether a certain neighborhood outlined by block 1 is at risk for flooding. In this case the flood risk area does not overlap with the block so it should be out of the risk area. This is an example of a simple topological query where focus is on the spatial relationship between two features. Another common task is to single out areas with certain combined characteristics. The example in Figure 5b shows how a subarea within block 3 and also

<table>
<thead>
<tr>
<th>Flood risk</th>
<th>Census block</th>
<th>New area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part of no risk</td>
<td>1</td>
<td>N1</td>
</tr>
<tr>
<td>Part of no risk</td>
<td>Part of 2</td>
<td>N2</td>
</tr>
<tr>
<td>Part of no risk</td>
<td>Part of 3</td>
<td>N3</td>
</tr>
<tr>
<td>Part of risk</td>
<td>Part of 2</td>
<td>N4</td>
</tr>
<tr>
<td>Part of risk</td>
<td>Part of 3</td>
<td>N5</td>
</tr>
</tbody>
</table>

Figure 3 The geometric stage of an overlay produces new areas that are a combination of the source layers.

Figure 4 With raster data a common resolution and extent is usually set for each data layer before the actual overlay. Therefore no new areas are created in the geometric stage of the overlay.
within the flood risk area is identified using a Boolean query. In the final example in Figure 5c we use the overlay to extract information about the demographics of areas affected by flood risk. In this case we use a topological relationship between objects in one layer to find attribute information for overlapping areas in another layer.

The last type of spatial query in Figure 5c can also be used to effectively summarize attribute information for the whole area in a contingency matrix. In this matrix we can collect some type of attribute summary, such as minimum, maximum, mean, or sum, for each combination, or contingency, of the combined spatial units.

The contingency matrix summary is a general and important descriptive tool that allows for some specific uses. For example, Figure 6 illustrates a raster version of the flooding and block data after overlay. The associated contingency matrix summarizes the number of pixels for each contingency. There are, for example, 4 pixels in census block 1 and they are all outside the flood risk area. Block two on the other hand is split so that half, 5 pixels, are in the ‘no risk’ area and the other half, 5 pixels, are in the ‘risk’ area. Using the spatial reference information about the layers the number of pixels can easily be recast into spatial area units so that an areal estimate is given in the contingency matrix instead of raw pixel counts. This technique is also commonly used to produce spatial summaries of combined factors, or for looking at changes over time in an area. For example, making an overlay with data from different times, t1 and t2, will produce a change image and the associated contingency matrix can now be termed a change matrix (Figure 7).

In the change image, each pixel can hold information on what change happened from time t1 to t2 and the change matrix may then summarize the amount of change from one category to another, so that it is possible to say that, for example, 3 pixels remained in category A but 1 pixel changed from A to B, 3 pixels changed from B to C, and 1 pixel changed from C to B. Again, applications often translate this into area units so the outcome could be interpreted as, for example, 15 sq mi changed from agricultural to residential land use, given that each pixel is 5 sq mi, B is agriculture and C is residential. The major diagonal has a certain meaning since all those cells summarize areas of no change. Applications of this technique can be found in various land use, population,
and climate change analyses. A variation of this technique is also a standard procedure to make accuracy assessment of map and satellite data in which one layer is the map estimate and another layer contains a carefully measured reference. The contingency matrix then is interpreted as an error matrix where off diagonal elements are indications of map error.

### Deductive Overlay

The Boolean overlay illustrated in Figure 5b above is actually a simple example of a larger group of deductive analyses that can be performed as an overlay process. Deductive reasoning is a type of inference where a conclusion is reached based on a set of facts and an inference rule or logic to interpret those facts. We could, for example, say that all residential areas within a flood prone area are at a certain type of risk and should be selected for emergency planning. This translates into a Boolean logic: if a location in layer 1 is ‘residential’ and the same location in layer 2 is ‘flood risk’ then that location needs ‘emergency planning’, and the logic will ultimately select the area highlighted in Figure 5b. It is easy to see that we could include more than two layers, or criteria, to determine the outcome, and such spatial multicriteria overlay processes came to be almost synonymous with overlay analysis in early GIS applications. They were commonly used as a method to find, for example, an appropriate location for an activity using rules that followed expert knowledge or opinions. Figure 8 illustrates how a simple suitability analysis can be performed based on two criteria found in layers 1 (census block demography) and 2 (flood risk). In the first layer the three census blocks are assigned values between 0 and 10 to indicate the degree of suitability based on, for example, the population density in each block. In the second layer the flood risk is rated in a similar way as to its suitability for site selection. A summary operation is then performed based on the geometric overlay of the value layers. This produces a resulting site suitability map where the highest value could correspond to the most suitable location.

There are obviously many ways that factors can be summarized and the choice of what logic to follow all depends on the data and question at hand. One type of logic is essentially to use a dominance rule on the data so that the most frequent, largest, or smallest value is preserved. Examples of some dominance rules are given in Figure 9 for binary and interval data.

The maximum operation applied to binary data can also be thought of as a set union operation and a binary minimum operation would be equal to a set intersection operation (Figure 9, left). This logic is sometimes referred to as exclusionary screening and depending on how data is coded these operations make possible successive binary overlays with, for example, binary ratings of disqualifying factors to remove areas unsuitable for any further analysis. We can think of the Richmond housing condition study in terms of a manual version of the binary minimum operation to single out the poorest housing areas (Figure 1). With ordinal, interval, or ratio numerical data it is possible to single out the highest or lowest values in any of the layers. This may be a suitable logic if any of the several independent factors have a direct influence on the outcome.

A second type of logic uses some form of arithmetic to summarize the separate layers into a result. Figure 8 above was one example of this logic where a simple sum was used to add factor suitability scores. Basically any standard arithmetic operation such as addition, subtraction, division, and multiplication, can be performed as an overlay operation given that the level of the measurement in the data supports the operation, see examples in Figure 10, left. It would, for example, not be appropriate to divide one ordinal number with another ordinal number. Furthermore, division and multiplication rules are very sensitive to zero values and multiplication tends to magnify combinations of moderately high values. For example, while 4 + 4 and 7 + 1 give the same result for a simple sum, 4 * 4 is more than twice as much as 7 * 1.

Following this line of reasoning we could, for example, modify the Richmond housing condition analysis so that each layer holds degrees of how, for example, average rent
or age of buildings indicates poor housing. Instead of using just binary classes such as average rent more or less than $15 per month, we can use an ordinal rating of several classes, for example, using the highest rating for the lowest rents and the lowest rating for the highest rents. If all layers employ the same rating scale, for example, 1, 2, and 3 to denote slight, moderate, and severe (poor conditions), it is reasonable to use some form of summary arithmetic to evaluate the total severity of the housing conditions as a combined indicator of poor housing. This was also the logic that Ian McHarg introduced with his example evaluations of land suitability. In his case it was implemented manually by creating transparent overlays with different shades of gray representing grades of suitability. Put together the stack of transparencies showed the added result of different factors as darker or lighter areas. In a digital environment it is obviously easier to control and manipulate the aggregation of ratings through the chosen arithmetic and more refined versions of such arithmetic overlays as averages and weighted sums. These weighted summaries often preserve the original measurement scale in the result as opposed to a simple sum or product. This has the added benefit of being more intuitive so that any number of factors scored, for example, 1–3 will render a combined rating in the same range 1–3, see examples in Figure 10 right.

While a mean operation simply gives equal importance to each layer, the weighted sum gives users an opportunity to assign different importance to the separate layers. In the Richmond housing condition analysis we could argue that average rent is a more important indicator of poor housing than race, and consequently give the rent factor a higher weight than the race factor. These methods and their successive refinements are commonly

Figure 8  A simple multicriteria overlay analysis using two layers with census information (Layer 1, categories A, B, and C) and flood risk data (Layer 2, categories 1 and 2). Value tables translate factor categories into suitability ratings (0–10) that are overlaid and summed together to produce a summary suitability score for each location.

Figure 9  Example of dominance overlay rules applied to binary (left) and interval (right) data.
referred to as multicriteria evaluation and as much as they are commonly undertaken in GIS overlay analysis they have also been criticized for being just a weighting and rating game. The most important issue is probably that of rescaling original factors, for example, monthly rent and building age, into standardized ratings, for example, 0–10, to indicate poor housing. Is 10 twice as bad as 5? Is 5 building age, into standardized ratings, for example, 0–10, rescaling original factors, for example, monthly rent and rating game. The most important issue is probably that of have also been criticized for being just a weighting and evaluation process. This can be achieved through the practice of public participation GIS. Recent developments have also suggested that the use of fuzzy set based measures together with a general logic for ordered weighted averages can help with the rescaling of factors in a way that makes aggregation effects more transparent to the user.

Inductive Overlay

A third major type of overlay analysis is to use the geometrically combined overlay as a starting point for more exploratory and inductive tasks. Once the geometric stage is completed we can consider the new map as area observation for a multivariate data set. For each area we can have a large number of attribute values such as population density, type of land use, flood risk, etc. Using this information we can look for relationships in the data – for example, to see if it is possible to build a regression model based on the attributes so that one dependent attribute can be found or estimated using one or more other independent attributes. If we had data on some instances of poor housing conditions in the Richmond data, we could use those observations as regression data points to build a formula for the weighted sum of factors following standard univariate or multivariate regression techniques. Recently, geographically weighted regression has demonstrated more refined versions of that same idea. Exploratory spatial data analysis is another example where inductive overlay analysis can be an integral part.

Application Summary

As a descriptive tool, overlay is an important part of most digital mapping applications since it enables users to put different data layers on top of each other to visually evaluate the totality of a place. The overlay process is also very often a starting point for many types of quantitative analyses and it is usually found as just one component of more elaborate spatial analysis tasks performed in a GIS. The analytical framework of map algebra, introduced by Dana Tomlin, integrates operations on zones and neighborhoods such as creating buffers around roads or sites with overlay analysis to evaluate spatial adjacency, inter action, and other core geographic questions.

Further Readings


Oxbridge Geographies

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Introduction

The geography departments of Oxford and Cambridge have distinguished histories. It was to both universities that the Royal Geographical Society (RGS) turned in the late nineteenth century when it sought to secure the institutionalization of the discipline. This story is well known, and often told in terms that imply a prominent degree of Oxbridge exceptionalism: that geographers at the two universities led where others subsequently followed. In reality, the development of geography at each place was more uneven, and for long more vulnerable, than this portrayal suggests. It has also often been along divergent paths, so that it is appropriate to speak, in the plural, of ‘Oxbridge geographies’.

Recent scholarship highlights the significance of contests for resources and the contingency of wider networks of support, from within and beyond institutions, in shaping the evolution of academic disciplines. This article approaches its subjects from this viewpoint. It also highlights some of the similarities between the two universities. For example, the provision of college based teaching systems has lent quite distinctive characteristics to student experiences of ‘Oxbridge’, a term which emerged in the twentieth century to distinguish the two old English universities from the host of later municipal, Redbrick, and 1960s campuses.

Establishment

The RGS Initiative

Since the end of the sixteenth century, there had been a continuous tradition of geographical teaching at both Oxford and Cambridge. This occurred in various guises, notably as ‘descriptive’ and ‘mathematical geography’, the roots respectively of regional geography and of cartography. One of its best known exponents was the sixteenth century Christ Church writer Richard Hakluyt. By the late nineteenth century, as the universities moved away from their essentially humanist conceptions of education and the curriculum, geography existed as an adjunct to the historical disciplines of classics, geology, and history itself. Assumptions that it was somehow institutionally secure because of associations with imperialism may hold for mainland Europe. They are not true for Britain where geography was poorly taught in schools, usually by non-specialists, and lacked an independent presence in the universities, a necessary condition for the development and maintenance of an academic discipline in the way in which that concept is now been understood.

This was the context in which the Council of the RGS commissioned a report on geographical education from Scott Kelbie, its secretary. It was published in 1886. Kelbie observed that there were at least 45 chairs of geography in continental universities. His report paved the way for successful proposals that the RGS help fund the establishment of a readership in geography at Oxford and a lectureship at Cambridge. This occurred in 1887 and 1888, respectively, although any guarantee of disciplinary continuity was a long time in the making. Lectures in geography continued to contribute only toward papers in other subjects. Specific diplomas in the subject were not first awarded in Oxford until 1901 and in Cambridge even later, in 1907.

Although Oxford gave the title of professor to A. J. Herbertson, in 1910, it was a personal chair that died with him in 1915. A permanent appointment at this level was not made until 1912, one year after the move in Cambridge. This gradual cementing of disciplinary reproductive capacity reflected the rapid growth in the popularity of the subject in the meantime in schools, driven in part by its practical and field based focus. Membership of the Geographical Association (GA), established to support geography in the schools, rose from around 100 at the turn of the century to over 4000 by 1921. Yet these figures disguise the effort that went in to achieving a hard won place for geography at university level.

Imaginative Advocacy

In the universities, teachers of geography faced ongoing contests for respectability when, as now, a clear disciplinary rationale could be difficult to articulate with conviction. In these early years, most teachers had degrees in subjects with long established cachet, such as history, law, geology, or chemistry. Geography could only make a name for itself through imaginative advocacy. Two advocates bestrode the stage, both holders of the Oxford Readership. One was Herbertson, the second reader, the other was the first occupant of that position, Halford Mackinder. While Mackinder is nowadays best known for a range of educational and political attainments probably not matched by a geographer since, the quiet and persistent groundwork laid by Herbertson was also of great importance in securing a wider profile for an emergent discipline.
The New Geography

Mackinder came to notice promulgating what he called ‘the new geography’ in lectures for the Oxford extension movement, crystallized in a famous paper entitled ‘On the scope and methods of geography’ which he delivered to the RGS in 1887. Herbertson’s name would be particularly associated with a paper he published in 1905 called ‘The natural regions of the world’. What then was this new geography?

In the 1887 paper, Mackinder posed a rhetorical question about geography: “Can it become a discipline instead of a mere body of information?” He urged drawing together the then common division between physical and political geographies into one whole, defined as “the science whose main function is to trace the interaction of man in society, and so much of his environment as varies locally.” Mackinder’s geography is usually remembered for his defining work in geopolitics, with its imperial and nationalistic backdrop. But he was also driven by a humane desire to understand human life in relation to the environment. Herbertson picked up this theme, arguing in 1905 that, “Until we have a systematic classification of environments it is obviously impossible to study with any precision the effect upon the organism,” in the sense of “a right understanding of social, political and historical problems.”

Both Mackinder and Herbertson knew the importance of carrying the new geography into schools through the agency of trained teachers. Mackinder was instrumental in setting up the GA, the founding meeting of which took place in his college, Christ Church, in 1893. Herbertson was its honorary secretary from 1900 to 1915. Their work in codifying geography at both university and school levels came together in their vacation courses for teachers held at the Oxford School of Geography.

Consolidation

Tripos and Honours

If Oxford had outshone Cambridge geography before World War I, the situation was reversed thereafter, not least as the consequence of Oxford’s long reliance on two individuals. After Herbertson’s death, the readership was not filled until 1919, and despite the desire of the RGS to see an Honours School established in Oxford this did not happen for some time. It did occur in Cambridge where a two part Tripos was introduced, also in 1919. With the requirements of the Tripos, and greatly increased numbers of students post war (113 attending in 1919–20), the scale of teaching changed dramatically, and the first Cambridge degrees in geography were awarded in 1921. This was at the same time as Leeds, and a little later than Liverpool, Aberystwyth, and London.

The focus of the Cambridge Tripos was a mixture of systematic and regional geography. The six Part I compulsory papers were in physical geography; political and economic geography; cartography; history of geography; anthropogeography; and regional geography. The five Part II papers, of which a candidate was required to offer either two or three, were in surveying; geomorphology; oceanography and climatology; historical and political geography; and economic and commercial geography.

Oxford, meanwhile, not only retained a more regional focus, but was also stuck with its Diploma alone: and in 1930, only seven of these were awarded. Because applicants for university posts were by then required to have Honours degrees, this outlet for Oxford trained geographers had, in contrast to earlier years, dried up. After Honours had been introduced at Durham in 1930, only Oxford and St. Andrews among British universities teaching geography were left without the equivalent of an Honours School.

Oxford Ascendent

By 1920, 12 out of 35 recognized teachers of geography in British universities or university colleges were former students of the Oxford School, which had both the profile and, through this, the better students. Consequently, the contrast between the early history of geography at Oxford and in Cambridge is marked. Oxford’s success was, though, largely dependent on Mackinder and Herbertson. Mackinder retained the readership until 1905, while also being the principal of the new university extension college at Reading in 1892, a founding lecturer at the London School of Economics (LSE) in 1895, and its director in 1903. Herbertson, in the years before his death in 1915, was delivering between two thirds and three quarters of all the Oxford lectures, in contrast to the situation in Cambridge where, from 1908, such responsibilities were more evenly spread between three university lecturers.

New Chairs

The Oxford situation was rectified in 1931, the same year that Frank Debenham became the first professor of geography at Cambridge. In 1932, Kenneth Mason became the first holder of the new chair at Oxford. Both appointments reflected the lingering influence of the RGS, whose pertinacity, through ongoing representation and provision of funding, had ensured that the subject had survived in both universities. Even so, this was after the establishment of redbrick geography, the first chair having been set up at Liverpool in 1917.

Mason was born in England but worked for much of his career for the survey of India and had explored and climbed in the Himalayas. Debenham was an Australian polar scientist, who had gone south with Scott on the Terra Nova expedition of 1910–13. Debenham had been
appointed to a Cambridge lectureship in 1919, and held a BA in arts and a BSc in geology from Sydney, and a Cambridge BA and MA. Mason, by contrast, was trained at the Royal Military Academy, Woolwich, and the School of Military Engineering, Chatham, and had no previous university experience. Perhaps not surprisingly, he encountered ongoing difficulties in the reception accorded to geography in Oxford.

By the late 1930s, however, Mason had done much to restore its position in the university, despite not being an obvious choice for a department seeking to reclaim its academic credentials. In 1939, there were 39 Oxford Honours finalists. Cambridge, meanwhile, was gaining a considerable reputation for both geography and polar research, thanks to Debenham, who was also instrumental in the establishment of the Scott Polar Research Institute, which opened in 1934. However, it was during World War II that both departments undertook work that has since been seen as ‘a monument in geographical writing’. This was the production of the Naval Intelligence Handbooks for the Admiralty.

**Naval Intelligence Handbooks**

Between 1941 and 1946, two teams of authors based in Oxford and Cambridge produced 31 regional titles (in 58 volumes), a massive undertaking to supply up to date accounts of countries that naval ships were likely to visit. In 1940, the Director of Naval Intelligence had asked Mason and his colleagues in Oxford to prepare a number of reports of immediate significance for the conduct of the war (such as the Norway landings). The Handbook team in Oxford was also led by Mason, and included most lecturing staff in geography, as well as contributors from other disciplines. With its expertise in regional geography, and Mason’s willingness, the task was largely handled ‘in house’. In Cambridge, Debenham was not prepared to release his colleagues for such work, and it was instead coordinated by an editor in chief, H. C. Darby. Darby assembled a more institutionally dispersed team, including several geographers from the London colleges.

It is tempting to see the compendious handbooks as the acme of an ‘Oxbridge geography’ as it had developed over the preceding 60 years. The description may not be inaccurate for Oxford. It seems less so for Cambridge, which was establishing a reputation for field based studies in both physical and historical geography. Two examples are James Steers' *The Coastline of England and Wales*, first published in 1946, and Darby’s *The Draining of the Fens*. Steers had been awarded a first in the first examination for Part II of the Cambridge Tripos in 1921, and in 1949 was to become professor and head at Cambridge. In 1966, he was in turn succeeded by Darby, who had been awarded the first Cambridge geography PhD, for his Fenland work, in 1931.

**Diverging Fortunes**

**Post-War Oxford**

The history of Oxford geography after World War II is not writ large like that of Cambridge. Its faculty mostly lacked the imaginative geographers that Cambridge had fostered into legend during the next 30 years. It had relinquished to the other place the torch of discip•

linary reproduction that it had carried after the turn of the century. Mason’s entry in the *Oxford Dictionary of National Biography* observes that the staff that he appointed, during his tenure of the Oxford chair, which lasted until 1953, were almost wholly ‘products of the Oxford school with little commitment to research and publication’.

Oxford did nonetheless produce graduates who went on to make notable careers in the discipline, although this was usually via doctoral research elsewhere. For example, Chauncy D. Harris, who became an urban geographer of renown, returned to the US to a PhD at Chicago after earning his Oxford BA on a Rhodes scholarship in 1936. Richard Chorley, whose work subsequently revolutionized British physical geography, undertook his PhD with Arthur Strahler at Columbia after graduating from Oxford in 1951. Chorley’s contemporary, Yi Fu Tuan, later a widely admired cultural geographer, went to Berkeley for his PhD. But in his autobiography, in 1999, Tuan’s only observation on his Oxford geography training was that in his day the professors at both Oxford and Cambridge were explorers.

Tuan revisited Oxford in the mid 1960s and gave a memorable course of lectures on arid lands. This was a time when in house lectures were accorded little status, certainly in comparison to the main focus of the colleges: tutorial teaching. Tutorials (known in Cambridge as supervisions) emphasized wide reading and frequent writing, often taking the form of discussion of weekly essays between student (or students) and don (the Oxbridge term for an academic). There were some outstanding tutors, such as J. N. L. Baker of Jesus College who taught a generation of Oxford geographers before and after the war. His successor at Jesus, Ernest Paget, gave stimulating tutorials, particularly in social geography that were later to be marked in a *festschrift* as seemed by former students who became notable figures in this field. They included David Ley at the University of British Columbia and Ceri Peach and Colin Clarke at Oxford.

Two of the more research oriented Oxford geographers both had connections with Cambridge. Marjorie Sweeting, the only Cambridge trained geographer on the Oxford staff, moved there in 1951. As a specialist physical geographer, she became a world authority on karst landforms. Robert Beckinsale, a University of London graduate, joined the staff after the war, having worked on
the Handbooks. He was the more typical Oxford geographer of that time, with a range of interests spanning historical, regional, and physical geography. He attained note in collaboration with Chorley, his former student. Together they produced three magisterial volumes on *The History of the Study of Landforms*, the first of which appeared in 1964.

**Cambridge Ascendent**

Cambridge meanwhile had become very much the center of the British geographical universe. As in Oxford, a limited number of colleges were known for geography, notably St. Catharine’s, St. John’s, and, later, Sidney Sussex. ‘Catz’ under Steers had been a mecca for aspiring geographers in the inter war period, drawing in under graduates such as Darby, Oskar Spate (later to be foundation professor at the Australian National University), and A. A. L. Caesar. It was Caesar who was to become a renowned tutor at St. Catharine’s in the post war years, cementing its position as the home of an ever extending network of geographers. In 1983, Steers estimated that about 80 university posts, including 20 chairs, were or had been held by ‘our men.’ They included Michael Chisholm and Gerald Manners, who edited a volume published in 1971 to endow a college prize in honor of Caesar, their old tutor. It contained essays from, among others, Peter Hall, Peter Haggett, David Keeble, and Kenneth Warren.

**Chorley and Haggett’s Cambridge**

Steers, who has been called an ‘Olympian’ head of department, presided over a place that was a ferment of innovation, which included Peter Haggett as student and, from 1957 to 1966, lecturer; Richard Chorley, as lecturer, reader and, from 1974 to 1994, professor; and David Harvey, a postgraduate student at St. John’s, who went to lecture at Bristol in 1961. Haggett, in an obituary of Chorley published in 2002, described as ‘benign’ the environment that Steers provided in which Chorley’s ‘experiments could take place’. These were based on ‘a quantitative model based paradigm with an emphasis on General Systems Theory and numerical modelling’ (Haggett, 2002). This was in direct contrast to the situation in Oxford, where the only geomorphic topic then offered for finals was the ‘Geographical cycle of erosion’.

In contrast, Chorley had recalled, in an essay entitled ‘Haggett’s Cambridge’, how Haggett had been called into Steers’ office after a presentation to the RGS – of what was to become a landmark paper using quantitative analysis in a regional context – to be told that he was bringing the discipline into disrepute. This may have been the fear of geography’s older establishment, but Haggett was soon to publish *Locational Analysis in Human Geography*, the book that did more than any other to promote the quantitative revolution and to position the subject in the excitement of university expansion in the 1960s. In it, Haggett formulated a model for human geography that was closely linked to recent developments in geomorphology. With Chorley, he worked to ensure the reach of the new approach by reviving the summer schools for teachers that had been popular years before in Oxford. These took place at Madingley, outside Cambridge, from 1963 until 1978. The early ones provided an audience that acted as a sounding board for the ideas that became *Frontiers in Geographical Teaching and Models in Geography*.

**The Cambridge–Bristol Axis**

These volumes encapsulated an approach to geography that had gained traction in the United States in the 1950s. Excepting Beckinsale’s contribution to *Frontiers*, they are notable for their lack of Oxford contributors. In contrast to many of their Cambridge counterparts, most Oxford students had to discover such books for themselves. Taught to a curriculum that might have been recognized able to a student of 50 years before, some were even told in the late 1960s – in an echo of Steers’ warning – not to include these new ideas in their finals papers. But there were a few Oxford lecturers, such as Ceri Peach and Richard Jackson, who did provide a more contemporary perspective for students.

There was, in fact, anxiety in some quarters in both Oxford and Cambridge (and in many other places) as to whether geography was to be captured by the new positivistic approaches, or if it was to uphold what was seen as the heritage of Mackinder and Herbertson. A fervent supporter of this heritage was the Oxford lecturer W. H. Parker, who in 1958 had responded to an attack on systematic and regional geography that appeared in the *Universities Quarterly*.

The irony of such a position was that Chorley and Haggett worked hard to establish links between the natural and the behavioral sciences. Soon it was not uncommon to refer to the ‘Cambridge–Bristol axis’ of innovation in British geography. (Haggett had moved to Bristol in 1966, to a department chaired by R. F. Peel, another former Catz geographer.) This axis was widely understood to refer to the British nodes of the quantitative revolution and also to bypass Oxford, its geographic midpoint.

**Oxbridge Geographies since the 1970s**

**Progress**

There was a keen sense of anticipation in Oxford when the celebrated French geographer, Jean Gottmann, who had worked for many years in America, was appointed to the chair in 1968. Gottmann’s brief was to revive the
fortunes of Oxford geography. He had made his name with the publication of a compelling regional geography about the new urban form emerging on the Eastern Seaboard of the United States, *Megalopolis.* If this term penetrated more deeply into public consciousness than anything more directly associated with the Cambridge–Bristol axis, Gottmann nonetheless lacked connections with the proponents of the new geographies diffusing from that axis.

He did initiate the reorganization of the Oxford syllabus and backed this by breaking with the internally focused appointments policy of his predecessors, Kenneth Mason and Edmund Gilbert (1953–67). Some of his earliest appointments were of Cambridge trained geographers: Andrew Goudie (who succeeded him as professor in 1984), John Patten, and Kenneth Warren. Such moves began to reenergize the Oxford School, while at the same time strengthening traditional interests of Oxbridge geographies in geomorphology and historical geography. When a second chair, in the name of Halford Mackinder, was introduced, the first holder (from 1974 to 1983) was John House, a Jesus man, previously at New castle. His field of regional economic problems was again a not uncomfortable fit with Oxford interests. At the same time, Ceri Peach was attracting a line of doctoral students in social geography, including Peter Jackson and Susan Smith, who have gone on to forge distinctive contributions to the cultural turn in human geography.

The new geographies characteristic of Cambridge were meanwhile being widely promulgated with the establishment in 1969 of the annual *Progress in Geography* series. It counted Richard Chorley, Peter Haggett, and David Stoddart among its founding editors. By 1976 it had divided into the two ‘piglets’, the serials *Progress in Human Geography* and *Progress in Physical Geography* and *Progress in Urban Geography.* These remain some of the highest impact factor journals in the discipline.

Growing Diversity

Cambridge geography in the 1980s was marked by vigorous internal debate during the headship of Michael Chisholm, professor from 1974 to 1994 and a keen proponent of the positivistic, model based approaches rooted in the 1960s. This was a time when younger dons, such as Derek Gregory, Ron Martin, and Graham Smith, were working to convey to undergraduates ‘a sense that geography had much to contribute to the other social sciences but that recent advances, particularly in critical theory, were pivotal to making sense of our geographical world.’ They were supported by people like Stoddart, a distinguished physical geographer and acolyte of Steers, but openly sympathetic to such interpretations. This atmosphere helped to disseminate a more engaged, theoretically informed, and critical human geography, as Cambridge renewed its role as a center of innovation.

A moment in this new engagement is captured in a photograph of student and senior members of the Vidal de la Blache Society, the undergraduate geographical society at Sidney Sussex College, in May 1983 (Figure 1). This is the college of which Gregory and Smith as well as Chorley were fellows; they were joined on this occasion by Haggett. Although all the senior members were male, there are more women students in the photograph than there are men. Students pictured who went on to university chairs as critical human geographers include Nick Fyfe, Gillian Rose, Chris Philo, and Tony Bebbington. Both Gregory and Stoddart moved to chairs in North America, at the University of British Columbia, and at the University of California, Berkeley, respectively. Just as St. Catharine had played a key role in disseminating new geographical orthodoxies in the 1950s and 1960s, so too did Sidney Sussex both with and for a later generation.

In response to this latest reorientation of human geography, in 1987 Oxford again selected a celebrated geographer, electing David Harvey as second holder of the Mackinder chair. Harvey has recorded how many college dons “treated me as if I had just arrived from Cambridge,” regarding the intervening years, including nearly two decades spent at Johns Hopkins in Baltimore, as “some unwanted exile.” Although the best known sociologist in human geography, Harvey has recorded his gratitude to the Cambridge trio of Chorley, Haggett, and E. A. Wrigley for the ‘liveliness’ that they had imparted to geography during his Cambridge years and for many thereafter. In Oxford, stung by the weakness of intellectual responses to Thatcherism, he wrote *The Condition of Postmodernity* and began the work that became *Justice, Nature and the Geography of Difference.*

Harvey stayed in Oxford for six years, an inspiration to students, and, adding his influence to appointments and the syllabus, furthering the process already underway of prising open the department to a greater diversity of contemporary geographies and geographers. The Oxford School today maintains ‘Spaces of globalization’ as one of its research themes. But the real focus of growth in the 1990s and beyond has been in a wide range of environmental research, spearheaded by Andrew Goudie. It now has a large faculty drawn from a broader range of backgrounds than at any previous time. The Environ mental Change Institute was founded as an allied interdisciplinary unit in 1991, now both the Institute and the School are the keystones of the Oxford University Centre for the Environment. In all, the Centre today has ten professors, four of whom are women, reflecting a shift away from the masculinist tradition of Oxford geography.

The Cambridge department also has a number of environmentally related research clusters, linking society,
environment, and development. There are 11 professors, only one of whom is female. It is Cambridge rather than Oxford that now retains a high proportion of home grown lecturing staff. Traditional strengths remain apparent in a focus on polar research, on environmental processes, and on ‘spaces of economy and society’, a cluster which includes scholars such as Bob Bennett and Ron Martin. It also maintains a commitment to its legacy of historical geography, including the demographic work of the Cambridge Group for the History of Population and Social Structure (one of whose founders was E. A. Wrigley).

Oxbridge Today

In the first three Research Assessment Exercises, between 1986 and 1992, Oxford and Cambridge were both in the top category. In 1996 and 2001, Cambridge outscored Oxford. This, however, is only one way of positioning Oxbridge geographies. Equally if not more pertinent for the future of the discipline is the greatly enhanced size of the graduate schools in each place, compared to earlier times. This is in terms of both numbers of PhD students and those enrolled in that currently popular form of teaching, specialist masters courses. Cambridge lists over 80 PhDs and has about 20–30 a year on taught masters courses. Numbers in the Oxford Centre for the Environment reflect its growth in standing: about 100 research (mostly D Phil) students and 120 in taught masters courses.

Nonetheless, the majority of Oxbridge geographers are, as has always been the case, undergraduates. The continuing appeal of Oxbridge geographies to them lies only partly in relative standings. There are many other attractions: a college based, and convivial, education; the opportunity to learn not just within one’s subject but to engage actively with many others; and the means that each university provides for exercising the imagination in many different spheres. It was after all the imagination that Mackinder identified as being crucial in the education of a geographer.

Acknowledgments

The author is grateful to Robin Flowerdew, Pip Forer, Wendy Lawson, John Overton, Peter Perry and Simon Swaffield for discussing their experiences of Oxbridge geographies with me; to them, as well as to Ross Barnett, Andrew Goudie, Ron Johnston, David Ley and James Sidaway, for comments on an earlier draft; and to Nick Fyfe, Peter Haggett and Chris Philo for help with the photograph.

See also: Cultural Turn; Gottmann, J.; Harvey, D.; Historical Geography; Mackinder, H. J.; Quantitative Revolution; Redbrick University Geography in Britain; Regional Geography I; Social Geography.

Further Reading


Relevant Websites

http://www.geog.cam.ac.uk
Department of Geography, University of Cambridge.

http://www.oxforddnb.com

http://www.ouce.ox.ac.uk
Oxford University Centre for the Environment.
Anssi Paasi, a professor of geography at the University of Oulu in Finland, is one of the world’s foremost political geographers. He was born on 14 September 1955 and was subsequently educated at the University of Joensuu in Eastern Finland (at master’s, licentiate, and doctoral levels) in the period between 1979 and 1986. Following his doctorate, he was appointed to the post of docent in the University of Joensuu and was subsequently promoted to a chair in geography in the University of Oulu in 1990. He still remains a docent of human geography in the University of Joensuu and was also elected as an honorary professor of human geography in the University of Wales, Aberystwyth, in 2006. He has, additionally, carried out research as a visiting scholar in the University of Nijmegen, Loughborough University, and UCLA. To date, he has published over 150 papers, reviews, and chapters, as well as 19 books and monographs in both Finnish and English. His work has centered on understanding certain key concepts within political geography, most notably those relating to the region, nationalism, and territories/boundaries. The empirical focus for Paasi’s research throughout his career has been on Finland and its relationship with a broader Baltic region.

In many respects, the fact that Paasi is a Finnish geographer has had a profound effect on his career. Perhaps most prosaically, Paasi’s nationality has meant that he has conducted the vast majority of his empirical research on Finland. Similarly, his nationality has also meant that he has published a large proportion of his research in Finnish language publications, especially during the early stages of his career. But it is clear that Paasi’s Finnish identity has also impacted on his research career in more subtle, yet equally far reaching ways. In the first place, the fact that Paasi is a Finnish geographer has meant that he has always worked on the relative ‘margins’ of human and political geography that is dominated, in large measure, by geographers living and working within an Anglo American academy. Anssi Paasi is thus to be congratulated for being able to lead academic debates within contemporary political geography, despite this relative marginalization. At the same time, it is arguable that some of Paasi’s potential impact on human and political geography in an international context may well have been dissipated as a result of being a voice speaking from the ‘margin’. The clearest indication of this relative loss of academic impact, of course, is the fact that a large proportion of Paasi’s research has been published through the medium of Finnish and has not, therefore, become part of an international academic debate conducted, for better or worse, in English.

In order to understand a second subtle influence of Paasi’s Finnish identity on his academic career, one needs to appreciate the history of human geography within Finland. Paasi has noted that the character of human geography within Finland during the 1970s was affected by its academic affiliation to faculties of science within the vast majority of universities and by the dominance of
an older generation of human geographers who were proponents of quantitative and positivist approaches. These twin influences made it difficult for a new generation of human geographers, such as Anssi Paasi, to gain a foothold within academic geography in Finland, especially during the 1970s and 1980s. Paasi's early work on regions, for instance, was deemed by certain individuals within an older generation of Finnish human geographers to be marginal to Finnish human geography and, indeed, he became labeled as a 'geosociologist' rather than a human geographer. Paasi, in this regard, has considered himself to be a geographer who was in the 'wrong place'. It was also perhaps as a result of this relative antipathy to his work in Finland, at least during the 1980s, that Paasi increasingly sought to publish his research through the medium of English.

In a second context, one must also appreciate Paasi's specific lifepath 'within' Finland (see Figure 1). As noted above, Paasi received his formal geographic education in the University of Joensuu and this possesses two important implications for his career. In the first place, Paasi has maintained that the Department of Geography in the University of Joensuu acted as a key location for the 'social scientification' of the discipline of geography within Finland. "Close connections with fields such as history, economics, sociology and social policy," (Paasi, 2005: 608) according to Paasi, enabled human geographers within the University of Joensuu to engage more fully with some of the important philosophical currents that were affecting the humanities and social sciences internationally from the 1970s onward. But of course, the 'social scientification' of human geography taking place in the University of Joensuu during this period also contributed to the relative disenfranchise ment of Anssi Paasi and other researchers at a broader Finnish scale, as discussed above. It is also important to note that the University of Joensuu lies in Finnish North Karelia and, in this respect, Paasi's time within the university can be seen to have contributed in a direct way to some of his most notable and innovative work: much of Paasi's research to date has centered around developing conceptual and empirical understandings of the Finnish territory and border, most notably in the context of the disputed borderlands of Karelia. Indeed, Paasi has made significant contributions to at least three debates in political geography: the institutionalization of regions; the sociospatial processes that help to reproduce nationalism; and the broader significance of borders and territories as a way of articulating a sociospatial consciousness.

It is Anssi Paasi's work on the institutionalization of regions that has, arguably, cemented his reputation as one of the world's foremost contemporary political geographers. He has admitted that the inspiration for this work derived from academic debates concerning social constructionism, which were emerging during the late 1970s, as well as a series of more specific contributions by individuals such as Allan Pred and Nigel Thrift, which were beginning to interrogate the meaning of regions in more theoretically sophisticated ways. Paasi believed, nonetheless, that these various contributions failed to explain fully how 'regions became what they were'. It was with this context in mind that Paasi sought to provide a new theoretical and methodological way of comprehending how regions – understood as a sociospatial unit and a version of a 'higher scale' history into which individuals are socialized – are institutionalized. Four, mutually constituting, stages are said to be key to the process of institutionalizing regions. The first relates to the 'territorial shape' of a region or, in other words, the degree to which the territorial extent of a region becomes embedded in individual or collective consciousness in various social practices. Second, Paasi draws attention to the importance of the 'symbolic shape' of a region, which refers to the process through which particular symbols come to represent the region in question. Third, a region may derive 'institutional shape' from the broad range of institutions, that give some formal structure to social and spatial life within the region. Finally, Anssi Paasi describes the way in which regions may become 'established' within the sociospatial consciousness and may assume "the material expression of the ends to which state power is applied" (Paasi, 1991: 247). Taken together, therefore, Paasi's work is concerned with explicating the

![Figure 1](image-url) Finland, showing key locations that have contributed to Paasi's career.
way in which regions are in a constant process of 'becoming' in a variety of different contexts. Regions may emerge and become consolidated or 'established' within society. By the same token, they may become marginal to people's lives and, indeed, they may even disappear. Equally as significant as Paasi's efforts to devise a conceptual and methodological framework for understanding regions, though far less evident in an international and specifically English medium context, has been his empirical study of the institutionalization of four Finnish regions: Lapland, Southern Ostrobothnia, Northern Karelia, and Uusimaa. This project used a range of archival material, including administrative documents, maps and atlases, regional newspapers, and school textbooks, along with 2600 questionnaires in order to explain the extent to which the regions in question had become institutionalized as part of the regional structure and within the sociospatial consciousness of the inhabitants of the four regions.

Anssi Paasi's other two key areas of academic interest have followed on, in many ways, from his earlier work on the institutionalization of regions. Some of his more recent work has examined the reproduction of nations and national territories – or, alternatively, the institutionalization of the nation – specifically in the context of Finland. This work, in conceptual terms, has attempted to show how nations, national territories, and their boundaries are reproduced through a combination of a sociospatial consciousness – centered on the activities of the state's agents at the national scale – and a social representation, which lies within the domain of more ordinary people within localities. Equally as interesting within this work was Paasi's empirical focus on Finnish national identity, particularly in the context of the role played by the border region of Karelia in reflecting and shaping the sociospatial consciousness and social representation associated with Finnish nationalism. In this way, Anssi Paasi has been able to show how the reproduction of a Finnish nation and national territory has come about as a result of a combination of formal state building projects and the more mundane and day-to-day practices of ordinary people. Paasi's concern with the role of the Finnish-Russian border in defining the Finnish nation has also encouraged him to engage in a second new area of research in recent years, namely, his attempt to think about the broader significance of boundaries in a contemporary globalizing world. This work has been part of a broader academic project to deliver a more conceptual attuned understanding of borders and boundaries. Part of this project has revolved around the need to view boundaries and borders as socially produced. Geographers such as Anssi Paasi have drawn inspiration from social and cultural theory to show how boundaries should be viewed as contingent processes in motion. They are, moreover, geographical entities that are produced as a result of a mixture of processes; some are undoubtedly state driven but other actors within civil society are also implicated in the process of 'narrating boundaries'. Moreover, globalization has not undermined the significance of boundaries but has merely made the various processes that are associated with the reproduction of contemporary borders more complicated and contingent.

Anssi Paasi's work, when viewed as a whole, has formed a remarkably coherent academic project over a number of years. He has drawn inspiration from new developments in social and cultural theory in order to rethink the significance of key concepts in political geography, most notably those relating to regions, nations/territories, and boundaries. The impact of his work has been widespread in political geography and further afield and is highly likely to remain so in future years.

See also: Nationalism; Political Geography; Region.

Further Reading


Relevant Websites

http://www.oulu.fi

Anssi Paasi's homepage.
Introduction

The Pacific Rim has a general geographic reference to the countries located on, along, and within the physical boundaries of the Pacific Ocean. However, the Pacific Rim is much more than a geographic concept. It denotes a broad and differentiated geographic landscape imbued with multiple and layered political, economic, and cultural dynamics and meanings. As these dynamics unfold over time to yield a temporarily shifting view of the Pacific Rim as a geographic structure, the meanings of the Pacific Rim evolve with it. While the twenty-first century is still young, it provides a temporal vantage point to take stock of the Pacific Rim as a dynamic geographic construct and its associated politicoeconomic and sociocultural dimensions.

A more conventional geographic treatment of the Pacific Rim is likely to follow the established regional divisions of East Asia, Southeast Asia, South Pacific, and whatever other countries that are not neatly labeled categorically. It may bring in the west coast of the United States, South America, and Australia but may not deal with them in depth and detail. This conventional view would see the Pacific Rim as consisting of several spatial blocks that organize different sets of political and economic relations between countries. The latter are taken as constituent units of these geographic groupings and also constitute the larger set of bilateral relations spanning the entire Pacific Rim. While this approach may look for subnational dimensions and variations of these units and ties, it is premised on a state-centric perspective on the Pacific Rim. The combination of conventional regional divisions and state-centric relational account has its advantages in that it not only establishes the broad geographic composition of the Pacific Rim but also identifies uneven relations that bind together clearly bounded countries. But this treatment can no longer fully capture the complex realities of the Pacific Rim.

The Pacific Rim today calls for an alternative conceptualization because it differs sharply from the pre-1980 Rim. Over the last quarter century or so, a multitude of economic and geographic forces have unfolded in both convergent and divergent manners across the dual axes of regions and borders, reshaping the Pacific Rim in the process. The regional axis features the complementary and divergent trend of formal regionalism versus informal regionalism. The axis of borders exhibits the simultaneous processes of de-bordering and re-bordering. As the two axes intersect, they have altered the geographic contour of the Pacific Rim, created new political and economic networks and alliances, and activated old and/or gendered new social and cultural ties and meanings that invoke and may constitute real or imagined regional communities.

Formal Regionalism

Formal or top-down regionalism or regional integration has an obvious powerful impact on the Pacific Rim through strengthening various region-wide or subregional sets of economic and political linkages, while weakening few others by excluding them. Unlike the European Union (EU), which typifies formal regionalism to the tilt, formal regionalism in the Pacific Rim or any Asian context has been weak in terms of producing anything that approaches the EU in form and function. The closest entity approximating Pacific Rim wide integration is Asia Pacific...
Economic Cooperation (APEC), which consists of 21 member economies on both sides of the Pacific Rim. A relatively loose organization, or cooperative process more precisely, APEC holds an annual forum to promote intergovernmental, multilateral initiatives for regional economic integration and cooperation. As this process continues, with improved official economic relations and limited real economic benefits, it has been accompanied by other subregional trade promotion deals such as AFTA (the Association of Southeast Asian Nations (ASEAN) Free Trade Area) and ASEAN + 3 (China, Japan, Korea). The latter has recently entertained a proposal to become ‘ASEAN + 6’ by including India, Australia, and New Zealand. With 3.3 billion people, or half of the world’s total population, and one third of the world’s total GDP, ASEAN + 6, if materialized, can truly be the third pole of the world economy vis-à-vis the EU and NAFTA.

To the extent that the large scale realignment and regrouping of major Asian economies enhances the collective economic strength of the Pacific Rim, primarily its western side or half, it also is producing a more layered and jumbled structure of formal regionalism. To complicate this structure further, the East and Southeast Asian governments have developed specialized mechanisms for cooperating on regional monetary and financial issues. For example, as a response to the Asian financial crisis in 1997–98, ASEAN + 3 launched the finance minister process called the Economic Review and Policy Dialogue (ERPD), which promotes regional financial cooperation through information exchange, policy discussions, and peer pressure. In May 2003, ASEAN + 3 finance ministers agreed to strengthen the Chiang Mai Initiative (CMI), introduced in 2000, by increasing bilateral currency swap size and linking CMI to the regional economic surveillance of ERPD. Given its both more general and specialized institutional arrangements, formal Asian regionalism has been characterized by such muddled metaphors as ‘a patchwork of hubs and spokes in a spaghetti or noodle bowl’, with noodles provided by formal regionalism. Through this lens, instead of seeing a broad region of totally bounded countries and state territories, we visualize a mosaic of transborder subregions that cuts across the multiple and adjacent boundaries of countries. This alternative re mapping of a conventional map is more than an arbitrary cartographic exercise. It instead is based on a very different theoretical premise and methodological orientation.

A formal regionalist analysis would focus on examining the level of trade integration and benefits for the parties involved, while the typical explanatory variables include national goals, size of regional groupings (number of member countries) and power differentials among them, perceived costs and benefits regarding included versus excluded trading partners, and extraregional factors such as global economic influence or superpower interference. Large developmental and power disparities threaten but do not necessarily lead to failure in regional trade integration, as exemplified by rich, globalized Singapore and poor and repressive Myanmar in ASEAN. In addition, selective and targeted protection of certain domestic sectors of countries in existing and attempted trade deals creates barriers to true openness and integration. Instead of being nation state led and formally institutionalized, the units in the informal regionalist frame – transborder subregions and global(aizing) city regions – are driven by a combination of local (municipal) state initiatives and private sector activities such as direct investment by multinational firms. This funda mental difference shifts theoretical analysis from questions and concerns associated with trade and international relations theories to a more complex theoretical challenge that needs to draw analytical assumptions and insights from research on global and secondary cities, global value
chains, regional development, and network analysis, as well as on the restructuring and rescaling of the state that favors the rise and developmental behavior of the local state.

**De-Bordering and Re-Bordering**

The turning or rotating of the Pacific Rim along and around the formal–informal regional axis or dimension is critical to a geographic reappraisal of where it stands now and may be headed. This cannot be accomplished based on its logic alone, however. The axis intersecting and reinforcing informal regionalism is ‘de bordering’ and ‘re bordering’, which describes a pair of processes in which borders are considered mutating spaces rather than fixed lines. As economic interdependence between Asia Pacific countries and between them and the global economy widens and deepens, more sections of and points on their borders are open to more intensive interactions with the forces and actors of the neighboring countries. While this process represents de bordering by making borders more porous and more difficult to control, it can prompt central and local state authorities

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to reassert border control, resulting in re-bordering. When more open borders bring about nasty unintended consequences such as increased cross border drug trafficking, threat of epidemics, or terrorist activities, states are forced to tighten their borders as a result. Examples include heightened border control in response to 9/11 in 2001 and SARS in 2003.

Despite some re-bordering that features renewed border control, de-bordering appears to be stronger and more widespread at and along many land and sea borders in the Pacific Rim. It is characterized by the shift of borders’ role from barrier to bridge, especially across the previously closed and heavily guarded borders. These borders used to function as political barriers that blocked economic and cultural exchanges to differing degrees. They also existed as military frontiers that received heavy defense spending but little economic assistance. As a result, the zones around these borders became marginalized. Due to changes in a variety of conditions, these borders have begun to bridge separate and isolated local and regional economies. The emerging transnational spaces provide new opportunities for global–local links, generating either self-sustaining and/or externally linked local development.

The bridging role of borders has either unleashed new informal regionalist tendencies or strengthened existing ones. Bridging creates a cooperative space between binational or trinational economies. Broadly viewed, bridging generates economic growth and transactions that can spread beyond the immediate border zones to other parts of the transborder subregions. On the other hand, bridging may turn borders and border zones into new contested terrains for illegal migration, spillover pollution, and other undesirable outcomes. States may respond to these threats by reimposing border control, thus moving back toward the barrier role of borders and thus re-bordering again.

Within the Pacific Rim over the last two decades or so, informal regionalism has gained strength because de-bordering has occurred on an increasing scale, while formal regional integration has proceeded apace through a variety of intergovernment cooperative mechanisms such as ASEAN + 3. Formal regionalism tends to reinforce state-centric interactions and relations, which may lead to more cross-border trade and investment. However, its reliance on formal institutional arrangements and involvement of entire states work differently from informal regionalism, which stems from de-bordering of boundaries connecting contiguous and adjacent local and subnational units and thus exerts a strong and extensive bottom-up pressure on the relational structure of the Pacific Rim. In the second half of this essay, several cases are used to illustrate the coupled force of informal regionalism and de-bordering in reconfiguring the Pacific Rim.

**The Various Facets of Informal Regionalism and Debordering**

The first illustrative case is a transborder subregion that consists of Hong Kong, Taiwan, Macau, and China's Guangdong and Fujian provinces, primarily the Pearl River Delta region in Guangdong (labeled the Greater Southeast China Subregion (GSCS) in Figure 1). New economic linkages across the China–Hong Kong border emerged in 1979 when the establishment of four special economic zones in southeastern China triggered the initial movement of Hong Kong's labor intensive assembly operations over the border. Taiwanese investors and tourists began to flood Guangdong and Fujian provinces in the 1980s. Two and a half decades later, a massive (re)division of labor between Hong Kong and Taiwan with southern China has been firmly entrenched. By the end of 2005, over 10 million jobs were created by over 60,000 Hong Kong and Taiwan invested factories in the Pearl River Delta alone.

The blurring of the Guangdong–Hong Kong border has been intimately linked with the ‘miraculous’ growth of Shenzhen from a tiny fishing town of less than 100,000 bordering Hong Kong to a sprawling industrial city of over 10 million. Shenzhen and Hong Kong have literally grown into each other and formed an extensive cross-border metropolitan region. Today huge flows of people and goods go through several rail and road checkpoints along the Shenzhen–Hong Kong border, and the Lufu crossing point has become China’s busiest land port for human traffic. On weekends and holidays, thousands of Hong Kong residents ride the train and then walk through the crossing points to shop, dine, and enjoy entertainment in Shenzhen where these things are much cheaper. This pattern has reversed the flow of money and wealth in the old days when Hong Kong residents would bring over consumer goods such as household electronics and daily necessities to their relatives and friends north of the border. Just as Hong Kong consumers spend money in Shenzhen, the increasingly wealthy residents in Shenzhen actually spend more money in Hong Kong. However, by buying a large number of cheaper homes in Shenzhen as residence or investment, Hong Kong residents have raised the property prices and cost of living in Shenzhen to be among the highest in China now.

The second case is what is generally known as the Greater Mekong Subregion (GMS), which comprises Thailand, Vietnam, Laos, Myanmar (formerly Burma), Cambodia, and China’s Yunnan province (see Figure 1). Given its composition and some intergovernment co-operative arrangements, the GMS crosses over the formal–informal divide of regional integration. However, despite growing international trade among the GMS or Mekong countries, border trade has constituted the most visible and significant cross border economic tie among the key border regions within the GMS. The 1990s and
beyond saw the return of Yunnan province’s historical crucial role in border trade with its southern neighbors. In the first 6 months of 2004, Yunnan province handled $2.5 billion in border trade, a 25.4% rise over the same period of 2003. In the first 6 months of 2004, Vietnam registered the highest growth rate of 37% among Yunnan’s border trading partners. Yunnan’s six border prefectures, which are geographically contiguous with Vietnam, Laos, and Myanmar, accounted for just about all the provincial border trade. Key Chinese and Myanmar border towns are intensive spots for border trade. The end of Chinese support before the collapse of the Burmese Communist Party in 1989 facilitated the opening of more border trading posts between the two countries. The Myanmar border town of Muse became open for border trade in 1998, while Yunnan’s border city of Ruili created the Jiagao Border Economic Development Zone in 1991. Myanmar’s border trade with Yunnan not only has enlivened the town of Muse but also has revived cities away from the border.

Border trade across the Mekong countries, however, has been constrained by the lack of physical infrastructure, prompting renewed efforts of the region’s national and local governments to improve it. The authorities of Mekong Delta provinces and cities are working hard to perfect the ‘one stop’ mechanism for administrative procedures in order to meet investors’ requirements. They attach priority to road and waterway systems, airports, and ports to facilitate goods transportation. Export processing zones and industrial zones are being built alongside with efforts to develop services in water and power supply, telecom networks, hospitals, and banks. In December 2006, Thailand and Laos opened the second bridge across the Mekong River, which is their common border, linking Mukdaharn province in north eastern Thailand to Laos’ southern province Suvanna khet. On 1 January 2007, the governments of Myanmar and Laos began to charge transit fees for cargo boats, mostly Chinese owned and carrying Chinese agricultural exports to Thailand, using their stretches of the Mekong River. Some environmentalists are alarmed by Chinese projects to improve the navigability of the Mekong River by widening its banks and removing islands and rapids.

The third case illustrates both the complementary and conflicting sides of the transborder region in Southeast Asia known as the Indonesia (Riau)—Malaysia (Johor)—Singapore Growth Triangle (IMS–GT) (see Figure 1). The IMS–GT demonstrates a complementary mix of resources among the three units. In contrast to Singapore’s high labor and land (very limited) costs, the Johor state of Malaysia just north of Singapore and Riau islands of Indonesia – 20 km away from Singapore by boat – have medium level and low land and labor costs. Transborder economic complementarity in terms of differential factors of production in the IMS–GT has fostered growing internal links, especially between Singapore and Johor and Singapore and Riau.

Yet the IMS–GT has not been without intraregional conflict. Following its ban on the export to Singapore of sea sand used for land reclamation in February 2003, Indonesia in January 2007 banned the export of sand, a basic construction material, to Singapore just as the latter’s construction sector rebounded on strong demand for high end apartments and the building of two multi billion dollar casino complexes. The Indonesian government worries that massive sand quarrying from Riau islands could lead to the disappearance of small outlying islands, and as the maritime borders erode, Indonesia’s territory and exclusive economic zone could also shrink. Indonesia imposed this ban knowing that it could trigger economic dislocation as thousands of local residents depend on sand quarrying for a living.

Finally, new transborder economic space has opened up in South Asia, extending informal regionalist and de bordering tendencies in the Pacific Rim to its most western edge (see Figure 1). On 6 July 2006, India and China (re)opened the Nathu La Pass (4545 m above sea level) between Tibet and the tiny state of Sikkim in northeastern India, 44 years after a brutal frontier war in 1962 shut down the ancient route. Until now the bulk of trade between China and India was transited by sea, and via Tianjin – a port city nearly 4400 km from Lhasa, which is only 1200 km by land from Kolkata (formerly Calcutta), a major Indian port city. Thousands of Indian pilgrims used to make the annual 15 day journey to Tibet’s Mount Kailash, revered by Hindus as the home of Lord Shiva. With the opening of the border pass, the pilgrimage will be just a 2 day drive from Nathu La. While giant warehouses have been constructed on both sides of the Nathu La Pass for its opening ceremony, trade at China’s border mart is currently very small, while Indian exports are slightly higher, both far less than expected. However, truckers on the route expect to earn large annual revenues at present freight rates, even if the traffic volume were to be as low as 100 trucks a day. China does not impose any restrictions on cross border trade except for illegal items, and hostels have been built to accommodate Indian traders, but Chinese traders cannot spend the night at the Indian mart. India is concerned about low price Chinese products flooding the Indian market. Other barriers include the lack of infrastructure (poor roads and communications), banking facilities, container depots, and the need to expand the basket of permitted trade items.

Conclusions: Remaking the Pacific Rim

What would the Pacific Rim look like if its entire western half and far western margin that blends into the Indian
Ocean were spatially reconfigured around the eight transborder subregions plus the Greater Shanghai Region (see Figure 1) instead of the current nation states. These transborder subregions tempt us to imagine a reconfigured Pacific Rim in which the bulk of the population and territory falls into the boundaries of the transborder subregions. The forces that facilitated the rise of the transborder subregions were embedded in a much earlier history and became more visible and active only recently. Yunnan province in China provided the historical must go through pathway on the 'Southern Silk Road' for trade with India and Burma dating back to China's Han dynasty. Trade through the Nathu La Pass accounted for the lion's share of total cross border trade between China and India in the early 1900s. The disappearance of the geopolitical bipolarity with the end of the Cold War, coupled with a series of resolved border disputes, has activated and augmented these historical economic ties.

While the distinctive geographic position and physical boundaries of the units that make up the transborder subregions are stressed, there are crossover ties and spillover influence between some pairs of these regions. South Korean companies have invested heavily in both subregions. Where the boundaries of the units that make up the transborder subregions are stressed, there are crossover ties and spillover influence between some pairs of these regions. South Korean companies have invested heavily in both subregions. Where the boundaries of the units that make up the transborder subregions are stressed, there are crossover ties and spillover influence between some pairs of these regions. South Korean companies have invested heavily in both subregions. Where the boundaries of the units that make up the transborder subregions are stressed, there are crossover ties and spillover influence between some pairs of these regions. South Korean companies have invested heavily in both subregions. Where the boundaries of the units that make up the transborder subregions are stressed, there are crossover ties and spillover influence between some pairs of these regions. South Korean companies have invested heavily in both subregions. Where the boundaries of the units that make up the transborder subregions are stressed, there are crossover ties and spillover influence between some pairs of these regions. South Korean companies have invested heavily in both subregions. Where the boundaries of the units that make up the transborder subregions are stressed, there are crossover ties and spillover influence between some pairs of these regions. South Korean companies have invested heavily in both subregions. Where the boundaries of the units that make up the transborder subregions are stressed, there are crossover ties and spillover influence between some pairs of these regions. South Korean companies have invested heavily in both subregions. Where the boundaries of the units that make up the transborder subregions are stressed, there are crossover ties and spillover influence between some pairs of these regions. South Korean companies have invested heavily in both subregions. Where the boundaries of the units that make up the transborder subregions are stressed, there are crossover ties and spillover influence between some pairs of these regions. South Korean companies have invested heavily in both subregions. Where the boundaries of the units that make up the transborder subregions are stressed, there are crossover ties and spillover influence between some pairs of these regions. South Korean companies have invested heavily in both subregions. Where the boundaries of the units that make up the transborder subregions are stressed, there are crossover ties and spillover influence between some pairs of these regions. South Korean companies have invested heavily in both subregions. Where the boundaries of the units that make up the transborder subregions are stressed, there are crossover ties and spillover influence between some pairs of these regions. South Korean companies have invested heavily in both subregions. Where the boundaries of the units that make up the transborder subregions are stressed, there are crossover ties and spillover influence between some pairs of these regions. South Korean companies have invested heavily in both subregions. Where the boundaries of the units that make up the transborder subregions are stressed, there are crossover ties and spillover influence between some pairs of these regions. South Korean companies have invested heavily in both subregions. While informal regionalism and de bordering, which have fostered the transborder subregions, are remaking the Pacific Rim, their interface and relationship with formal regional schemes like APEC remain relatively weak and elusive due to their different logics of organization and operation. If APEC really opposes the idea of an inward looking trading bloc and instead pursues a free trade orientation of ASEAN/AFTA. Although the geographic overlap between ASEAN + 3 and the parts of the transborder subregions in the countries involved is substantial (all constituent units of the GMS are included in ASEAN + 3), it remains to be seen if the more formal cooperative activities of ASEAN + 3 will be compatible with the informal cross border trade and investment flows within the transborder subregions.

To sum up, informal regionalism and transborder regions have done more than formal regionalism to alter the basic spatial ground and parameters for rethinking and reimagining the Pacific Rim of the early twenty first century, a Pacific Rim that is also moving west to envelope the rising economic power of India. Seeing the Pacific Rim through the dual lens of informal regionalism and de bordering also brings into clear view the geo-economic, historical, and sociocultural conditions such as ethnic connections that foster the transborder subregions. This integrated treatment yields a richer and more nuanced picture of a new Pacific Rim that will continue to evolve and thus challenge our capacity to conceptualize it geographically and otherwise.

See also: Global Production Networks; Industrial Location; Regional Production Networks.

Further Reading


Relevant Websites

http://www.prac.org/
The Greater Pearl River Delta. http://www.pacificuniversity.edu/
University of San Francisco, Center for the Pacific Rim.

Figure 1: Remapping East Asia: The Construction of a Region.
The work of parenting as an emotional and day to day practice that is embedded in larger social and spatial contexts is a hugely debated topic. The institutions of motherhood and fatherhood are equally debated through contested ideological structures that are often seen as at odds with the work of mothering and fathering. To take one example, feminist critiques of the social science literature on parenting uncover an ideology that suggests the belief that active participation by mothers in the daily care of children is obligatory, whereas nurturing and care taking by fathers is discretionary. Through the externalization of women’s roles and their increased paid employment it may be argued that men increasingly escape from so called ‘good provider’ responsibilities. And so, in an important and problematic way, fatherhood today assumes a voluntary dimension and fathers can either retreat from responsibility or participate more fully in the family. In addition, good enough practices of mothering and fathering are too often aligned to an idealized myth of parenthood within a nuclear family, and this myth is exacerbated as state institutions roll back responsibilities of childcare to communities and families. Assigned this neoliberal burden and caught up in a rhetoric of individuated child raising responsibilities, mothers and fathers exercise complex coping strategies that often end in what is akin to a familial implosion. Of late, geographic discussion engages the globalization of texts of parenting with increased concern for the roles of mothers and fathers, gender power relations, and the legitimation of parental authority and responsibility in increased neoliberalism and cosmopolitanism.

The formal academic study of parenting is a relatively recent endeavor, coming first to conscious attention in the late nineteenth century when rapid social and economic transformation precipitated dramatic familial changes. Some theorists maintain that parenting is a stable union of mothers and fathers as a natural unit of biological and social reproduction that needs no sense of history of geography to uphold and perpetuate its raison d’etre. In the early twentieth century, anthropologist Bronislaw Malinowski argued that the conjugal family, comprising a mother and a father, was unassailable because it fulfilled universal needs. In the late 1940s, sociologist George Peter Murdock coined the term ‘nuclear family’ as a functional rather than a biological unit, which comprised two adults in a socially acceptable sexual relationship, one of whom (usually the female) stayed at home looking after one or more children. So the myth is exacerbated as state institutions roll back responsibilities of childcare to communities and families.

Academic discussion on parenting began in geography in the 1980s with feminist concern to redress certain research imbalances. Feminist geographers argued that focusing on the optimal location of firms and the rank size rules of cities, for example, was favored in geographic research over any serious work on women’s issues such as childcare, school access and affordability, and parenting. Since that time there has been an outpouring of work on mothering in particular and, to a lesser extent, fathering. This work may be categorized broadly into theoretical...
work that frames spaces of parenting and ideologies of parenthood, and empirical and ethnographic studies that focus on the work of parenting and into the construction of mothering and fathering identities.

Of late, there is growing concern for the burden placed on parents with legislation favoring state rollback of welfare responsibilities to communities and families. Within these categories, specific spatial topics such as the access and affordability of childcare, schooling, trans- portation, and the ways parents juggle paid labor, the emotional work of parenting, and domestic responsibilities are of paramount importance. Diversity concerns highlight different styles of parenting amidst hegemonic representations of parenthood that problematically raise normative Anglo American, heterosexual white, middle class representations. Other issues relate to the ways parents strategize their productive and reproductive activities within spatial systems (institutions, neighbor- hoods, and cities), and how these strategies play out in an age of neoliberal globalization.

Parenting as a ‘Woman’s Issue’

In a 1974 *Antipode* article that presaged the feminist call for geographers to include studies of families and women’s work, Allison Hayford notes that women were functionally and emotionally central to the establishment of kinship systems in precapitalist times and with the emergence of capitalism it became important for them to be subjugated to parenting roles and control within the domestic sphere. Susan MacKenzie and Damaris Rose spatialize Hayford’s ideas with a critical appraisal of the domestic economy and home life through the industrial revolution. They outline the historical origins of the complex relations among social production, the circulation of commodities, and the reproduction of labor as they relate to spatial changes in parenting practices and family life. MacKenzie and Rose were the first to probe the importance of the spatial separation of the public sphere of production (work) and the private sphere of reproduction (home) as a series of struggles rather than a fait accompli of the emerging capitalist system. Industrialization threatened to destroy the family with expanded work hours for men, women, and children engaged in wage employment because increased time spent in the productive sector left almost no time for the domestic sphere. Long work hours and low wages in combination with cramped and unhealthy living spaces resulted in the creation of a separate domestic sphere where people pooled their wages to maintain themselves and where they lived. The household ceased to be the center of production although it remained the center of family life. Discontent with the lack of concern by factory and mine owners for the health and housing of families led in part to struggles for a separate domestic sphere. Philanthropists and local governments began to intervene on behalf of the family to provide education and medical care. Through a series of Factory Acts first in the UK and USA and then copied elsewhere, women and children were excluded from factories for the sake of their health, and their place was squarely recognized as within the ‘safe haven’ of the domestic sphere. Later, organized labor unions agitated for the ‘family wage’, based in part on a desire to keep married women in the home so that they might take care of the male wage earners’ children.

The separation of home and work resulted also in the separation of fathers from their children, at least during working hours. From the nineteenth century onward another geographic solution to industrial urban squalor – the suburb – further separated fathers from children and spatially entrapped women with children. Ironically, contemporaneous reformers saw the city, and particularly working class neighborhoods, as reflecting and reinforcing the erosion of the family. Although the creation of suburbs in the nineteenth and twentieth century in duustrializing nations has a complex history they are, like family wages, a large part of the construction of the modern nuclear family norm.

The spatial entrapment of mothers thesis was developed by geographers in the mid 1980s through analyses of large data sets from North American and European urban populations. With the discovery that most women’s work trips were shorter than those of men, researchers concluded that peripheral suburbs were built for a commuting husband with mothers fettered primarily to the domestic sphere and raising children. Studies in the United States, Canada, Sweden, and France demonstrated that mothering had a major impact on women’s travel. A celebrated 1993 article on ‘Suburban pink collar ghettos’ in the *Annals of the Association of American Geographers* by Kim England suggests more complexity to the spatial entrapment thesis. England found that mothers in Columbus, Ohio who would normally be thought of as spatially entrapped actually traveled further than never married women without children. England concludes that spatial entrapment theory is contingent upon historical patterns of the 1960s and 1970s and does not reflect a move toward neoliberal economics of the 1980s and 1990s that often require full time employment of fathers and mothers. Her study utilized both quantitative and qualitative methods, the latter of which were becoming increasingly important for place based studies of mothering and fathering identities.

In the 1990s, geographers argued that local places often provided meaningful opportunities for mothers to express relationships with the public sphere. Isabel Dyck used ethnographic interviews in conjunction with Anthony Giddens’ structuration theory to trace the space–time connections of suburban mothers in Van couver. With a concern for women’s agency, she shows
that the notion of motherhood and the sets of practices making up mothering are interpreted, negotiated, and transformed as women respond to the social and economic structure of particular places. She shows ways that women's interpretation and management of mother–child relations are linked to local contexts, as well as larger structural forces, arguing that women are not passive agents with regard to the place based conditions that contextualize their mothering, but rather they "modify these conditions and negotiate 'good' mothering practices through the recurrent practices of their everyday lives." In the preface of a book introducing a wide ranging series of geographic studies on North American working mothers, Kim England argues that the study of "childcare across a variety of scales is important because disparities and inequities often become more apparent at finer scales" (England, 1996: 4).

Sarah Holloway extends the issue of webs of meaning and childcare solutions into local cultures of mothering and their relations to spatial justice in a 1998 article published in Gender, Place and Culture. She uses the exemplar of British local education authority playgroups to suggest that locally embedded childcare cultures shape mothers' attitudes toward their children's educational development and their strategies for accessing childcare. Also negotiated through these local contexts are moral geographies of mothering that relate to the social construction of what it is to be a good mother. Territorial justice is concerned with the public sphere (i.e., the delivery of childcare as conceptualized in spatial terms) whereas childcare cultures are concerned with intertwining public and private spheres with a contextual (i.e., local) understanding of need. Put another way, it seems that -- at least in the British middle class context -- homes and neighborhoods remain a major locus of reproductive activities. Arguments of this kind paved the way for neoliberal communitarianism such as Anthony Giddens' The third way, which proved hugely influential in British rollback millennium politics.

**The Awkward Spaces of Fathering**

What emerged through the twentieth century, and continues today, is a division of gender roles that was prefigured from the start because it gave fathers a choice that is apparently not afforded to mothers. The last two decades' interest in fathering has been fueled to a large degree by increased public employment for women and by unprecedented demographic changes in Western families. That said, elsewhere in the world, and in the context of low income families in the West, women have always engaged hugely in productive activities. The assumed role of men as breadwinners and guardians of families as a traditional key denominator for male identity is increasingly challenged. Questions that arise from these changes relate to family politics and changes in authority, the roles of fathers in the lives of infants and young children, and the performance of fathering identities.

A review of historical trends in Western notions of fatherhood suggests that the 'father' has evolved from the distant breadwinner of the nineteenth century, through the genial dad and sex role model of most of the twentieth century to today's father as equal co-parent. How ever, the practice of fathering remains vague and inscrutable. As the role of women changes in Western society, leaving new spaces for male identities, some geographers argue that younger generations of men do not easily fit into 'traditional' categories of father and breadwinner. At the same time, the creation of new social norms and values has not automatically led to an aban donment of old patriarchal norms, thus representing significant fields of conflict for the development of fathering identities. Much of 'crisis of masculinity' literature in the 1990s and contemporary critical assessments of masculinities has no sustained discussion of fathering but focuses instead on public arenas such as employment, the workplace, and politics. As a consequence of this academic and political neglect, fatherhood is regarded as a backwater to the dominant discourses of men in public power.

Contemporary wisdom suggests that the spatial entrapment of mothers and children in suburbia is cons trasted with an ever more distant father who maintained control of productive, public space. With the rise of neoliberal processes of globalization, a paradox arises because this emotional separation and individuation through the late nineteenth and into the twentieth century does not reflect day to day life in the same way that it buttresses society's mythic ideals of social repro duction. There are some interesting consequences to this inconsistency. As mothers enter the paid labor force and some decide not to become mothers, they are blamed either for maternal depravation or they are chastised for following masculinist roles. In critical indictments of research on fathers' roles, some feminists suggest that social science research is constructing fatherhood as a panacea for the problems mothers create and cannot control. One example is child development research, which often assumes that a father's presence is almost always a good thing. Feminists also point to 'institutionalized father love' that serves to establish fathers' claims to authority over children whether or not they have actually participated in the work of caring for them. Mothers, on the other hand, are left not only with the emotions but also the physical labor that has been historically placed on their shoulders.

It seems that fathering as a practice and fatherhood as an institution are difficult to define without recourse to
mothering and motherhood. The Western media is replete with stories of caring, nurturing, domesticated dads who are fighting the strictures of the workplace to spend the same amount of time with their children as mothers, and a burgeoning social policy literature is focusing on men's co-parenting skills. However, in a study of a Lone Fathers Association in Newcastle, Australia, Hilary Winchester notes a reification of hegemonic forms of masculinity among members to the extent that her interviewees' views were "profoundly misogynistic." The most significant issues for these fathers concerned access to, and custody arrangements and maintenance payments for, their children. Most felt that the courts and their ex wives treated them unfairly. Winchester's interviews raised important questions about inequitable access to legal aid and the vulnerability of all separated fathers to unsubstantiated allegations of child physical and sexual abuse. Such contexts, real or alleged, are an important part of the hidden spaces of fathering. Winchester points out further that the fathers in her study were frustrated by legal, institutional, and familial structures predicated upon some very traditional ideas of fathers as the breadwinner of the family. Empirical focus in recent years has moved away from Winchester's lone and disgruntled breadwinner of the family. Empirical focus in recent years has moved away from Winchester's lone and disgruntled fathers to the extent that different perspectives on fathering are embraced. These studies demonstrate how fathering identities are contingent on place and time. Although a growing literature espousing the value of the domesticated father, a powerful patriarchal 'idea' continues to influence the work and spaces of fathering. Research on 'the new father' tends to be uncritical and positive in its analysis of the contemporary culture of fatherhood while missing what is implied by the work of fathering, with all its emotional trappings. Ironically, a monolithic concept of 'the new patently domesticated father' was originally justified and supported by a feminist ideology that advocated men's involvement in parenting. It may be argued that because of the supposed hegemony afforded to individual families in private life, there is greater potential for altering hegemonic discursive fields. This notwithstanding, deviations from accepted gender performances are transgressions which pose a threat to the continued hegemony of normative gender norms. The private relational nature of power in families offers opportunities for resistance, negotiation, and change for mothers, fathers, and children.

The emotional work of parenting focuses upon the value of parenting as labor that is emotionally charged as opposed to biologically determined. The 'biological facts' of motherhood and fatherhood are not 'given' but come into being as science progresses and identities assume cultural significance through political struggle. If we embrace feminism as a powerful de-naturalizing force then we must conclude that gender is a socially imposed division of the sexes, and this includes women's relations to the birth process. Proponents of greater rights for fathers argue that there is no exception. That said, familial spaces are forged over extended periods of time and they are gelled with commitment and obligation. The biological connections between parents and their children are not just about sperm, gestation, labor, birth, transferred DNA, and nursing. Each of these facts is loaded with centuries of cultural evolution co mingled with biological evolution. The fact of motherhood is not just about the reality of giving birth, it is also about the labor that goes into making connections and appropriating the fetus and baby into the mother's moral and emotional space. Without diminishing the importance of the embodied connection between mother and child, there is clearly an emotional geography at work here for fathers and mothers that transcends, transforms, and reifies physical bonds.

**Powerful Emotions**

Family relations cannot exist without parental authority, and some argue that these relations remain the best for enabling children to develop a capacity as adults to give allegiance to the principles and presumptions of a demographic society. Recent geographic research looks at how family authority is constituted and how gendered authority relates to raising children. By identifying discourse forms, as well as routines and practices in which family members engage on a regular basis, it is possible to understand how discourses constitute and organize social and power relations in families. Families are political in the sense that the activities and predicaments of members often are superimposed and/or sanctioned by subordinate members. However, those predications are constantly changing. As political sites, through actions and practices, families are continually engaged in the reproduction of discourses, meanings, and subjectivities. It may be argued that because of the supposed hegemony afforded to individual families in private life, there is greater potential for altering hegemonic discursive fields. This notwithstanding, deviations from accepted gender performances are transgressions which pose a threat to the continued hegemony of normative gender norms. The private relational nature of power in families offers opportunities for resistance, negotiation, and change for mothers, fathers, and children.

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**Neo-liberal Processes of Globalization and Geographies of Care**

Some important recent geographic work on parenting focuses on neoliberal processes of globalization. In large
part, discussion critiques the rollback of state monies for children's welfare, with increased pressure on communities and families to provide support. Much of this work looks at the impact of global economic restructuring on local family contexts. For example, in a 2001 article in *Antipode*, Elsbeth Robson shows how the AIDS crisis in Zimbabwe has resulted in children leaving school and caring for their ailing parents. In a 2006 article in *Area*, Joel Jennings and his colleagues point out that children in Tijuana as young as 12 can earn more than their parents. The notion of children as primary bread winners and caregivers in their families opens up inter esting notions of what precisely constitutes parenting.

In a recent study of Nicaraguan mothers, Julie Cupples finds new forms of mothering in a postrevolutionary state that resist and transform the neoliberal present. State transitions to neoliberalism in countries in the majority global South create spaces in which normative understandings of femininity, masculinity, and parenting are renegotiated in ways not seen elsewhere. She argues that the nexus of work, single mothers, and men de mobilized from the recent revolutionary conflict in Nicaragua creates a context through which women take on both the emotional care and the economic care of children (and other dependents such as grandparents). The idea that marriage and motherhood means an end to paid work is identified as a discourse but rarely subscribed to by some mothers in Nicaragua as is the idea that biological mothers should raise their children. Other studies in Latin America and Asia document numbers of poor mothers who leave their children for months and sometimes years to migrate to places where waged labor enables them earning power to send home family remittances.

With the hardship fomented through the excesses of neoliberal economic restructuring – reductions in services and welfare provision, the failing of certain sectors of employment, and increased burdens on low income parents – studies in Africa, Asia, and Latin America suggest that earlier geographic studies of changes in parenting during Western industrialization tended to rely too much on stereotypes of motherhood and fatherhood, and concluded too readily that women and children were subjugated and marginalized. This past work focuses too narrowly on exploitation and fails to adequately theorize the noneconomic work, emotional behaviors, and iden tity restructurings of men, women, and children. A recent shift is away from a political economy perspective to a poststructuralist perspective that emphasizes multiple constituted forms of mothering, fathering, and being a child/grandparent and engages critically hegemonic forms of motherhood, fatherhood, and domesticity. This, of course, is the contested and problematic ‘illness and remedy’ that constitutes contemporary neoliberal global alization. Economies and systems of governing and edu cation are not the only things to be restructured under neoliberalism: motherhood and fatherhood undergo forms of restructurings of their own that unleash a number of complex, contradictory, and unexpected twists. Glob alizing processes are facilitating at the local level by new gender relations and identities, and new intersections between the work of mothering and fathering.

In her 1999 book *Globalizing care*, Fiona Robinson argues that when geographies of care do not respond well to distance they become utterly territorial, and that we need to move to a notion of relational responsibility that is about difference rather than exclusion, that is embodied, and that is not restricted to the very local. This strategy recognizes that the global is wholly implicated in the local work of mothering and fathering because parental identities are forged through embodied relations that are extended geographically, as well as historically.

See also: Care/Caregiving; Community; Feminism/ Feminist Geography; Neoliberalism; Patriarchy.

Further Reading


Participant Observation
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Glossary

Covert Participant Observation  The practice of conducting participant observation without informing the researched of the researcher's identity or purpose.

Field Notes  Data recorded by the participant observer, often in the form of a field diary.

Gatekeeper  The person through whom access to a particular group or space is negotiated.

Going Native  The act of becoming involved in the community of participation to such an extent that observation becomes problematic.

Insider  The position, not fully possible or desirable, of becoming one of the group being researched.

Positionality  The subject position of the researcher defined through social categorizations, for example, gender or class, personal beliefs, experiences, and attitudes.

Introduction

Participant observation is a research method originally associated with anthropological field work, but increasingly used by human geographers, usually as part of an ethnographic approach. The terms ethnography and participant observation are often used synonymously but, while they are closely related in research methodology, they do have distinct meanings. Participant observation is a key method used by ethnographers, but ethnography refers to a more holistic research approach which might also include, for example, quantitative methods or interviewing techniques. Nevertheless, when human geographers talk about the strength of ethnographic research methods, they are usually implicitly, and sometimes explicitly, arguing that it is the addition of participant observation that has changed their understanding of a particular social or cultural phenomenon. This is because the term refers to a set of research practices thought to generate unusually in depth material.

In participant observation, the researcher attempts to learn about a particular socio cultural space and those who inhabit it by taking part and continually reflecting on what is happening. Unlike other qualitative methods, participant observation involves examining what people do, rather than only what they say or what they say they do. However, in contrast to simply observing, the active participation by the researcher is thought to maintain the naturalness of the research encounter and limit the disruption otherwise generated by their presence in the field. Participant observation is, therefore, different from 'pure observation', a method in which researchers try to exclude themselves as far as possible from the context of their research by using video cameras or tape recorders to collect data for later analysis. Likewise, participant observation is different to 'full participation'. This might occur accidentally during participant observation, but is considered undesirable as it refers to the loss of the identity of investigator and, by implication, a reduction in analytic possibility.

Participant observation is further differentiated from other research methods by the sensual, emotional, and embodied experience of the researcher being incorporated as a significant part of the research. The participant observer is figured as a fully 'human' researcher, rather than a detached and neutral scientist. This has led to recognition of the inevitably 'messy' nature of fieldwork. Accounts by human geographers of their experiences in the field resonate with those of anthropologists who emphasize the ongoing and subjective process of coming to understand social and cultural practices. Rather than seeing this as problematic, however, those conducting participant observation have worked hard to acknowledge the implications of their field corporeality through practices of critical reflexivity.

In traditional anthropological fieldwork, the boundary between home and field was thought to be clearly defined. The discipline established itself through fieldwork on the tribal so the field was always situated away from home, usually in another country. However, influenced by postcolonial theory and the increasing recognition of the power laden dynamics of fieldwork, the focus of some researchers began to alter. Participant observation is now just as likely to be carried out 'at home', within the so ciety of the researcher, as it is elsewhere. So, the binary oppositions previously set up between home and field, here and there, have been complicated and sometimes collapsed. This is certainly the case for human geographers who have increasingly adopted participant observation to investigate subcultural groups and spaces within their own society or argued that they have felt a sense of belonging in the field.

Despite its central significance in anthropological fieldwork, participant observation has traditionally been a peripheral methodology in human geographical enquiry. The increasing importance of participant observation in
contemporary research by human geographers can be linked to attempts to research everyday life and practice. Indeed, the influence of nonrepresentational theory on human geography has been enormously significant. Human geographers who have generated nonrepresentational theory argue that social performances are never limited to words, but also lived through corporeal and emotional experience. This argument has had an import ant impact on both the topics and methods of analysis being explored by contemporary human geographers. Within anthropology, participant observation has long been celebrated as a method which incorporates social and cultural meanings beyond those which are verbally expressed and this is also its appeal to many of the con temporary human geographers who have since adopted it as a central method in their research. Participant obser vation is considered a useful method to go beyond dis cursive and representational geographies.

The use of participant observation by human geog raphers has also increased with a wider recognition of the importance of qualitative methods within the discipline. Arguably, human geographers developed increasingly sophisticated qualitative research skills generating, and responding to, the social and cultural turns of the 1980s and 1990s. Since the mid 1990s, many human geographers have embraced participant observation, using it to investigate a wide range of social and cultural spaces, practices, experiences, and identities. For in stance, human geographers have used participant obser vation to analyze geographies of illness and disability, migration, home, work, activism, tourism, consumption, human–animal relationships, leisure practices, and café culture. Some of this research will be drawn upon to illustrate the remaining sections of this article. The initial focus is on ‘doing’ participant observation and the methodological debates surrounding participant obser vation as a research practice are then discussed.

Doing Participant Observation

In the 1970s, how to handbooks on participant obser vation were virtually absent and students in anthro pology, about to embark on their first research visits, were directed instead to classic accounts of life in the field, such as those of Bronislaw Malinowski, Margaret Mead, and Claude Levi Strauss. Fortunately, since then, anthropologists have begun to address this absence and human geographers have followed suit. Nevertheless, many still infer that doing participant observation is a matter of innate personal skills rather than something that can be learnt. This might well be related to the difficulty of anticipating all eventualities in the field, something that is thought to necessitate the flexibility and resourcefulness of the researcher. Also, the centrality of the researcher as a participant demands particular social skills, such as the ability to ‘fit in’ with people who may be perceived as belonging to a different (sub)culture. Yet, in accounts which argue that participant observation is a research skill, certain key practices are identified repeatedly. These include negotiating access, adopting covert or overt strategies, and writing field notes, each discussed here in turn.

Negotiating Access

It is generally accepted that participant observation has the potential to be used in the majority of field settings, but the ease of gaining and maintaining access will vary considerably. Accounts of geographical fieldwork suggest that negotiating access might be fraught with difficulties or surprisingly easy, but many emphasize the necessity of being flexible and persistent. Often the researcher will need to gain access to a particular site or event. This might be relatively straightforward if the research involves public spaces. Examples here would include cafes, shops and malls, parks, street festivals, sports stadiums, clubs, and bars, although hanging out for a long time in such spaces might still attract attention. However, when it is private spaces that need to be accessed, the researcher will often seek permission or introduction through a ‘gatekeeper’. Examples here would include research in the home, as well as workplaces, hospitals, social groups, schools, and many other organizations. A further possi bility is that the researcher will work with particular individuals, accompanying them as they go about their daily routines in a range of public and private spaces (access being gained to the latter through invitation). This requires recruitment of key respondents willing to be shadowed or share their lives with the researcher on a temporary basis. The difficulties of gaining access have led to many human geographers choosing to conduct participant observation in places and with groups or in individuals they already had access to prior to the start of the project.

Covert Strategies

When access is very difficult or the researcher’s presence is expected to be particularly disruptive or controversial, covert participation observation is sometimes used. In covert participant observation, the researcher does not inform the researched of their motives for being in the field but instead presents themselves as a different (sub)culture. Among those human geographers who practice covert participant observation, a diversity of approaches is evident and these can be understood as tactical responses to variations between field spaces. For example, some researchers will be putting themselves in situations where, if found out, they might be at risk of physical harm or legislative retribution. They may,
therefore, feel forced to lie in order to keep their position secret and complete the research at all. Other researchers are able to be completely open about their position as a researcher, but feel the need to hide the focus of their analysis from all or some of the researched. Meanwhile, there are other researchers who initially set out to research one theme, but find themselves compelled to respond dynamically to the material they are collecting as a result of their presence. Deciding whether to reveal or conceal their purpose and identity, raises both practical and ethical questions for the researcher. While covert participant observation may be regarded by some as dishonest, many researchers argue it is a compromise they must make to achieve access to socio cultural spaces that they would otherwise be denied. It is often considered necessary by researchers who require access to more powerful individuals and institutions responsible for the social marginalization or exclusion of minority groups. A political commitment to the well being of the less powerful, something that guides many researchers interested in social justice issues, therefore results in ongoing ethical debates, but covert participant observation has enabled many human geographers to produce sensitive and/or critical geographies of the world we live in.

The work of the feminist geographer Hester Parr is useful as an example through which to explore the ethical issues surrounding covert participant observation strategies. In her research on people with mental health problems, Parr adopts both overt and covert strategies in a range of spatial settings. To access hospitals and homeless hostels, Parr negotiated official access to conduct her research. However, in the public spaces of streets and parks she used covert participant observation to make contact with people with mental health problems who avoided institutional spaces. Furthermore, Parr deliberately used her body in similar actions to those people she was observing (e.g., smoking, foot tapping, and adopting certain postures) in an effort to make herself unthreatening and, therefore, to enable her to participate in verbal conversation and ‘body talk’. Such corporeal presentation, as Parr herself recognizes, raises significant ethical issues, particularly in research on vulnerable individuals and groups. Yet, in this case, covert participant observation was also an undeniably necessary part of producing empathetic and useful knowledge about the everyday experiences of people living with mental health problems. Many more accounts of covert participant observation by human geographers could also be used to illustrate how the ethical issues surrounding such strategies are rarely straightforward.

Writing Field Notes

The issue of how to write field notes has been relatively neglected in the methodological literature on participant observation, in stark contrast to the noticeable concern across disciplines with the politics and poetics of representing ethnographic material at the ‘writing up’ stage. Yet, field notes are a distinguishing feature of participant observation and, as the experiential and observational material (or data) that the researcher will continually analyze to explore their research questions, they are an extremely significant part of the research process. One concern that might explain this reticence is that field notes in their ‘raw’ form can be perceived as too messy; they might be full of emotional response, incomplete analysis, unresolved questions, interpretations that are not yet fully thought through, or even admissions of mistakes. By the time field notes are to be presented or published, they are reordered and reworded, their significance selected and revalued for an audience.

A further problem is that there is seemingly no consensus regarding how exactly to write field notes. Certainly, there are no published examples of raw field notes against which to compare first attempts. However, some human geographers have used extensive extracts from their field notes to illustrate their research which, although undoubtedly polished for publication, offer clues about what sort of information might be recorded and reassurance that a personal style is inevitable. Others provide lists of things that might be included, such as: reflexive accounts of access issues, power relations, emotional experiences, as well as more pragmatic logging of who you talk to, where you go, and when. The matter of when to write field notes is also contentious: some argue that memory distorts field notes written at the end of the day, while others claim that a notebook can be disruptive as it reminds the researcher of your motives for being there.

Methodological Issues and Debates

A Scientific Method?

A persistent critique directed at human geographical enquiry using participant observation is that such research is considered inherently unscientific. This claim is based on questions about the reliability of the material gathered, as a result of the high significance placed on interpretation in participant observation techniques and the significance of the researcher themselves in the field. A further concern raised by participant observation centers on the difficulty of generalizing from empirical research based on small sample sizes. Sustained interaction with a particular group or site is time consuming and, therefore, limits the possibilities of including as many research participants as surveys, or even interviewing methods, routinely managed. This raises questions about the representativeness of the sample and the applicability of the interpretations to other sites or groups.
While such critiques are recognized as serious concerns for the human geographer, many have argued that the taken for granted scientific objectivity of knowledge is actually socially constructed and, therefore, must be challenged whichever research methods are being used, because all research involves interpretation. Likewise, it is argued that the problems related to small sample sizes in participant observation are far outweighed by the in-depth nature of such research and that empirical findings can often be generalized when the researcher chooses appropriate respondents and/or sites of analysis. Furthermore, for many, the researcher's subjectivity is an advantage in participant observation: it is their emotional and embodied experience of learning that offers insight into the social and cultural meanings they set out to explore. These arguments are so widely accepted in contemporary human geography that explicit response to such critiques is now deemed for the main part unnecessary (although it is important to note that many students on degree programs in human geography still come across resistance to their desire to use qualitative research methods of any kind in projects and theses).

Critical Reflexivity

For human geographers using participant observation, critical reflexivity is often a hugely significant research practice. In the work of feminist geographers, the term refers to the practice of continual critical introspection on the researcher's fieldwork practices and relationships, particularly with respect to the power involved. In adopting the technique of participant observation, the researcher must be sensitive to their centrality in the research process and consider the implications carefully. The researcher is often figured in participant observation as the 'vehicle' or 'tool' of the research method and many human geographers argue that with this position comes a heightened responsibility to engage with questions raised by their own positionalities. The multiple subject positions of the researcher will impact on the research in ways that can never be fully traced. Factors such as gender, class, ethnicity, age, sexuality, education, and the personal beliefs and perceptions of the researcher will influence every stage of the research, including the research questions they choose, their interactions with the researched, and their interpretations of the material they collect. No research is without such dilemmas, but the close personal relationships over a long duration which are involved in participant observation potentially incease the importance of critical reflexivity.

Ethical arguments for using critical reflexivity are also heightened in research on marginalized or vulnerable groups. This is most obviously a concern when those associated with institutions in the West travel to conduct their research 'elsewhere' in postcolonial settings and development contexts. However, concerns about power relations do not disappear for human geographers conducting research in their own society, especially when they are researching across generational, class, and ethnic divisions, or examining geographies of illness and disability.

Insider/Outsider

Increasingly, the false binary of insider/outside has been deconstructed in accounts of participant observation, including those written by human geographers. Initially, it was argued that it might be more appropriate to consider a range of possible positions along a continuum from insider to outsider. More recently, however, fieldwork accounts have been produced that recognize multiple shifts between various positions, or the possibility of holding several positions simultaneously. Nevertheless, anxieties persist about the potential susceptibility of the participant observer 'going native'. This is a term which refers to the researcher becoming too involved in the space being studied, by accident or by choice. This is considered by many human geographers to limit the ability of the researcher to distance themselves from the events and people around him/herself and, therefore, to maintain a sufficiently critical analysis.

However, in accounts of the researcher as activist, claims to remain detached have been superseded by an acknowledgment of the researcher's various identities and by efforts to be transparent about their effects on the research. Indeed, some human geographers have been actively working to disrupt the separation of the academy from something that lies beyond. Participatory approaches to research that are activist led, challenge these boundaries by positioning the academic as a facilitator and the role of the participants as co-researcher or co-activist. In this way, participants are thought to become more empowered than they might through more traditional approaches and the researcher becomes an active part of the community, albeit in an unusual position. For many, this has become a way of doing human geographical research which offers the potential to increase the relevance of their working lives and make a difference to the world outside their university.

Such ongoing debates about being an insider/outsider are also highlighted by some specific contexts in which participant observation might be carried out. For instance, the process of researching sexuality is thought to raise particularly challenging dilemmas for human geographers using participant observation and qualitative methods more generally. Feminist geographers Alison Bain and Catherine Nash, for example, have conducted participant observation at a queer bathhouse event. For them, as for many other human geographers, it is not enough to simply state their positionalities through social...
labels, for instance, lesbian women. Instead, Bain and Nash question what it means to place their lesbian bodies and identities into the sexualized space of the field, detailing their experiences of conducting participant observation (dressing, positioning, and interacting with their bodies) in order to interrogate the partiality of their knowledge construction. In doing so, they explore their position as both insiders and outsiders and the multiple ways in which they negotiate this. For instance, they chose to dress in streetwear to communicate that they were not available to participate in sexual activities, but acknowledge their simultaneous inclusion as desiring bodies in voyeuristic practices.

Field Relationships

Participant observation demands the establishment and ongoing negotiation of social relationships for eliciting findings, and the quality of these relationships is understood to be critical to the success of the research. At the same time, the researcher is often away from home and/or working with their informants over a relatively long time period. This kind of immersion in the field site generates particular ethical dilemmas for the participant observer around notions of intimacy, while also potentially exaggerating many of the ethical dilemmas facing qualitative researchers more generally.

Intimacy is central to participant observation, evoked in the language of rapport, trust, and friendship. The participant observer is advised to get close to the researched in order to become accepted and unobtrusive. This will usually involve distinct, deliberate efforts on the part of the participant observer and sometimes ‘learning to act’ in certain ways to fit in. Many human geographers discussing their field experiences have commented, therefore, on the difficulties of negotiating such significant, yet unusually strategic, relationships. On the one hand, such relationships can feel deceptive; this is often the case when the participant observer considers that they would not normally associate with the researched due to their different cultural and political practices or moral principles. On the other hand, the participant observer may feel that their relationship with the researched goes beyond the research project itself. Indeed, through long term participant observation they may begin to feel as part of their lives. When relationships feel more ‘natural’ or genuine, however, ethical dilemmas do not simply disappear. In each case, the researcher draws boundaries around what is researched and what is not, and must decide if the researched is to have any input in this process.

Crucially, however, participant observation does not just rely on being able to establish and maintain relationships, but also to detach from them. While the researcher is called upon to provide evidence of their presence, they must also demonstrate their critical distance. Detachment is necessary both in the field, during daily observations and writing of field notes, and when leaving the field at the end of a period of fieldwork. For this reason, integration must never be complete and relationships (except where fieldwork is done nearby) temporary, or at least they must be adapted to virtual or transnational connections. For the researcher who has lived fully immersed in the field, therefore, the deval opment of field intimacies often raises further questions about the emotional geographies of home and belonging. This tension between the personal and professional identities of the participant observer is evident in many accounts written by human geographers.

See also: Ethnography; Fieldwork.

Further Reading


**Participation**

S. Hickey and U. Kothari, University of Manchester, Manchester, UK

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**Glossary**

**Stakeholder** An individual or group that is affected by or impacts upon an action or intervention.

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**What Is Participation in Development?**

In development discourse, the term participation is gener ally used to describe the type and level of stakeholder or beneficiary involvement in development planning, projects, and practices. The ostensible aim of participatory ap proaches is to make ‘people’ central to development by encouraging the involvement of socially and economically marginalized people to influence the policies and practices that affect them. In this way, it is expected that development processes will become more relevant, efficient, and sus tainable, and that unequal power relations will be challenged in ways that empower previously subordinate actors.

Originally promoted as a strategy for ‘alternative develop ment’, the 1980s and 1990s in particular saw the widespread mainstreaming of participatory approaches within the aid industry. As a result, participatory methodologies – often referred to as Participatory Rural Appraisal (PRA) or Participatory Learning and Action (PLA) – have become commonplace across virtually all sectors of development. Importantly, they have also been scaled up from the localized level of project intervention to form an ideological and instrumental cornerstone of contemporary development policy, as illustrated by the World Bank studies on the ‘Voices of The Poor’ and its promotion of participation within flagship policy initiatives such as the ‘poverty reduction strategy’ process. We focus here on the implications of this trajectory, identifying some of the problems associated with participatory approaches and recent efforts to deal with these, and draw attention to the broader ways in which ‘participation’ has been associated with development.

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**The Emergence and Benefits of Participation in Development**

‘Participation’ has been a clarion call for a variety of ideological and institutional interests in development, from the colonial project of ‘community development’ through to the focus on social movements by those espousing post Marxism and postdevelopment alike. There have been a number of different approaches within development theory and practice over the past century that have taken participation as a key element of their overall project (see Table 1). Here it is instructive to distinguish between the role that participation is envisaged to play in terms of development as a historical process (e.g., capitalism, political development, social change), and the more immediate world of development as a specific set of interventions (e.g., projects). For example, approaches to participatory action research during the 1970s encouraged participants to analyze wider societal problems and then sought to integrate analysis and action in iterative cycles, with action against oppression often taking a political form (e.g., within political parties). More broadly, popular participation has clearly underpinned developmental and political action in many developing countries without external intervention. Against this, the later approach of PRA sought to transform relations within specific development encounters – between development professionals and project ‘recipients’ – and to generate knowledge not only for empowerment but also for development planning.

It is this version of ‘participation in projects’ that dominates in international development. Influenced by key pioneers such as Michael Cernea (a strategically placed sociologist at the World Bank) and Robert Chambers, participatory approaches were progressively globalization over the late 1980s and early 1990s through training workshops, specialist journals, and word of mouth. A range of committed nongovernmental organizations and practitioners from both the developed and developing world were critical in the expansion and mainstreaming of such approaches within the larger bilateral and multilateral agencies.

There are a number of broader reasons for the emergence of participatory approaches and their rapid and widespread adoption by development agencies and practitioners in the 1980s. The ineffectiveness of externally imposed and expert-oriented forms of research and planning had become increasingly evident, and participatory approaches emerged primarily as a response to this. The shift from blueprint to process approaches to development planning that began in the early 1980s led to a concomitant shift from expert and professional knowledge to people’s knowledge implying a new professionalism and a change in balance of power of stakeholders with greater recognition and support for ‘local’ people. Furthermore, it became increasingly clear that beneficiaries could be empowered not only as a consequence of the development intervention but also through the methods of enquiry. The evolution of these methods also took place in connection with a shift in the social sciences, away from quantitative, and toward more
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Qualitative research methodologies which were seen to have stronger explanatory power. In historical terms, the emergence and use of participation has also been linked to the pursuit of political objectives at different moments. These have included efforts by colonial powers to co-opt and stabilize rural communities into particular forms of state building and social engineering, and more recent attempts to promote higher levels of state accountability and legitimacy by involving citizens in every more influential processes of policymaking and governance.

Arriving at the time of the ‘impasse’ in development studies, participatory approaches held the promise of renewal for a field of theory and action beset by internal soul searching and external critique. In this context, it is important to note that the rise of participation gained ideological support from alternative/radical perspectives that emphasized popular empowerment and participatory forms of democracy, but also from within the growing neoliberal hegemony, whereby individuals and their own views of the world and people to become aware of the structural reasons for their traditional exclusion and how their own views of the world and thoughts processes can or cannot challenge these.

There are numerous benefits of participatory development, not least that such analysis is seen to be better informed, because the research and data on which it is based has been generated collectively between development practitioner and potential beneficiary. Furthermore, participatory research builds a sense of commitment, and allows local knowledge to contribute to how the project is implemented while participatory evaluation gives beneficiaries the chance to comment on the effectiveness of a given development intervention.

Another advantage, perceived by those who see participation as an end in itself, is that the process of involving intended beneficiaries in decisions, planning, implementation, and evaluation of projects, from which they had traditionally been excluded, can itself be empowering. Moreover, participation can enable poor and marginalized people to become aware of the structural reasons for their exclusion and how their own views of the world and thought processes can or cannot challenge these.

Participatory approaches are seen as producing information that is closer to the truth than other less participatory, top-down methods of enquiry and knowledge accumulation. These claims to acquiring ‘truer’ knowledge and, for some practitioners, to empowering participants through their involvement in the process, have encouraged the overwhelming adoption of participatory techniques within development policy and practice.

### Participatory Methods: A Focus on Research

Although participatory development incorporates a range of processes and practices, tools, and techniques, it is most commonly associated with PRA. PRA can be used to identify and assess community needs and priorities for, and feasibility of, development activities as well as for monitoring and evaluating the impact of these. It can also inform continuous re-assessment of the program as a result of the information gathered. A significant characteristic of PRA methods is the emphasis on visual methods of collecting and analyzing data, primarily for the purpose of ensuring that less literate people can be fully involved in the process. These methods include, diagramming (seasonal calendars, time lines, Venn diagrams, etc.), mental and social mapping and modeling, transects and historical timelines, ranking and scoring preferences, observation, focus groups, and role play.

Participatory training provides concrete skills in these methods as well as highlighting the potentials and limitations of these. Importantly, research training manuals emphasize the necessity of practitioners to adopt particular sensibilities to empower community members to express, share, enhance, and analyze their knowledge, including, for example, showing respect for local people and interest in what they know.

In this approach, informants are not objects of study, but are participants in the research process and therefore problems need to be understood from their point of view. A priority within participatory approaches is to limit the separation between the collection and analysis of information. Thus research is not a mechanical procedure of information gathering where data is collected in one place and then analyzed ‘back home’ but an iterative and flexible process where information is collected and analyzed in the ‘field’ and issues that arise feedback into the process. Although indigenous knowledge is prioritized, triangulation is a key component of the research process whereby information sources, informants, and methods are cross checked to incorporate different people’s perspectives and different methods. Indeed, one of the key principles of PRA is the offsetting of biases not only among informants but also among research facilitators. Participatory practitioners are encouraged to consider and address the different understandings of interviewee/interviewer about the purpose of the enquiry and in what ways their relationship shapes the kinds of data gathered. Furthermore, they need to be aware of the dynamics of group activities and to ensure that information generated by different social groups with potentially conflicting viewpoints have been ad equately represented and to be cognizant of any groups that have been left out of the process and the power dynamics that shape different people’s participation and interests. This has resulted in a version of participation geared toward knowledge production as a means of catalyzing social change and challenging dominant relations of power.
Critical Challenges

The mainstreaming of participation has been accompanied by a rising tide of critical debate concerning the extent to which it has actually lived up to its often ambitious claims. Criticisms have come both from within the ‘participatory movement’ and without, and generally take two main forms: those that focus primarily on definitional differences, debates over the objectives of participation and the applicability and appropriateness of the methodologies and techniques and, those that pay more attention to the theoretical, political, and conceptual limitations of participation.

Technical limitations of the approach are primarily articulated by those who stress the need for self critical reflexivity and a reexamination of the methodological tools used. Within the discourse there is an espousal of ongoing self critical epistemological awareness that is considered an essential component of participatory ideology and practice. This generates a continuous dialog between practitioners on the quality, validity, and ethics of what they are doing in order to prevent poor practice or exploitation of the people involved. This reflexivity does not represent a critique of participatory methodogy per se, however, it is seen more as an intrinsic facet of the approach itself. In this way, it is envisaged that the methodological and practical problems of the approach are continuously highlighted and revisited. However, the often pressurized daily realities of development work do not always allow for such reflexivity to emerge in practice.

There are other critiques of participation, particularly focused on PRA, that foreground issues of diversity and differentiation. Use of the homogenizing term ‘community’, for example, has been challenged with questions raised about representations of ‘communities’ as static and harmonious units within which people share common interests and needs. Critics argue that this understanding of the notion of ‘community’ conceals power relations within ‘communities’ and further masks biases in interests and needs based on, for example, age, class, caste, ethnicity, religion, and gender. Frequently, simplistic notions of ‘community’ employed in PRA expose its weakness in exploring social and political complexity, which may be better understood using nonparticipatory methods. There is also an assumption within participatory practice that ‘consensus’ is possible and/or desirable in a ‘community’, whereas, it may represent co option of the process in the interests of existing elites. The question therefore arises as to whether participatory research can ever take place outside of local power relations, let alone challenge these. Further dangers can arise when the data produced by PRAs are interpreted out of the context in which they were produced. This context includes informants’ perceptions of the purpose of the PRA, and of the facilitators, and the problem is compounded when there is a scarcity of reflection and reporting on the PRA process, including the role of the ‘practitioners’.

Such methodological dangers are particularly apparent when efforts are made to scale up participatory research exercises in order to inform policymaking at the national level. For example, ‘Participatory Poverty Assessments’ have involved efforts to aggregate PRA findings from a wide variety of different sites, despite the fact that the particularly flexible process of participatory research (unlike more standardized survey work) rarely unfolds in a similar enough way to allow for genuine comparisons and aggregation to occur. It has also proved difficult to determine which issues should be prioritized from this mass of rich oral and visual data, with long and unproductive wish lists sometimes being the unsatisfactory outcome.

Other critics move beyond an identification of limitations of, and adjustments to, the methodology to more fundamental critiques of the discourse of participation, albeit recognizing that some of these do indeed emerge out of technocratic concerns. These critiques provide important insights into the participatory development discourse, through a conceptual and ideological examination of its theories, methods, and practices. They focus on the extent to which participatory facilitators override existing legitimate decision making processes, how group dynamics can lead to decisions that reinforce the interests of the already powerful, and how certain kinds of knowledge are deemed less important than others. They highlight potential barriers in the public arena for the expression of certain views and views of certain marginalized people who would not normally be expected even to be present in formal public encounters and who are unaccustomed to expressing themselves in terms suitable for a public audience. A further concern is related to the inexorable rise and prioritization of participatory methods in development that is seen to have driven out other methods of enquiry that have advantages participation cannot provide such as in depth ethnographic and more theory based research.

Others challenge the conceptual and political limitations of the approach, demonstrating how participation can lead to political co option and mask continued centralization of development policy and planning in the name of decentralization and participation. For example, the ‘local knowledge’ shared in the process is seen to have driven out other methods of enquiry that have advantages participation cannot provide such as in depth ethnographic and more theory based research.

These problems arise, in part, due to the perceived tension of incorporating and matching participants’ interests with existing donor priorities and thus the potential for manipulating people’s needs and interests so that they fit into those of the funding organization.
Some critics examine the complex micro politics and social practices of knowledge production uncovering differences in the constitution of knowledge and the diverse ways of knowing. Culturally, socially, and politically produced, knowledge is a powerful normative construct formed out of an accumulation of social norms, rituals, and practices which, far from being constructed in isolation from power relations, is embedded in, or against, them. Within much participatory discourse, however, ‘people’s knowledge’ or ‘local knowledge’ is seen as a fixed commodity that people intrinsically have and own, as individual experience, preference, or choice. It is not seen to embody power relations since it appears to be articulated and believed in by all.

Participatory research has also been criticized for simplifying complex processes and realities so that they are manageable for the planner. It ‘cleans up’ local knowledge through mapping and codification, and marginalizes or discards that which might challenge the status quo or is messy or unmanageable. Techniques such as seasonal calendars and wealth ranking require a purification of knowledge and the exclusion of experiences that do not fit the structured representations implied by the tools.

These critiques from within and outside the participatory movement are clearly related. The mainstreaming of participation during a particularly neoliberal and technocratic moment of development theory and policy is considered by some to have drained the approach of its radical potential. Participatory approaches become a technical method of project work designed to ‘change attitudes’ rather than a political methodology for challenging structural exclusions at a range of scales. The failure to look beyond ‘the primacy of the personal’, and to examine the underlying causes of exclusion, rather than those related to development interventions alone, has lent participatory approaches a methodological individualism that is inevitably depoliticizing, and which obscures deeper understandings of what makes participation difficult for marginal groups in the first place, particularly in relation to processes of state formation, social stratification, and political economy. Significantly, participation lacks a coherent theory of social change, such that it is not clear how transformations within development interventions relate to broader social change.

Participatory approaches can mask, and indeed sustain, inequalities and injustices, by co opting and thus reducing potential spaces of conflict and dissent. Yet, intended participants can, and do, resist participation in a number of ways. These include simply refusing to participate, rejecting projections about their lives, retaining information, and presenting themselves in a variety of diversionary and conflictual ways. Furthermore, given the long, and often unhappy, history of efforts to co opt popular agency in many developing countries, let alone the time costs of participating, noninvolvement may well be an understandable response.

Moving Participation Forward: Dealing with Power and Politics?

Despite the veracity of these critical challenges, they have notably failed to halt the spread of participation as a development concept and strategy. Apparently undeterred, and increasingly underwritten by policy and funding support from major development agencies, the participatory turn has become expressed more deeply and diversely within development theory and practice over recent years. Within this continued upward trajectory it is possible to discern two types of response to the above critiques, particularly the charge that participatory approaches fail to adequately address issues of politics and power that the rhetoric of empowerment raises.

The first has been a largely practical and methodological response, whereby problems of power and politics are addressed by leveraging participatory approaches into ever higher levels of decision making. Examples here include not only the scaling up of PRA methods into national research exercises (as with participatory poverty assessments) but also a wider push for participation to form the basis of development policymaking at national levels. The key exemplar of this has been the insistence by the World Bank that governments should undertake broad based consultations with citizens as part of formulating, implementing, and evaluating their debt related poverty reduction strategies. Here participation is charged with its usual roles of securing relevance and legitimacy but also of the broader goal of ‘ownership’. Such moves are relatively new, although there is evidence to suggest that participatory processes within such processes have led to some institutional innovations that have brought civil society organizations into the policy process, and helped ensure a stronger pro-poor focus within policymaking. However, numerous problems have also emerged, including the exclusion of key actors from consultative processes (particularly unions and political parties); the timing and constraints on genuine participation; the discretionality and patronage based character of these forms of ‘invited’ consultation; and the failure to open up key aspects of government and donor policy to participatory scrutiny (most notably macroeconomic policy).

Linked but not confined to this shift has been the broader emphasis placed on participatory forms of democracy and governance. Promoted by donors, but often originating within national political projects, many countries have sought to implement democratic forms of decentralization, participatory planning within municipal governments, and even participatory budgeting, whereby citizens play a direct role in setting budget priorities and
monitor expenditure patterns. Although some successes have been apparent, it is not always clear that such approaches are more successful or effective than centralized approaches, or that they have transformed the tensions between participatory and more representative forms of democracy and governance into more progressive synergies.

The second set of responses address the more fundamental criticisms of participation by reconceptualizing participation into a more politicized form of theory and (by implication) action, and derive from a belief that participation remains a critical aspect of an emancipatory and progressive form of politics. For example, some have suggested that what is required is to focus on developing the ‘political capabilities’ of poor and marginal groups. Here, the notion of political capabilities can ‘repoliticize’ the theory and practice of participation in development and governance by drawing attention to long term processes of political learning, the ways in which ideas, identities, and collective self awareness constitute valuable political resources; and the importance of understanding empowerment in relation to the relationship between the state, the organizational resources of the poor and relevant policy areas. As such, it appears to offer new strategies for promoting political inclusiveness.

Others have sought to relocate ‘participation’ within citizenship analysis. This situates it in a broader range of sociopolitical practices through which people extend their status and rights as members of particular political communities, thereby increasing their control over socioeconomic resources. Participatory notions of citizenship are particularly relevant to marginalized groups by offering the prospect that citizenship can be claimed ‘from below’ through their own efforts in organized struggles rather than waiting for it to be conferred ‘from above’. The question for participatory interventions becomes how the ‘competency’ of participants to project their agency beyond specific interventions into broader arenas can be enhanced, thereby progressively altering the ‘immanent’ processes of inclusion and exclusion. In theory, then, citizenship offers a means of covering the ‘political capabilities’ of poor and marginal groups.

proponents of participatory approaches, although vested interests and ideological commitments remain strong. It is now increasingly recognized that participatory discourse and practice need to engage more seriously with issues around power and politics.

See also: Aid; Citizenship; Civil Society; Debt; Empowerment; Indigenous Knowledges; Neoliberalism; Neoliberalism and Development; Nongovernmental Organizations; Participatory Action Research; Participatory Video: Poverty.

Further Reading


Relevant Websites

http://www.worldbank.org

http://www.un.org

http://www.ids.ac.uk
Participation Team Overview, Institute of Development Studies.

http://www.drc.org
The Development Research Centre on Citizenship, Participation and Accountability.
Participatory Action Research

S. Kindon, Victoria University of Wellington, Wellington, New Zealand
R. Pain, University of Durham, Durham, UK
M. Kesby, University of St. Andrews, St. Andrews, UK

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Glossary

Discourse A specific series of representations, practices, and performances through which meanings are produced, connected into networks, and legitimized.

Emancipation A term used to describe the process of freeing someone (usually a disenfranchised group or individual) from various political and other restrictions, or the state of being free from those restrictions.

Empowerment A process of developing the power and capacity to overcome internalized oppression, to negotiate and influence the nature of relationships, and/or to act collectively to change political structures and local conditions.

Paradigm The assumptions, procedures, and findings generally accepted by a group of scholars, which together define a stable pattern of their research orientation and activity.

Participatory Development An approach to international community development which believes that people are important actors capable of shaping their own future. It uses various approaches, which involve local decision making in the design, planning, and implementation of any intervention.

Introduction

Participatory approaches to research offer a radical challenge to ‘how’ data are collected, ‘what sort’ of new knowledge results, and ‘what impacts’ they have; as well as to ‘who’ directs and benefits from research. Participatory action research (PAR) – the most popular of these approaches in human geography to date – is a collaborative process of research, education, and action explicitly oriented toward social change. It involves academic researchers (usually full time and paid) and nonacademic co-researchers and participants (usually part time on the project and not paid) working together to examine a problematic situation in order to change it for the better on participants’ own terms.

This kind of research is certainly not new (in general or to geography). For over 70 years, advocates of such approaches have sought to challenge the traditional model of research (which might be characterized as imperial, hierarchical, and extractive). They have also sought to promote alternative modes of investigation, which enable participants’ empowerment in and through the research process and in which the benefits of research accrue more directly to communities involved. However, notwithstanding this long history, a recent sharp resurgence of interest has meant that participatory approaches are only now becoming a leading paradigm within contemporary social and environmental sciences.

We believe that PAR presents some of the most radical, creative, exciting, and challenging approaches to knowledge production in human geography, and clearly our voices are dominant within this article. However, in keeping with the value orientation of PAR, which works to embrace diverse knowledges and destabilize hierarchical relationships between researchers and participants, this article also includes voices from nonacademic colleagues reflecting on their priorities and experiences with PAR.

Origins and Epistemological Underpinnings

When engaging with participatory approaches, it is important to avoid simply adopting the many novel methods into ‘research as usual’. First, it is vital to understand the theoretical reasoning that enables innovative techniques to be deployed within genuinely alternative modes of research that are action oriented.

Historically, the term ‘action research’ was initially coined in the USA by Kurt Lewin (1946), who introduced the idea of an iterative (or repeated) cycle of action and reflection in research, something he called ‘spiral science’. Similarly, Sol Tax and William Foote Whyte developed an approach to research that enabled local people to directly voice their concerns without mediation by outside experts. However, it was the South American emancipatory educator Paulo Freire’s community based approach to research in 1960s’ Brazil that most famously inspired researchers to involve their participants directly in knowledge production and turn research into a means of social transformation. Freire developed an epistemology in which investigation was grounded in people’s struggles and local knowledges, and he saw research as an opportunity for conscientization (conscientización), a process through which poor and marginalized people could develop a heightened awareness of the forces affecting their lives, and on which they could base social and political action. His ideas connected with others in
the majority world who were dissatisfied with the ongoing legacies of colonization, modernistic development inter-
ventions and positivist research paradigms promoted by university based researchers, and the early 1970s par-
ticipatory approaches proliferated across Latin America, Africa, and India (where they resonated with the earlier social movements led by Mahatma Gandhi). In the years that followed, the foundations for PAR were laid, among others, by Marja Liisa Swantz in Tanzania, Rajesh Tandon in India, and Orlando Fals Borda in Colombia. Then in the 1980s, a ‘second wave’ of PAR emerged in community led international development and partici-
patory development.

As a result of this innovation, a plethora of approaches to action oriented research and development now exists.
Of these, we favor PAR because it signals a commitment to directly engage participants in collaborative processes as well as to engage in research for action. Further more, within the diverse and overlapping ‘schools’ that compile contemporary PAR, we particularly value those informed by feminist, post structural, and postcolonial perspectives. We discuss these briefly here and return to them later in more detail.

Feminist theories offer insights into the nature and depth of social inequality, highlight the masculinist nature of ‘research as usual’, and speak directly to the need for collaborative, participatory research and alter native methods. Feminism also has a longstanding com-
mittment to activism within and outside of the university. Janet Townsend’s early geographic work with women in Latin America exemplifies this kind of participatory feminist approach and illustrates how participatory practice can be extended into collaborative research outputs, a point we return to later.

Post structuralist theories have been helpful in pro-
viding alternative and relational understandings of power and the workings of discourse, which both constrain and enable participatory processes. Working on a post structuralist vein, geographers like Jenny Cameron and Kathy Gibson have demonstrated the politically powerful effects of paying attention to language, identity, and rep resentation in PAR projects in Australia. Caitlin Cahill’s work also draws productively on post structuralist think ing to explore how subjectivities of young women change throughout their engagement as co researchers on a PAR project in New York.

Postcolonial theories have been invaluable in calling explicit attention to the ongoing effects of colonization in present day institutional arrangements, images, and representations, and interpersonal relationships. This is critically important in the context of PAR’s focus on working with marginalized and traditionally oppressed groups. Sara Kindon’s work with Geoff Hume Cook and Te Iwi o Ngāti Hauiti – a Māori tribe in Aotearoa, New Zealand – has used participatory video to destabilize the masculinist and colonial gaze of mainstream media representations of Māori, and has provided a vehicle for self representation and community building.

Clearly, as an approach, PAR is diverse because it is always shaped by a commitment to locally appropriate public engagement. Nevertheless, it is also always marked by a commitment to theorize and produce knowledge through mutual respect, dialog, and inclusive methods, and as such a number of general characteristics of PAR, and those that facilitate it, are distinguishable, which provide a useful guide to the politics, practice, and pro fessional identity of those involved (Box 1).

The Participatory ‘Turn’ in Geography

Three forces have driven the recent explosion of interest in participatory approaches in human geography: first, a

Box 1 Key characteristics of PAR and PAR researchers

| 1. Aims to change practices, social structures, and media which maintain irrationality, injustice, and unsatisfying forms of existence |
| 2. Treats participants as competent and reflexive agents capable of participating in all aspects of the research process |
| 3. Is context-bound and addresses real-life problems |
| 4. Integrates values and beliefs that are indigenous to the community into the central core of interventions and outcome variables |
| 5. Involves participants and researchers in collaborative processes for generating knowledge |
| 6. Treats diverse experiences within a community as an opportunity to enrich the research process |
| 7. Leads to the construction of new meanings through reflections on action |
| 8. Measures the credibility/validity of knowledge derived from the process according to whether the resulting ac tion solves problems for the people involved and in creases community self-determination |

Participatory action researchers are generally

1. Hybrids of scholar/activist where neither is privileged
2. Interdisciplinary
3. Mavericks/heretics
4. Patient
5. Optimistic, believe in the possibility of change
6. Sociable and collaborative
7. Practical and concerned with achieving real outcomes with real people
8. Able to be flexible and accommodate chaos, uncertainty, and messiness; able to tolerate paradoxes and puzzles and sense their beauty and humor
9. Attracted to complex, multidimensional, intractable, dy namic problems that can only be partially addressed and partially resolved
10. Engaged in embodied and emotional intellectual practice
series of conceptual shifts over the last decade in philosophical critique, in economic and environmental policy, and in international geopolitics; second, the wider uptake of PAR in other social and environmental sciences; and third, increasing critical reflection among those employing such approaches.

Ethically, PAR is increasingly viewed as one answer to the recent (re)questioning of relevance and to renewed calls for more morally aware, less hierarchical research practice which challenges and acts upon inequality. In intellectually, PAR is well suited to research that explores people's relations with, and accounts of, space, place, and environment because it is context specific, foregrounds local conditions and knowledge, and produces situated, rich, and layered accounts. It also offers a concrete means of attempting to connect the multiple relations between issues and processes at different scales.

The ‘participatory turn’ in geography is, itself, stimulating a ‘geographical turn’ in participatory approaches as advocates become aware that PAR reflects and affects the spaces within which it takes place. Thus, the geographies of PAR are vital to how it plays out to effect or to stymie change. Informed by these spatialities and relationalities, PAR leads to new or modified theories of its materialities and objects of study, such as environmental degradation, the circulation of social capital, or the impacts of crime in rural areas. PAR's grounded and relational orientation toward knowledge construction challenges the hegemonic norms of insular academic production and enables more diverse and contextually rich theorizations and actions to emerge.

For example, in Rachel Pain's current PAR art project with locally born and refugee young people in Newcastle upon Tyne UK, Gaby Kitoko, a refugee community activist and research collaborator reflects that one benefit of the research has been that it has worked as a space where young white and black children have been able to integrate, often for the first time (Box 2).

It has also worked to produce knowledge and expressions of feelings about being a young refugee, which were used to try and effect change in wider arenas (Figure 1).

The relationships between the participatory and other ‘turns’ in geographical enquiry are worthy of further exploration. For example, while some viewed the cultural turn of the early 1990s as a move away from forms of radical research focused on practical social change, nevertheless, its focus on the voices and histories of marginalized social groups and emphasis on qualitative methods, produced the conditions in which PAR's older critique of conventional research could flourish.

More recent resonances have been with the ‘emotional turn’, which insists on the emotional and embodied nature of knowledge production, and the ‘material turn’, which has refocused attention upon how the materialities of objects within particular cultures and landscapes might be mobilized to challenge injustice and ground political struggles. Finally, while the ‘nonrepresentational turn’, has largely ignored the legacy and potential of participatory approaches, its call for methods that attend to the range of sensory experiences that inform knowledge and action, and which reach beyond the limits of the textual, verbal, and material to engage new media, lived experiences, performative and haptic knowledges, might find some useful responses within PAR.

Critiques of Participatory Approaches: Power and Empowerment

Naturally, participatory approaches (including PAR) are not without their critics. Many being influenced by the recent post structuralist and postcolonial ‘turns’ mentioned above, associated with the work of theorists like Michel Foucault, Gayatri Spivak, and Edward Said. While those sympathetic to participatory approaches worry that their terminology and techniques are being appropriated and commodified within policy and research initiatives (e.g., in international development) that...
essentially remain unchanged (i.e., top down and extractive), a more hostile set of critiques propose that participatory approaches are just another form of power, producing various negative effects (see Box 2). Most damningly, these critics suggest that rather than facilitating the empowerment of participants, participatory approaches actually reinforce existing hierarchical power relations, reproducing the very inequalities they seek to challenge (Box 3).

Rather than abandoning participatory approaches however, we respond to these critiques by suggesting that the post structuralist, postcolonial, and participatory ‘turns’ need not necessarily lead in different directions. Yes, participation is a form of power, but then there is no escape from power. Indeed, it is helpful to retheorize the empowerment sought and facilitated through participatory research along post structuralist and postcolonial lines, viewing it as an ‘effect’ of the deployment of the powerful resources of participation. Such an understanding helps to explain why empowerment and decolonization can be difficult to sustain over time and space, why it is insufficient to create the conditions for empowerment and decolonization within the arenas of participation, and highlights why researchers need to identify which resources will ‘travel’ and can be ‘distanciated’, so as to sustain empowered and decolonized performances in contexts that would normally facilitate the subjection or marginalization of certain people and groups.

Our interpretation of post structuralist and post colonial critiques is not absolutist, but rather is refracted through an older feminist lens that perceives the ambivalent role of strategic essentialism. Thus, we would argue that it is legitimate, as well as practically necessary, to deploy forms of governance like participatory research, which although they shape and direct people’s conduct, at least do so in ways that enable them to challenge and change other, more domineering powers and relations in their lives.

The key of course, is to try and maintain a self reflexive appreciation that rather than being a privileged, power free mode of research, participatory approaches, and PAR, are situated, limited works in progress that are improvable, contestable, and ultimately, replaceable. In this regard we see participation, post structuralism, and postcolonialism as mutually informative and not inherently antagonistic. Furthermore, we believe that the people friendly, accessible, and flexible methodologies of participatory approaches actually offer useful resources through which the critical social reimaginations promoted by post structuralist and postcolonial scholars might be distanciated beyond the academy.

**Research Processes, Methods, Outputs, and Outcomes**

We have placed a discussion of participatory methods toward the end of our article in order to underline the key point made earlier – conducting participatory research requires far more than the use of participatory methods or techniques in data collection. It requires an epistemological and practical shift in how we do research, how we relate to our participants, and what we think of as knowledge. The ethics of participation involves explicit attention to the negotiation of ownership at each stage of the research from scoping to publication.

As suggested earlier, the general methodology of PAR is structured as a cyclical process of action and reflection. Researchers and participants identify an issue or situation in need of change or identify strengths and attributes they wish to enhance in their communities; they then initiate research that draws on capabilities and assets to precipitate relevant action. Both researchers and participants reflect on, and learn from, this action and proceed to a new cycle of research/action/reflection.

While a considerable catalog of techniques have already been developed and recorded, the key is that researchers and participants should together develop context specific methods that facilitate the iterative cycles of action and reflection in their own specific projects (see Box 4).

Significantly, most of the approaches and methods used within PAR projects are variations of standard methods used in conventional research (e.g., mapping, interviewing, questionnaire surveys, and focus groups, as well as approaches involving technologies like photogrophy, video, and geographic information systems (GIS)). What is different in PAR is that these methods

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**Box 3 Some potential negative power effects of participatory approaches**

- Delegitimization of research methods that are ‘not’ participatory
- Production of participants as subjects ‘requiring’ research
devlopment
- Production of suitably disciplined subjects as ‘participants’ expected to perform appropriately within participatory processes
- Retention of researchers’ control while presenting them as benign arbiters of neutral or benevolent processes
- Reauthorization of researchers as experts in participatory approaches
- Romanticization or marginalization of local knowledge produced through participatory processes
- Reinforcement of preexisting power hierarchies among participating communities
- Legitimization of elite local knowledge simply because it is produced through participatory processes
- Legitimization of neoliberal programs and institutions (such as the World Bank) that also deploy participatory approaches and/or techniques

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**Box 2**

*Legitimization of neoliberal programs and institutions (such as the World Bank) that also deploy participatory approaches and/or techniques*
and approaches are deployed within a participatory framework committed to genuinely democratic and noncoercive forms of research ‘with’ and ‘for’, rather than ‘on’ participants. It is this framework and value orientation that fundamentally changes the work done, the knowledge generated, and outputs produced.

PAR researchers (and others, notably many feminist researchers) question the impact of outputs such as academic journal articles on the issue being studied, as well as whose goals, interpretations, and perspectives they primarily represent. Therefore, a range of outputs typically characterize PAR projects and commonly include: diagrams, maps, reports, websites, videos, phography, stories, poetry, performances (drama or dance), public art, poster or sticker campaigns, awareness raising workshops, and formal presentations.

A key principle is that these outputs are woven into the research’s outcomes or material effects, that is, they are geared toward influencing social change or transformation. As such, they may aim to improve interpersonal or interinstitutional relations, or increase the potential for self-help within communities. In most cases, they may seek to enhance the personal growth and level of critical awareness of the individuals involved so that they leave behind enhanced capacities for future research, and social change. A useful illustration of this orientation is reflected in the comment from a nonacademic project member working with Sarah Elwood on a participatory GIS project in Chicago (Box 5).

The key point here is that while people’s participation in research is important (and an ethical necessity), unless it translates into action that somehow improves their lives on their own terms, it serves to perpetuate (perhaps even exacerbate) existing inequalities.

PAR projects are varied in their action orientation. Many work with or for institutions to affect change in service delivery or to policies, conventions, and laws affecting the groups involved. Other projects are more overtly radical and seek to further advocacy, resistance, or activism. In what they call ‘solidarity action research’, Paul Chatterton, Duncan Fuller, and Paul Routledge argue that PAR should more fully embrace a spirit of solidarity between academic researchers and participants, which involves active critique and disagreement, and does not romanticize or defer to the ‘authentic’ voice of those marginalized. This way of working returns us to an explicit engagement with power, emotions, and the spaces in which they occur, in our efforts to practice research that matters beyond the academy – engagements which human geographers are well placed to facilitate.

Conclusion

PAR and other participatory approaches present radical challenges to what might be, and should be researched in human geography, how, and by whom. While participatory approaches seek socially and environmentally just processes and outcomes, they nevertheless constitute a form of power and advocate the need to be alive to the fact that they can sometimes reproduce the very inequalities they seek to challenge. However, PAR is one means of repoliticizing research and practicing relevance, emphasizing dialogic engagement with co-researchers, and the development and implementation of context appropriate strategies oriented toward empowerment and transformation at a variety of scales. While not a panacea for all the ills of contemporary research and development, there is much radical potential in PAR, as long as we maintain a critical and honest awareness of its challenges and dangers. By recognizing the roles of power, emotions, space, and place within PAR, and PAR’s embeddedness within multiple scales, we can be more explicit about the cartographies of our engagements and ensure that all three elements – participation, action, and research – combine productively to effect positive political change.

Box 4 Methods used in participatory action research

- Art and media
- Diagramming and drawing
- Dialog
- Educational camps
- Exchange programs
- Group work and discussions
- Interviewing
- Learning by doing
- Participant observation
- Political action and advocacy
- Mapping (paper and using GIS)
- Ranking and scoring
- Role plays and theater
- Secondary data analysis
- Shared analysis, writing, and presentations
- Storytelling
- Surveys
- Transect walks

Box 5 The importance of action-oriented outputs

If you do research, it has to be action-oriented […], or it will be thrown away and never really used. […] The GIS has become part of what we do in our organization [… and is one of the most important things that will help us prepare a community plan.

Staff Member, Near Northwest Neighborhood Network, Chicago
See also: Activism; Auto-Photography; Community; Critical Geography; Cross-Cultural Research; Empowerment; Ethical Issues in Research; Focus Groups; GIS, Public Participation; Participation; Participatory Video; Postdevelopment; Situated Knowledge, Reflexivity.

Further Reading


Relevant Websites

http://www.alara.net.au
Action Research, Action Learning Association (ALARA) Home page.

http://www.feduphones.org
Fed up Honeys Home page.

http://www.pygywg.org
Participatory Geographies Working Group (PyGyWG) of the Royal Geographical Society, UK Home page.

http://www.goshen.edu
Web Links to Participatory Action Research Sites, Anthropology/Sociology, Goshen College, Indiana, USA.
Introduction

Participatory video (PV) has its origins in a desire to effect change. From its radical origins in Canada nearly 50 years ago, the use of video for participatory development, communication, and action has become more possible with changes in technology. Along the way, it has taken many forms, which have had different effects. In this article, the history and evolution of PV is reviewed and then its current uses in development, research, and advocacy are explored. Its process is summarized and various issues related to power, resources, ethics, and audience are attended to. Its benefits are identified and it is suggested that human geography has much to gain from engaging this particular methodology.

History and Evolution

The first participatory use of video occurred on Fogo Island, Newfoundland, Canada in the late 1960s. Widely referred to as the Fogo Experiment, the pioneering interactive use of film and video in remote locations was part of the government’s Challenge for Change program. The Challenge for Change program was revolutionary in its desire to document social problems. It also sought to use the audio-visual documentation process as a means of raising awareness and information sharing within and beyond the communities involved to achieve social change and community empowerment. It aimed at producing three kinds of films. First, films for government departments and the general public which explained a problem; second, films for social workers and change agents involved in the problem; and third, films planned and produced by the people affected by the problem.

In terms of current practices of PV, it was the last type of film that was most radical and influential. By putting community members behind as well as in front of the camera and by facilitating a process of community feedback (or dialog) on the films produced, the filmmaker Colin Low and academic researcher Donald Snowden demonstrated that the ‘process’ of production was often more important than the actual films produced. Through the dialogic process, research participants became image and meaning makers who explored and worked to change their own ‘realities’ through the production and analysis of video products.

In this respect, their process enabled participants’ technical empowerment by increasing their knowledge and confidence using video and editing equipment. It also facilitated participants’ personal and community empowerment by showing their lives on screen and facilitating discussions about possible actions for change. The Fogo Process enabled individuals in isolated communities to connect with each other and distant others through the collective representations produced, and the resulting discussions about them and the lives they represented. These connections fostered greater senses of both imagined and virtual communities, which in turn promoted greater social cohesion and action on the ground.

The Fogo Experiment lasted for 18 months then moved elsewhere in Canada through the Challenge for Change program for almost a decade. In 1969, the first indigenously authored film was produced dealing with treaty rights along the USA–Canadian border. By the mid 1970s and early 1980s, the process was exported to the USA as well as parts of Africa and Asia. Alongside the Fogo Process, Martha Stuart in the USA developed the Village Video Network of New York, which traveled to India in 1984 to work with the Self Employed Women’s Association (SEWA) in Ahmedabad. Since its initial training, SEWA has gone on to be one of the most well-known proponents of PV. They have involved hundreds of women in the process and produced more than 400 films. Through both the process and the products, they have achieved some major changes associated with labor and women’s rights at various scales from household gender relations through to Indian state legislation.

Alongside these development oriented uses of video, it (and film before it) was being used in disciplines like...
anthropology and geography for research purposes. Using realist documentary conventions, academics sought to ‘capture the reality’ of people and their activities in naturalistic settings for subsequent analysis, or representation to others. In the 1960s and 1970s, however, in a radical departure from previous work, the technology was handed over to participants to do their own filming. One of the most famous examples of this approach is perhaps the work of Sol Worth and John Adair. In 1966, they taught a group of six inexperienced Navajo in Arizona to make and edit silent 16mm films. However, ultimately the purpose of the process remained the same: for academics to achieve a better (i.e., more objective and ‘truthful’) understanding of their subjects’ lives through the products of their own labor. Their work did not try to change or improve the lives of the Navajo through the process.

In Australia in the mid 1970s, Eric Michaels took this approach a step further by integrating an action orientation to his work with rural aborigines. He didn’t just want to understand their engagement with the technology, but worked actively to enable them to use it to tell their own stories on their own terms. Since Michaels’ pioneering work, it has been mainly feminist researchers in anthropology and sociology who have sought to use video as an empowering and democratizing technology, and these uses are not dissimilar to PV within development, but maintain more of a research focus.

In some respect, the distinction between the use of PV in development or PV in research is less clear cut than the distinction between the emphasis on the process or the product. Ultimately, the use of PV depends on the purpose of people’s involvement. If the purpose is to facilitate interaction, enable self-expression, and achieve specific localized goals, then the process associated with making and engaging with the video is paramount, and the videotape produced may have little life outside of its immediate context. If however, the goal is to reach an external audience for educational purposes or to exert pressure to achieve a defined goal of change, then the videotape becomes more important than the process of its production. The different goals of the people involved as well as either the researcher or development facilitator will influence the precise form and orientation taken.

Current Uses of Participatory Video

Over the last 20 years, two parallel shifts have resulted in an increased use of PV around the world. The first relates to the rise of alternative paradigms to mainstream economic development and positivistic social science respectively. Increasing dissatisfaction with top-down, hierarchical, and extractive interventions into people’s lives by policy makers, practitioners, and academics have produced a range of different approaches to development and research. These more bottom-up and people centered approaches seek to involve people as active agents of their own analysis and change processes emphasizing participation and representation. While varied, these approaches generally fall into the categories of participatory development and participatory action research. They seek to facilitate research and development by, for, and with the people concerned, not on or about them. For video, this has meant a shift in the locus of power and control from outside technical experts to processes that enable people to research and produce their own representations, either to facilitate self and group empowerment or community development.

The second shift relates to reductions in the size and cost of the technology involved. Since the 1990s, the increasing availability and affordability of digital video, computer, and Internet technology has fueled the growing use of PV within community development, academic research, and social justice activism. Prior to this, making films and videos was largely confined to Western academics, wealthy elites, and commercial filmmakers working with expensive and cumbersome equipment. Now, the relative ubiquity of video cameras (even in mobile phones) and laptop computer based editing software, plus increasing access to Internet distribution mechanisms mean that more people than ever before are becoming producers rather than consumers of their own video products.

PV is currently used in three main ways: as a tool to facilitate community development, as an action oriented research methodology, and as an advocacy or resistance tool.

Participatory Video (for Development)

The main use of PV builds on the experience of the Fogo Experiment discussed in the previous section. Also known as process video or the ‘video as dialog process’, PV is used as a tool to support community education, cultural identity and preservation, organization, and political participation. Generally, participatory or process video does not involve commercial production. Rather, it involves ‘ordinary’ people as video directors, camera operators, interviewers, and subjects. The products are primarily oriented to those involved in the production and may not conform to standard Western filmmaking conventions. This doesn’t matter however, as in many cases, it is the discussion of, and immediate feedback on, the video products, along with the sense of community and cooperation fostered through making the video that is considered most important. Where conventions may become more important, the goal is to use the video products within advocacy (also see below) to...
communicate key issues to people in positions of power as a vehicle for social or political change.

**Participatory Video (for) Research**

As within anthropology, video has been used within geographic research. Often it has been used to record interviews for the academics’ subsequent analysis, or to record people’s movements and interactions in particular spaces and landscapes – as a form of naturalistic inquiry. With a more interactive orientation, people have been supported to produce video diaries or to carry out video tours as part of wider projects with academic researchers.

More recently, with the rise of the so called ‘participatory turn’ in human geography since the late 1990s, and falling costs of technology, there is now a growing body of work in geography and allied fields engaging more participatory uses of video. Caitlin Cahill, for example, is facilitating a participatory research video documentary project with young people from Salt Lake City in the USA on undocumented students’ experiences of racism at high school. Kay Haw in the United Kingdom has been exploring how PV can provide an alternative voice on youth risk and resilience associated with crime. In the Caribbean, Pamela Richardson has been using PV to understand more about sugar and agribusiness networks, and, in Uganda, Louise Waite and Cath Conn have been using PV in their work with young women around issues of sexual health. In Western Australia, Guy Singleton and his colleagues from the Ngalia people are exploring the role of PV and other ICT to develop effective cultural heritage management strategies to protect their sacred places/sites and develop sustainable livelihood options for their community. And finally, the author’s own work with Geoff Hume Cook and members of Te Iwi o Ngati Hauiti (a Māori tribe in the central North Island of Aotearoa, New Zealand) represents perhaps the first discussions and analyses of PV’s application in geographic research.

**Video Advocacy**

The third way in which video is commonly used is as a tool for advocacy because video can counter stereotypes and build intercultural understanding and solidarity. Advocates argue that it can circumvent issues associated with literacy and reach diverse audiences to mobilize people into action. The mobilization occurs because video elicits powerful emotional responses and connects audiences to the personal stories of those being represented. A number of organizations around the world now work effectively with this use of video (see Box 1).

Where the use of video advocacy differs from the other uses of participatory video is in the locus of decision making and control. In the majority of advocacy videos, production is discussed with the people involved and their consent sought to film. However, many also take place covertly because of the desire to expose human or environmental rights abuses. In addition, the subjects of advocacy videos are not usually the producers or editors. Rather, trained professionals ensure that the video products can reach and be understood by their intended audiences to effect change, a point the author returns to later. Of course, the subjects of the video may be empowered through the telling of their stories to change the conditions of their own lives, but this is often an indirect outcome of the work.

Outside of these organizations, there is also a wide movement of radical alternative video journalism. Organizations like Altermedia International, the Guerrilla News Network, and Guerrilla Video Productions encourage people to shoot, edit, and share footage on the Internet as a form of activist resistance to the control of information and news by mainstream media conglomerates. These independent digital video producers or ‘diguerrillas’ tend to follow the ethic of ‘use less money, less time, fewer tools, and new rules’, and are more anarchic in their orientation than the video advocacy or organizations discussed above. They are focused on the video product rather than the process of the video’s production. And, while they do often desire to effect wider social change, they do not work with a personal or community development orientation.

**Process**

In this section, the focus is more explicitly on the use of PV for research and/or development, rather than on video advocacy or guerrilla video, to further explore the forms it can take. Table 1 locates these different forms or applications within a participation continuum. Thinking more specifically about participation is helpful to consider the issues of power, ownership, and representation, which are at the heart of this work.

While not intended to be a hierarchy, the continuum is helpful to illustrate the different positions that can be occupied by community members, outside video producers (or researchers), and various audiences within any...
participatory use of video. Such positions reflect how power circulates. They enable researchers, practitioners, and community members to be more realistic about their relationships and the outcomes that these will both enable and constrain.

In general, PV follows a process similar to any video production process. The main difference is the time and energy invested in the development of relationships with the people who will become the community producers (and/or editors) and their training (Box 2).

For PV processes to be successful, sufficient time and energy needs to be invested in preproduction and post production stages. The production stage of the process is relatively short. Within participatory development applications of PV, the cycle of stages in the field is often shorter than represented in Box 2, as much of the initial conceptualization and preproduction work takes place between development agencies and the outside video facilitators. Within research applications however, the process in Box 2 is more typical.

### Issues

PV as a process for research and development is not without its critics. Four issues are discussed here, which

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**Table 1** Participation models continuum and participatory video process

<table>
<thead>
<tr>
<th>Model of participation</th>
<th>Applicable video process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-option</td>
<td>Outside video producers meet with key community members, decide on salient issues, and make their own program. Local community may see the final product, which is aimed at a national ‘majority’ or international audience.</td>
</tr>
<tr>
<td>Compliance</td>
<td>Community members conduct research. Outside video producers decide on salient issues and make their own program, with some community members in on-camera roles. Local community may see the final product but the target audience is not local.</td>
</tr>
<tr>
<td>Consultative</td>
<td>Community members share their thoughts and opinions about important issues, which outside video producers consider when developing their program. Local community may see the final product and be aware that it is meant to be shared with other communities.</td>
</tr>
<tr>
<td>Cooperative</td>
<td>Community members and outside video producers develop concept together. The outsiders make the video, generally with some community members in minor behind-the-scenes and/or on-camera roles. Local audiences generally see finished product but are not the target audience.</td>
</tr>
<tr>
<td>Co-learning</td>
<td>Community members and outside video producers develop concept and ‘script’ together. The production is made jointly with an outsider directing or facilitating the process. Community members are involved in a wide range of roles. Local audiences will see, and have access to, or a degree of control of, the product. It is shared with other communities.</td>
</tr>
<tr>
<td>Collective action</td>
<td>Community members determine the important issues, develop the story/script, and make the video themselves (any outsider involvement is within community-determined parameters). The purpose of the video is for use by the community to raise the status of issue(s) and to advocate for change within the community, or between the community and others that impact on it.</td>
</tr>
</tbody>
</table>

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**Box 2** Generic outline of a participatory video process

#### Conceptualization and research

- Contact and establishment of relationship between outsiders (academic and/or video producers) and community members.
- Negotiation of purpose, process, and outcomes (this may include a Memorandum of Understanding covering copyright/ownership of media produced).

#### Preproduction

- Negotiation of access to equipment, resources, funding.
- Identification of, and negotiation with, participants to be trained.
- Production timeline and planning.
- Training of community members increased familiarity and confidence with equipment, concepts, and techniques.

#### Production

- Filming of video footage by community members.

#### Postproduction

- Training of community members.
- Editing of video footage with and by community members.

#### Screening, Dialog, and Feedback

- Footage screened (to participants and/or to wider community) and discussed.
- Learning and exchange facilitated.
- Possible change or action as a result of discussion.
- Management of video products (dissemination, storage, access).

#### Then more production, postproduction, screening etc. Or preproduction

- Motivation to create more projects of benefit to the community.
- Liaison with outsiders about future and ongoing involvement and so forth.

Adapted from DeNegri et al. (1998:4) with input from Geoff Hume Cook, pers.comm 2007.
require more analysis and theorization if their power effects are to be more adequately understood.

**Tyranny**

Video as a method or even as a methodology rarely stands alone. It is used as part of larger participatory research or development initiatives. As such it is susceptible to the criticisms about the tyranny of participation associated with the role of facilitators, the disciplining effects of participatory methods, and the desire for group consensus. In addition, within PV projects facilitators must also manage technical aspects as associated with camera operation, sound quality, editing, and storytelling. Not surprisingly, PV is only as good as its facilitation, and PV’s facilitation can be demanding.

**Resources**

Video can also be expensive to use. While the costs of camcorders are decreasing, the other essential equipment associated with sound recording, editing, and screening means that initially, at least, a considerable investment in technology is needed. Furthermore, within PV where the goal is often to affect some kind of sustained change, adequate time is needed to develop the capacity for community members to film and edit their own footage. If the aim is to produce short videos for immediate feedback and discussion, this may limit community members’ participation in hands on editing. If the aim is a larger scale documentary project, then ways to sustain and recompense community members’ time and energy are essential. As with any project, the level of investment in resources, and the ownership and control over those resources can have huge effects on the power relations at work and the outcomes possible.

**Ethics**

Working with video involves layers of ethical considerations. Most of these are not yet adequately addressed by university ethics review boards, which predominantly concern verbal and written research approaches. In PV, questions arise about the ethics of engagement (i.e., the levels of consent required at different stages in the process) and the ethics of representation (i.e., the facilitator/researcher’s and/or community members’ skills at using visual images ethically and artfully). Visual images are open to different interpretations and uses. With the proliferation of web based environments such as YouTube, their original intent or message once screened, may be reedited and re-presented in ways that create new ethical issues over which the original producers have no control.

**Audience**

PV is only meaningful if there are audiences for the products produced. But how audiences are defined will influence what they are expected to do as a result of watching. Within video advocacy approaches, audiences are usually external to the community involved in filming or being filmed. The products must therefore conform, to some extent, to the dominant forms of cultural and visual literacy if they are to be ‘read’ appropriately. Within PV however, participants themselves or their surrounding community(ies) may be the intended audience and issues of cultural and visual literacy may be less important than the process of production and discussion.

In either case, questions arise about the relationship between the communicational intent of the video product(s) and its attendant production process, and the ability of the intended audience(s) to frame the images and messages appropriately so as to access their intended meanings. Video doesn’t capture or record reality; rather, it constructs or produces partial realities mediated by culture, ideology, and subjectivity. Aspects of the process of production, its representation, and translation are intertwined and informed by the discourses within which audiences are positioned at the time of viewing.

**Benefits**

While there are these ongoing issues associated with the use of PV, it has been applied successfully across a wide range of cultures and contexts. It has also been especially powerful in communities where there has been less exposure to commercial mainstream audio visual media, and where participant groups have been marginalized or disenfranchised. In the final part of this article are outlined three reasons why, within the contexts of human geography, PV is worthy of closer scrutiny.

**Critical Consciousness**

PV and the act of putting someone behind, instead of in front of, a camera momentarily detaches them from their immediate surroundings and effectively provides them with a different way of viewing and engaging their environment. Such an experience increases their ability in Paulo Freire’s terms to ‘read the world’ by developing a more critical consciousness. Their development and application of critical thinking about representations within mainstream media associated with their community expands the notion of literacy. Participants develop the ability to express their understandings of ‘reality’ in ways that go beyond the written word and which produce new meanings and resist others.
Voice

PV changes the voice of research and development. By emphasizing more democratic and horizontal forms of communication, it can legitimize people’s voices and enable them to be heard and taken seriously by others in positions of institutional authority. In addition, its aim is to make texts (and the knowledge they convey) more accessible, and challenge hegemonic discourses by opening up space for alternatives. PV communicates information that is not always easily translatable into the verbal, and the combination of image and text can be more subversive than text alone. Its political effects can provide new opportunities for theory building and action engaging the emotions, which in itself often challenges the status quo.

Social Construction of Knowledge

Using video makes the construction of knowledge more explicit. Once positioned behind a camera, a person becomes acutely aware of what s/he chooses to frame and privilege. The often taken for granted connection between ‘ways of seeing’ and ‘ways of knowing’ is called into question. When editing, the social and cultural codes drawn on to produce meaningful images become more evident through negotiations about the length and duration of shots, their sequencing, and associated sound track or voice over. In addition, cultural and moral dimensions of knowledge are negotiated with respect to the ethics of representation and issues of translation required by the audience. The whole process increases the practice of self-reflexivity, which in turn forms an iterative cycle of action and reflection and deepens participants’ critical consciousness and ability to affect change in their lives.

Conclusion

PV is an exciting vehicle for communication, connection, and change. Varied and adaptable in its application, it has been successful in informing constructive community research and development in a range of cultural contexts. While questions remain about the intersections and political effects of its process, representation, and translation for diverse audiences, PV serves as a useful tool with which to explore the interplay of visual, verbal, and written knowledges. It also enables a more explicit engagement with the ethics of research and development and the practice of self-reflexivity by those involved.

See also: Activism; Auto-Photography; Community; Critical Geography; Cross-Cultural Research; Empowerment; Ethical Issues in Research; Movies and Films, Analysis of; Participation; Participatory Action Research; Postdevelopment; Representation, Politics of; Visuality.

Further Reading


Relevant Websites

http://www.c4c.org
Communication for Change (C4C).
http://www.guerillavideoproductions.com
Guerilla Video Productions.
http://insightshare.org
Insight Video.
http://idrc.citizenship.org
Participatory Video: A Useful Lens for Research?
Patriarchy
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Glossary
Second-Wave Feminism  A historical moment in Western feminism in the 1970s and 1980s when activism and scholarship focused on politicizing systemic/structural inequalities based on gender differences.
Third-Wave Feminism  A historical moment in Western feminism in 1980s and 1990s where activism and scholarship turned to postmodern and post-structuralist ideas to deconstruct identity categories.

Introduction
Patriarchy, traditionally defined, refers to a system of social relations in which there is gender inequality between socially defined men and women. This system of inequitable social relations is embedded in the political, social, cultural, and economic institutions of a society as well as in, and through, private domestic relations. In these systems of gender inequality, women find themselves disadvantaged in various ways within social relations and organization. In patriarchal societies, women are collectively excluded from political, social, and economic positions of power; women find themselves paid less well for work of equal value; and women are more likely to experience poverty and unequal access to resources, goods, and services. While individual women may experience success in various spheres, women as a distinctive social group are generally disadvantaged in these ways. Earlier sociological and political definitions of patriarchy focused on domestic social relations organized around the law of the father and the social control that men, as heads of households, have over their wives and daughters. Within feminist scholarship, patriarchy has been understood more broadly as the system in which men as a group are constructed as superior to women as a group and as such have authority over them. In some instances, scholars have distinguished between ‘paternal’ patriarchy to refer to forms of private, household organization run by the father and ‘fraternal’ patriarchy to refer to the domination of women in public civil society. For geographers, this distinction mirrors the division between private domestic space and public social space. More generally, patriarchy is conceived of as a broadly based system of social, legal, economic, political, and cultural structures and practices, which position men as the dominant social group and as able to marginalize, and exploit women.

Scholarly research suggests that current Western forms of patriarchal relations are constituted within Western notions of modern science that emerged during the Enlightenment. The notion that science is a universal, value-free system for producing knowledge and acting as a liberating force for humanity is critiqued as a system that excluded women from that emancipatory project. Modernist notions about rational thinking and objectivity require a dichotomy between men and women, nature and nurture, and the rational and emotional, in ways that support or operate in conjunction with masculine and scientific domination over nature and women. Modern science is portrayed as a consciously gendered patriarchal activity and project, grounded on the subjugation of women and nature. Scholars link these patriarchal representations of knowledge, rationality, and the objective subject to the social and political needs of the newly emergent industrial capitalist system in Western societies. What such thinking highlights is how patriarchal relations can be conceptualized as differently interwoven into social systems and structures depending on specific historical and cultural eras.

The term ‘patriarchy’ first gained prominence in feminist scholarship in the 1960s and 1970s, when feminists developed the notion of gender roles and gender relations as categories of analysis. Gender as an analytic category is conceived of as distinct and separate from biological sex and as a concept that could undermine the claims of sexual differences between men and women in Western society. Gendered behaviors, expectations, practices, and roles are seen as reflective of social and cultural processes and are not biological ‘givens’. The binary categories of man/woman, masculinity/femininity; and male/female are seen as key factors in the organization of social life. These categories are ordered hierarchically with women constructed as inferior to men, and with those attributes seen as ‘feminine’ undervalued. These constructed, binary differences that are embedded in Western systems of thought and practice, as well as our social structures and institutions and social relations, provide powerful explanatory tools for analyzing women’s inequality across distinctive historical and cultural eras.

Patriarchy and Capitalism
Within feminist theorizing, the concept of patriarchy surfaced in 1960s socialist and Marxist feminism theorizing the linkages between patriarchy and capitalism in advanced industrial societies. Feminists explored
the interrelationship between gender and class within the spheres of production and reproduction. Explanations for changes in gender roles and relations in the modern era were located in major structural changes that occurred due to the shift to industrial capitalism. Feminist geographers, influenced by socialist/Marxist feminism, argued that women’s inequality could be explained as a result of the social and spatial separation of production and reproduction and women’s containment in the private, domestic sphere. However, feminists disagreed over the nature of the relationship and linkages between Western industrial capitalism and patriarchy. Some argued that the separation of the public and private spheres of work and home was driven by capitalism’s need for this particular social order and patriarchy was a secondary structure arising out of capitalist social relations. For others, capitalism and patriarchy were conceptualized as distinctive but entwined systems of structural relations. Developing a coherent theoretical framework is still a work in progress.

For feminist geographers, the work of Sylvia Walby has been particularly influential for thinking through the various formulations of patriarchal relations. Walby argues that patriarchal relations in advanced industrial societies operate through, and are maintained within, six analytical structures in which men dominate and exploit women. These six structures are interconnected and operate in different ways in different places and circumstances. The six structures are household production; patriarchal relations in waged work; patriarchal relations in the state; male violence against women; patriarchal relations and sexuality; and patriarchal relations and cultural institutions. Scholarship also acknowledges that patriarchy takes different forms in different places and contexts and that its operation is dependent upon multiple and interrelated understandings of age, class, sexuality, ethnicity, and other markers of identity. Within patriarchal relations, various formulations of power are in circulation such that some individuals are complicit in their oppression and may find pleasure and security in the normative expression of gender roles, behaviors, and practices.

In contrast to Walby, Robert Connell argued that the notion of patriarchy proposed forms of male power that were too monolithic and coercive. He proposed the concept of a ‘gender regime’ which some scholars regard as providing a more nuanced conceptualization of how dominant regimes not only dominate and oppress but can also extract the willing consent of those marginalized groups. Further, he argues that dominant gender regimes, although seemingly stable over time, are actually made up of a number of conflicting regimes that challenge dominant assumptions and bring about change and, potentially, relief from domination. Scholars argue that this is a more optimistic conceptualization of gendered social relations, allowing for a recognition of the pleasure and satisfaction some people experience in particular gender regimes. In addition, it opens up the possibility for women’s agency in resisting and negotiating patriarchal relations and thereby creating opportunities for women’s greater participation in civil society.

The concept of patriarchy has been criticized for being too universal and overarching in its conceptualization. Early work on patriarchy positioned it as an all-encompassing feature of relations between men and women and as an ahistorical and acultural structured set of inequalities, seeming inflexible and resistant to change. Given its myriad formulations, patriarchy is perhaps more helpfully understood as neither unitary nor self-contained and as incapable of being separated, analytically, from the evolving social structures in which it is embedded.

Currently, arguments positioned within a postmodern intellectual framework (advanced by so-called third wave feminists) critique universal structural explanations contained in concepts such as patriarchy, arguing that it lacks a nuanced and complex appreciation for the diverse forms that oppression may take. Postmodernist arguments suggest that, in deconstructing the categories of men and women in order to demonstrate their fragmented and unstable constitution, the concept of patriarchy fails when the binary categories on which it depends are dismantled. Despite these more recent arguments cogently critiquing patriarchy as an analytical and conceptual tool, patriarchy continues to be a useful theoretical perspective for highlighting structured inequalities in gendered spatial relations and social organization.

**Patriarchy and Geography**

Western feminist geographers have found the concept of patriarchy useful for conceptualizing gender relations across a variety of scales. The concept of patriarchy has been used to conceptualize the heterogendered and heterosexual regulation of women’s bodies, the division between public and private spheres, women’s access to the public spheres of waged work and their presence in civil society. Patriarchal relations operate at a variety of interlocking social and material scales.

**Patriarchy and Bodies**

Feminist geographers argue that the body, as a place, is the site and locus of the material and embodied individual whose subjective understanding of the self is constituted through social relations. Within patriarchal relations, individuals understood as biologically female have normalized expectations of dress, manner, gestures, behaviors, interests, and desires such that women come to
understand themselves as gendered and sexualized subjects. Within patriarchal power relations, women find themselves subject to bodily constraints not only through expectations of physical behavior but also constraints imposed through expectations about what that body is capable of and where that body belongs, both literally and figuratively.

Because of women's ability to give birth and breastfeed, scholars argue that women are then construed as best suited to raise children and care for the family and are thereby seen as most properly found in the private, domestic spaces of the home. Historically and culturally specific political and social institutions such as marriage, welfare provisions, income tax laws, and daycare policies arguably work to ensure women's normalized restriction to the domestic sphere and the patriarchal authority of the male head of the household. Women’s bodies are constituted as being monogamously available for one man, ensuring the legitimacy of children for inheritance purposes. Women's bodies are also points of contestation in debates about abortion and national issues around fertility rates and population reproduction.

Women's bodies are also constituted as out of place in the public sphere of waged work and civil service. Employment opportunities are gendered with some forms of work seen as being more suitable to women rather than men. In addition, institutions such as the military and, more particularly, combat positions, are constructed as expressly masculine pursuits and beyond the ability of women. Arguments are often made that women are not physically or emotionally capable of killing; are in need of defending by the nation's men; and are, in their embodied presence, a dangerous distraction to men waging war.

Public and Private Spaces

Feminist geographers use the concept of patriarchy to theorize the connections between women's household or domestic labor in the private sphere and the public sphere of waged labor within advanced industrial capitalism. The distinction between productive and reproductive work is portrayed as essential to the smooth operation of capitalism. Women's reproductive labor in the home reproduces and maintains the health and well-being of the productive labor force on both a daily and a generational basis. Within capitalist relations, women are exploited both by the capitalist system (collectively benefiting men) and by individual men who are able to appropriate women's labor for their benefit. Others argue that in advanced industrial capitalist societies, women's labor in the home helps to stabilize patriarchal structures through their fulfilling of social roles -- defined as wife and mother. Women help stabilize the economy through their role as both producers and as low waged laborers themselves in the labor market. Patriarchal gender roles ideologically confined women to the private sphere where the gendered characteristics of nurturing, caregiving, domesticity, and child rearing are seen to belong. With the family increasingly targeted as a market for mass produced goods, women as consumers of household goods and services made the 'home' a unit of consumption, as well as one of reproduction. The spatial dimensions of this capitalist system of social relations ensure that women's domestic labor is confined to the private sphere of the home and is considered outside of the purview of public civil society.

This confining of women to the private sphere of domesticity through combinations of capitalist and patriarchal relations has led feminist geographers to focus on the spatial constraints imposed on women through these social relations. This includes research on the emergence of the residential subdivision and the single family dwelling as dominant residential land forms in Western cities. Women living in these spatial arrangements often find themselves limited in their ability to travel beyond the confines of these neighborhoods due to restrictive public transit options, limited child care options, and few opportunities for waged work outside the home.

Feminist geographers argue that not only do women find themselves constrained within the private sphere, but patriarchal social relations also construct and maintain gender and gender relations in public spaces. Patriarchal social relations are seen as operative in the constitution of public spaces through both formal and informal disciplinary systems imposing expectations on the way women dress, behave, and act in public spaces. Women are often expected to use certain urban spaces only during certain times of the day and to limit their occupation of public space in the nighttime unless accompanied by male escorts. Certain types of bars, restaurants, taverns, and sporting and leisure events are also often seen as places more suitable for men. Patriarchal relations also operate through the institutional regulatory regimes of city planning, administration, and management which constitute public spaces as 'safe' or appropriate for women through street lighting, landscaping, and various forms of surveillance. More recent work has considered how contemporary public surveillance by video and still camera is experienced differently by men and women. While women may paradoxically feel safer due to the various forms of surveillance, others argue that surveillance in urban space is mistrusted by women who are uncertain that they can rely on those behind the camera because of the reproduction of patriarchal power through surveillance.

Research on the urban sex industry also demonstrates the contradictory ways in which women experience...
public space. For women, public visibility subjects women to the male gaze and objectification that often results in a commodification of women’s public embodiment. However, scholars argue that sex work can be seen as a new form of labor whereby women can claim full sexual citizenship and the opportunity for sexual emancipation in ways that resist male domination. Public visibility and asserted expressions of female sexuality challenge oppressive heterosexual norms and women’s visibility and public space. Scholars such as Nancy Duncan claim that sex workers’ use of public space is a form of resistance similar in kind to that undertaken by other sexual minorities, who use visible public presence to promote sexual diversity. Through other activities such as Take Back the Night Marches, women are able to challenge the patriarchal nature of public space by using that space to make claims for sexual and gender rights.

**Citizenship**

The concept of patriarchy has also been used to explore the nature of the relationship between gendering and the state. Scholars argue that the state is patriarchal in structure and organization, given its support of male privilege through its various institutional structures. The question of the relationship between patriarchy and capitalism also arises with some scholars arguing that the state is principally capitalist and secondarily patriarchal. Others assert that capitalism and patriarchy are dual and overlapping systems operative around and through the state. Claims that the state is patriarchal, arguably, presents the state as uniform and monolithic when the state can perhaps more properly be described as a series of arenas in which patriarchal relations may be in circulation in particular ways.

Feminist geographers argue that men’s and women’s knowledge and experiences of urban spaces and their ability to occupy public spaces is differently constituted. In terms of being a ‘citizen’, scholars argue that having meaningful civil, political, and social rights and participation has a spatial dimension. The ability to participate in the affairs of the state and in the activities of citizenship require access to the material and symbolic public sphere, and if men and women have access to and experience these spaces differently, then being a citizen is differently constituted as well. Given that citizenship is defined by either inclusion in or exclusion from the national space, spatial accessibility is fundamental to notions of citizenship and equality. Arguably, patriarchal spatial divisions between men and women, operative through the notions of the public and private sphere, work to symbolically and materially exclude or limit women from participating in the public sphere of citizenship and civil society.

**Nationalism and the State**

At the scale of the nation and the nation state, feminist scholarship demonstrates how nationalism is not only gendered but racialized and sexualized as well. Scholar-ship on colonialism and imperialism, for example, demonstrates how English national identity in the nineteenth century was grounded in the ideal of a white patriarchal family. This ideal served to distinguish and distance the white, colonial explorer from the distinctive, matrilineal, extended kinship systems and unstable gender relations often in operation in those lands brought under colonial rule. Through, imperialism and colonialism, scholars argue that the British, white patriarchal ideal about family, sex, and gender roles circulated globally and imposed this normalized standard on colonial groups often replacing women centered social structures. Feminist scholarship demonstrates that in various colonial locations, culturally specific, patriarchal structures incorporated Western colonial notions of patriarchy, and thus require careful historical research to chart the emerging distinctions between places.

Feminist research has also focused on how nationalistic and patriotic narratives draw on various forms of patriarchal social relations in constituting national mythologies. These include representations of the nation as female and deserving of male protection through military might and warfare; the need to preserve the ‘purity’ of the nation through protection of women from the foreigner; and the construction of the military as a singularly male institution engaged in the protection of the feminized nation.

**Globalization**

While patriarchy has been critiqued by some feminist scholars for being too universal and overarching as a conceptual tool, patriarchy has remained a fruitful analytic for many non Western feminist scholars. In a number of developing countries, grassroots feminist movements and national and international development organizations have increased the focus on women’s roles in international economic development. With increased financial and organizational resources, these various organizations have struggled to further women’s causes and improve the lot of women within distinctive social, political, and cultural systems. Research has demonstrated that simply adding women to existing institutions and systems is problematic when these institutions themselves are constituted within and through specific patriarchal social relations. Scholars argue that further work needs to be done on the particular historical, political–economic relationships between capitalism and patriarchy, within the exploitative colonial relations.
underpinning current processes of globalization and the international division of labor. For some scholars, capitalism and patriarchy are theorized as inseparable with capitalism underpinning historically and culturally specific patriarchal social relations in advanced industrial societies. Both capitalism and patriarchy, arguably, need to be interrogated as an integrated system working to maintain women's exploitation and oppression. In these contexts, patriarchy remains a powerful analytical tool for conceptualizing particular historical and societal dimensions of women's oppression. Such a perspective demonstrates how distinctive patriarchal systems emerge and develop differently in particular times and in different geographical regions. Seen this way, capitalism can be conceptualized as the latest manifestation of patriarchal relations. In some developing countries, this perspective supports the argument that women's experiences in contemporary globalization cannot be explained by reference to some precapitalist system of patriarchal social relations that has been transformed by contemporary capitalism. On the contrary, scholars argue that as capitalism struggles for dominance, its various transformations both rework and sustain patriarchal social relations in new and unforeseen ways.

Within the context of globalization and international development, Third Wave feminism emerged as a powerful voice in the late 1970s and early 1980s. Third Wave feminists argued that 'empowerment' was central to women's emancipation. Transforming economic, social, and political structures at national and international levels was seen as being crucial for achieving women's equality. Scholars argued that women's empowerment required systemic changes to the specific social and cultural forms of patriarchy in different places and locales. To effect change, an analysis of the place specific family, community, market, and state structures that supported and stabilized patriarchal norms was required. Women needed to gain access not only to economic and material resources, but also needed to work for the dismantling of the broader social and political structures that supported patriarchal hierarchies. From this perspective, many mainstream and state led developmental interventions now tend to focus on local gender relations and the roles that women, in particular, play in certain societies. As a result, women's access to resources, and their active and visible participation in development processes, becomes a central plank in development efforts. Despite the modest success of these approaches, scholars also need to consider how women's obligations to family and community are constituted within patriarchal relations in ways that constrain women's ability to effect change. Women's participation in the public sphere of work may cause considerable stress and difficulty in the private domestic sphere, in ways that may be dangerous or debilitating. In working towards women's participation in development processes, attention must be paid not only to the broader economic structures but to the embedded patriarchal relations that order and regulate women's participation and possible emancipation.

Men and Patriarchy

Other scholars have also considered the conceptual intersections of patriarchal social relations and men and masculinity. Arguably, if patriarchy is conceptualized as a set of interrelated structures supporting men's exploitation and oppression of women, then masculinism, as Brittan argues is "the ideology that justifies and naturalizes male domination and as such is the ideology that justifies and naturalizes patriarchy." Formulations of masculinism are conceptualized as working to ensure that men are constituted within and are the beneficiaries of Western patriarchal systems that assert male privilege. Yet despite men's subjective constitution and positioning within patriarchal systems, scholars contend that men are in a position to understand and challenge the essentialist and narrow possibilities provided for the masculine subject within patriarchy. Men need to become aware and acknowledge male privilege and to find ways to work against and potentially dismantle supporting political, social, and economic structures.

See also: Body, The; Emigration;Masculinities; Parenting/Motherhood/Fatherhood; Public Space.

Further Reading

Relevant Websites

http://www.africabib.org
African Women's Bibliographic Database.
http://ec.europa.eu
European Union, European Commission, Employment, social affairs
& equal opportunities, gender equality.

http://www.emporia.edu
Gender in geography bibliography.
http://www.un.org/womenwatch
United Nations Inter agency network on women and gender equality.
Peasant Agriculture
J. D. van der Ploeg, Wageningen University, Wageningen, The Netherlands
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Glossary
Modernization Process The multidimensional restructuring of agriculture toward highly specialized, large-scale, intensive, and market-oriented production.
Objects of Labor The organic resources that farmers work with and reshape.
Peasant Condition The overall position of peasants within a particular society.
Repeasantization The twofold process through which the number of peasant units increases and/or the peasant nature of existing units is augmented.
Technical Efficiency The ratio between resources employed and productive output.

Modernization and the Demise of Peasant Agriculture

Since the large modernization programs of the 1950–80 period, which had a wide ranging impact on agricultural production systems all over the world, peasant agriculture has been increasingly regarded as irrelevant and/or due for extinction. Many programs have promoted depeasantization. These include the Mansholt reforms in the former European Economic Community (now the European Union) and the Green Revolution schemes applied in Africa, Asia, and Latin America. Land reform processes, credit schemes, and other state induced changes that eliminated typical ‘peasant crops’ (e.g., coffee in Brazil) to make room for other crops (like soybeans) that are produced by larger enterprises, all contributed to this process. These programs have redefined, reshaped, and reordered the technicalities of farming. They have also aimed to create a new professional identity. It was as summed that the peasantry would be transformed into or replaced by new agricultural entrepreneurs and corporate farmers. This would move agriculture beyond the back wardness and stagnation assumed to typify peasant agriculture. Peasant farming was seen as having no future because of the technical constraints inherent in its resources. Consequently, external interventions were seen as necessary in ‘getting agriculture moving’, to borrow the title of a well known manual from the 1960s. Farming strategies oriented toward self subsistence, survival, and equilibrium were to be replaced by new strategies that centered on profit maximization and expansion. There equally was to be a shift from partial to full market integration, and a change from local cultural repertoires to rational decision making. All these changes were seen as important cornerstones of the transformation of agriculture.

The modernization of agriculture (always characterized by a central role of the state) was strongly influenced and ordered by modernization theories which then held great sway (and sometimes by Marxist approaches that equally saw the peasantry as a main obstacle for development). The close intertwining of theory and practices (the latter being inspired and informed by the former, the former increasingly a reflection of the latter) resulted in a remarkable path dependency that ultimately backfired on both theory and practice. The many indications that the newly emerging agricultural entrepreneurs were far from textbook applications of Homo Economicus as stipulated in agrarian economics and the ‘early adopter’, specified in the diffusion of innovations tradition, did not feed back into theory; they were perceived as being just anomalies. The same occurred with the findings that modernization, as an empirical phenomenon, was far less unilinear and complete than should be the case, according to reigning theories.

In short, modernization theories heralded a transformation that implied, both theoretically and empirically, a reallocation of the peasantry and peasant agriculture to remote times and places – to the past and to the periphery. In the modern world, there was no place for peasants and peasant agriculture – theoretically at least.

There is little point in discussing the validity of modernization theory, or whether it represented a true picture of reality. What is crucial is that it was made to come true. Yet, modernization has been a highly differ entiated process that has resulted in unequal, and often unexpected, outcomes. Three of these are of particular interest. First, many expressions of modernization (as, e.g., land reform processes and irrigation schemes) turned out to be broken promises. They did not function as assumed and often impacted in a negative way upon the affected agrarian sectors, as well as on wider society. Second, it is proved to be increasingly difficult (if not impossible) to explain a highly modernized agriculture, such as those existing within Western Europe, and the farmers who operate within it, solely in terms of agrarian entrepreneurship, that is, as a definitive adieu to peasants and peasant agriculture. Third, among an economically active population of 2.6 billion worldwide, a little more than 50% (i.e., 1.35 billion) are engaged in farming, and a large majority of them are peasants. Together, these observations raise new questions that the (still dominant)
modernization paradigm is barely able to address. For instance, in many areas in the world, farming is a major employer and this is one of its principal functions, second only to the need to produce good food and maintain the resource base. Despite this, the policies that draw on modernization theory and its assumptions about entrepreneurship still look to cut farm labor to the bone – and then cut it again.

The Peasantry of the Third Millennium

Although the relative weight and the different interrelations vary considerably, nearly all agricultural systems in today’s world consist of three different politico economic arrangements (see Figure 1). These are capitalist or corporate farming (in which the wage-labor relationship is central), entrepreneurial farming, and peasant farming. The main difference between the latter two forms is that peasant farming is strongly based on available ecological capital (especially living nature), while entrepreneurial farming is consistently moving away from nature. Artificial growth factors replace natural resources and the availability of (or dependence upon) financial capital becomes a main feature. This allows for economies of scale and rapid (albeit often partial) increases in productivity. Peasant farming also needs to be distinguished from other rural activities. Compared to the landless, peasants maintain a self-controlled resource base, although there are evident variations in its dimensions. Compared to other rural professionals, peasants are special in that they are involved in co-production, that is, the ongoing interaction of man and nature and the associated transformation of both natural and social resources.

These interfaces highlight and define the distinctiveness of peasant agriculture, which is grounded on the use of a self-controlled resource base in which nature is central and is used for co-production. The results obtained belong directly to those involved in production, although gender, age, and ethnicity might make for inequitable internal distributions.

Different politico economic arrangements imply different modes of farming. That is, they translate into different material configurations, for example, different breeds and selection strategies, a different layout of the fields, and a different coloring of the landscape. The different modes of farming also translate into different relations with rural society and the rural economy. The associated development trajectories contrast considerably. A proper understanding of the multiple differences that delineate peasant agriculture from the corporate and entrepreneurial forms requires a more detailed specification of the peasant condition.

The Peasant Condition

The overall position of peasants in wider society can be summarized in the concept of peasant condition. Peasant agriculture (or, the peasant mode of farming) originates from and is embedded in this condition. The peasant condition induces and reproduces the central characteristics of peasant agriculture. Without the former, the specificities of the latter cannot be properly understood.

The peasant condition consists of a context characterized by dependency relations, marginalization, and deprivation, which is countered through a struggle for autonomy (see Figure 2). Despite the many differences that exist between agriculture in the developed and developing worlds, it is important to note that both are subject to high levels of dependency. In developed countries, this occurs through the squeeze on agriculture, regulatory schemes, and the power of agribusiness. The forms and mechanisms of dependency, and the associated deprivation, marginalization, and insecurity,
might differ but farmers in both locations are confronted with a hostile environment. The resulting struggle for autonomy aims at, and materializes into, the creation and development of a self-controlled resource base. This resource base embraces both social and natural resources (knowledge, networks, labor force, land, cattle, irrigation channels, manure, crops, etc.). Land forms a central pillar of this resource base, from a material as well as a symbolic point of view. It represents the basis of a certain degree of independence. It is, as it were, the rock from which the hostile world is to be faced and countered, hence, the centrality of land in the many peasant struggles of the past and present. In turn, this resource base allows for different forms of co-production between man and living nature. Co-production (i.e., the process of agricultural production) is molded in order to fit, as much as possible, the interests and prospects of the peasant family and, in turn, co-production interacts with the market. A variable part of production will be sold, and another part used for the reproduction of the farm and the peasant family. Thus, co-production allows, directly and indirectly, for survival and for future prospects, and also feeds back into, and strengthens, the resource base, thus improving the process of co-production. This mostly occurs through qualitative improvements: making land more fertile, breeding more productive cows, selecting the best potato seedlings, making better storage facilities, enlarging knowledge, making roughage production meet the needs of the herd, etc. Such qualitative improvements feed back positively into co-production; they also (might) translate into enlarged autonomy and thus reduce dependency. Depending on the particularities of the prevailing socioeconomic conjuncture, survival and the development of the self-controlled resource base might be strengthened through engagement in other non-agrarian activities. Taken together, these relations are arranged into a strategically ordered flow of activities through time.

The pattern of the interrelations between peasant agriculture and markets plays an important role within this flow. In this respect, it is crucial to distinguish between input markets and those for outputs.

**Market Linkages and Distantiation**

From an analytical point of view, farming consists of three interrelated and mutually adapted processes (Figure 3). These are the mobilization of resources, the conversion of resources into (end) products, and the marketing and reuse of the end products. The first and the third process, and increasingly the second one assume, and de facto imply, relations with the markets; however, these can have completely different patterns.

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**Figure 3** The basic flows entailed in farming.
Resources can be mobilized through different markets or, equally, can be produced and reproduced within the farm. This applies to all social and material resources, whether cows, feed and fodder, fertilizers, seed, labor, knowledge, working capital, or buildings. They might be obtained through market transactions and enter the production process as commodities. They might equally be produced and reproduced within the farm unit itself, or be obtained through socially regulated exchange. Those resources that cannot be produced physically on the farm (like heavy machinery) can be acquired in different ways: either with one's own resources (e.g., savings) or through creating dependency by borrowing to raise the money. Thus, the specific social history of objects can make a very real difference.

Peasant agriculture tends to be mainly based upon commoditized resource flows. This is reflected in (and might be measured through) relations a and b in Figure 3. If, however, commodity circuits play central roles in the mobilization of resources, farming falls within the entrepreneurial (and/or corporate) agricultural constellations. Thus, the 'degree of peasantness' becomes central to the analysis of agriculture. This varies through space and time. Peasant agriculture is less dependent on markets for factors of production and inputs, while an increase in such dependency will move agriculture toward the entrepreneurial or capitalist modes of farming.

**Peasant Agriculture: Six Decisive Features**

The specific position of the peasantry within wider society (i.e., the peasant condition) has important implications for the way in which peasant agriculture is structured. The first and probably the most important one is that peasant agriculture is geared to producing as much value added as is possible under the given circumstances, and that its development aims, above all, to increase value added within the farm household. This focus on the creation and enlargement of value added mirrors the peasant condition: the hostile environment is faced through independently generating income in the short, medium, and long run. Although the centrality of value added production within the framework of peasant agriculture might seem self-evident, this feature distinguishes peasant agriculture from other types of farming. The entrepreneurial mode is equally oriented toward the takeover of opportunities to produce value added as it is to the direct creation of value added. This process occurs through the acquisition of resources previously owned by others. Capitalist agriculture centers on the production of profits, even if this implies a reduction in the total value added.

The environment in which agriculture is embedded significantly influences the levels of value added and how they unfold over time. Peasant agriculture, in particular, requires space to fulfill its potentials. If such space is not available, due to negative interactions between peasant agriculture and the society in which it is embedded, its ability to realize these potentials will be blocked. Thus, peasant struggles are a reflection of the multifaceted nature of interactions between peasant agriculture and society at large.

A second distinctive feature of peasant agriculture is that the resource base available to each unit of production and consumption is limited and coming under increased pressure. This is partly due to internal mechanisms such as inheritance practices that mostly imply a distribution of available resources among a growing number of households. It is also due to the external pressures on resources as, for example, climatic change and/or usurpation of resources by large export oriented corporate interests. Peasants will not seek to compensate these downward pressures by expanding their resource base through establishing substantial and enduring dependency relations with markets for factors of production, as this runs counter to the search for autonomy and would also imply high transaction costs. The (relative) scarcity of available resources increases the importance of improving technical efficiency. In peasant agriculture, this implies realizing maximum output with the given resources and without a deterioration in the quality of these resources.

A third important feature regards the quantitative composition of the resource base: labor will often be relatively abundant, while the objects of labor (land, animals, etc.) will be relatively scarce. In combination with the first characteristic, this implies that peasant production tends to be intensive: production per object of labor will be relatively high and the development trajectory will be shaped as an ongoing process of labor based intensification.

The qualitative nature of the interrelations within the resource base is also important. This brings out a fourth characteristic: the resource base is not separated into opposed and contradictory elements (e.g., labor vs. capital or manual vs. mental labor) but, instead, the available social and material resources represent an organic unity that is owned and controlled by those directly involved in the labor process. The rules governing the interrelations between the involved actors (and defining their relations with the resources) are typically derived from (and embedded in) local cultural repertoires, including gender relations. Chayanovian types of internal balance (e.g., those between drudgery and satisfaction) also play an important role.

A fifth characteristic (that follows on from the previous ones) concerns the centrality of labor: the
productivity and future development of a peasant farm critically depend upon the quantity and quality of labor. Associated aspects of this include the importance of labor investments (terraces, irrigation systems, buildings, improved and carefully selected cattle, etc.), the nature of applied technologies (skill oriented as opposed to mechanical), and peasant innovativeness.

In the sixth place, reference needs to be made to the specificity of the relations established between the peasant unit of production and the markets. Peasant agriculture is typically grounded upon (and simultaneously embraces) relatively autonomous, historically guaranteed, reproduction. Noncommodity flows and circuits dominate commodity flows and circuits. Each cycle of production builds upon the resources produced and reproduced during previous cycles (see Figure 3). Thus, they enter the process of production as use values, as labor objects and instruments (in short, as non commodities) that are used to produce commodities, and at the same time to reproduce the unit of production. This pattern starkly contrasts with market dependent reproduction, in which most or all of the resources are mobilized through markets, entering the production process as commodities. Thus, commodity relations penetrate into the heart of the labor and production processes.

From a neoclassical point of view, the differences between the situation of actively constructed self provisioning (i.e., a relatively autonomous and historically guaranteed reproduction) and the one characterized by high market dependency is irrelevant. Seen from the neoinstitutional perspective, they are both clear examples of the basic dilemma: to make or to buy? The typical peasant response to this dilemma is as relevant in developed countries as it is in developing ones.

The characteristics elaborated above flow together in the distinctive, albeit often misunderstood and materially distorted, nature of peasant agriculture, which is primarily oriented toward the search for, and the subsequent creation of, value added and productive employment. In the capitalist and entrepreneurial modes of farming, profits and levels of income can be increased through reducing labor input. Both modes progress through, and contribute to, continuing outflows of labor from agriculture. This does not so readily occur in peasant units and, if it does, it is a step backward. In peasant farming, emancipation (successfully facing the hostile environment) necessarily coincides with the enlargement of total value added per unit of production (i.e., per farm). This occurs through a slow but persistent unfolding of the resource base, and/or through improving the technical efficiency. Mostly these two movements are combined and intertwined and are self reinforcing. In peasant agriculture, the ongoing increase of value added per farm is brought in line with simultaneous increases at two interconnected levels: that of the peasant community as a whole and that of individual actors engaged in the process of production.

At the level of the peasant community as a whole, possession of a specific resource base by a specific family is generally recognized. Within the prevailing cultural repertoires (or moral economies), the takeover of adjacent plots or possessions is definitely not viewed as progress; for the peasant community as a whole this would be tantamount to self destruction. Hence, individual peasant families strive to progress (albeit with different rhythms and different degrees of success) within and through their own efforts and using their own resources. This adds to the overall growth of value added at the level of the community (or regional economy).

Within the pattern typical for capitalist and/or entrepreneurial farming, growth at the level of individual enterprises often associates with a stagnation or even decrease of the total amount of value added at higher levels of aggregation. A peasant economy excludes the occurrence of such a pattern. This also explains why, throughout history, agricultural sectors worldwide showed an ongoing increase in the absolute size of the total agricultural labor force. It also explains why demographic growth translated into further agricultural growth. It is only from the 1950s onward that such interrelations have been interrupted and replaced by new patterns.

Processes of Repeasantization

The world is currently witnessing new and often unexpected processes of repeasantization. In Brazil, more than 1 million new peasant units have been forged through the struggles of the Movimento dos Sem Terra (MST) – the movement through which the dispossessed from large metropolis are returning to the countryside in order to create an existence as peasants. Similar, albeit less visible, processes are occurring throughout Latin America. In Eastern Europe, many people entered the peasant condition after the collapse of the Soviet Bloc. And, within the European Union, the widespread, denogenous process known as farmer led rural development is explicitly enlarging the peasants of its agriculture. Expressions of this process include entering into on farm processing, developing direct retailing, of offering agro tourist facilities, engaging in the management of landscape and nature, creating new forms of energy production, developing new forms of cost reduction by regrounding farming on nature, and strengthening organic agriculture. These expressions of repeasantization are intended to counter the squeeze exerted upon agriculture through liberalization and globalization and to enlarge autonomy at the farm level. At the same time,
this repeasantization results in the creation of new and positive interrelations between the farming sector and society at large.

See also: Agriculture, Sustainable; Food Networks, Alternative; Green Revolution; Modernization Theory; Post-Productivist and Multifunctional Agriculture; Regional Development, Endogenous.

Further Reading


Relevant Websites

www.viacampesina.org
La Via Campesina: International Peasant Movement.
www.ruralimpact.net
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www.jandouwevanderploeg.com/env/empire peasantry and resistance
Rural Development Challenges and Interlinkages.
Peet, Richard (1940–)

The influence of a scholar depends not only on his or her written words, but also on the time in which those words are written. Richard Peet’s voice has been influential in geography both because of the depth of his scholarship and because his words have provided intellectual and political leadership at key moments in the history of the discipline (Figure 1). He is both an academic and an academic activist.

Born in Southport (England) in 1940, Richard Peet received his formal education from the London School of Economics (BSc, economics, 1961), the University of British Columbia (MA, geography, 1963), and the University of California, Berkeley (PhD, geography, 1968). He has been teaching geography at Clark University since 1967.

Peet’s doctoral research in traditional economic geography applied von Thunen’s theories to the global expansion of commercial agriculture in the nineteenth century, showing a fascination with global spatial and structural systems, and their connections that has survived to the present. However, Peet was also a product of the socially tumultuous late 1960s in America and became a strong advocate of ‘social relevancy’ at a time of the anti war and the Civil Rights movements. In 1970, he became the editor of *Antipode*, the first geographical journal dedicated to a radical perspective that encouraged geographers to address urgent social issues and to use geographical knowledge to promote change. In the first issue, he outlined an agenda for teaching an undergraduate course in radical geography.

Peet’s early publications take aim at poverty in the United States, stressing inequalities in American society and geography’s indifferent or complicit role in fostering class differences, racism, war, and environmental degradation. He documented poverty as a geographical phenomenon that varies according to location, and in specific social, economic, and physical environments, including rural environments and racialized inner cities. This early writing has a pragmatic caste, emphasizing the need for practical solutions forged in public policy and planning.

Throughout the 1970s, Peet concentrated on economic theories to understand the structural conditions that foster inequality. As the pages of *Antipode* increasingly demonstrated the inadequacies of conventional geographical models to bring about social change, Peet’s became one of the most articulate voices in the break through to Marxism. He focused on two distinct, but interrelated, themes: the role of ideology in defining geographers’ interpretations of the world, and the ideological frameworks that support and sustain economic systems.

During the 1980s and 1990s, his emphasis shifted from poverty in the developed world to international underdevelopment. With that shift came a deepening of his interest in structural understanding of social processes and modes of production causing underdevelopment, deindustrialization, spatial shifts in production, environmental degradation, and the expansion of new forms of economic consciousness. These issues have remained at
the core of Peet’s work, expressed in some of the most incisive critiques in the discipline of the transition from Keynesian to neoliberal economic regimes, and of the real differences in the material lives of ordinary people that that transition has hailed.

The depth of his intellectual contribution has been most apparent at key moments of transition (or ‘paradigm shifts’) within the discipline. During the 1990s, as the discipline was negotiating the jagged edges of the post-structural turn, he became deeply involved in confronting the relationship between economy and culture. Some scholars on the geographical left had criticized Peet for maintaining a ‘binary’ between the material and ideal. The result of this conversation has been an extended and fruitful debate, published in widely read journals such as the *Annals of the Association of American Geographers* and *Economic Geography*, over his staunch refusal to give ground on the philosophical question of how theory making relates to external reality. When Trevor Barnes, for example, wrote a critique of the use of metaphors in economic geography theories, claiming that the act of theorizing by all geographers, including Marxists, is a constitutive – and therefore contingent – one, Peet responded with characteristic pugnacity, maintaining his faith in the search for a truth beyond ideology, and giving no quarter toward work he views as relativist, amoral, or socially detached. And he gives no quarter toward economic geographers, including those writing from the left, in whose work he sees idealist tendencies.

His critique of idealism is extended in *Modern geographical thought*, widely regarded as his most important intellectual contribution, a large scale mapping of the discipline, from positivist, to radical, to post structuralist, and postmodern perspectives. It tacks between lucid descriptions of intellectual developments and charged critiques of the political and ideological implications of geographical ideas. From those critiques flows his critique of ‘critical modernism’, developed with Elaine Hardwick in *Theories of development* to support his enduring contention that underdevelopment is a result of powerfully structured historical successions of modes of production, in which changing forms of consciousness have played a role that he increasingly ascribes to acts of representation. While this development shows the extent to which he has taken seriously the work of post structural theorists such as Foucault, always he maintains a distinction between semiotic struggle and discursive constitution of reality, whether with respect to the natural environment or the industrial landscape.

Peet’s more recent work addresses power in creating and sustaining both the ideology of capitalist relations and the instruments of state and economic control. Peet’s thinking remains strongly influenced by Gramsci’s understanding of ideology in forming state–society relations, but he exceeds Gramsci’s emphasis on discursive meaning as an instrument of power. This emphasis gives his ongoing work a powerful basis for understanding the strategies of international actors such as the World Bank and the International Monetary Fund.

Peet’s work shows a number of recurrent themes. Geographers need to have a radical conscience, to take responsibility both for understanding geographies of inequality and for using scholarship as a basis for social change. A geographical conscience implies a political position. Most important of all, perhaps, are his insistence on the politics of engagement and his faith in the possibility of emancipatory and liberation economics. As a scholar, a teacher, and an activist, Dick Peet is most aptly described as ‘engaged’ with the world that he has helped to change.

See also: *Marxism/Marxist Geography I; Marxism/Marxist Geography II; Radical Geography*.

### Further Reading

Introduction

People's geography describes an orientation toward the production of geographical knowledge. People's geographies draw on the theoretical advances achieved over 40 years of radical geography to create knowledge that is useful in the struggle for social and economic justice. This knowledge may take the forms of pointed scholarly analyses, popularizations of existing knowledge, or the translation of critical theories into political practice.

Roots of People's Geography

In a 1984 'Manifesto' David Harvey declared that “the geography we make must be a people's geography” that depicted the world as it really was rather than as we hoped it might be. He argued that a historical–materialist approach to human geography required focusing on the historically developed structures that shaped and determined people's lives and against which they struggled for change. Fifteen years later a group of American geographers met in New York City to found the People's Geography Project (PGP). The PGP is dedicated to the proposition that in the struggle for social and economic justice it is vital to understand how everyday life is structured through relations of power that are fundamentally geographical. It seeks to popularize radical geographical analysis so it becomes a stronger tool in the fight for a more just world.

The notion of a people's geography has many roots. Among US geographers, Howard Zinn's influential People's History of the United States is one. This book outlines the social and political history of the United States from the perspective of working people, minorities, and the dispossessed, and seeks thereby to shed critical light on the ideological claims of freedom, right, and goodness that support the American imperial project at home and abroad. The book has long been, and remains, a lodestar for activist groups seeking progressive social change. The goal of any people's geography has to be to help foster the realization of the fundamental importance of space and spatiality to social life and social justice.

Another crucial influence on the development of people's geographies in general and the PGP in particular, is the Detroit Geographical Expedition and Institute (DGEI) and its offshoots in Toronto, Vancouver, London, and elsewhere. Developed in collaboration with neighborhood residents and activists (especially teenagers) by pioneering geographer, Bill Bunge, after he moved to Wayne State University in the mid 1960s, the DGEI sought (1) to uncover and map the structural forces that shaped the unjust geographies of everyday life in the city; (2) to bring geographical knowledge to 'the people' and thereby to transform the nature of geographical knowledge production and learning; and (3) in the process to transform higher education (especially geography) to make it more accountable to community people. Working with community members and activists, the DGEI sought both to diagnose the geographies of injustice within which (particularly) African Americans lived and to transform those geographies. Mapping was critical to this project – 'expeditions' mapped everything from incidents of broken glass, to rat bites, to where drivers typically sped (Bunge was particularly interested in how unjust geographies threatened the survival of children) – but so too was analysis. For example, the DGEI hypothesized that schooling for African American children would be better if it were under 'sympathetic authority', that is, if local community members, and members of the same race, had control of local schools. Analysis thus focused on how to change the geographies.
of authority – through electoral campaigns, advocacy movements, etc. – within the Detroit school district. In other words, the DGEI sought not only to uncover the reality of people’s geographies, but because it understood that these geographies shaped – even determined – the structures of life and death, it sought to radically alter them.

A final critical determinant of the rise of interest in people’s geographies in the 1990s and early twenty-first century was the general scaling back of leftist geographers’ ambitions as they retreated from constructing a ‘radical’ project to an interest in a ‘critical’ one. Radical geography’s early years were suffused with a sense of urgency and filled with the potential that the world really could be changed. Forged in the fires of the global uprisings of the 1960s, radical geography was radical both in that it sought and expected real social transformation (and understood that geographic knowledge was critical to such change), and in the sense that it was creating something radically new in what had been a fairly hidebound discipline. If the so-called quantitative revolution had shaken geography’s old guard but nonetheless seemed to be aligned with the political status quo (it was largely a technocratic development), then radical geography hoped to upend both the discipline and the world of which it was part. Radical geography was thus infused with experimentation: theoretical experimentation, as well as experimentation in modes of exposition. It sought to be directly relevant in ordinary and oppressed people’s lives in ways that academic knowledge production rarely was.

However, with the defeat of the global left in the 1970s, radical geography turned inward. Much of this was salutary, leading as it did to a consolidation and development of theoretical gains in Marxism, feminism, and other oppositional modes of theorizing. Academic debate in left-leaning geography during the 1970s, 1980s, and into the 1990s was sharp. New conceptualizations of scale, social reproduction, the relationship between structure and agency in everyday life, the social production of nature, new projects focusing on the fate of places in the midst of industrial restructuring, the emerging geography of sexuality, the restructuring of local and national states; new theories imported from French post-structuralism, cultural feminism, cultural studies, and elsewhere: all these built on, while also strengthening, the foundation of radical geography forged in mid-twentieth century Marxism and socialist feminism. They radically transformed radical geography. Indeed, so great had been the change, and so thorough the disengagement with the social movements and political ferment that had marked the birth of radical geography, that by the early 1990s numerous left-leaning geographers, especially but not exclusively in Britain, had begun calling for the dismantling of those institutions that had sustained the radical movement, such as the Socialist Geography Specialty Group of the Association of American Geographers (which itself had succeeded the far less staid Union of Socialist Geographers), and their replacement with institutions that would instead promote ‘critical geography’. (And in fact, by the start of the twenty-first century, this move had been successful with the Socialist Geography Specialty Group rebranded as the Socialist and Critical Geography Specialty Group and a new international formation of left-leaning geographers that came together under the banner of the International Critical Geography Group.)

By the 1990s, ‘critical geography’ had become the preferred term for all that scholarship that was (1) oriented toward theoretical development and explication; and (2) did not overtly hew to a corporate, military, or elite class, sexist, racist, or homophobic line. Critical geographies encompassed everything from studies of fashion in men’s magazines and everyday shopping behavior, to abstruse arguments about how creative people use commodities creatively, to polemics about how capitalism was nothing more than a discourse that could be combated by creating alternative discourses. Critical geography, in many ways, was the academic echo of ‘third way’ soft social democracy. To be sure, there was still much strongly oppositional, directly political work – such as the turn to Lefebvre already noted, the theoretical and empirical developments of labor geography, the rise of queer geographies, and the close, critical examination of Clinton–Blair workfare policies that paved the way for a concerted theorization of, and attack on, neo-liberalism in the 2000s – but such work was scattered, poorly coordinated, often attacked for being ‘totalizing’, and generally swamped by a larger celebration in critical geography of geographers’ own theoretical sophistication and cleverness.

Such disciplinary contexts – the history of intellectual and political ferment, and the retreat into the carapace of ‘critical’ scholarship – provided the immediate context for those who met in New York City in 1999 to revive an interest in people’s geography and a return to the arguments Harvey had made in the 1980s for the need to develop a “mundane enterprise that reflects earthly interests, and claims, that confronts ideologies and prejudice as they really are, that faithfully mirrors the complex weave of competition, struggle, and cooperation within the shifting social and physical landscapes” of the contemporary world. Such disciplinary contexts made clear the need to reorient the progressive geographical enterprise back toward its roots in understanding directly the ways in which geographies of social and economic injustice were produced, what they meant for those who lived them, and thus how they could be thoroughly transformed.
The People’s Geography Project

The PGP was founded to address this need. Founded in late 1999, the PGP brought together radical geographers from around the US with the goal of taking what was best from the impressive intellectual ferment that had marked geography since the 1960s – the rapid theoretical advancement, the lasting, if now muted, commitment to social justice – and putting it to work for people. The PGP’s founding goal was to popularize radical geography (and radicalize popular geography) so that the graphic insights necessary to progressive social change could be ready at hand for both activists and those who simply wanted to better understand the worlds of which they were part. The PGP was, therefore, as much an intellectual project as an activist one. Taking its cue from the radical popularizations of Zinn and the social history movement, members of the PGP outlined a series of projects that ranged from creating ‘guerilla geographies’ (pamphlets addressing critical issues of the moment), to developing teaching materials for both university and school teachers, to producing a comic book of radical geography (modeled on the famous ‘For Beginners’ series), to writing a large scale People’s Geography of the United States. In addition, the PGP was active in organizing special sessions at conferences of the International Critical Geography Group, the (American) Working Class Studies Association, the American Studies Association, Rethinking Marxism, and elsewhere, in an effort to draw others into the project of constructing people’s geographies.

Over the next year work began on each of these initiatives. With the terrorist attacks in the US on 11 Sep tember 2001, however, the work of the PGP shifted. Working with a team of students from Syracuse University (where the PGP director was employed), the PGP rapidly mobilized to become a clearinghouse for teachers seeking alternative materials for teaching about the attacks, American imperialism, the geographies of terrorism, and related issues. A later, similar clearing house was developed in the run up to the war against Iraq. Such efforts monopolized the time of PGP members during this period and momentum was lost on other planned projects, such as the People’s Geography of the United States book which still has not been written.

Simultaneously, PGP faculty and students at Syracuse University turned their attention to pressing local concerns: hunger, economic injustice, racism, and so forth. Beginning first with the Syracuse Hunger Project and developing into a Syracuse Community Geography Project, geographers, local social service providers, activists, and others, began a concerted campaign to map and analyze the landscape of food injustice, racism and incarceration, the structural determinants of teen pregnancy, and other critical forces. Such work, while in the spirit of the PGP (and drawing as long as it lasted on PGP funding), detracted from the intellectual and larger scale popularizing projects the PGP had outlined as primary goals.

Indeed, the PGP has not achieved most of its original goals. It has, however, maintained an active website with resources for scholars and students seeking to develop their own people’s geographies; it has been an active presence at conferences; and work under its banner continues to be published in journals. More importantly, others have picked up the banner.

Other Projects

In Los Angeles, Laura Pulido and others have developed maps and walking tours of people’s histories and geographies. In Chicago, Carrie Breitbach and the Chicago Center for Working Class Studies have published a labor history map. And in the American South, Derek Alder man has used funds from the PGP to produce maps and brochures on the geographic legacy of Martin Luther King, Jr. A course on the People’s Geography of American Empire is offered at Evergreen State University in the state of Washington; its instructor, Zoltan Grossman, is working with Joseph Nevins of Vassar College to write a book of the same name. Nik Heynen of the University of Georgia is reworking people’s geographies as geographies of survival.

There is a renewed interest in producing public geographies, which, though not identical to people’s geography, share many overlapping concerns. Katharyne Mitchell at the University of Washington used her term as the Simpson Professor of the Public Humanities to promote the role of public intellectuals in geography and beyond. At Birmingham University, Ian Cook and his colleagues have developed a public geographies project that possesses many of the same goals as the PGP. Scholars and activists in Australia have adopted the people’s geography title for a website that links activist scholarship with progressive politics. Activist students and faculty in Hong Kong, Hungary, Italy, Japan, Taiwan, and elsewhere have begun to develop the people’s geography idea in ways appropriate to their own contexts. And, as witnessed by the 2007 Summer Institute on Geographies of Justice (cosponsored by the PGP), a new generation of geographers, no longer content to be merely ‘critical’, are reclaiming the radical mantle.

In other words, the ‘idea’ of people’s geographies continues, and continues to change, even if the specific goals of the PGP have gone unmet.

See also: Critical Theory (After Habermas); GIS, Public Participation; Historical-Geographical Materialism; Marxism/Marxist Geography I; Marxism/Marxist
Geography II; Participatory Action Research; Radical Geography.

Further Reading


Relevant Websites

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International Critical Geography Group.
http://www.academic.evergreen.edu
People’s Geography of American Empire, Evergreen.
http://www.peoplesgeography.com
People’s Geography/Reclaiming Space.
http://www.communitygeography.com
Syracuse Community Geography.
http://www.peoplesgeographyproject.org
The People’s Geography Project.
Glossary

Nonrepresentational Theory  A body of thought developed by Nigel Thrift endorsing many key strands of post-structuralist theory, but extends to consider how space is made in ways outside of representation. It considers social practices that cannot be represented through words and discourse, and amplifies the importance of these in terms of related affect, emotions, and spaces.

Post-Structuralism  A branch of philosophy, a subsection of which was developed by French and Continental thinkers such as Gilles Deleuze and Felix Guattari, and which moves away from strict binaries that form the core of structuralism, toward the notion of multiple realities and possibilities and an opening out of the world.

Research as Performance: Introduction and Context

Performance, although often researched as a field in its own right can be used as a research tool, and/or a metaphor to think and act through when researching performance and social practice. Within human geography, this consideration has emerged alongside a body of work attentive to post structuralist philosophy (most notable in the work of Deleuze and Guattari and other Continental philosophers), and the applied nature of performance in all its manifestations – from the social practices of everyday life to performing arts such as dance, drama, music, theater, and so on. This body of work is called nonrepresentational theory and has provided an opening for performance research within human geography. It claims to supplement the understanding of practice and performance, rather than write a general prescriptive theoretical approach. It can be argued that Thrift is the source of inspiration for this particular strand of performance research.

Thrift considers the problems that geographers researching performance frequently face – nonverbal, noncognitive bodily practices that often resist interpretation, representation, description, and definition. The nonrepresentational approach attempts to explore some of these issues, and indeed, to put forward some suggestions for actually carrying out fieldwork into these social practices. Although the roots of nonrepresentational thought can be traced to wider philosophical and theoretical movements, the more evident, consolidated, geographical interest in performance, performance theory, performance studies, and an emphasis on social practice emerged in the late 1990s and early twenty-first century, filtering through to methodological explorations.

The Methodological Shift

A distinct dissatisfaction with conventional qualitative techniques for performance research began to manifest within geography at the start of the current decade. For example, the special edition of Environment and Planning D in 2000 addressed specific facets of performance (of both everyday life and the arts), and how to research it, as did the Possibilities of Performance special edition of Environment and Planning A in 2003.

Doctoral students at the School of Geographical Sciences at Bristol University around this time were also embarking on methodological innovations in relation to much interest in post structuralist and nonrepresentational approaches. A research cluster emerged around issues of performance and practice, and more importantly, asking how to actually employ methods that would be able to get at these issues. The then Bristol based research cluster (comprising, JD Dewsbury, John Wylie, Paul Harrison, Derek McCormack, Mark Paterson, Claire Pearson, Emma Roe, and others), created a core of practice based approaches that would then unravel to inform research methods using performance as a metaphor. Within human geography these methods originally emerged as a response to various needs in the fields of performance research. A summary of some typical key problems with traditional methods are outlined here:

1. Existing qualitative methods within the social sciences have frequently relied on interpretation and social construction, and therefore lack the capacity to grasp the more expressive, emotive, and nonverbal, noncognitive aspects of social practices and performances that resist interpretation.
2. There is a lack of suitable vocabulary within current geographical and social scientific methodology to talk about, present, or document practices and performances.
3. Existing methods are not attuned to the sensuousness of performance and practice, and the accompanying temporalities, for example, events in real time.
4. Existing methods rely heavily on words to describe and explain rather than to experience or evoke
practice in a much more relevant way, through other means such as film, photography, sound, etc.

5. Existing methods do not accommodate the unpredictability of performance, or the significance of events occurring in real time.

6. Existing methods do not allow us to get close to, or get within, performance/practice.

Performance Methods

There are two main ways of dealing with the problems that conventional methods create for performance research.

Reworking Existing Methods

Methods have the potential to engage with, and go with, the flow of embodied practices, and their ways of being in the world, and so there should be more use of techniques that instill conventional research methods with the sense of the creative and the performative. Explorations into using methods in such ways, and adapting methods to suit performances being researched, have been taking place within geography. In particular, the performing arts such as dance, drama, and music, are apposite examples because they have performative and embodied articulations and negotiations of space and social life at the very core of their existence. They are embodied, affective, and expressive, and they involve acts of doing in real time – in the now. Some examples of reworked methods are given here:

Diary–photo diary–interview

Alan Latham's diary–photo diary–interview requires respondents to keep a diary of their sociable practices for a certain period of time, which comprises a log of places they went, at what time, with whom, and why. An interview based on the diaries is then undertaken. The use of photography by the participants is also encouraged (see the section titled 'Knowledge of practice/knowledge in practice' below). The benefit of this approach is the variety of narrative accounts, accompanied with pictures and additional interview material, which offers a wide range of possibilities for presentation of research materials. It may also help to embody and convey the sense of performance and movement within the actual research (see Figure 1).

Reworked ethnography

Ethnographies of use

Loretta Lees, in her study of the new public library building in Vancouver, endorsed a technique that she calls ethnographies of use. She acknowledges and presents the everyday engagement and use of the library
building through a series of vignettes, based on her own experiences of being in the building.

**Audio ethnography**

By piloting research that prioritizes sound rather than sight, Susan Smith reveals that existing qualitative methods are too engrossed in what can be seen, rather than what can be heard. Her proposal for an audio ethnography involves an adaptation of existing traditional methods in order to account for the sound environment, in addition to crafting new procedures to access and to present the sound world.

**Musical ethnography and ethnomusicological influences**

Anthropologist, Sara Cohen, claims that musical ethnography should accentuate the particular complexities that take place in musical performance. Similar innovations, but within the field of ethnomusicology, have occurred via a conceptual shift from classification, description, and exposition of music structures, toward an understanding of music as culture and music as a lived out social practice. This shift is especially evident within the methodology of contemporary ethnomusicology research practices.

**Participant observation and observant participation**

New ways of researching music by active participation and engagement rather than observation and description, and by using the musical skills and knowledge of the researcher, are evident in much contemporary ethno-musicographic work. Active and personal participation in social and often skilled practice can have innovative results, for example, narrative accounts of playing the piano. In geography exclusively, much more attention is being paid to taking part in actual live events of musical performance, and how we can engage with/in them, as opposed to the textual analysis of musical scores, or song lyrics. Indeed, Thrift's emphasis upon observant participation is fitting to this sort of approach. Wood et al. also identify some key elements of this type of performance research, for example, ‘participant sensing’ being particularly relevant here, whereby the researcher experiences the performance at the time it occurs, while note taking at the same time.

**Performative ethnography**

Performative ethnography is an approach related to the specific practice of Irish traditional music sessions in Galway City. It differs from standard ethnography due to its emphasis on the multiplicity and fluidity of performing and improvising in the now – how people move through different spaces and experience them differently. It also differs from conventional ethnographies, which observe particular cultural groups and only write about them from the outside because this research performs within the social practice in question, and so experiences the performance. This approach moves away from rigid and standardized research questions and structures, and toward capturing the sense of the social practice as something always in process. The techniques employed within this performative ethnography are outlined below in Table 1.

This approach has some crossover with techniques of participant sensing, photo elicitation, recording, and styles of writing to embody performance that musical geographers are pioneering.

**New Methodological Approaches to Performance Using the Influence of the Performing Arts and Performance Studies**

**Performative writing**

Performative writing is a creative and useful tool for any type of performance based research and should be an attempt to creatively act out the emotional and affective forces of performance. Performative writing should be evocative and bring the reader into contact with and conjure up the various aspects of performances, as exemplified in the excerpts below (Boxes 1 and 2).

**Multimedia and creative presentation**

Using media like photography and video have also emerged as additional ways of evoking performances, and another way of imbuing our research methodologies with a sense of practice. For example, research by Emma Roe uses video methodologies for mediating the practices of food. Such an approach can work in synergy with performative writing, to evoke place and time (see Figure 1 as a way of evoking bodily movement when making place). For example, using video, photography, sound recordings, etc., makes it possible to gain more of a sense of performance, and what the spaces and times involved are like (see Figure 2).

**Knowledge of practice/knowledge in practice**

Knowledge of specific arts and disciplines can be considered specialist because these have often been practiced, developed, and refined over a long period of time. If, for example, the researcher does not have specialist knowledge of the practice in question, performance research is still useful. It is still possible to get close to practice at different levels in order to get at different things. For example, one geographer has narrated the experiences of learning French folk music and dancing and the ability to engage with music to understand the affective and embodied elements of folk practice.

**Cultural geographies in practice**

Examples of new research styles using performance are evident in the accounts in ‘Cultural geographies in...”
practice’ – a methodological forum in the journal Cultural Geographies. The emphasis here is on alternative presentations of research, and experimenting with ways of writing up research. This is related to performative writing, and similar work can be found in performance studies.

Ethics and Problems in Performance Research

Taking part in performance research means intensive participation. Blurring of boundaries and roles between

<table>
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<th>Table 1: Performative ethnography</th>
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<tr>
<td><strong>Technique</strong></td>
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<td>Spoken diaries</td>
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<th>Box 1 Excerpt from Morton, 2005a</th>
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My eyes are closed, and all I can feel is rhythm pulsating through my body. I can feel the shape of the tune, the patterns it makes as the melody rises and falls. The wood of the flute is buzzing through my hands, as the feeling runs lightly along the volar ridges of my finger tips, and the soft pads vibrate. I open my eyes and the rich pine green color of the walls in Taaffe’s, lined with pint-bearing listeners, seeps through the wispy layers of smoke, and I look toward Lorenzo as I can feel that the end of the tune is near, and something is going to happen, it is going to change: he nods at Barry, then at me, all the time still playing the pipes, and Barry, who is playing the box, his body jolting as he stamps his foot in time with the rhythm, gives a slight ‘hup’ and then the tune has changed. We all flow from the last to the next, to this, and I close my eyes again to feel the rhythms of not only the music, but of the sounds and smells as they close in on me, and I disappear into the world of music.

|----------------------------------|
Dearest,
If I told you I love this city, love the way it opens its dirty limbs to me, love the way it absorbs me without noticing me, love the way it gives rhythm to my walk, gives nuance to my skin, gives purpose to my plots, would you be jealous? I know you refuse to be jealous of people, but I wonder how you would feel if I swear my utter devotion to a place.

Figure 2
being a researcher and a performer is inevitable, however, can also highlight ethical considerations for the social practice and the dynamics of the performance that is being researched. For the researchers with specialist knowledge of a particular practice, this may be less of an issue, as they are more likely to be aware of etiquette and acceptable levels of interruption. Accepting that the presence of a researcher may alter events slightly is also inevitable, and can be problematic, however, there are also benefits of this, as the researcher becomes a former in the process, alongside the research participants, and the issue of positionality becomes a less power filled problematic.

**Contributions and Benefits of Performance Research to Geography**

**Inclusive Spaces**

Performance related methods make it possible to negotiate access to spaces that are created in the now. Although these spaces only exist for the duration of performance, and are therefore temporary and transient, they are given more weight in geographical research. This is because they make sense, if not necessarily of a rational explanation or recognizable meaning. These spaces of the now constitute a sense of belonging and understanding for many people who participate in their making.

Geography can now begin to be more inclusive toward ways of knowing and sensing the world that exist in practices such as sign language, music, dance, and art therapy, to name a few, rather than remain focused on verbal and/or textual ways of talking and writing about space. Despite the degree of need for the scriptural within geography, there must be space made to consider the alternative advantages that the nonverbal can bring to the discipline, especially in terms of including groups and practices that do not use words or texts.

**Politics of Research**

Using performance in research advances a bottom up methodological politics, which, rather than follow a prescriptive theory, respects the practice in question. In this sense, practice becomes the means through which theory is created. It becomes an active methodology – a theory of practice is actively being written as performances take place. Research is a more democratic process – power is diffused from the researcher's assumed central position, toward participants who are reconstituted as co-researchers, rather than 'subjects' of research. The performance based methodology also endorses a reworking of the dynamics between the researcher and the re-searched by emphasis on co-production of events and materials to be used in the presentation and execution of the findings. Experiencing the strangeness, the immanent forces and unsettling aspects of performance, and the complexity of researching all this puts the researcher in a different position whereby he/she is susceptible to the effects of performance rather than only selecting events that fit into a research program. As a result, it is possible to feel, hear, and experience the difference that nonrepresentational approaches can make to both theory and methodology. Overall, this type of research endorses a different kind of research politics than conventional methodologies do.

**From Positionality to Positioning**

Positionality within the field and among the people involved in the research has been a central problematic in traditional and contemporary ethnography because of the suggestion that our position affects research by making it more subjective. Within performance research there is a need to move from one particular position (that of researcher) to an awareness of the fluid and changing ways that people become positioned within practices (positionings), especially researchers and participants. This provides potential to produce relational knowledge and a relational appreciation of positionings – people can move from being performer (playing music, undertaking ob servant participation) to researcher (actively researching within a given situation) and from researcher to performer (performing inside and outside of the research).

**Interdisciplinarity**

The kinds of spaces that are accessed by performing have rarely been presented to a geographical audience before, despite their longstanding contribution to other disciplines and interdisciplinary research such as performance studies, ethnomusicology, cultural studies, drama, and other forms of the arts such as writing, poetry, etc. The method of performing research within geography dares to move away from more Euclidean, geometric, and static concepts of space, and toward more live, active, embodied, and dynamic ever changing spaces.

See also: Affect; Embodied Knowing; Ethnography; Performativity; Space I.

**Further Reading**


Performative and Embodied Mapping
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Glossary
Cartography Practices, processes, and discipline concerned with transforming and representing a real world in a mapped form.
Corporeal Appertaining to the body as against the mind.
Ethnography Qualitative methodology based on in-depth field-based contextual research.
Performance Doing action and work.
Performativity A nonfoundational approach to the production of identity, grounded in action and practice.

Introduction
People have always made maps and employed them to make sense of their worlds. Their maps communicate information in symbolic forms, which we read and interpret. What we make of them varies. For Western society, the map now stands mostly as a mirror like representation of the real, a factual tool to help us to navigate, plan, and control the world out there. Employed to chart explorations, administer cities, foster trade, bound nations, regulate property transfer, locate people, places, or events, and to link us to the world, the map as artifact is a practical device – an outcome of a problem solving technology. In our time the artifact carries with it an aura of authority: what else would one expect from a functional mechanism?

The processes that wrap around the object have been regarded as being less significant than the map itself. Until recently, the history of cartography was the history of mapmaking, in which accuracy constantly improved, technologies advanced, and innovation took place and from which the discipline of cartography emerged after World War II. Cartographic research mostly focused on a very narrowly defined set of practices: the goal was a normative improvement of map design, in isolation of any social context. The scientific maps produced by cartographers were the maps that mattered, and these were taken for granted; all other mapping was ignored or demonized. Social processes underpinning this prescriptive narrative went largely unnoticed until the last decade of the twentieth century, and the rich diversity of everyday mapping was marginalized.

Since the late 1980s, however, there has been a major shift toward considering mapping processes. Some are technical, within the ambit of traditional cartographic research. Maps are surveyed, derived, drafted, copied, and scanned; they may be a source for other mappers, digitized, and rescaled; information may be selected for inclusion, generalized, and symbolized. An artifact may be produced from these practices, and then a whole series of other things happen around it. The map might be folded, or rolled; converted to another file format; and embedded with other media. It might be packaged, marketed, sold, bought, used, stored, collected, reused, thrown away, or recycled. The cultural uses of mapping are particularly complex: it is read in different ways in different contexts, but the same map may mean different things. It might fire the imagination, inspire a revolution, plan a journey, make money, or teach moral values. Meaning is constituted in the actions that mapping processes call into being. So the performative and embodied mapping characterized in this article is both dynamic and enacted. The argument focuses upon the ways that people deploy mapping behavior and artifacts, and how these might be related to more abstract theoretical constructs such as Butler’s notion of performativity. The cultural shift toward practice and performance forms its chief focus.

The Turn toward Practice
In the last decade of the twentieth century, there has been a shift in the humanities and social sciences from considering texts as the bearers of culture, toward performative ways of knowing the world, in which the dynamic aspects of culture matter. New ways of understanding the world have emerged from theater studies, anthropology, environmental psychology, the philosophy of language and linguistics, sociology, science studies, visual culture, and art history, and these have increasingly been employed to interpret mapping. The philosophical shift away from representation, toward action, has been paralleled by a greater contextual concern. Relations and flows in a network are more important in this approach than entities and their properties. Conventional approaches to mapping have increasingly emphasized the interplay between history, geography, and social or literary studies. The changing ways in which mapping has ‘worked’ in different contexts have shifted the emphasis from a study of artifacts, to a much more ethnographic concern with practice and the relations of mapping performances to other actors and actants.

During this change, fields of study have been reshaped. Mapping is being rethought in interdisciplinary
endeavors, which reject long accepted binary distinctions. New concepts have emerged, with mapping theorized as performative, emergent, narrated, and affectual, or as networked flow. These changing ways of thinking about mapping focus around performance and embodied ways of understanding processes and a shift toward ethnographic ways of understanding.

Judith Butler's notion of performativity offers an important way of understanding mapping practices. Butler argued that identities are constituted through what people do, rather than who they are, and that bodily practice is central in this process. She recognized that unspoken psychoanalytical factors contribute to the formation of subjects, but argued that social norms and historical contexts also strongly affect action, through the operation of discursive power and past performative utterances. We never quite ever conform to the ideal norms around which performativity acts, so individual agency and resistance are still possible. A performative approach sees mapping as not only taking place in time and space, but also capable of constituting both. New worlds are made every time a map is deployed. Del Casino and Hanna argue that the practices of mapping might be understood using this construct. They suggest that mapping is always being made and consumed and that, following Butler, ethnographic work should move beyond the binaries author/reader, body/society, and subject/object. Instead, they argue that spaces and mapping coconstitute one another, produced by, and productive, myriad corporeal practices. Tourists consume a map of historic Fredericksburg in conjunction with other texts, with other tourists and workers on the site, and through bodily practice as they move around. Meaning depends on action. They imagine the place before they go or recall their visit after; their gaze not only deploys the map during the visit, but also produces new geographical imaginings. The map is never complete; like identity it may be temporarily fixed, but it is always fluid and contested, deployed in new ways. A hybrid mapping emerges from this process, at once produced and consumed, not only cultured but also natural.

Other theorists also argue that mapping practices call spaces into being and that maps themselves are onto genetic, rather than ontic. Instead of an emphasis upon the hybridity, practice is understood as always changing. Maps are always being called into being, to perform particular tasks, only existing when they are deployed, of the moment, dependant on a local context. Focusing upon the transformational qualities of practice, Kitchin and Dodge draw on the concept of transduction to explain how we constantly solve relational problems during all phases of mapping behavior. Like Hanna and Del Casino they stress that all mapping involves remapping: making and use can never be separated. They then deploy the notion of technicity, to explain mapping practice as an event involving people and technology, with prosessional outcomes, always emergent, in which representation is mutable.

For some, this relational and contextual turn has been theorized as Deleuzian. This kind of approach also reflects a philosophical shift toward mobility, and away from essence, in which mapping is imagined as a suite of cultural practices involving action and affects. James Corner recognizes that this bestows an agency on mapping, embodying it with creative power. Instead of a mere tracing of the world, mapping becomes rhizomatic. It becomes a powerful, open ended, indeterminate process that unfolds and makes new places and actions.

Some researchers have used this kind of approach to focus on the significance of movement in the construction of identity and used this to critique a representational approach to mapping and way finding. A more than representational approach to mapping becomes possible. For example, Tim Ingold repositions mapping as story telling about journeys, in which the map becomes an inscription, that possibly emerges from a reenactment of mobility, rather than reflecting the existence of any preexisting cognitive structure. Others have stressed the affectual qualities of mapping practices focusing on the power of practice to move, and on the emotional geographies that emerge from performing mapping and geovisualization.

Mapping is also mobile and networked, an outcome of a technology that allows cultural messages to be transformed and shared. The development of ‘actor network theory’ (ANT) in science studies encouraged a con sideration of the transformative potential of technologies and also focused attention on empirical consideration of the performance of mapping. Flows between different actors and actants can be traced, and a thick description of the context can lead to a relational understanding of mapping practice. Researchers not only must trace the inscriptions left behind by different actors, but also need to carry out ethnographic work in the field. Research can then chart the translations, through which mapping works, to reveal the ambiguities of mapping practice.

**Performative Methods**

Scientific practice seeks to control empirical investigation, simplifying complexity and establishing carefully regulated experiments into narrowly defined aspects of mapping, with a predominantly quantitative methodological emphasis. Discursive approaches, in contrast, focus largely upon analysis of the map as a textual source, amenable to critical approaches, many of which draw inspiration from qualitative ways of knowing the world. In contrast, the turn toward performance implies a change in research strategies. Research is starting to
employ ethnographic approaches to carry out empirical investigations of everyday mapping practices in the field. An ethnographic approach sees mapping as a social activity, rather than an individual response. By observing and participating in the performances around mapping we can explore its relations to identity, how different spaces are co-constructed, and the ways in which people behave when carrying out mapping tasks. Ethnomethodological work is beginning to yield rich descriptions of the actions performed in, and around, the mapping process. Brown and Laurier, for example, chart the social use of mapping in everyday car and tourist navigation activities, in which the mapping process is cast as a complex negotiation of identity in a social context. Map reading depends upon the context of the task: ethnomethodological observation reveals much more at stake than individual cognitive map reading (Figure 1). The previously taken for granted social actions and interactions in the field are recorded, revealing complex everyday behavior. Film, video, or photo diaries can be coded, translated, and interpreted, and a rich empirical exploration of actions becomes possible, if the researcher is deeply immersed in the mapping context. Map reading depends upon the context of the task: ethnomethodological observation reveals much more at stake than individual cognitive map reading (Figure 1).

The Performative Tradition

In the multivolume History of Cartography project, a catholic definition of mapping has been popularized, which goes well beyond the Western metrical tradition of the map as an object. Instead, Woodward and Lewis argue that mapping comprises three different but interrelated traditions: one grounded in material culture leading to the creation of real maps and which previously dominated research, a cognitive tradition in which mapping is imagined, deployed as a mental image to help make sense of the world, and a social tradition in which mapping is performed, by telling a story, recalling a dream, performing a dance, singing a song, or enacting a ritual. Spatial and social meaning in this tradition is communicated through movement, gesture, words, music, narrative, and action. Performative mapping may make ephemeral traces, such as chalked map on a wall or a route mapped in soft mud, but is often strongly embedded in cultural practice. So the performative tradition reinforces a more symbolic role for mapping. Mapping comes to embody cultural values and reinforces particular practices. It becomes a powerful agent, forming social cohesion or difference, influential in how we live in the world and form a sense of place.

This performative tradition is most obviously enacted in indigenous mapping, in recent Western technological interactivity, and in artistic practice.

The Indigenous Tradition

Most research in this performative tradition emphasizes cultures outside of existing Western orthodoxies. Mapping traditions either reside in evidence from the past or are uncovered by anthropologists engaging with surviving marginalized practice. Evidence of nonmaterial mapping is less likely to have survived or is harder to establish. It is the artifactual maps that have been preserved and institutionalized. Nevertheless, an impressive amount of evidence survives about the history of performative cartography. Important comparative studies have been carried out, and we now appreciate the rich performative tradition from first peoples in the Americas, Africa, Asia, Australasia, the Arctic, and the Pacific. A holistic and unified worldview is often revealed in these performative indigenous mappings, which avoids the dualisms of modern material maps. Art and science merge in practice; myth and ritual make the mapping, but are also made by it; landscape and the event are not separated; time and space become relative and culturally enacted; and religious and secular beliefs combine.

For example, aboriginal mapping in Australia operates with different conceptions of time and space to those that govern Western maps. Song lines, or the tracks made by the ancestors across the continent in the Dreaming, are celebrated and perpetuated in art, dance, and story telling. They serve as a complex and practical oral tradition, not only facilitating way finding, but also...
symbolizing an individual’s obligation and reciprocal relationship to the land. Other performative traditions also serve practical and more abstract cultural roles, without recourse to direct representation of the world. For example, Melanesian navigators were able to travel vast distances across the Pacific, identifying and locating tiny atolls. In the Marshall Islands stick charts served as part of a performative and heuristic navigational tradition. The charts were at once indexical and egocentric: they served as a framework studied before a voyage, placing an individual in relation to an abstract grid, and allowing navigators to learn about swell patterns that might be encountered on a voyage. Way finding depended upon an embodied experience, a combination of sensing the refraction of swells in response to changing bathymetry, and also celebrating memory.

Encounters between local performative traditions and modernist colonial representational mapping have also been well documented. In many cases it is only through these encounters that evidence has survived of other traditions. Of course the performative, oral tradition may only be documented through a Western written experience, so historians have had to be cautious in their interpretations. Contemporary ethnographic research into performative indigenous cartographies is increasingly considering non-navigational and metaphorical relations between maps as objects, and more performative traditions, such as the ways in which stories about the world might be related to embodied spatial practice.

Everyday Western Mapping Performance

Mapping in Western societies is nowadays a ubiquitous and everyday part of people’s lives. Maps of the real world vie with imaginary worlds mapped in fantasy novels; media mapping grounds news narratives; journeys are planned; wars fought; and cities imagined. Space is described and knowable. Maps are everywhere in visual culture. The vast majority of mapping experiences in developed Western societies are, however, nowadays enacted through an electronic medium, distributed and shared over the web, or viewed on a television or on stand alone personal computers. Technology not only allows much greater control but also makes complex performance the norm. Mapping is now interacted with, and frequently changed, by readers, who are also producers. Printed maps are increasingly customized to meet particular desires, and the published hard copy is increasingly being replaced by the ephemeral display. Animated mapping is now commonplace. People zoom in, pan around a map, and perform simple GIS operations such as selecting a layer. Mass collaborative cartography is performed by a growing number of activists, creating mashups based on Google and other map portals, linking their own location based data to web served backdrops (Figure 1). People employ mapping in social situations where it would not have appeared even 10 years ago.

In the past maps largely supported work, rather than play. Specialist printed leisure mapping met particular market needs: a tourist map for holidays, a canal map, a distribution graphic for birders, etc. The printed map formed a backdrop for some board games, around which activities could take place. Or the map jigsaw might be reassembled. Only orienteering mapping was created by users. Playing with maps has, however, changed fundamentally, because of digital interactivity, networking, increasing real income, and new media with which to play. Computer gaming encourages new mapped worlds to be designed, and shared between players, and the design of mapping has itself become a game for many. New outdoor pastimes are emerging around this theme, such as geo caching, a kind of GPS based treasure hunt, and geographic information systems like the FooScap World Map critiqued the all knowing myth of professional scientific mapping (see Figure 2). These critiques are clearly revealed in allegorical mapping, and especially in the genre of embodied mapping.

Embodied Mapping

In the seventeenth century heyday of decorative European cartography artists and mapmakers shared similar concerns. The subjective world of the artist employed the map as a scientific device to poke fun at reason: imaginary worlds in seventeenth century novels, the ubiquitous use of mapping metaphors in Shakespearian drama, and satirical images such as the Foolscap World Map critiqued the all knowing myth of professional scientific mapping (see Figure 2). These critiques are clearly revealed in allegorical mapping, and especially in the genre of embodied mapping. Embodied maps draw analogies between corporeal form and cartographic depiction of geographic shapes. People came to represent and personify places. Rulers literally appear as the map of their nation, the coastlines recognizably morphing into familiar human forms. The political messages in these embodied maps depend on their context. Elizabethan personification of the Queen as the nation reinforces the power of monarchy; Victorian satirical embodied maps trade on derogatory national stereotypes, supporting imperial discursive constructions of nationality, that speak to Anderson’s notion of
imagined communities. The genre continues to be popular among modern artists employing mapping in their work. The forms of the body are sometimes represented in a map like fashion, contoured or gridded, cartographic forms juxtaposed with the subject, in a corporeal contrast. Or else the body may be warped, transformed, and projected, as in the work of Lilla LoCurto and Bill Outcault, where it frames questions about visibility and representation.

Mapping is also deployed on the body: map tattoos move as muscles ripple, activating the apparently static landscape. Artists working with the visual form have also deployed mapping as clothing to drape around the body, and clothing itself depicts the cartographic form, T-shirts selling places through their outline.

The body also appears on decorative maps of the early modern period, often juxtaposed to landscapes laid bare for colonial or European conquest. Here the naked, native, female form is often presented as eroticized adornment in the cartouche, reinforcing the narrative and gendered power of the map as a male discourse, naturalized and juxtaposed to clothed male explorers, or symbols of European commercial power.

(E)motional Mapping

The increasing academic interest in affect has a parallel in the genre of emotional maps, which chart human feelings onto a cartographical landscape. These maps move their readers, transporting them across terrain, guiding them on an emotional journey through life. The landscape in these maps often serves a moral purpose, mapping out accepted or deviant behavior. The most studied example of the genre, Madame de Scudéry’s Carte de Tendre (Figure 3), for example, maps a landscape displaying relationships and feelings, which acts as a metaphor not only for an imaginary novel, but also for experience. Artists continue to make emotional maps, which depict our lives but also question how we live. For example, Kathy Prendagast’s work highlights questions of identity and its links to landscape, by engaging with the political significance of place names. Recently, technology has allowed an even more performative mapping to be enacted within this genre. The World of Experience website allows users to devise and customize their own emotional landscape, choosing what kinds of thoughts or experiences and feelings or passions to map, save, and perhaps purchase, through a simple Flash-based application. Corporate versions of this approach are also marketed from www.companymap.com, allowing the quest for profits, to be mapped and customized.

Performative Artistic Mapping

Since the 1980s avant garde artists have increasingly employed mapping in their works, as a device to draw attention to the ways in which we relate to the world. Mapping is now more socially ubiquitous than ever before. It is hardly surprising that artists have deployed these images to say things about our society and its values. Surrealists, pop artists, situationists, land artists, conceptual artists, community artists, digital media artists, and live artists have all employed maps in their work, encouraging a performative encounter. Common techniques include: fragmenting known maps and rearranging them in novel ways; juxtaposing far with near; distorting space into a relative or egocentric form; emphasizing networks and encounters; changing orientation;
manipulating projection, scale, and generalization to in fringe accepted mapping standards; drawing on standard cartographic tropes such as the border, or naming to question social norms; abstracting and overcoding a known form; employing recognizable country shapes in new ways; shifting novel conceptual frames onto familiar icons such as the globe or tube map; and mapping onto different media so as to ask questions about the world or our identities.

Many of these artistic encounters with mapping explicitly focus on the performative potential of the medium. The Situationists in the 1950s and the 1960s enacted a strongly oppositional cartography, moving art from the galleries to the streets of Paris. Guy Debord proposed psychogeographic encounters with the city and encouraged people to take part in dérives, or drifts, walking across urban space, enacting random but creative encounters, that subverted the controlled modernist...
Performative and Embodied Mapping

Performative and embodied mapping not only depends on local contexts, but also makes these places. It suggests an optimistic possibility for creating new futures, in which human agency is recovered. Technologies become empowering instead of controlling. The visual can be deployed in new embodied ways. On the one hand, all mapping can be seen as performative, enacted, and creative: called into being to meet particular human needs, flowing from action, instead of being grounded in power; networked and relational, capable of moving us all. Dead representation becomes alive. On the other hand, some mapping is more likely to be performative. Indigenous traditions reveal a rich diversity of mapping practice; networked technology led interactive mapping is facilitating newly performative mapping, and artistic practices also reveal this performative potential, sometimes in explicitly performative actions and sometimes in the creation of artifacts that encourage action or change.

Embodied and performative mapping opens possibilities for a coming together of action and theory in critical praxis. This kind of approach to mapping brings the academic world closer to those of the creative artist and activist. It shows how mapping can be at once social and empowering.

See also: Art and Cartography; Embodied Knowing; Ethnography; Mapping, Philosophy; Performativity.

Further Reading


Relevant Websites

http://www.acmejournal.org
http://www.companymap.com
CompanyMAP
http://www.worldofexperience.com
World of Experience.
Introduction

The importance of the concept of performativity within human geography can be situated within the emergence, during the 1980s and 1990s, of an interest in questions of representation and its role in shaping the relation between space and culture. Responding in part to what they saw as the limits of the kind of cultural geography as associated with the work and influence of Carl Sauer, a generation of geographers began to foreground the importance of representations in understandings of space and place. Such geographers began to pay particular attention to the role that representations played in shaping the meanings and 'identity' of places and their inhabitants of those places. At the same time, the authority and stability of representations were also questioned: rather than fixed things through which the world was reflected, representations were understood increasingly to be unstable, partial, and contestable, and within the context of wider discursive formations. A corollary was that the identity of place and people was also unstable and contested.

From the early 1990s, such efforts found an important source of conceptual support in the work of the North American philosopher and cultural theorist Judith Butler, and specifically her ideas about performativity. Given the influence of her work, it is worth beginning by outlining the key elements of Butler's writing on performativity: Butler's discussion of this concept can be understood as a key element of her critical genealogy of the identity of the human subject, particularly in relation to questions of sex/gender. Much of Western thinking and philosophy can be understood as an attempt to establish a relatively fixed conception of the subject as the basis for proper political action and thought. This subject is presumed to be a rational, coherent, self aware actor. It is also a subject with intentionality – the subject can exert a strong degree of agency over its action. Put another way, the individual subject is a kind of sovereign power. Crucially, the identity of this subject is fixed: it has an essence that is not contingent upon the changing circumstances (cultural, social, and political) within which it finds itself. While this conception of the subject has been come taken for granted – to a degree at least – its apparent naturalization actually conceals its dependence upon a certain set of exclusions. The rational, mindful subject is defined in opposition to that which it is not: irrational, emotional, and bodily. Furthermore, it has come to be defined as implicitly masculine, and many of the qualities it excludes have tended to be identified as feminine.

Seen in this way, the apparent stability of the identity of the subject can be unsettled by resituating it as something dependent for its meaning upon a complex set of relations with other identities. It is exactly such an unsettling of the apparent fixity and identity of the subject that we find at the heart of Butler's work. In developing her critique of the subject, Butler draws upon a range of influences, including the dialectical philosophy of Hegel,
psychoanalytical theories of desire; and post structuralist theories of discourse and language. Her critical genealogy of the subject owes a particular debt to the work of Michel Foucault, for whom discourse was not just a system of neutral representations but was a series of related statements whose repetition is generative of certain stabilities of meaning across a range of practices. Understood in these terms, the identity of the subject is not borne during a kind of foundational moment: it does not preexist discursive practices but is the effect of such practices. Butler is particularly interested in the implications of such ideas for how we think of gender identity. Again, rather than the essential quality of an individual possessed from birth, gender identity emerges through the individual being addressed (as ‘boy’ or ‘girl’) from a very early age. Here Butler draws also upon the idea (derived from elements of the work of thinkers such as Austin and Derrida) that speech itself is performative – it is generative of the thing it merely purports to name.

An important upshot of this claim is that the identity of the body is neither fixed nor given. Rather than a mere thing, the body comes to matter through the repeated stylization of its features or gestures – through ways of behaving, talking, gesturing, dressing, etc. For Butler this also means that it makes little sense to make a sharp distinction between sex and gender: indeed, she is critical of those feminists who make this distinction. Any identity, including sex, emerges through the repetition of categorical practices within discourses. The important point is that even if Butler seems to make room for the possibility of subverting such identities, it is not the individual who is performative, but the discursive practices within which the individual finds her identity articulated: discourses ‘perform’ the subject. Such ideas about the peformativity of gender identities could also be employed to think about questions of race, class, ethnicity: rather than naming a set of distinct and fixed set of identities, the contested meaning of each category is located within a set of performative discourses.

**Performativity, Identity, and Space**

For geographers, Butler's work provided a way of thinking about the relations between the peformativity of identity and questions of space. Indeed, early readings of Butler work stressed the need for geographers to ‘spatialize’ performativity. An early and controversial example of this was a piece by David Bell, John Innis, Julia Cream, and Gill Valentine in which the authors explored the relationship between sexuality, space, and identity. Butler's work has also allowed geographers to think about the relation between discourse and economic processes rather than identifying real underlying structural forces and mechanisms, the ‘economy’ can be seen as a category whose ongoing citation stabilizes the identity of a diverse set of forces. Furthermore, with this economy, work often involves becoming implicated in highly stylized bodily performances differentiated in highly gendered terms through modes of presentation and adornment. Butler's work has also been used to raise important question about the production of geographical knowledge itself. As Gilian Rose argued in a key article about the politics of doing research in the wake of feminist critiques of the subject and identity, it became difficult for geographers to employ the tactic of self reflexivity and the disclosure of positionality when any appeal to knowledge of the ‘self’ seemed to rely upon the kinds of subject positions about which Butler's work is so critical.

While highly influential, the use of Butler's work by geographers has been the subject of various critiques and debates. For instance, Lise Nelson argued that Butler's account of performativity – and its adoption by geographers – leaves little scope for any conception of transformative agency. Thus, by equating agency with a kind of abstract, ideal, and masculine subject, Butler seems unable to account for the possibility of active, intentional reflection from which various forms of resistance to hegemonic discourses might emerge. This critique also complicates Butler's reading of various kinds of apparently subversive forms of identity performance through, for instance, dressing across genders – to what extent are such performances to be explained by ap pealing to a kind of intentional subject which itself is the target of Butler's critique? In turn, Nelson's critical commentary has been challenged insofar as it mistakenly reads Butler as rejecting any appeal to agency. Thus, for Catherine Nash, Butler encourages us to develop a more sophisticated account of the relation between agency, identity, and discourse.

To such debates we might add two further substantive critiques of Butler's conception of performativity. First, by equating agency with subjectivity Butler's work seems unable to account for the more distributed understanding of agency we find for instance in recent research in human geography, particularly work influenced by that set of ideas known as actor network theory. Such work suggests that it is possible to hold on to some sense of agency or actancy without necessarily appealing to intentionalism as the sovereign source of such agency. Then, and second, by emphasizing repeatedly the danger of appealing to the pre discursive in critical accounts of subjectivity, Butler arguably limits the range of practices and processes upon which geographers and others might draw in articulating new ways of thinking about the performative or political aspects of space and spatiality. How, for instance, might we make sense of spatiality of affective processes which seem to have some kind of tangible, visceral force before they are ever named explicitly through language?
Making More of Performative Movements

One way to focus the increasingly diverse conceptions of performativity circulating within the discipline is through the example of specific kinds of performance practices. Dance has figured strongly here. For instance, as part of his elaboration of nonrepresentational theory, Nigel Thrift uses dance as a practice that serves to exemplify the performativistic dimensions of bodily space and spacing. For Thrift, it is precisely the way in which dance works upon the precognitive or nonrepresentational dimensions of bodily thinking that gives it a performativistic quality. Such claims seemed to move against the grain of geographical work influenced by Butler, insofar as they decouple performativity from representation, and the critical/political purchase a focus on the latter term has provided geographers. Hence, therefore, the concern expressed by Catherine Nash in a review of how ideas about performativity had been put to work by Thrift in thinking through practices such as dance. For Nash, Thrift seemed to be using dance to appeal to the possibility of escaping the kinds of discursive practices that had been rendered more tangible through Butler's work. As such he seemed to run the risk of eroding the very political gains that feminist and cultural geographers had worked hard to make in the wake of various readings of Butler's work. Furthermore, as Donna Houston and Laura Pulido argued, Thrift's apparent focus on the ephemeral/practises such as dance as an aesthetic form of performativity would seem to work against and affirm more obviously political performances through which the performative identity of space and place was contested and subverted.

It would be a mistake however to posit any neat distinction between an emphasis on performance as the escape from real politics and a more politically attuned conception of performativity derived from the work of Thrift. Butler's argument, refined in more recent writing, is that there are more ways of making performativity (and performance) political than that offered by Butler. At the same time Thrift has drawn attention to some important limitations in Butler's work. These limitations include the fact that Butler is primarily a theorist of the symbolic registers of cultural life, that her work tends to equate political change with active interventions made by 'marginalized' subject positions, that it says little about the potential possibility of certain practices from which can emerge various kinds of distributed agencies and forces for change. Thus, while Butler provides one set of conceptual apprehensions for thinking through the question of performativity, there are others. These include, for instance, the tradition of ethnomethodological approaches to the performance of everyday life, exemplified in the pioneering work of Erving Goffmann. But in working up an account of the nonrepresentational dimensions of the performativity of space and spacing, geographers have also drawn upon a much wider tradition of thinking, making particular use of the work of the philosopher Gilles Deleuze. J. D. Dewsbury elaborates upon the contribution Deleuze's thinking makes to any conception of performativity. In contrast to Butler's conception of performativity as a function of the repetition of certain practices, Deleuze draws at attention to a conception of difference that does not depend upon such repetition. For Dewsbury, following Deleuze, thinking the performativity of space – or spa cing – requires us to come to grips with a conception of difference as ongoing differentiation without representation. It also means that the event of performativity is always excessive of attempts to capture it in representational form. In developing this discussion, Dewsbury problematizes any neat distinction between the concept of performance and performativity, and particularly any attempt to define performance as a set of practices presupposing an intentional subject.

So, to return to dance, while such a practice can still be understood in terms of its articulation through discursive processes, it also always opens onto registers of experience that are more or less than representational. Furthermore, the performance of dance is never simply a matter of individual creation – it can be and is emergent from the relations between bodies, texts, technologies in ways that complicate any subject centered account of agency. Thinking through dancing bodies does not so much mean ignoring questions of gender: it encourages us to think of the moving body as a site through which multiple processes of differentiation at a range of durations and intensities are engendered. Some of these differentiated engenderings may, through their recognition and articulation through webs of discursive signification, coalesce into recognizable identities. Others may not, continuing to exceed the terms of representational politics by facilitating various forms of relations within and between bodies. As important a point that needs to be made here is that nonrepresentational accounts of performativity do not just expand the range of the processes and practices to which geographers attend. They also encourage us to make more of the performative character of the very process of this knowledge production. On one level, this means thinking of many of the more familiar techniques of knowledge production (maps, diagrams, and images) less as devices of representational capture than as performative operators – things that do work rather than arrest the 'doing'. It also means making more of the key registers through which knowledge is presented – writing and speaking. Indeed insofar as writing is performative, one of its key tasks might be to elicit those qualities of difference which are always excessive of textual
strategies. One way to do this might be to fold the performative intensity of various practices – such as dance – into the style of writing and presentation. Such writing would never be about capturing the movement of dance, but about developing ways of allowing the qualities of movement to animate the logics of geographical thinking.

And More to Come...

In many ways, the concept of performativity is still working its way through the discipline. It continues to offer ways of agitating and altering theorizations of space and place, and beyond the obviously cultural corners of the discipline. For instance, political geographers have drawn upon the concept in order to rethink the ways in which the performative articulation of certain imaginative geographies as part of the ongoing ‘war on terror’ actually produce the effects they purport merely to name. At the same time, feminist geographers are continuing to refine Butler’s critique of materiality as part of a wider attempt to rework conceptions of the lively matter of bodies. Elsewhere, the concept is being used to rethink the way in which various forms of code and inscription contribute to the operation and organization of everyday space times. Here, drawing upon insights about the dynamic character of technological systems, geographers such as Rob Kitchen and Martin Dodge have argued that mapping actively transforms both itself and the places it purports to ‘represent’ in a performatively iterative process.

Cutting across these various employments and reworkings of performativity is an ongoing affirmation of a dynamic conception of space. This is perhaps the key contribution made by the concept to human geography – an enlivening of the very matter and meaning of spatiality. Rather than a static container within which things happen, spatiality has, in part because of the influence of notions of performativity, come to be seen as an ongoing contingent and contextual process, emergent through a range of practices and processes. That is not to say that ideas of performativity mean that space is always up for grabs at any given moment. To say that space is performative is not to claim that anything can happen; rather, it is to become open to the possibility that we do not quite know what might happen, where, how, or when. In these terms, the concept of performativity remains an important and lively participant within the practices of which the discipline(s) of human geography consists, even if the precise ways in which it participates are all ways matters in transformation.

See also: Becoming; Fluidity-Fixity; Identity Politics.

Further Reading
Bell, D., Blinne, J., Cream, J. and Valentine, G. (1994). All hyped up and no place to. Gender, Place and Culture 1, 31–47.
**Introduction: Humanistic Geography and Phenomenology**

Humanistic geography is concerned with geographical experience — what the spatiality of the earth/world means to those whose lives are part of it — in contrast to those who study geography as externalized, objective data. Geography is not merely a dimension of human life, but rather pervades it, and thus the core argument is that geography is humanism. Phenomenology offers a radical methodology for description that opens the field of meaning constitution to investigation, displaying the evidence upon which meaningful and valuable entities, events, and the limits of the experiential horizon appear within experience. Thus, phenomenology offers a methodology that can open up the full spectrum of the spatial inscriptions of human life, the fundamental concern of humanistic geographers. Geographers advocating a humanistic turn developed an interest in phenomenology in the late 1960s, followed by intense productivity in the 1970s and early 1980s. Publications in humanistic geography can be placed in roughly six categories: articles wrestling with theoretical issues relating humanistic geography with phenomenology (e.g., those by Buttmer, Entrikin, Mercer and Powell, Relph, Samuels, and Tuan); articles identifying a quasi phenomenological turn in geographical literature of predecessors and contemporaries (e.g., Sauer, Lowenthal, Gregory, Kirk, and Wright); textbooks and encyclopedias devoting space to humanistic geographers’ focus on phenomenology (e.g., Ley and Samuels); hybrid treatises (e.g., Warf’s synthesis of humanist and structuralist perspectives, and Schatzky’s synthesis of Heideggerian spatial ontology with the spatial causality of explanatory science); works that employ...
humanistic geography as a component (e.g., Porteous’ landscapes of the imagination); and full length monographs representative of the position (see readings).

The renewed interest in lived geography of the 1990s revolved around several substantive issues such as developing a phenomenological environmentalism, for example, David Seamon's humanistic geography/architecture of built space, Robert Mugerauer's various methodologies for interpreting environments, and Edward S. Casey's phenomenology of place. In his 1996 text, Sensuous Geographies, Paul Rodaway develops the cross fertilization between humanistic and postmodern geographies. A recent trend, enactive geographies, incorporates Maurice Merleau Ponty's existential phenomenological behaviorism as one of its influences. Editors Paul C. Adams, Steven D. Hoelscher, and Karen E. Till developed a critical humanistic geography in their 2001 volume, Textures of Place: Exploring Humanist Geographies, which investigates globalizing forces in light of place. The further development in methodological pluralism situates phenomenology along with humanistic geography as one approach among many in the study of a particular phenomenon (see, for example, Martin Selby's 2004 volume, Understanding Urban Tourism, especially ch. 6, "The experience of urban tourism"). Lastly, in a more diffuse way, the spirit of humanistic geography pervades works that do not directly make reference to it, but call on the same phenomenological sources and accomplish the same kind of work (see, for example, Charlie Hailey's 2008 work, Campsite: Architectures of Duration and Place).

Humanistic geography emerges as both a reaction and a response to the hegemonic development of objectivist/naturalistic geographical science. Geographers committed to the humanistic turn, such as Yi Fu Tuan, Edward Relph, and Anne Buttimer, had been dis-appointed by the objectification of human phenomena and they took up the project to develop the geography of lived experience. Objectivist science alleges that human life is only accessible to scientific examination from the perspective of detachment. Objectivism's discounting of geographical experience is a vestige of the Cartesian double world theory in which the world as lived is taken to be merely subjective; the real, mechanistic, quantifiable world can be reached only through thought, not through life. The empirical version of this objectivist dualism is positivism, which emphasizes perceptible/observational facts, accounted for through causal explanation, versus nonobservable, unscientifially verifiable subjective experience.

Humanistic geographers were drawn to phenomenology because it provided a philosophically articulated alternative to objectivist science, critically challenging its ontological dualism and scientific monism, offering methodologies congenial and adaptable to their geo graphical concern for the experiential dimension. Four difficulties immediately faced implementation. First, humanistic geographers had to learn phenomenology without background in epistemology, ontology, and the history of philosophy. Second, they studied phenomenology within the mind frame that philosophical acumen is irrelevant to the goal of the human sciences. Third, they appropriated phenomenology to their respective humanistic bents, that is, their primary goals were not to become phenomenologists, but rather to forge their identities as humanistic geographers. Lastly, they had to learn to apply phenomenology to their subject matter in order to uncover the phenomenological structures of geographical experience. As with any new area, the introduction of phenomenology to geography brought about self reflective, critical discussions and accusations of misinterpretations and misunderstandings within their own group, for example, Relph's contentions with Tuan and Buttimer concerning the significance of humanism and a humanistic geography, and John Pickles' insistence on a rigorously orthodox Husserlian geography against other interpretations.

Phenomenology’s Historical Context: Neo-Kantian Explanatory Science versus Husserlian Descriptive Science

Phenomenology arose amidst the conflicts of the nineteenth century. Just as soon as Immanuel Kant's critical philosophy had eliminated metaphysical speculation and had provided a compromise between rationalism and empiricism, the excess of metaphysical extremes emerged once again in idealism and materialism. On the one hand, G. W. F. Hegel created an ‘absolute idealism’ on the basis of pure speculation: reason viewed as the process of concretizing transcendental subjectivity in history. The uneven progression of ‘spirit’ is exhibited in Hegel's infamous geography of continents and nation states based on the relation of physical geography to culture. On the other hand, metaphysical materialism provided for scientific reductionism—all of being is reducible to quantifiable, isolatable bits of matter and mechanistic laws. Naturalism, its less extreme cousin, reduces all of reality to natural objects, operational concepts, and explanatory principles. Natural science had been grounded in Kant’s critical philosophy—the a priori principles of possible experience are at the same time the universal laws of nature—and thus is viewed as avoiding metaphysical commitment. Eschewing the extremes of nineteenth century idealism and materialism, the goal of the neo Kantians was to ground the newly forming human sciences (psychology, sociology, anthropology, etc.) on a Kantian basis. Edmund Husserl, the progenitor of phenomenology, shared this anti metaphysical concern for scientific foundation. However, Husserl’s
phenomenological science profoundly differs from Kantianism – by its rejection of Kant's formal a priori through the development of the material a priori based on the apprehended evidence of phenomenological analysis. This formal/material distinction is the key to properly grasping the source for, and the difference between, the explanatory (natural) science adopted by the empirical (human) sciences, which the humanistic geographers reacted against, and the descriptive (phenomenological) science that they embraced. The neo Kantians maintained that reality as given is inchoate; in order for it to be known, the inchoate must be structured (formed) by cognition. These constructions within sociohistorical settings in turn remain scientifically unknowable until formed through the explanatory methodologies (model formations) of science. It is this hegemony of neo Kantian naturalism (all of being, quae knowable, is to be treated as an object, a natural entity) that Husserl (in his doctrine of regional ontologies, being is differentiated: eg., physical thing, pure consciousness) and the humanistic geographers found unsatisfactory.

For Kant, a priori synthetic judgments are possible on the basis of constructing concepts through their application to sensible intuition. Based on Kant's Copernican Revolution, that objects conform to the mind, the a priori structures of the mind impose form on reality through the construction of concepts on the basis of the given. Husserl calls this Kantian doctrine 'a priori constructionism' and Kant's 'faculty psychology' – mental functions constructing appearances. Husserl's battle cry 'back to the things themselves' and his various ways into phenomenology are attempts to apprehend the things by avoiding any admixture of Kantian constructionism. The neo Kantians' development of the human sciences advocates Kant's constructionism. Husserlian phenomenology instead opens up the field of the material a priori by which objects are constituted (not constructed) on the basis of intuition, the givenness of evidence within the intentional structure of consciousness. Kant's 'poverty' of intuition, the givenness of evidence within the apprehension of evidence through phenomenological analysis. Phenomenological description is to be contrasted with description within the naturalistic attitude that remains naively object focused. Husserl's phenomenological reduction (in its Cartesian mode) leaves consciousness as its residue through which the researcher remains solely occupied with appearings. Through the phenomenological epoché, which suspends all judgments concerning the spatiotemporal existence of things assumed to be 'out there', opens up the field of meaning constitution – how the world comes to appear.

Both Martin Heidegger and Maurice Merleau Ponty point out that the Husserlian doctrine of empty and fulfilled intentions, especially concerning categorial in tuition, is the break with neo Kantian constructionism that opened the phenomenological field of meanings. For Kant, judgment forms are constructed by the a priori categories of the understanding. For Husserl, judgments are empty intentions that are to be filled through the intuitive givenness of categorial objects as presented in experience. Husserl's first work in static phenomenology dealt with eidetic description of an act and its object (act psychology). As act psychology is limited in scope, in that it does not consider context/horizon of both world and subjectivity, Husserl developed constitutive phenomenology: lived experience is 'thick', consisting of more than merely an act and object. The subjective context of experience (core fringe of attention, act complexes, etc.) and the objective context (a milieu with the world as horizon) are brought into phenomenological investigation. At the same time, Husserl elaborated eidetic phenomenology (all phenomenology is eidetic, but eidetic phenomenology is object focused), which involves the realm of the possible (apprehending essences vs. the empirical generalizations of actuality – positivistic matters of fact) through the methodology of imaginative to lighting candles (speculative idealism), holding hands (soft minded preliminary to real science), and talking about feelings (solipsism); in other words, the generic positivistic criticism, along with those made by geographers such as David Harvey and Richard Morrill concerning the nonscientific character of phenomenology would stand. Accordingly, without phenomenology's rejection of objectivism, lived experience would remain at the merely subjective level of what Kant calls judgments of perceptions (what it feels like to me), whereas by contrast, naturalistic science for Kant involves judgments of experience (formed by application of a priori categories, e.g., cause and effect) and thus involves per manent and universal cognition, the necessary conditions for scientia. However, if the things themselves exhibit (material) a priori principles, eid or essences, as Husserl maintains, then rigorous descriptions based on lived experience are a most proper realm of scientific enquiry – the apprehension of evidence through phenomenological analysis is a legitimate form of scientific investigation.
variation. Husserl also extended his investigations to create a genetic phenomenology that accounts for the stream of consciousness (the temporal nature of consciousness itself), which allows for the uncovering of temporal depth – sedimentations of meaning built up over time. Husserl later worked out the phenomenology of the lifeworld, the pre-given structures of the world of experience prior to any of our theoretical/scientific reconstructions – the world that is always already there. He offers a methodology of reflective history in his critical work on the crisis of European science. Husserl forges each of his ways into phenomenology with the goal of apprehending the things themselves through meaning construction, carefully avoiding naturalistic scientific theoretical construction (the primacy of intuition over construction). The phenomenological slogan, back to the things themselves, involves bracketing the natural attitude that informs the empirical sciences, and training eidetic seeing that opens the phenomenological field of meanings.

Other Major Phenomenologists that Influenced Geographers

Alfred Schutz developed social phenomenology on a Husserlian foundation in order to clear up ambiguities in Max Weber’s notion of ‘verstehen’, distinguishing meanings that the social world has for a social actor (insider) from the meaning interpretations of an outside observer. Schutz puts forth a constitutive phenomenology of the natural attitude, the world of the everyday as it is socially structured. Schutz describes eidetic social structures: we relationship, thou orientation, intersubjectivity, anonymity, zones of operation, system of relevancies, stock of knowledge, the taken for granted, etc. In terms of human/social science, Schutz was not so much interested in personal testimonies; he was interested in the formation of ideal types, second order typified social puppets that could be hypothetically situated by the human/social scientist and typically described in terms of characterology, course of actions, etc. The world of the social puppets must coincide with the typifications employed by social actors (insiders) living within the context of the actual social milieu. The social (actor) insider/observer outsider distinction greatly influenced geographers Relph, Buttimer, and Seamon, even though there was some confusion/conflation of the insider's perspective with Husserlian egology. Transcendental phenomenology and Schutz’s constitutive phenomenology of the natural attitude are to remain conceptually distinct – unfortunately, the confusions play into the positivist’s critique of phenomenology as merely the subjective description of an insider (a story, not science).

Heidegger creates a hermeneutic phenomenology for the purpose of raising anew the question of ‘being’. But this first requires the necessity of investigating the being for who its own ‘being’ (Dasein) is necessarily implicated. Critical of the metaphysical tradition, Heidegger claims that ‘being’ is not itself a being. The fundamental structure of Dasein is being in the world, which preempts the modern tradition of the subject–object dichotomy. It is the spatial ontology of worldhood, a constituency of being in the world that most influences humanistic geographers, for it articulates a nonphysicalist notion of space and provides the possibility for uncovering the existential significance of place/environments/umwelt. Positivism’s ontological commitment to discrete things and isolable facts (‘being’ as beings) does not know what to make of Heidegger’s holism whereby context or world horizon provides significance and the objects and facts so dear to positivism appear only in a secondary or derivative mode of knowing, rather than in the primary mode of circumspection (existential engagement). Heidegger’s later philosophy opens up the hermeneutic on the basis of language as the house of ‘being’. Through an ontological poetics, Heidegger explores the root meanings of dwelling and building and examines the con- structing essences of traditional and modern technologies.

Merleau Ponty, on the basis of Husserl’s later correction of his earlier intellectualism, is led to the notion of lived body intentionality. In Experience and Judgment, Husserl develops a genealogy of logic where logical forms (the source for Kant’s transcendental deduction of the formal a priori categories) are shown to be already present (nascent) in the ‘cognitive basements’ of perceptual consciousness, thus further destroying Kant’s formalism/constructionism. Merleau Ponty radicalizes this Husserlian doctrine of pre predicative experience into a matter pregnant with form doctrine whereby meanings are autochthonously birthed in the structures of embodiment. Lived body intentionality is precognitive and involves an ambiguous field of meanings that is reducible neither to transcendental subjectivity nor to natural thing. Subject–object roles are reversible between the co constitutive poles of body sensibility and milieu. Merleau Ponty describes the senses as essentially spatial, a spatiality that enacts meanings in the lived body’s engagements and negotiations with its milieu. Space, then, is neither a Kantian a priori form to be constructed nor an objective container to be measured. Meanings emerge through spatial morphologies as they are manifest through the body schema. The body schema reflects the meaning of the milieu on the basis of the lived body’s postures. Spatiality is an existential process of être au monde. Thus, behavior is not reducible to naturalistic accounts (human bodies are not merely ‘natural objects’), which has huge implications for geographical study, both in developing research in behavioral geography and in
critically chipping away at the alleged adequacy of the positivistic objectification of behavior.

Edward S. Casey has published two volumes concerning the philosophy of place, *Getting Back into Place* and *The Fate of Place* that have influenced and stimulated the work of both environmental philosophers and geographers. Casey develops the notion of implacement, the collision of the lived body and place. Casey's approach is highly informed by Merleau Ponty's intentionality of the lived body but further develops the spatial structures in the meaningful enactment constitutive of place. Investing the fundamental structures of dimensionalities and directionality, providing a Merleau Pontian perspective on the notion of dwelling, and developing a phenomenology of wild places, Casey links up concerns of lived geography with environmentalism.

Other phenomenologists and existential phenomenologists, for example, Bachelard, Jaspers, Scheler, Buber, and Sartre, have had some influence for example, Jean Paul Sartre's influence on Marwyn S. Samuels, Gaston Bachelard's influence on Butler. References to these thinkers appear in various seminal articles, but their influence is too diffuse to consider here.

**Geographers Influenced by Phenomenology**

Edward Relph's critical discussions concerning humanism led him to argue that humanism is an attitude, rather than a substantive parameter or subfield of geography. Influenced by Heidegger, Relph's phenomenology examines the lived experiences of people engaged in their environments. He sees the method of phenomenological description as an optimal way of apprehending the plurality of spatial worlds of lived experience. His work on place and placelessness in effect offers a spatial in-terpretation of the care structure of Dasein, for he sees place as the spatial rooting of authentic existence. Place constitutes the meaningful center of one's circumstantial dealings with the world. Inauthenticity involves placelessness, a weakening of identification with place. A fundamental sociogeographical structure discussed by Relph is the insider–outsider continuum. Specific structures are empathic insidedness, existential insidedness, existential outsidedness, and objective outsidedness. Relph also develops a way into phenomenological geography: seeing, thinking, describing. He extrapolates John Ruskin's patient and careful manner of perceiving, Heidegger's reflective (vs. calculative) way of thinking, and the later Ludwig Wittgenstein's sense of showing. He defends himself against charges of ecocentrism, idio syncrasy, and mere impressions, but does not use rigorous phenomenological methodology to preemp't such criticisms. By 1981, in *Rational Landscapes and Humanistic Geography*, Relph eschews humanism because he sees it historically developing into modes of domination and exploitation based on scientistic arrogance, which follows from Heidegger's rejection of humanism. He advances a new attitude of geographical humility, which leads him to focus on notions such as genius loci. Remaining respectful of genius loci requires responsible modes of attunement and careful sensitivity in place making. Relph is able to uncover the essence of modern building: the instant environment machine and its construction of commodity landscapes. Disregarding genius loci, the instant environment machine constructs ersatz places, now based on the marketing mythologies of postmodern capitalism.

Yi Fu Tuan's works are quasi phenomenological, for he rigorously adheres to only one of its principles: the phenomenological reduction that brackets the use of the natural and cultural sciences—all theories of the natural attitude. Tuan considers the interrelation of human and world to be fundamentally both geographical and mean-ingful and sees phenomenology as the study of 'man in the world'. In his best known work, *Topophilia*, Tuan avoids a technical or methodological presentation and this sets his *modus operandi* for his subsequent monographs. Presented as if a surface level phenomenological description, his insights, however, exhibit much deeper phenomenological analysis, which is recognizable to a trained phenomenologist. *Topophilia* is informed by phenomenology due to its focus on the subject pole in the experience of the environment/setting. More specifically, he describes the structures concerning perception of, at titudes of, values of, feelings of, topos, concerning the human species per se, the cultural group, and the individ ual. Tuan's overarching goal is to phenomenologically describe topophilia, the affective bond between people and place. In *Cosmos and Hearth*, Tuan presents hearth/home/cosmos/world as a fundamental eidetic structure of the lifeworld as it is spatially/geographically experienced. He develops a genetic phenomenology that describes the buildup of meaning in experience as it progressively ex pands from home toward world. Tuan unveils the tenn sional relation between hearth and cosmos to be eidetic: neither is satisfactory of itself and both together are contradictory. This tension is illustrated in his two teleological–historical reflections concerning China and the United States. Tuan questions the sedimentations in the genetic buildup of sense, much like Husserl's presentation of the Galilean style of science in the *Crisis of European Sciences*. Teleological genesis that forgets its roots in the earth involves a crisis unless the earth can somehow be brought back into experience. The cosmopolitan hearth gives us a way back to home/hearth from the uprooting tendency of the cosmopolitan point of view. This 'solution' is analogous to Husserl's strategy for overcoming Galilean science's abstractive (objectivist–naturalist)
uprootedness from experience by re-rooting science in the lifeworld.

John Pickles is the most rigorously Husserlian of those geographers influenced by phenomenology. Pickles elaborates his geography on the Husserlian model of a regional ontology. He seeks to investigate the eidetic structures of world, worldliness, space, human spatiality, place, etc. Unlike many of the humanistic geographers, and especially theoretically opposed to Buttimer, Pickles is not so much interested in the study of insiders' testimonies or the everyday lifeworld. Better than any other geographer, Pickles understands Husserl's phenomenology to be a rigorous science that, in terms of its substantive exploration as eidetic science, would be complementary to the empirical sciences. Pickles emphasizes eidetic phenomenology, focusing on the a priori structure of geographical phenomena; it is not about experiences, even though it is ultimately founded on transcendental subjectivity. Pickles realizes that Husserlian phenomenology offers the fundamental ground for intellectual responsibility, a rigor that precludes the naive of objective science. Objects are not simply there as they are naively taken to be from the standpoint of the natural attitude, and the sciences built on that attitude; phenomenology examines how human consciousness becomes aware of objectivities and constitutes their meanings. The phenomenological field of constitution accounts for the appearance of objectivities in scientific cognition, the 'readymade already there' objects of objective science. The explanations of objective science are based on dominance and control over reality, without attaining to the fundamental and radical responsibility of accounting for scientific life, which involves the epistemological recognition that the subject-object relationship is primary. Ignoring this primacy is an aspect of the crisis of the European sciences. Unfortunately though, after making much of the nature of transcendental subjectivity, Pickles then turns to a Heideggerian ontology of space and related themes, without sensing a tension between the two orientations. Heidegger's hermeneutic of Dasein does not capture the Husserlian sense of a regional ontology nor does it take the approach of a Husserlian analysis of intentionality. It is unclear, given Pickles' emphasis on regional ontology, why he would not attempt an eidetic methodology focused on the phenomenon of space itself. It is unclear why in his later interest in maps he does not carry out a Husserlian genetic phenomenology concerning cognitive mapping, given his earlier emphasis on transcendental subjectivity.

David Ley's A Social Geography of the City draws on the social phenomenology of Alfred Schutz through making thematic the eidetic sociogeographical structures of the urban environment. Ley's sociography is recognized by the titles of the parts comprising the book: 'The geography of everyday life', 'The social basis of urban life', and 'The city and social structure'. He is interested in the spatial structure of everyday life – how social structures are spatialized in the urban setting. Ley is highly conscious of his experiential turn, critical of the limits of other approaches, for example, behaviorism/ objectivism, and aware of the pitfalls that need to be avoided in engaging 'philosophies of meaning', such as an appeal to subjective perspectives/impressions. Yet, his phenomenology is embedded in a social science approach of citing the findings of empirical studies, rather than carrying out eidetic phenomenological description. To illustrate, phenomena such as access, spatial mobility and immobility, restrictive environments, place opportunities for social contact, etc., are nowhere given formal eidetic description in the Schutzian style – as fundamental structures of sociogeographical phenomenology. Thus, the Schutzian component in his work is not displayed in its distinctive approach and thus the phenomenology that he extols figures as dispensable, except as a contributor to the overall sociogeographic orientation. Perhaps this is why there have been no further major developments in the phenomenology of sociogeography, for in this work it appears to be overshadowed by empirical case studies.

Anne Buttimer, in Values in Geography, maintains a fundamental humanist position that her science or profession is not compartmentalized from her life and that the horizon or values toward which she is directed rests on commitment and care. She argues for her position by showing that to promote value free science is in fact an expression of a value system. Thus, the geographer is not a neutral observer, but rather the concepts and methodologies employed for study already contextualize the geographer in value commitments. In sociogeographical study, the sense of any place is revealed through values that manifest in the choices and actions of its constituency. Values and meanings allow the geographer to engage in the study of lived geography. Buttimer's approach also owes much to Bachelard's notion of topoi, which is a kind of phenomenologically informed psychoanalysis that examines the interconnections of places and identities – cultures and individuals. She explores such subtopics as the interrelation of place and creativity. Buttimer eidetically distinguishes the insiders' experiences as fundamentally of process from the outsiders' experiences as fundamentally of images. Her approach then is to mediate between them, envisioning a veritable science that transcends the insufficiencies of the subjective/insider and the objective/outsider points of view.

David Seamon continues the work of Buttimer, but in addition owes much to Merleau Ponty's notion of lived body intentionality. He later develops a richer...
position influenced by architectural theory by placing more emphasis on the constitutivity of the lived body in relation to the built environment. He envisions his work as offering a reflexive perspective in behavioral geography, providing a humanistic-phenomenological alternative to behaviorism. In his earlier work Seamon develops such notions as the body subject, body ballet, and place ballet; the latter is illustrated in a description capturing the time-space routines of a marketplace in Sweden. Seamon explores the world of the everyday through three of its components: movement, rest, and encounter. In more recent interests, Seamon embraces the architectural work of Bill Hillier. Hillier examines the relationship between the structural patterns of design and human interactions. What is interesting here is that Hillier is usually viewed as an empirical scientist, whereas it can be argued that his apprehension of morphological structures in relation to human interaction really offers an eidetic phenomenology. Seamon, then, complements Hillier's work with his own work concerning the precognitive level of lived body-milieu, emphasizing the co constitutive aspect of the field. What is gained is how difference in patterns sets parameters for the taking place of events. Thus, Seamon adds to what Merleau Ponty did not fully articulate with his lived body intentionality, the contribution of the milieu itself to the meaningful field of spatial enactment.

Trained in Heidegger's phenomenology, Robert Mugerauer provides exemplars of phenomenological description through his analyses of yards and porches. Through his sensitivity to the hermeneutic component of description, which he envisions as an expansion of the phenomenological project, Mugerauer becomes aware that meaning genesis in the context of historical time is a fundamental moment of interpretation. He reasons that if landscapes/environments are addressed as texts, then interpretations of those texts are a function of changes in assumptions and considerations over time, over historical eras. Mugerauer masters interpretive methodologies across the spectrum of traditional/historical, phenomenological/hermeneutic, and deconstructive/postmodern in his interpretations of environments, place, and architectural elements. His descriptive studies are didactic by articulating the essential distinguishing features of each methodological perspective and by showing the benefits of multiple interpretive perspectives, especially for practical application. He critically focuses on contemporary environmental problems such as the loss of place and the loss of the sense of place, as well as the problematic role of technology. His goal has been to inform geography and the design professions with deep theoretical insights while opening paths of practical applications toward solving environmental problems.

**Concluding Remarks**

Phenomenology has entered into the various fields of human science exhibiting varying trajectories and moments of success. Within geography it was a humanistic turn in reaction to objective science through which phenomenology came to be introduced to the field. The experiential turn of phenomenology informed geography immediately set up a reactionary moment and an adversarial atmosphere in relation to ‘acceptable’ geographical paradigms. But it is really only the vestige of a metaphysical commitment to naturalism that disallows the possibility for overcoming these scientific contingencies. It has long been this author’s view that eidetic science and empirical science are complementary, which he dramatizes by the following (perhaps hyperbolic, but heuristic) statement: “Eidetic science without empirical science is empty, empirical science without eidetic science is blind” He puts forth that such a position would promote the highest possible excellence in geographical science and would overcome the polarizations. Also of consideration is that, the momentum that had been built up in phenomenology oriented geography had been weakened by new and exciting postmodern forms of exploration. Yet, this ‘distraction’ has not destroyed the movement, for there is some overlap and interrelation between approaches. The fact that there are not many phenomenology minded geographers occupying chairs in geography departments in recent times has not destroyed the movement, either. But what is needed perhaps for its revitalization is one or two newly published definitive works explicating its methodologies in rigorous, but readable, terms for geographers and one or two volumes of excellent case studies exhibiting the eidetic/empirical complementary approach in order to assure its earlier confrontational history.

**Further Reading**


**Relevant Websites**

http://www.phenomenologycenter.org
CARP: Center for Advanced Research in Phenomenology
http://www.arch.ksu.edu
EAP: Environmental and Architectural Phenomenology Newsletter, The College of Architecture, Planning and Design.
http://www.towson.edu
IASESP: International Association for the Study of Environment, Space, and Place.
http://www.o.p.o.net
OPO: Organization of Phenomenological Organizations.
http://www.spep.org
SPEP: Society for Phenomenology and Existential Philosophy.
http://www.phenomenology.org
WPI: The World Phenomenology Institute.
Introduction

Geography has always had a relation to philosophy. Many of the great thinkers of the Western philosophical tradition have written explicitly on many of the key issues of concern to geographers. These have included discussions within metaphysics and physics concerning nature, space, time, place, and the human; logic and epistemology on the nature of knowledge and scientific method; and ethical questions about behavior and its spatial variation, political organization, cultural difference, and our role in the world.

Philosophy, traditionally, included a far broader range of aspects than the university discipline which goes under this title today. Philosophy is, literally, the love (philōs) of wisdom (sophia), and can be argued to provide the foundation for core arguments across the human and physical sciences. The field of physics, for instance, used to be known as natural philosophy, as the term physics derives from the Greek physis, nature. One of the key insights of philosophy is that our assumed ideas are dependent on prior argument, and tracing the history of fields of human knowledge can provide insight into how we came to think as we did. Philosophy can be a bidding area, since it often depends both on conceptual rigor and knowledge of earlier thinkers and their ideas, but its potential impact is substantial. This extends across the range of concerns of geography, for many great philosophers, such as Gottfried Leibniz, René Descartes, and Aristotle, were important scientists in their own right, and many of the figures of social/spatial theory who have been so influential in contemporary human geography were trained in philosophy.

Philosophy tends to abstract from particulars, whether through initial observation and generalizing from parts to produce explanatory theory, or through beginning with reasoned argument which is then used to make sense of the world. Its impact has been felt throughout the history of the discipline. In modern times, both positivism or the spatial science of geography, or the reaction against this in humanism or postpositivist theory have all been uses of philosophical arguments.

The Philosophical Tradition

Early Greek Thought

Within the Western philosophical tradition – the key thinkers and texts since its inception – there are a number of philosophers that have explicitly thought about geographical concerns. From the very beginning of preserved Western thought, in the fragments of the texts of the pre Socratics (so called because they preceded Socrates), philosophers have been concerned with the nature of the world. Heraclitus, for example, likened change in the world to a child playing a game, suggesting the elements of chance within rules that shape its destiny.

It was, however, a later group of Greek thinkers that defined much of the way in which philosophy came to think, and the terms within which it did so. Socrates, whose ideas were presented in dialogs by his student Plato, provided a model of philosophical inquiry as well as many of the key questions themselves. Plato’s writings, which cover the full range of human inquiry, often do not have specific topics, and issues of interest to geographers appear throughout. His dialog Timaeus attempts to provide an explanation for the origin of the universe, with the idea of the creator and the laws governing it. It is also important for its discussion of the khora, a term some times misleadingly translated as ‘space’, but which is closer to a notion of place, a location, or a receptacle for something.

Aristotle

Plato’s most brilliant student was Aristotle, whose extant works are largely notes for lecture courses, and therefore, tend to be more systematic and less literary than those of his predecessors.

Aristotle wrote on almost all fields of human knowledge, from zoology and biology to reflections on theater and rhetoric. He made a number of analyses of questions in language and logic, and studied political and social organizations in a comparative manner. His Neoacham Elites contains reflections and arguments not just on ethics, justice, and virtue, but also discussions of the nature of knowledge and the division between practical and philosophical wisdom. His Rhetoric offers more than simply an analysis of speech, but discussions of moods and the collective community. In his Physics he analyzes a range of concerns around place, nature, and movement, and the Metaphysics – so named because it came after (meta) the Physics – is a collection of theoretical treatises on being, matter, and mathematics.

Aristotle’s work demonstrates an early version of what might be called the scientific method, with a combination of abstract reflection with practical observation. He deduced that the Earth had a spherical shape because he...
observed lunar eclipses and reasoned this from the shadow cast on the moon's surface. His work on biology and comparative anatomy set the tone for much future analysis. His work on motion in the Physics is tied to his understanding of place. For Aristotle, place is an inherent quality of beings, it is their capacity to be present. Yet, the physical extension of an object is insufficient to understand place. Objects have, for Aristotle, their proper place, and therefore, motion is tied to this understanding of place. Heavy things tend downward, and air and fire tend upward. Celestial bodies move in a circular motion. These are natural motions. Aristotle believed that the speed of falling was proportional to both the weight of the object and the density of the medium it is falling through. In Aristotle's theory, place does not move, and only what is movable is in a place. Motion is not spontaneous, and therefore, there must always be a mover, giving rise to the idea of God as the prime mover – the being that initially sets things motion.

**Medieval Philosophy**

The Medieval period is not straightforwardly characterized, but tends to be understood through its relation to theology. Certainly, many of the key thinkers were theologians as well as philosophers – Augustine and Thomas Aquinas among them. In these writers, there can be a tendency to retreat from the understanding of this world in favor of thinking about other matters. Aristotle's work was hugely influential in this period, and he was often referred to simply as 'the philosopher'. Many of the key developments in this period were the product of influences from Arab thinkers, such as al Idrisi, whose reflections on geography and cartography were important for several centuries.

**Descartes and Modern Philosophy**

Modern philosophy emerged out of the Renaissance and the coming back into general circulation of a number of texts of the ancients. Somewhat crudely, philosophy of the seventeenth and eighteenth centuries can be seen as an extended debate between the Rationalists and the Empiricists. For the Rationalists, which would include Descartes, Leibniz, and Baruch Spinoza, the world is understandable through the abstract processes of reason. Descartes is the paradigmatic example.

In Descartes’ work, the material and mental worlds are strictly divided. Descartes suggested that in order to get knowledge on a firm footing, he would doubt everything of which he could not be certain. He argued that he could not doubt that he was doubting, and therefore, could be sure that he was thinking. Because he was thinking he could be sure that he existed, therefore the famous phrase *cogito ergo sum* – I think, therefore I am. This meant, for Descartes, that there were certain things that could be characterized as *res cogitans*, thinking things. Everything else had a physical manifestation, material or matter. These he characterized as *res extensa*, extended things, because he reasoned that extension in three dimensions was their central, fundamental characteristic.

Other characteristics of material things – such as their weight, color, and shape – were secondary. Descartes’ example for this is to take a piece of wax and make a number of observations of it. Heating the wax would cause almost everything to change – its color, shape, and smell, for example – but not that it occupied space, that it was extended. Descartes, therefore, defined a material body as bounded, enclosed in a place, and filling up space. The last part of this is particularly important – space is a container, itself extended in three dimensions, of which objects exclusively filled up a part of it, excluding other objects from that same space. Things can be in the same place – different pairs of shoes in a cupboard, for instance – but not in the same space. Space is bounded and exclusive. Descartes, therefore, understands motion as movement through space, position as the location variation of things possess in relation to each other, and shape and its change as dependent on the limit of the extension.

This gives rise to a particular way of seeing and conceiving the material world as a whole. Extension in three dimensions – length, breadth, and depth – is the central characteristic of nature, and geometry is the science that allows us best access to it. In other words, there is a mathematical determination of the material world. Descartes’ work on geometry is extremely important in its own right, since he develops an analytic or coordinate geometry which allows geometrical problems to be reduced to numbers – equations, or the length (i.e., the quantity) of lines. Many contemporary geographers have criticized this abstraction and mathematicization, in cluding feminists who see it as masculinist.

For the Empiricists, who include John Locke, Bishop Berkeley, and David Hume, observation of the physical world and generalization of rules from this observation is the correct way to proceed. Prediction may be difficult, but it is not impossible and is based on generalization of experience. Hume famously suggested that all works should be evaluated on two simple criteria – whether they contained “abstract reasoning concerning quantity or number” or “experimental reasoning concerning matter of fact and existence.” If the answer was no to both, then he suggested that we “commit it to the flames for it can contain nothing but sophistry and illusion.” Empiricism has had a significant impact on what might be seen as a commonsense view of geography, whereby gathering data leads to descriptions of the world and its features and inhabitants.
Immanuel Kant is generally seen as the most important philosopher since Aristotle. One of his many merits is that he provided a way of reconciling rationalist and empiricist positions within a unified model of thought. He also thought that there were some things that were matters outside the realm of rational thought, such as the existence of God. He convincingly demolished the arguments for or proofs of God’s existence, suggesting that this was rather a matter of faith.

In his most important work, the *Critique of Pure Reason* in 1781, Kant tries to bring together experience and reason. He suggests that there are a number of kinds of statements we can make about the world. Statements can be either analytic or synthetic – meaning that they explicate the meanings of terms or add something additional. Analytic statements would be of the form ‘all fathers are male’ or ‘green things are colored’ – statements whose negation would be absurd, and which do not need to be validated. Synthetic statements would be of the nature of ‘Kant was a philosopher’ or ‘copper conducts electricity’ – things that are not inherently self evident. Statements can also be a priori or a posteriori. There are some things we know prior to experience and some we know after it. These divisions of statements are not unrelated – it is clear that all analytic statements are a priori and that all a posteriori statements are synthetic.

This leaves the question of whether synthetic a priori statements are possible. Hume had denied that they were, whereas Kant thinks they are. For Kant, they are combinations of concepts and particulars, of reason and experience. While the Empiricists suggest all our knowledge must conform to experience, Kant says all experience must conform to knowledge. What this means is that we can only experience within our conceptual frame. Kant, therefore, suggests that experience is a ‘necessary’ condition for knowledge (thereby criticizing the Rationalists), but it is not a ‘sufficient’ condition for knowledge (thereby criticizing the Empiricists). Kant’s famous phrase is “thoughts without content are empty, intuitions without concepts, blind.”

The conceptual frame from within which we experience the world means that, for Kant, our minds are constructed in a particular way. He suggests, crucially for geographers, that space and time are a priori concepts – that is they precede experience – which serve to structure the world we perceive. He calls these the transcendental aesthetic, from the Greek aisthesis, perception. We cannot think without using these concepts – they are like seeing through a pair of irremovable, tinted glasses. Space and time for Kant are thus part of our perceptual apparatus, the way in which we perceive the world, not that which we perceive, which means that we experience within space and time rather than experience space and time themselves. Space and time are, therefore, determined in advance in Kant’s thought, the material world is understood before it is experienced, and there fore, what we experience is conditioned by our prior knowledge. The limits of the system, thus, become the limits of the experience; the composition of the thought of nature becomes the limits of nature itself. Nature ceases to be what it might be except in terms of the system through which it is understood.

Kant wrote a number of other important works, including two further ‘critiques’ – The *Critique of Practical Reason*, in 1788, and *The Critique of the Power of Judgment*, in 1790, dealing with ethics, esthetics, and teleology. He also lectured on anthropology and physical geography for a number of years. While he edited the former into a book, *Anthropology from a Pragmatic Point of View*; in 1798, the *Physical Geography* exists only as a compilation from lecture transcripts. Kant thought that, together, anthropology and geography provided knowledge of the world, which served as empirical grounds for his thought. Both of these were taught for their pragmatic dimension – what they could provide as guides for our moral and practical life. This leads Kant to what he calls ‘moral geography,’ which looks at the customs and characters of different peoples and some outdated and discredited views of race. Kant provides extensive discussions of contemporary thinking on the Earth and its terrain, earthquakes, climate, rivers and water, flora, fauna, and minerals. The final part of the book is a series of descriptions of particular regions and places in the world. While much of the detail may be outdated and therefore of merely historical interest, Kant’s way of structuring geographical knowledge and its relation to his thought as a whole is of enduring importance. This importance lies both in the way it understands geography as a counterbalance to history, and in terms of the organization of knowledge. For Kant, all perceived things are located in logical classifications, such as those of Linnaeus; and in space and time. Logic deals with the first; physics with space and time, and of these, geography deals with space; history with time. Geography, therefore, allows us access to the ordering and categorizing of the world. Indeed, Kant distinguishes geography, as the description of the whole world, from topography, as the description of single places, and chorography, as that of regions.

Kant’s actual impact in geography has been erratic, with the schema for the relation between time and space and geography and history more important than the empirical and analytical details. Yet his wider philosophical thinking of the categories of space and time have been profoundly important in shaping the way subsequent philosophies of this topic have engaged with these topics. Georg Wilhelm Hegel’s philosophy, and in particular, his political philosophy of the state as an organic whole were influential for German geopolitics of
the late nineteenth and early twentieth century, in particular in the work of Friedrich Ratzel.

After Kant, philosophy becomes much less of a unified discipline. Indeed, the two dominant paradigms of Western philosophy can often barely agree on who counts as a philosopher after this date. The continental Euro
pean tradition would include Hegel and the German romantics, Karl Marx, Friedrich Nietzsche, the phi
nomenology movement best exemplified by Edmund Husserl, Martin Heidegger, and then a range of post World War II thinkers in France, such as Jean Paul Sar tre, Michel Foucault, and Jacques Derrida. Analytic, or Anglo American, philosophy on the other hand tends to take its influence from other sources, such as Gottlob Frege and Ludwig Wittgenstein, the American pragma
LISTERS, and the ordinary language philosophers who analyzed how language works instead of abstract reason. Both of these traditions, and the debates within them, have much to say about aspects of geographical concern.

**Positivism**

Positivism within geography can be described as the use of modern scientific method. Although undoubtedly more influential within physical geography, this has had a significant impact within human geography as well.

Like Hume, positivism suggests that there are two kinds of meaningful statement. Those that are logically true, such as those concerning the nature of mathematics or lan guage; and those that are verifiable through empirical observation. Anything else is metaphysical and, ultimately, meaningless. This leads to an emphasis on observation, which is based only on what is directly seen rather than inferred, and the primacy of this over theoretical prop ositions. Models and theories should be developed from their basis in this empirical observation. Observation could be guided by a prior hypothesis, so that rational thought structured the process of inquiry, but this hypothesis was open to testing, and therefore capable of being disproved. In this, the positivists were influenced by early twentieth century philosophers, particularly those of the Vienna Circle. One of their number, Karl Popper, proposed that the criteria for validity in science should not be that there are examples which prove it, but that there could be those which would disprove it. In other words, the strength of a theory is not that it is sufficiently general that it appears to explain, but that it is sufficiently narrow and focused that if a prediction proved untrue the theory would be exposed. This is the criterion of falsifiability. For Popper, and oth ers, this meant that the explanatory claims of much social science were not scientific at all.

In social science and human geography more specifically, this led to the development of a number of quantitative and statistical techniques. The aim was to ground geography as a spatial science, with the removal of value judgments and the utilization of scientific methods. This is sometimes known as the quantitative revolution in geography. David Harvey's 1969 book *Explanation in Geography* was a key text in this field, but it also extends to some forms of cartography and locational analysis. It also provides much of the conceptual foundation to the claims of Geographic Information Systems (GISs), which in practice is strongly associated with Empiricism.

**Humanism and Marxism**

There have been various reactions to positivism within geography. Humanist geography emphasizes the indiv idual experience of place, and suggests that general theories neglect the unique perceptions of people and groups. Some elements within this strand of geography adopted ideas from phenomenology and existentialism, stressing the sense of place as opposed to the abstract geometries of space. Yi Fu Tuan's *Topophilia*, in 1974, and *Space and Place: The Perspective of Experience*, in 1977, were important texts. For others, the insights of hermeneutics allowed human geography to be situated within the humanities rather than the social sciences.

Marxist thought was relatively late in terms of its influence within geography, compared to other social sciences and humanities disciplines. It can be seen as part of a wider trajectory of radical geography. Marxist geography has both introduced the arguments of Marx ism, particularly political economy, into geographical analysis, but also provided the introduction of a spatial element in Marxism. In the first, there is an emphasis on questions of value, rent, and appropriation. The second is potentially more challenging, since it attempts to redress the imbalance of historical materialism, with an emphasis on temporal chance, with a historical and geographical materialism, which takes space as a crucial determining context to all social interaction and struggle.

David Harvey's *Social Justice and the City*, in 1973, was a crucial mediating text in introducing Marxist ideas into geography, but it was arguably his *The Limits to Capital*, in 1982, which had a more profound impact. This study looks to fill the 'black boxes' of Marxist thought from a geo graphical perspective. The French Marxist philosopher Henri Lefebvre's *The Production of Space*, in 1974, first translated in 1991, also had an important impact. In this work, Lefebvre provides a summary of philosophical theories of space, and proposes an understanding of space through a combination of physical, material attributes; mentally conceived space; and the lived spaces of social interaction. He proposes a historical investigation of these different spaces, simultaneously challenging traditional Marxist accounts of time and space.
A range of other Marxist thinkers have proved influential within the discipline. Althusser’s work on ideology and power in the modern state and Gramsci’s work on Fordist production, hegemony, and the structure of political action are two other particularly important examples, but traces of a Marxist approach and politics are widespread.

Radical geography also makes use of other approaches, such as feminist philosophy and anarchist thought. Its key contribution has perhaps been to raise the political question within geography again. Feminist thought in geography draws on a range of thinkers, many of whom – such as Julia Kristeva and Luce Irigaray – engage with a feminist re-reading of the Western philosophical tradition.

Postpositivism in Contemporary Geography

Besides the alternatives offered by humanism and radical geography, positivism has also been challenged by more scientifically minded approaches. The arguments of philosophers of science, such as Thomas Kuhn and Paul Feyerabend, have proved influential in rethinking the development of scientific knowledge, which has helped some to think about geographical advances. Kuhn, in The Structure of Scientific Revolutions, in 1962, proposed understanding scientific development through the notion of paradigms, which provide a framework of understanding within which science takes place. Most science is therefore ‘normal science’, operating within previously agreed rules and laws. Only some science truly challenges, opening up the possibility of a paradigm shift. Feyerabend’s Against Method, in 1975, argued that there was no single model of approaching science and that to impose one would hinder scientific progress. This theoretical pluralism is, he believed, less restricting on science.

In human geography, a range of contemporary philosophers have been influential with geography. Many of these have been appropriated under the rubric of social/spatial or sociospatial theory, but their insights can also, and perhaps better, be understood as philosophical. Michel Foucault, Jacques Derrida, and Gilles Deleuze have all had an impact in a broadly conceived, poststructuralist geography. This has been concerned with challenging the disciplinary range of what geography is, the binaries that traditional geography has tended to think with, and to emphasise the emotional, cultural, and nonsystematic elements of the interaction between humans and the world.

To turn the relation the other way round – to ask of the geography of philosophy – is to raise a wide range of issues. While some approaches of this kind would smack of a geographical determinism, locating particular kinds of thoughts within a particular place or tradition, there can be more productive work done. Philosophers regularly speak of contemporary French thought, German romanticism or idealism, English empiricism, and the Scottish enlightenment, for instance, and there is a long running debate about whether there is such a thing as a distinctively American philosophy. More productive work has been done by geographers of thought and science, such as Trevor Barnes, Anne Godlewska, David Livingstone, and Charles Withers. In their last book together, What Is Philosophy?, Deleuze and Félix Guattari proposed a concept of ‘geophilosophy’, which they claimed was founded by Nietzsche. But perhaps the most interesting geographical issue is the way that most discussions of philosophy – including this account – is of Western philosophy, that which can be derived from a lineage back to ancient Greece. This, of course, neglects important thought that has its roots in India, China, or other non-Western locations. This is rarely taught in philosophy programs, and has had much less impact on philosophical thinking in geography.

In summary, it is clear that many of the issues of concern to geographers have also been analyzed by philosophers. Geography has always been based on philosophical positions, but until relatively recently these were largely unexamined.

See also: Critical Geography; Enlightenment Geography; Human Geography; Mapping, Philosophy; Phenomenology/Phenomenological Geography; Postivism/Positivist Geography; Quantitative Revolution; Radical Geography.

Further Reading


Glossary

Color Infrared Photography A color film in which one layer of the emulsion has been made sensitive to electro-magnetic radiation in the near infrared, just outside of the visible spectrum (0.7–0.9 μm). Vegetation has its maximum reflectance in the near infrared, making this type of photography particularly suitable for monitoring vegetation. As it is a magenta dyed layer that is sensitive to the near infrared, vegetation has a characteristic red appearance on this type of photography.

High-Resolution Photographs Photographs that show fine detail on the ground, usually produced by using long focal length lenses and fine-grained emulsions.

Land Systems Analysis An aerial photography-based system of carrying out resource inventories. The approach was developed by Christian and Stewart at the Commonwealth Scientific and Industrial Research Organisation to meet the needs for rapid and cost-effective mapping of resources.

LiDAR Light Direction and Ranging, an active system, which uses a laser beam to measure the direction and distance of ground points relative to the system, which is normally mounted in an airplane. Used in conjunction with GPS and an inertial system, it can be used to create very accurate terrain models.

Orthophotograph An aerial photograph, which has all the errors in position and scale due to height distortions and tilt removed. An orthophotograph has the same geometric properties as an orthogonal map, but with the higher information content of the original photographs.

Photomosaic A composite image made up from several aerial photographs, which have been correctly positioned to give the appearance of being a single photograph.

Aerial Photography

Aerial photography can mean both the process of taking photographs from some kind of aerial platform, and the resultant imagery. The photography can be taken with the camera pointed vertically down toward the ground (the normal case), or tilted off vertical, so called oblique photography. Aerial photography is normally taken using a specially designed large format film camera producing a negative measuring 230 mm × 230 mm (9 inches × 9 inches).

The Early Days of Aerial Photography

In 1858, Felix Tournachon (Nadar) took the first aerial photograph over Paris from a captive balloon. However, Tournachon was not the first to suggest the possibility of aerial photography, or to see its benefits as a way of collecting information for map making. The earliest known suggestion was as a joke in a French lithograph from 1840. Despite being able to take photographs from a captive balloon, practical limitations of the photographic process meant that Tournachon had to take the darkroom up in the balloon as well as the camera. This was because the photography of his time used the so called wet plate process, where the glass negative was coated with the emulsion, exposed, and processed while the emulsion was still wet. This also meant that only tethered balloons could be used, limiting the range of targets that could be photographed.

To make aerial photography a viable technology, it was necessary to have a stable dry plate emulsion, portable cameras, and an aerial platform capable of being positioned at will over the required target. Technical advances in emulsions led to suitable photographic media being available by the 1880s. Advances in lenses meant that cameras suitable for aerial photography were available from about 1890. All that was now needed was a suitable platform. Experiments were carried out using free balloons, kites, and even pigeons, but it was the development of the aeroplane that made aerial photography a practical proposition.

Within a few years of the Wright Brothers’ first flight, a number of aerial photographs had been taken. These usually involved nothing more complex than pointing a camera over the side of the aeroplane and taking a picture. While interesting as images, they were of little practical value. The first aerial photographs to be used for a practical purpose were those taken by Captain Piazza of the Italian Army during the Italo Turkish War in 1912. These photographs were taken for military purposes, and the development of aerial photography was to be largely dominated by military applications until after World War I. The one notable exception to this was the United States, where the US Geological Survey (USGS) carried out experiments in civilian mapping from aerial photography prior to the United States joining the war in 1917.
World War I

Prior to the outbreak of World War I, aerial photography had been taken experimentally by most of the combatant nations. In Britain, for example, aerial photography had been taken during fleet maneuvers in the summer of 1913. However, when the war started, aeroplanes were initially used as if they were a modern form of cavalry, scouting ahead of the army and the aircrew providing written descriptions of what had been observed. As far as is known, no combatant army was equipped for aerial photography. However, some airmen took their own cameras with them to record what had been seen, and the value of the photography was quickly recognized by the intelligence services. Once the front line had stabilized and trench warfare had become the norm, aerial photography became the only way in which intelligence could be gathered on the movement, deployment, and defenses of the opposing armies. In addition to providing intelligence, aerial photography quickly became the most important source of information for mapping.

There were major improvements in cameras during the war. Anti aircraft fire forced aeroplanes to fly higher to avoid being hit, and this necessitated the development of longer focal length lenses to ensure high resolution photographs for interpretation. Although there were developments in film technology, most of the cameras used during World War I used glass plates, with the camera operator needing to change magazines in flight.

On the Western front, aerial photography was mainly used to revise and update existing maps, to plot the positions of trench lines, artillery positions, barbed wire, supplies dumps, railroads, and any other potential military targets. In the Middle East, it was used to produce entirely new mapping of previously unmapped areas. The experiences gained during World War I were to have a major impact on mapping policies after the war. Perhaps even more important, however, was the con sequence of exposing so many soldiers to this new data source. Many soldiers were to take the knowledge gained with them on their return to civilian life. After the war, new applications of aerial photography were quickly explored. Among the disciplines to benefit were archaeology, geology, physical geography, biology, and forestry.

The Inter-War Period

During the inter-war period, there were a number of technical advances in aerial photography with the development of improved cameras, which used film rather than glass plates and had improved lenses and shutters. Infrared and color film were introduced in the 1930s, but had hardly begun to be exploited before the outbreak of World War II. In practice, aerial photography was to remain dominated by black and white photography until the 1970s.

Archaeological uses of aerial photography received a great boost when Britain’s Ordnance Survey appointed O.G.S. Crawford to its staff. Crawford had become convinced of the value of aerial photography and demonstrated it through a series of publications for the Ordnance Survey and in *Wessex from the Air*. Aerial archaeology has continued to be an important area of work, but benefiting from an increase in interest in the late twentieth century through its use in conjunction with Geographic Information Systems (GIS) for historic landscape reconstruction. Despite civil applications of aerial photography becoming important during the inter war period, in Europe, at least, military requirement continued to be an important driving force behind technical developments. This became increasingly important with rearmament in the mid 1930s. It was really only in the United States that aerial photography was able to develop within an almost entire civilian context. This civilian context also encouraged the growth of commercial aerial photography companies. In Europe it was much harder for commercial companies to become established and to grow. One of the driving forces behind the civil developments in the United States was the relatively poor coverage of the country by the mapping of the national mapping agency. This encouraged the local administrations not only to adopt newer mapping techniques to create maps of the rapidly growing urban areas, but also to use aerial photography as a planning tool. The Federal Government also played its part in encouraging the development of aerial photography. Both the USGS and the Coasts and Geodetic Survey were keen advocates of the use of aerial photography.

However, in common with many government agencies, they could not develop as quickly as they would have wished due to government financial stringency. Probably, the biggest single drivers in the development of aerial photography during the inter-war period were the New Deal initiatives, such as the Agricultural Adjustment Administration and the Tennessee Valley Authority. Both initiatives relied very heavily on aerial photography, leading to technical advances in the field, developing a large cadre of trained personnel, and giving much needed work to private aerial photography companies. Lee and Joerg had discussed the possible use of aerial photography for studying urban areas, but the first serious attempts to use aerial photography for urban analysis did not take place until 10 years later with the work of Finch and Hudson. In practice, however, it was not until after World War II that anyone attempted systematic civilian studies of urban areas using aerial photography.

World War II

During World War I, the primary use of aerial photography was the updating of maps and the identification of
targets for shelling. In World War II these remained important applications, but the war spawned a wide range of other geographic applications that were to have important uses in the post-war era. The huge distances over which the war was fought, and the heavy reliance on bombing of strategic targets, meant that the aerial photograpy was heavily used both as a reconnaissance tool and for target identification. In the early years of the war, the Germans made the most successful use of aerial photography, but by 1941 this lead was eroded and by the end of the war the Western allies had the largest and most efficient system for photographic analysis.

A large part of the effort throughout the war was dedicated to target analysis, to identify potential targets for bombing, and then for postbombing analysis. Specialist teams were trained to identify particular types of targets, such as aircraft production facilities, or oil refineries, and to estimate the output potential of the identified facilities. Detailed studies were carried out of urban areas, which involved identifying functional areas within the town, and also the susceptibility to incendiary bombing of the buildings within the areas.

Aerial photography was also used for the detailed mapping of defenses prior to amphibious assaults, whether in northwest Europe or islands in the Pacific. In addition to studying the beach defenses, photography was also used to assess beach gradients and beach sediments. In the Pacific campaign, color aerial photography was used to determine the depth of water over reefs prior to amphibious assaults.

In 1942, Kodak introduced the first color infrared photography. Originally intended for camouflage detection, it was only rarely used in the immediate post-war era, as it was expensive, relatively unstable, and difficult to handle. However, from the 1960s, it was increasingly used for vegetation mapping and monitoring, becoming the standard tool for that purpose until challenged by airborne scanner systems in the late 1990s.

As with World War I, the most important legacy of World War II was not the technical advances that occurred during the war, but rather it was the huge numbers of personnel trained and experienced in the use of aerial photography by the war's end.

Post-War Reconstruction and Development

The use of aerial photography as a geographical tool was still largely experimental before World War II, but in the post-war world its use was to become standard. In part, that was due to the large number of service personnel, who had become familiar with aerial photography during the war, returning to their peacetime occupations aware of what aerial photography could offer. In addition, the victorious powers had large numbers of surplus aircraft and cameras that could be put to use in collecting aerial photography.

Among the first to starting making extensive use of aerial photography as a tool were the planners charged with the reconstruction of the devastated cities of Europe and Japan. The absence of up-to-date maps meant that photography was the only way in which a picture could be obtained of the situation on the ground prior to reconstruction. Even in countries like the United States, huge changes had taken place in urban areas as a result of the expansion of war-related industries. Not just factories, but new roads and housing had been constructed, but not shown on existing mapping. In part, the inadequacies of the existing mapping were also due to the diversion of mapping staff to war-related activities, leading to the neglect of the normal work of official mapping agencies. Planners quickly learnt that the photomosaics that had proved so useful as planning tools for military operations could equally well be used to show what already existed and what needed to be done. Within 3 years of the end of the war, the first seminal work had appeared, *Aerial Photography in Urban Planning and Reconstruction*, by Melville C. Branch, who had trained as a photointerpreter in the US Navy.

In Australia, World War II had demonstrated the vulnerability of the poorly populated northern part of the country. The war was followed by a drive to develop those vulnerable parts to encourage their settlement. As there was an almost complete absence of mapping, the Commonwealth Scientific and Industrial Research Organisation developed the method of land systems analysis to provide the necessary information on natural resources. The approach was entirely dependent on the use of aerial photography to identify terrain units, and was subsequently adopted in a number of countries both for general resource surveys and for specific development measures, such as road construction.

Prior to World War II, the development of most of Africa, even in the 'settler colonies', had been neglected due to a combination of lack of will and resources. Few colonies were mapped at more than a superficial level and there had been little in the way of systematic surveys of natural resources. Following the war there was a concerted attempt to develop the colonies, in some cases so that they could provide much needed raw materials and food to the metropolitan powers, in others to prepare them for eventual independence. The 'groundnut scheme' in Tanganyika was the most notorious scheme to provide foodstuffs for the metropolitan power, but there were similar smaller scale projects in a number of colonies. Using military aircraft and cameras, huge tracts of Africa were systematically photographed in the post-war period. This photography was used to create the first proper topographic mapping, or in the form of photo mosaics as a basis for resource inventories.
As African colonies were prepared for independence, aerial photography was used to carry out population censuses. Initially this was carried out using crude counts of buildings likely to be in domestic use. A scaling factor based on average occupancy rates was then applied to arrive at population totals. Subsequently, the net residual area approach was developed to provide more accurate population estimates. The use of aerial photography for population estimation is still widely used in Africa, Asia, and Latin America, both at national and at local level, particularly to monitor the growth of unplanned squatter settlements on the edges of cities.

One of the most significant applications of aerial photography has been its use for land use and land cover surveys, particularly in the United States by the USGS. After considerable preliminary work, the USGS formulated a classification scheme specifically for use with remotely sensed data. In practice, for all but the smallest mapping scales, this involved the use of aerial photography. Subsequently, many of the classification schemes used elsewhere in the world were based on the USGS approach. More recently, the Food and Agriculture Organisation developed a new approach, but there is, as yet, little reported use of the system.

Aerial photography continued to be important as a tool for military surveillance in the post war period, only being replaced by digital scanners toward the end of the century. The most famous military aerial photographic missions were those flown by the Lockheed U2 operated by the CIA. Designed to penetrate Soviet airspace above the range of air defences, it played a key role in the Cuban missile crisis of 1962. From the 1960s, aerial photography was supplemented by satellite data from programs such as Corona and Keyhole.

The early environmental satellites, such as Landsat, did not challenge the role of aerial photography as the dominant data source for land use or land cover studies. However, the launch of high resolution satellites at the end of the twentieth century has started to erode that dominance. The pricing policy in the United States has started to favor satellite imagery, especially as LiDAR is accepted as the standard methodology for most mapping.

Photogrammetry is the science and technology of making measurements using photographs. Although aerial photographs appear to be similar to maps in the way they present a plan view of the Earth, all aerial photographs will contain some positional errors, which means that they cannot be used directly to make accurate measurements of distances, areas, or directions. The photogrammetric process is designed either to derive accurate information from aerial photographs, or to create a photographic image from which all errors have been removed.

Laussedat first proposed the use of photographs for surveying and map making in the 1840s, but the photogrammetric process was unsuitable for the purpose. Following the early work of Laussedat, which used a camera lucida, the main focus of developments was on architectural applications. Practical photogrammetry for geographic applications started in the 1880s using photographs taken from the ground, so called terrestrial photogrammetry. In the main, these early geographical applications were confined to mountainous areas where the camera could be used to provide images of areas that would be difficult or dangerous to survey on the ground.

Deville was responsible for the earliest attempts to use photography for mapping in North America when he used the technique for mapping during the construction of the Canadian Pacific Railroad, on boundary surveys and in the Rockies.

The first successful attempts at photogrammetry usually involved graphical techniques to plot the detail, but in the early years of the twentieth century in dependent researchers in Europe and South Africa developed instrumental methods that increased the accuracy and the speed of plotting. These early instrumental methods were only suitable for use with terrestrial photography, the first really successful instruments designed for use with aerial photography were not introduced until the late 1920s. This meant that the huge expansion in the use of aerial photography for map making and map revision during World War I was reliant on simple graphical techniques or the use of optical projection systems, such as the epidiascope. Nonetheless, aerial photography had become a standard mapping tool by the end of World War I.

The instruments first developed in the late 1920s, such as the Zeiss C4, the Wild A5, and the Multiplex, and those developed from these early models, were responsible for instrumental photogrammetry becoming accepted as the standard methodology for most mapping. Their development also led to the huge extension in the coverage of topographic mapping available. Prior to World War II, few countries in Africa, Asia, or South America had complete mapping cover at medium scale (in the range 1:25 000 to 1:100 000). While it can be argued that the Cold War was the reason for so much of the World being mapped, the cold war years after World War II, it was photogrammetry that made the mapping possible. Initially, a graphical technique, called radial line plotting,
was also in widespread use, but by the late 1960s it had fallen into disuse.

In the 1970s, a new type of photogrammetric instrument started to have an impact; this was the analytical plotter. The first generation of instruments, usually referred to as analog plotters, had relied on the optical reprojection of photographic images to create a theoretically correct model, or had a mechanical projection system, which mimicked the optical system. These instruments needed to be manufactured to very exacting standards, and required frequent calibration to ensure accurate measurements. This made the instruments expensive to manufacture and to maintain. In addition, the types of photography that could be used in them were limited and there was little scope for automation of the data collection process. Analytical instruments, which used a mathematical model instead of a physical model as a basis for measurement, offered significant advantages. The instruments could be used with almost any photography for which calibration data were available, or could be obtained; manufacture of the engineered parts was simple and relatively cheap, and they offered the possibility of automation. An additional important advantage of analytical instruments was that the operators did not require the same level of skill as that needed to achieve good results using analog instruments.

Analytical instruments were initially more expensive than analog ones, but this was largely a function of the high cost of the computing power necessary to compute model solutions in real time. However, as the cost of computing power fell in the 1980s, analytical instruments rapidly became far cheaper than analog ones, and manufacturers ceased to produce them. However, because analog instruments had been so widely adopted, they continued to be in use in many parts of the world.

The dominance of analytical instruments did not last long. In the early 1990s, the dominance was challenged by digital, or softcopy, photogrammetric solutions. In this approach, hardcopy photographs are replaced by scanned aerial photographs, or by scanner data. This permits the use of automated image matching (or correlation) techniques to carry out the largely manual functions of the earlier solutions. In addition to speeding up a number of the processes, it also allowed the use of staff with a lower knowledge and skill base than earlier techniques. For the first time it opened up the possibility of desk top solutions for nonphotogrammetrists.

There has also been a significant shift in the applications to which photogrammetry has been applied. Traditionally, it has been largely associated with topographic mapping at medium to large scales, and this, together with military applications, has been the main driving factor behind its development. In the 1950s, a new type of photogrammetry emerged, orthophotography. The aim in orthophotography is to produce an image, which has the geometric properties of the conventional line map, with the information content of the original aerial photograph or scanned image. Air photo based maps were produced from the 1930s, but these lacked the geometric properties of conventional line maps. A number of early photogrammetrists had at tempted to create orthophotographs; these had been unsuccessful due to technical limitations in the equipment. The first important breakthrough was made at the USGS, where Russell K. Bean demonstrated a prototype plotter in 1955.

During the last years of the ‘Cold War’, the weapons programs of the US government created a demand for DTMs for missile targeting. Digital photogrammetry was, in part, a response to that need. The ending of the Cold War meant that technologies previously considered to be strategically sensitive could be derestricted and made more widely available. One of these technologies was high resolution satellite imaging. Previously, this technology had been restricted to so called spy satellites, but in the more relaxed atmosphere of the 1990s the US government sanctioned the launch of the first generation of high resolution civilian satellites. The data from these satellites, together with the ease of use of digital photogrammetry, and its relatively low cost, have led to its major impact on the use of photogrammetry in fields such as planning. Photogrammetry is now widely used to produce simulations of new developments by combining terrain visualizations with CAD drawings of proposed developments.

In the early twenty first century, the first digital cameras were introduced by the major manufacturers, which were designed specifically for aerial survey operations. These new cameras allowed mapping organizations to have a completely digital production flow from image through to final maps. This offers considerable cost advantages over the use of film cameras, where the film
needs to be scanned to create the digital image for use in softcopy photogrammetric systems. The high initial cost of the cameras, and the existing capital investment in more traditional approaches, has deterred many organizations from going entirely digital, but the introduction of a low cost camera by Vexcel is likely to lead to a more rapid adoption of the technology.

For much of the twentieth century, aerial photography for geographic analysis and aerial photography for photogrammetry were able to coexist quite happily. In optimal circumstances, the same imagery could be used for both purposes, reducing the cost of each accordingly. Early digital cameras designed specifically for photo-grammetry threatened this relationship since they did not offer the possibility of stereoscopic viewing. The most recent generation of cameras allows for both photo-grammetric and geographic users, restoring the mutually beneficial relationship.

See also: Cold War; Mapping; Topographic; Remote Sensing.

Further Reading


Relevant Websites

http://www.pipt.ee.ethz.ch
Chair of Photogrammetry and Remote Sensing, Geodetic Sciences at ETH Zurich.
http://www.fp.uni-stuttgart.de
Institut fur Photogrammetrie, Universitat Stuttgart.
http://www.photo.vemm.tu-muenchen.de
Institute of Photogrammetry and Cartography, Universitat Munchen.
http://www.isprs.org
International Society for Photogrammetry and Remote Sensing providing links to their online archives.
http://www.isprs.org
http://www.asprs.org
Photogrammetric Engineering and Remote Sensing.
http://www.rpcsc.org
Remote Sensing and Photogrammetry Society providing links to other relevant sites.
http://www.sli.unimelb.edu.au
University of Melbourne.
Photographs
R. Sanders, Temple University, Philadelphia, PA, USA
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Glossary
Daguerreotype The daguerreotype is a direct-positive process (without the use of a negative) that creates a highly detailed image on a sheet of copper coated with a thin coat of silver.
Digital Image A representation that takes its form by means of discrete digits and encodes the data mathematically. It involves coding the information in bits and assigning each a mathematical value. Digital photography records images as binary data. This makes it possible to store and edit on computer and also gives the photographer the ability to manipulate and delete unsuccessful images immediately.
Ground Truthing A method used to confirm or validate directly from information or data derived indirectly.
Phenomenology How we react bodily and emotionally as well as intellectually to the world around us.
Photocontext Internal and external cues that enable the photograph to be trusted. Photocontext provides limitations to be assessed; it is multi-faceted, reflecting the academic discipline, research paradigm and theoretical framework, and the disparity between the photographer's culture, race/ethnicity, religion, gender, class and values, and the object of the photograph. No photograph is without context.
Photographic Truth The ability of photographs to be regarded as unmediated copies of reality. The myth of photographic truth suggests that photographs are understood to be evidence of actual people, events, and objects of the past, even though they are highly subjective and can be manipulated. The truth value of the photograph has been the subject of ongoing debate particularly with the increasing popularity of highly modifiable digital images.
Picture Theory It investigates differences and relations between images and words.
Realism The depiction of subjects as they appear in everyday life, without embellishment or interpretation.
Representation The act of portraying, depicting, symbolizing, or presenting the likeness of something. Much like maps, photographs function to depict and symbolize aspects of the real world. Representations re-present some aspect of the real.
The Gaze A term used to describe the act of looking particularly as it is complicit with desire; for example, the gaze can be motivated by a desire for control over its object. Theories of the gaze have explored the complex power relations that are a part of the acts of looking and being looked at. The gaze is intimately linked to imagination and fantasy.
Visuality The quality or state of being visual. Typically, visuality does not concern itself with photographs, which are designed to be seen, but rather with the ordinary, the quotidian, and the everyday.

Overview/Introduction
Much of geography, both human and physical, is based on the looking and observing the landscape. In human geography, many of the key ideas – areal differentiation, urbanization, environmental determinism, friction of distance, gentrification, globalization, mental maps, patriarchy, spatial interaction, and structure/agency – ultimately revolve around a consideration of how ideas ground themselves in space and place. As such, or their effects, can be seen, processed, and monitored. Photography has been particularly useful in this regard. Despite its complexities, it is one of geography's most trusted scientific methods and has played an essential role in the formation of ideas about the meaning and meaningfulness of space and place. Indeed, photography is one of the ways in which geographers undertake analysis of what they encounter in the field, and simultaneously for many geographers, photography is how they do what they do. The image captured in a photograph provides a touchstone for theory as well as a way of establishing ground level realities. Because of the decisive place it holds in shaping notions of what is actual, it also lends itself to a discussion of what is featured beyond the frame and allows us to delve into complex issues such as representation, meaning, epistemology, and ontology.
Photography shares much with geography. Geography was catapulted into the world stage because of its contribution to exploration and colonization. So too was photography. Both helped usher in and shape the modern world and the very idea of what it means to be modern. Maps in particular provided an image of how the world was imagined, and like photography, they also provided a world view. Both afforded new ways to collect, document, and display information and, in doing so, opened up new vistas. Metaphorically, geography and photography made the past a part of the present and reshaped the world by making the distant familiar and knowable. Because they share similar intentions – to impart a way of seeing in
order to know the world and gain knowledge about people and place that is simultaneously scientific, rational, and objective; and subjective, experiential, and artful – both have the potential to bridge the separation between science, technology, and art/humanities and ultimately shed light on the human condition.

Quite simply, photography might be thought of as a technological process that yields a product. Accordingly, there are several ways of making sense of the process and the product. One way to think about the product is that it is an image recorded by a camera, fixed on a negative, and printed on paper. It is a physical object, a print, and picture. What is pictured is exactly what is there. Thus, photography captures what actually exists.

Geographers, influenced by recent work in deconstruction and interpretative analysis, have begun to interrogate the practice of photography and inquire into its objectivity. Is photography and its product a truthful instrument of simple observation or, are both process and product invested with intentionality and purposefulness? How is what is photographed different from the actual? How much is a photograph a product of technology versus a product of the mind? Thus, another way to think about photography is through the questions it spawns.

For example, consider when we read words on a page. They create an idea which we can see or visualize in some way. That the words on a page produce an image imbued with meaning suggests that our subconscious, in processing characters or images on a page, summons a level of mental acumen that signals our brain's perceptual apparatus to give a 'spin' to what we see. That is, what we chose to attend to and how we frame what we see and do is not entirely random. Unbeknownst to us, deep in the interstices of our brains are structures that function as repositories of signs, texts, symbols, meanings, and intentions. What the photograph is showing does not mirror it. The mind elaborates, fills in voids, embellishes, and proposes. The interpretation we bring is not void of context, a priori social construction, and purposiveness.

Still another way to think about photography is that it is a scientific endeavor, a means of collecting and classifying information and communicating it to popular, elite, and scientific audiences. In this way, the process is equivalent to collecting any sort of data and the product or what is represented in a photograph is not much different from a number or a specimen in a jar. It is theoretically informed and it allows us to understand a physical, historical, and social phenomenon that is implanted in our minds or on a landscape.

Photography might also be thought of institutionally, the product of technological know how at a given time. Within that technical establishment, photography is a means of capturing a discrete moment in the production and circulation of cultural meaning. In this way, it is once again a literal description of what exists – in the culture at that time; but without the available technology the description could not occur. When all is said and done, photography is a complex and far reaching communicative medium – empirical, informational, and expressive all at once.

History

Photography first appeared in Europe in the early nineteenth century during a particular moment when concepts of positivist science held sway. It relied on the technical instruments available at the time and thus was seen as scientific and reliable.

The immediate predecessor of the photograph was the daguerreotype developed by the French inventor, Louis Daguerre. The daguerreotype, though cumbersome and unwieldy, was an improvement over previous image making techniques that required vast amounts of time and effort to yield a final product. The daguerreotype was also revolutionary. It gave an illusion of integrity and truth that could not be achieved by pen and ink and importantly was commercially viable. Despite this, the process and instruments associated with the daguerreotype were still burdensome, awkward, and time consuming. Photography and the photograph provided the perfect solution. By comparison, the process and instruments were manageable, easy, and convenient. More importantly, photographic truth was not sacrificed.

The invention of photography and the use of the photograph also coincided with the rise of the modern nation state. In geography, photography was used as an aid in establishing nation and empire. It facilitated travel and discovery, and furthered landscape description and state administration. Schwartz and Ryan (2003) draw on a quote by William Lake Price to describe how geographers perceived early photography.

In a multiplicity of ways, photography has already added and will increasingly contribute to the knowledge and happiness of mankind: by its means the aspect of our globe from the tropics to the poles, its inhabitants, ... its productions, animal and vegetable, the aspect of its cities, ... are made familiar to us. (William Lake Price, 1868 cited in Schwartz and Ryan (2003))

The photograph also played an integral part in the scientific professions and the regulation of social behavior by bureaucratic institutions of the state. One of the earliest uses of the photograph in the social sciences was classification. Anthropologists and sociologists in particular used photographs to gather and report detailed information that would aid in classification and categorization of human populations in order to distinguish the ‘normal’ from the ‘abnormal’ and further specific social agendas. The photograph was highly valued for its ability...
to document and record ethnographic data and was instrumental in furthering claims of racial superiority and classifying and cataloging racial groups and racial characteristics. All of these geographical, sociological, and anthropological endeavors were highly politicized, thus raised concerns about photography and the photograph.

Ways of Thinking about the Photograph/Photography

At the heart of the photograph is its ability to construct knowledge (documentary, evidentiary, identification, ideological, social control, and forensic). This singular trait underlies its acceptance. Ultimately, it can be viewed as a piece of data, not unlike those used in more traditional analyses. Like all data, the photograph is produced in a context dictated by material and social infrastructure, disciplinary paradigms, and thematic/theoretical and stylistic norms/codes. The discipline trained picture taker has intimate knowledge of both the subject matter and the media and draws on specific discourses to produce normative images or photographs that make sense. In other words, the discipline in which photographic activity occurs triggers a system of codes, conventions, and a set of expectations. Just as researchers are partisan in their reading of numerical data and apply conventions of statistical analysis and discipline based theories, when taking a photograph, social scientists are attuned to look at and for interpretative and deconstructive analysis that is undertaken to provide the reader with an image of a site or structure referred to in the text. Landscape photography, on the other hand, has been used by geographers to detail features of a place or region. In research, these are literal representations used to provide a survey for purposes of documentation. In other instances, landscape photography has esthetic purposes: working with light, composition, and fast rules for deciding what to decode and what signs are to interpret, but deconstruction and interpretation provide the basis for addressing concerns not tackled in more traditional photographic methodologies.

Contemporary Research Practices

Some of the earliest and most frequent uses of photography in geography were documentary photography and landscape photography. The aim of documentary photography is objectivity – to produce a piece of data that accurately records what it intends to capture. Geographers use documentary photography to illustrate ideas, to give visual support to claims and assertions, and to provide the reader with an image of a site or structure. In historical geography, for example, the purpose of photography is only secondarily to allow twenty first century eyes to look back in time. The primary purpose is to allow the viewer to understand and appreciate nineteenth century ideas about space, identity, and power.

Photographs

It is precisely this power or presumed truthfulness of photography that has attracted the attention of geographers and prompted powerful critiques ranging from how photographs are understood to issues of interpretation. These concerns have less to do with the technology and what can be produced using that technology and more to do with how we understand what is pictured. Thus, it is the discourse around photography – what it reveals and what it conceals that has received most attention. So, in historical geography, for example, the purpose of photography is only secondarily to allow twenty first century eyes to look back in time. The primary purpose is to allow the viewer to understand and appreciate nineteenth century ideas about space, identity, and power.

Beyond academic training, the orientation of the researcher in time and place, the agenda of the fact gatherers, and the frame of reference of the audience are also important. Together they conspire to affect and constrain meaning making. Geographic fieldwork is a two way reflexive relationship that draws on the researcher’s skills of hearing, observing, listening, touching, and feeling. It is not an emotionless undertaking, void of human interaction, and human intervention. To its credit, photography acknowledges this.

Some of the earliest and most frequent uses of photography maintain that photographs are ‘better’ than numbers in that they capture realities in a way that numbers cannot. Numbers may be statistically significant on paper, but the reality they represent can only be understood by seeing how it grounds itself on the landscape. The ‘hopelessness and desolation’ associated with deindustrialization or the ‘sense of danger’ an unaccompanied woman feels on a deserted city street simply cannot be understood with numbers alone. The link between theory and ground level reality becomes clearer using a photograph that can freeze an idea in a time and space that is shared by those who witness what is pictured and those who take the picture. This is the power of photography.
Photographs

Figure 1 Pictures of Cecil B. Moore Street in Philadelphia: (a) 1961; (b) 1965; and (c) 1969. (a–c) Courtesy of Temple University Library Urban Archives.

together in a nonstructured format. Successful photo elicitation requires some foreknowledge of the respondents' use of photographs so that it can be assessed within the context of the informant's shared meanings. A single photo or a set of photographs are assembled by the researcher on the basis of prior analysis with the assumption that they have significance for interviewees. They are then shown to individuals to explore their knowledge, values, beliefs, and attitudes. The photographs may also be used to trigger reactions and explore how individuals and groups engage with a place. Photo elicitation often leads to further questions by unraveling individual semiotic constructions and untangling the connection between how people understand and experience place and scientific theories that explain what happens in place.

' Reflexive photography' has been used more in research undertaken by visual sociologists than geographers, although a few geographers have begun to explore its possibilities. Reflexive photography draws on standpoint theory and shifts the point of view away from the interviewer and places the interviewee in the center of the meaning making. It consists of the test person taking a photograph independently of the interviewer and later, in the interview situation commenting on what it mean. The interviewee then becomes the expert on his/her own photographs and the meaning they hold. As with photo elicitation, in geography reflexive photography is most commonly used in a classroom context with school children.

Both physical and human geographers use 'repeat photography' to monitor changes on the landscape. Repeat photography consists of five steps: (1) selection of the phenomenon – this could be a place (a neighborhood, community, street corner, worksite, or park) or a social group (a gang or family); (2) identification of the visual indices of change, informed by theoretical understandings; (3) collection or acquisition of the base line data; (4) setting the time frame or 'bracketing' of the work – the time interval might be the course of 1 day, several months, or several years; and (5) follow up in which the original sites, people, or archives are relocated and rephotographed. When going back to the original sites, it is ideal to use the same vantage point and angle of view if possible. Figures 1a–1c are pictures of Cecil B. Moore Avenue in Philadelphia taken over 8 years. Seeing the street in this way provides a visible record of shifts in circumstances. Not unlike the ground truthing that occurs in remote sensing, repeat photography confirms or validates the ground level reality based on information or data derived from other sources. Repeat photography can be used to ask questions that arise only by returning to the exact place where the photograph was taken. The photographs then act as a catalyst to generate new ways of thinking about the landscape, but as important it provides a way of gauging how ideas ground themselves on the landscape over time.

'Paired comparisons' employ duos of photographs focused on a common theme to arrive at macrolevel generalizations. In sociology and anthropology, paired comparisons explore the juncture between personally meaningful, context based experiences and large scale, theoretically informed understandings of social phenomena. In geography, paired comparisons typically explore the differences in how identical phenomena impress themselves in different spatial contexts, for example, how ideas around power look in capitalist and
socialist countries or how low income housing looks in the European and American context. Figures 2a and 2b, and 3a and 3b contrast food markets and financial institutions in two neighborhoods of Philadelphia – Bryn Mawr (a predominantly white, upper income area) and North Philadelphia (a predominantly black, lower/middle income area).

Reactions/Critique

The photograph as a method of conducting research has raised numerous issues. In historical geography for instance, the photograph has been criticized for being a servant of empire and for favoring the efforts of imperialism. In the early days of European expansionism, geographers frequently used the photograph to assist government in its efforts to extend territorial control, establish boundaries, inventory colonial holdings, and document the success or failure of development initiatives writ large. This complicity with imperialism has made geographers suspicious of photography’s claims to knowledge and has prompted the perception that the photograph is far from objective but rather serves the interests of those who make them, those who commission them, those who publish them, and the audiences who consume them. Because of photography’s complicity with an agenda – both overt and covert – it should be regarded as performing ideological work.

Another issue is interpretation. A photograph carries both informative as well as affective power. Its informative function is grounded in empiricism in that it represents the real world by substituting the name of an attribute for that of the intended subject and standing in for an object or event in its spatial and/or temporal boundaries. In other words, a photograph of a man’s face is not a man. It stands for a man and perhaps even for a class of men. A photograph of an inner city housing project is not just a housing project. It contains an idea and a feeling about housing projects in general. A photograph is also deeply personal and privately engaged. It is a representation, an abstraction extracted from the totality of an experience and foregrounded into consciousness. Visual anthropologists are quick to point out that through a photograph, we share a feeling, but not necessarily the same one the photographer had for the object. It might not even be the feeling that the photographer intended us to have. S/he recognized the
suggestive power of the image to direct us into a specific and known feeling, state of being, or place. Distant people and places are made intelligible in pictures. But the perceptions of these people are not alien. They have been suggested to us before in some way. Thus, a photograph is "an idea that fills the mind and satisfies one's previously conceived expectations."

Digital photography raises yet other issues. The line between retouching an image and reconstructing an image grows thinner and thinner as technology stretches the limits of what is possible. Minute changes may be just that or they may be the beginning of a slippery slope. Digital photography raises issues regarding permanence and accessibility. The images stored on disk, USB ports, and hard drives are seen as being more vulnerable than images printed on paper and stored in family albums, in galleries, or even in shoeboxes. More so, the digital technologies can become obsolete and computers can crash and the images stored on them can disappear.

Due to the cultural turn, the photograph enjoys a special place in geography because of the discussion it spawns regarding power and meaning, but aside from the discourse photography is indeed a mechanism of discovery in its own right.

See also: Critical Geography; Cultural Turn; Culture; Film; Historical Geography; Positivism/Positivist Geography; Subjectivity; Travel and Travel-Writing; Visuality.

Further Reading


Relevant Websites

http://www.geog.leeds.ac.uk/Images
UNI of Leeds, School of Geography, Images.
Physical Geography and Human Geography

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Introduction

Traditionally, geography is seen as the subject charged with describing and analyzing the spatial and temporal variation of phenomena over the Earth's surface. As such, it incorporates perspectives from a very wide range of diverse subjects from the social sciences (including history, sociology, politics, economics, and psychology) and from the natural sciences (including physics, biology, ecology, and geology). To some, this diversity has been regarded as a sign of weakness, suggesting that a subject with such a broad set of research fields must treat those in a superficial manner. Others have seen it as a sign of strength, arguing that geography has avoided the intellectual trap of increased specialization and held on to a holistic view of Earth phenomena. While this particular debate continues, there is a general feeling that geographers have moved considerably beyond Pattison's suggestion, in 1964, that geography embraces four main areas of interest: the spatial tradition; area studies; man–suggestion, in 1964, that geography embraces four main areas of interest: the spatial tradition; area studies; man–

However, within these four traditions and at various times throughout geography's history as an academic subject, its two main strands, human and physical geography, have interacted loosely, joined forces to provide hybrid geographies and evolved and worked separately. This discussion of the nature and history of the links between human and physical geography aims to examine a number of important themes and milestones within the development of the subdisciplines.

Many of the issues we face – ranging from globalization to migration, geopolitics of natural resources to climate change, racism to soil erosion – require a broader perspective than that offered by many of the other natural and social sciences. A successful assessment of soil erosion, for instance, requires an appreciation of a range of implicated factors including soil structure, farming methods, climatology, and land use change. The interdisciplinarity needed is therefore seen as a crucial approach for subjects seeking to understand many contemporary geographical issues and geography as a subject is unique among academic disciplines in its ability to offer a range of perspectives on these. However, this recent call for 'inter and postdisciplinarity' should not be taken to signify that geographers in the past have neglected such interactions. It can be argued that academic geography in North America and much of Europe began as an observational subject, concerned mainly with issues of regions and territory. In many ways, viewing human activity and the natural environment (within which this activity is pursued and which imposed constraints and provided opportunities) as an interrelated subject of study, can be traced back to the beginnings of academic geography in the eighteenth and nineteenth centuries. This point will be developed by looking at the works of geographers in North America and continental Europe.

A History

Contrary to contemporary geographic traditions where the distinction between human and physical geographers is regularly made, in nineteenth century America, geography was seen as an adjunct of geology. Perhaps, the most influential American geographer of this time was William Morris Davis (1850–1934). He started work as an assistant to Nathaniel Shaler at Harvard in 1876 and became an instructor of physical geography in the department of geology at Harvard in 1878. He is best remembered for his qualitative analysis of the ways in which landscapes develop. His view was that landscapes develop through time over a cycle of erosion. Time be

Davisian approach to research was built on three main characteristics. First, his assessments of landscape change were made following detailed and objective field observations, and the products of this approach are the accurate field sketches by which he is justifiably remembered. Second, Davis was at pains to highlight the importance of understanding the processes which drove landscape change, although his inability to measure these empirically was one of the main criticisms leveled at him in attacks on his work during the 1950s and 1960s by the new breed of process geomorphologists. Third, he had a deep appreciation of the interrelationships between human and natural factors in understanding landscape change. As Davis wrote:

…any statement is of geographical quality if it contains a reasonable relation between some organic element of the earth on which we live, acting as a control, and some
elements of the growth or behaviour or distribution of the earth’s organic inhabitants, serving as a response.
(Davis, 1909)

This theme of the symbiotic nature of life and land scape was also highlighted by the influential American geographer Ellen Churchhill Semple (1863–1932) who brought many of Friedrich Ratzell’s ideas to an English speaking audience. She is credited with developing a geographical philosophy based upon environmental determinism.

Criticism followed this work, many of her ideas about the ways in which the natural environment determined the development of human society and attributes were dismissed because of their potentially racist connotations. Critics argued that describing human societies as purely a product of their natural environment was a shortcut to justifying imperial and colonial actions. Criticism of such environmental determinism also followed because the concept failed to recognize that humans were able to modify the landscape deliberately and inadvertently.

However, this may be a partial misreading of Semple’s position because, like Davis, she too embraced the idea that humans both affected, and were affected by, the landscape. She wrote in the beginning of her seminal book *Influences of Geographic Environment*:

Man’s relations to his environment are infinitely more numerous and complex than those of the most highly organized plant or animal. So complex are they that they constitute a legitimate and necessary object of special study […] man has been so noisy about the way that he has ‘conquered nature’, and Nature has been so silent in her persistent influence over man, that the geographic factor in the equation of human development has been overlooked.

Outside of North America, the dominant schools of geographic thought were based in France and Germany. In France, a tradition of regional geography developed that took the region as a fundamental unit of study, and used understandings of physical and human influences on the region as its methodology. The major exponent of this approach was Paul Vidal de la Blache (1845–1918).

His approach to geography was to stress the inter connectedness of the environment and the human in fluence on it and, in doing this, he developed a dualistic way of seeing these interactions — the *pays* and the *genre de vie*. A *pays* is a natural region with defined boundaries (such as a mountain region, or an island) where Vidal believed the landscape to have played an important role in driving the development of human activity. This activity is constituted through the *genre de vie*, a cultural context enveloping language, traditions, institutions, food, etc. As a result, a landscape may possess both physical and cultural sets of characteristics.

Vidal’s work can also be seen as a response to environmental determinism. He argued that the land scape set the paradigm within which human activity was played out – creating opportunities as well as setting limitations on human endeavor. This possibilityism came to be seen as a much more sophisticated treatment of the ways in which natural and human systems interact than the simplistic causality espoused by determinism.

By the middle of the twentieth century, geography could be seen to have developed along twin tracks; a strong regional tradition in France and among some North American geographers, and a distinct systematic focus, largely driven by German geographers. Up to now, geographers would have defined themselves on the basis of their object of study. However, an important philosophical program had developed among European mathematicians, physicists, and philosophers in the 1920s and 1930s which was to radically alter the future direction of geography by introducing the idea that unifying the different strands of geographical practice could be achieved on ‘methodological’ grounds. The Vienna Circle was an enormously influential group of mainly German and Austrian thinkers which included philosophers such as Moritz Schlick and Otto Neurath and the mathematicians and logicians Kurt Gödel, Rudolf Carnap, and Ernst Mach. They developed a methodology based upon empiricist logical analysis which allowed them to produce a manifesto setting out the ways in which discrimination could be made between scientific and nonscientific analyses based upon metaphysics. By constructing a philosophy developed from logical positivism, they argued that assertions about the world are only scientific and meaningful when based upon empirical and verifiable observations. The impact this group had on many subjects was very considerable as it prevented a methodological rationale for differentiating between scientific and nonscientific subjects. While the German geographic tradition emphasized systematic study, geography in North America and Britain had a strong regional focus and this concentration on what was seen as primarily, and perhaps unfairly, an idiosyncratic philosophy (one based upon the study of unique phenomena) was viewed as being metaphysical by the logical positivists.

At this stage, there was a clear future roadmap for academic subjects. Those that wanted it to be seen as a science (with all the sociological cachet that this brings) had to embrace the methodology of the logical positivists. This initiated a vigorous debate between geographers concerned with the future direction and status of the subject. For physical geographers, accepting the logical positivist movement was a natural step toward placing models of landform evolution onto a more mathematical
and quantitative footing. This meant that many of the qualitative narratives used by Davis and his followers to describe landform evolution were now seen as out of date. This new physical geography was dominated by a focus on mathematical, physical descriptions of process, and the construction of mathematical models with predictive capabilities, an approach which could be seen as a vindication of the pioneering research on hydrology by the American geologist Grove Karl Gilbert (1843–1918), a contemporary of W M Davis.

For human geographers too, the language of positivism ushered in a new direction for research. One of the important ways in which this new methodology was integrated into human geography was via spatial analysis. Spatial analysis had a long tradition in geography, but with the development of new methods of analysis and observation such as computers and aerial mapping, the geographers’ concern with locational variables was rejuvenated. In the 1950s and 1960s, geographers such as Peter Haggett in the British Isles and Edward Ulman in the United States pushed forward this new field of geography. By integrating it with geographic information systems, physical geographers also used the tools of spatial analysis to map distributions of soils, ecologies, landforms, and climates. Both human and physical geography at this time had therefore adopted the methodologies of scientific method to study the complexities of the natural and human worlds, thus placing them firmly in the camp of other complex sciences such as geology and ecology.

However, this changed direction for human geography was not without its critics, and, over time, various dissenting voices such as the British geographer David Harvey and the American geomorphologist turned phenomenologist Yi Fu Tuan, came to be heard increasingly loudly. In the rapidly changing political world of the 1960s, many human geographers began to reimage different spatial forms of economics and social structures which would begin to address some of the problems of inequality and poverty. Associated with this was the development of different ideas around what constitutes legitimate politics, and these analyses introduced issues of race, gender, and different forms of capitalism into the intellectual mix. This period is often considered to represent a turn toward a more critical theory or philosophy in human geography, where many of the mathematical structures employed by the spatial analysts were discarded as research tools in favor of more narrative, qualitative, and personal assessments. Looking back at this time, however, it is clear that the cultural turn toward Marxist, humanist, and behavioral geographies was not a revolution in the subject with one catalyst, more an intellectual movement comprising a proliferation of (sometimes competing) ideas.

With the benefit of hindsight, we can now see that changing methodologies of analysis and observation gave the space for an increasing concern for theory and method. In certain ways, and over time, this allowed the subsequent split between human geography and physical geography to develop, as human geography began to institute a number of reimagined forms of theory as a means to becoming increasingly politicized. As a result, with this movement toward a more relativistic cultural geography, it became clear that many of the methodological links between human and physical geography were no longer in place, and we can argue that it is in geography that the development of CP Snow’s two distinct cultures of ‘art and science’ came to be manifested most strongly perhaps in the academy. Additionally, much of physical geography had become increasingly specialized, following in the footsteps of the rest of science where the information explosion created by the advent of computers and the growth of science had made it extremely difficult for any individual to have an expert understanding of more than a small part of a discipline. As a result, physical geographers tended to see themselves as scientists in a specific field (geomorphology, ecology, climatology, hydrology) who happened to work in geography departments, rather than as ‘physical geographers’ and this is borne out by the specialist nature of the journals in which many physical geographers concentrate their publications. Clearly, the relationship between human and physical geographers suffered as a result, with many on the physical sciences side, seeing human geography’s increasing concern with issues such as queer theory, Marxism, feminism, and relativism as irrelevant to understanding the nature of environmental systems. Many human geographers, too, held the alternative view that physical geographers were largely in thrall to logical positivism – a philosophy which many on the cultural side saw as an increasingly irrelevant and flawed philosophy. This split in the subject is seen in the changing pattern of publications in Transactions of the Institute of British Geographers, the leading journal of British geography. In the 1960s and 1970s, the journal was seen as an appropriate outlet for much physical geography research. By the 1990s, the journal was dominated by increasingly theory laden work by human geographers. This separation between the subdisciplines (and more generally between physical scientists and cultural theorists) perhaps reached its apotheosis in the Sokal affair of the late 1990s.

Alan Sokal, a quantum physicist, had become increasingly frustrated by the relativist philosophy movement underpinning much of cultural theory, which argued, among other things, that all knowledge was value laden and that, therefore, science was only one of a number of equally valid ways of looking at the world. This relativism was embraced by large parts of human geography and used a whole range of concepts from physics, mathematics, and logic to describe and explore
issues in cultural theory. It was (and is) clear that these concepts were being used with little appreciation of their meaning or physical significance; indeed, many physical scientists were of the opinion that much of this appropriation was done to impart an aura of intellectual sophistication to subjects otherwise lacking in this. Sokal wanted to expose this, what he considered to be an intellectual fraud. As a physicist who was politically left wing, he also railed against the hegemonic nature of the paradigm within which large parts of the social sciences were operating, arguing that it stifled debate by suppressing dissenting voices, especially in the US and among young academics without tenure.

To expose the shallowness of the relativist movement, Sokal wrote a paper called "Transgressing the boundaries: Towards a transformative hermeneutics of quantum gravity" and submitted it to the leading cultural studies journal Social Text, which was published in 1996. The paper was a hoax and this was revealed by Sokal in the same year in the journal Lingua Franca. While some cultural theorists and philosophers of science argued (and still argue) that Sokal had misunderstood the nature of the cultural theory program, suggesting that even specialized language must be able to have multiple meanings, it is clear that enormous damage was done to the intellectual credibility of postmodernism. While debate was rather muted in geography, the damage to the external (and perhaps internal) credibility of parts of human geography reinforced the views of many physical geographers that they stood to gain very little academically or intellectually by working with their human geography colleagues.

However, while the Sokal hoax certainly reinforced the damaging suspicion among physical geographers that the cultural turn in human geography had driven the two subdisciplines apart, substantial parts of human geography, such as economic geography and spatial theory, had remained essentially empiricist and rigorous throughout this period. As a result, it would be a mistake to believe that the cultural turn was the paradigm shift for human geography that the quantitative revolution was for physical geography.

At the beginning of the twenty first century, two other issues damaged the credibility of postmodernism. It has been argued that the first was the attack on the World Trade Center in New York in September 2001; the second was the realization that climate change was likely to become enormously significant and damaging to natural and human systems. Both of these called for a new pragmatism in politics and environmental stewardship, and both questioned the credibility of postmodern philosophies that had argued that ‘nothing was real’. As a result, over the last few years there has been a move toward redeveloping the links between human and physical geography. This has been partly driven by renewed philosophical arguments between the sub-disciplines, such as about the status of realism as a unifying philosophy of geography, and partly by pragmatic requirements. The latter can be illustrated with reference to three different debates and concerns: around nature and culture, applied geography, and climate change.

**The Nature–Culture Debate**

The idea that humans affect their natural environment, and that the natural environment plays a cultural role is, as we have seen, clearly not a new one and this view has been recently rejuvenated by human geographers such as Sarah Whatmore. However, in physical geography, the impact that humans have had on natural systems in the past has received renewed impetus by the development of improved dating techniques since the 1950s or so. In many regions, there is considerable and growing evidence that humans have been one of the main drivers of landscape change. For instance, in the uplands of the British Isles, periods of landscape instability from the middle of the Holocene coincide partially with phases of human occupation and consequent forest clearance and other land use changes. Landscape change in such areas is manifested by the construction of alluvial fans and river terraces, but there is debate about the extent to which this is driven by climate change, human activity, or a combination of these. Physical geographers have used a variety of techniques such as pollen analysis (palynology), analysis of tree rings (dendrochronology and dendroclimatology), and radiocarbon dating to assess the extent to which landscape change is forced by natural or human factors. This research area has also attracted archaeologists and human geographers who have added new insights into how humans colonized landscapes in Europe.

One of the major debates concerns the rapid nature of the landscape changes that have occurred since about 5000 BP (before present). At this time, there is a marked decline in many upland regions of certain tree species (such as birch and lime), probably associated with episodes of selective forest clearance by early agricultural communities, and with an abrupt deterioration in slope stability. Many physical and human geographers have been tempted by these temporal coincidences to develop models of landform development which stress the roles humans play in changing their natural environment.

Interdisciplinary research in the uplands has also been encouraged between archaeologists and cultural geographers and physical geographers from geomorphology and quaternary science backgrounds. For instance, in many of the upland moorlands of Europe, there exists a well developed periglacial (and therefore ‘natural’) landscape which has been partially modified by Neolithic
and later human activity. This has created a landscape complex comprising elements which can be interpreted as being the result of geomorphological processes, and elements which form a ritual and cultural landscape employed, and developed, by humans. Discrimination between these is problematic, and requires the successful collaboration between human and physical geographers. In this context, cultural geographers, archaeologists, and anthropologists have been especially concerned with phenomenological issues whereby natural elements of landscapes are employed by humans to form a sense of place or ‘home.’ Other work has examined the different ways in which ‘natural’ landscapes can be constituted and what it is to be ‘natural’ in a world which has undergone enormous transformation by human agency.

**Applied Geography**

Geographers are increasingly aware of the political importance of academic subjects becoming more relevant in economic or societal terms. This movement comes with increased recognition of the costs incurred by society in developing and maintaining healthy higher education sectors. At the same time, many problems that societies face require integrated approaches to research. For instance, successful infrastructure planning and development in geologically or climatically unstable regions calls for a risk mapping approach bringing together hazard assessments from a physical and human perspective.

**Climate Change**

Perhaps the biggest issue which has allowed a rejuvenation of interactive research by human and physical geographers is climate change. There is now overwhelming scientific consensus that human activity has changed the global climate, and will continue to do so in the foreseeable future, with potentially enormous implications for all natural systems on Earth. Taking a broad view of scientific understandings of climate change allows us to identify three distinct stages in the development of the concept. The first was the realm of physical scientists, such as atmospheric and computational physicists, and quantum chemists who developed models of atmospheric energy balance and radiative transfer. In the second phase, research began to look at the effects of climate change on a broad range of physical systems, and physical geography in all its manifestations has played a leading role in this program. For instance, glaciologists and cold climate geomorphologists have assessed the stability of ice sheets, mountain glaciers, permafrost, and related systems to predicted climate change. Fluvial geomorphologists have developed flood models to better predict where inundation will occur during flood events; and quaternary scientists have reconstructed past climate variability and estimates of climate sensitivity which have been used to put con temporary climate change into its historical context. The third stage has involved many of the social sciences working in collaboration with the physical sciences to explore the political, cultural, social, and economic responses to climate change and the policy implications of these. This last phase provides a set of major opportunities for human and physical geographers to integrate further their research agendas.

**Human Geography and Physical Geography: The Future?**

Judging the state of human and physical geography near the start of a new century depends on the viewpoint of the reader. It seems clear that there are two competing and opposing forces at work in the discipline. The first, and currently the one where research is actively being carried out, sees integration as an important program, starting with a series of conversations between researchers across the disciplinary divide. This program argues that geography is stronger as a discipline when integrated. Recent movements in physical geography (especially perhaps in biogeography and geomorphology) toward understanding of the nature of emergence and interacting elements as important characteristics of natural systems, is seen by some as a welcome departure from the more reductionist process form modeling undertaken elsewhere in the discipline, and offers several ways of linking with philosophical and practical concerns in human geography. Indeed, addressing and understanding the complexities of climate change on Earth systems may well require such a ‘holistic’ approach, and hence there may be signs that the reductionist program has run its course. Such work has the potential to play an important role in the development of public policy toward issues such as climate change.

The alternative perspective stresses the increasing ‘depth’ of science, and argues that it is simply not possible to undertake scientific research without increasing specialization. Physical geography, viewed like this, has therefore become a loosely linked set of specialties (geomorphology, climatology, hydrology, biogeography, and the like with their own specialist journals) whose researchers rarely interact ‘within’ physical geography, let alone between physical geography and human geography. As a result, the future evolution of the subject may be seen to be one where increasing fragmentation rather than interaction is the norm. This latter position is certainly the case in many British universities where joint research and teaching between human and physical geographers is still rare.
Judging between these two outcomes is difficult, but it seems clear that the major geographical issues that we face will require human geographers and physical geographers to increase rather than reduce the research conversations and interactions between them.

See also: Climate Change; Environment; Landscape; Nature; Vidal de la Blache, P.; Wilderness.

Further Reading


What Is Place?

Place lies at the center of geography’s interests. In a commonsense way geography is about places. But the commonsense uses of the word place belie its conceptual complexity. While the word ‘place’ has been used as long as geography has been written, it is only since the 1970s that it has been conceptualized as a particular location that has acquired a set of meanings and attachments.

Place is a meaningful site that combines location, locale, and sense of place. Location refers to an absolute point in space with a specific set of coordinates and measurable distances from other locations. Location refers to the ‘where’ of place. Locale refers to the material setting for social relations – the way a place looks. Locale includes the buildings, streets, parks, and other visible and tangible aspects of a place. Sense of place refers to the more nebulous meanings associated with a place: the feelings and emotions a place evokes. These meanings can be individual and based on personal biography or they can be shared. Shared senses of place are based on mediation and representation. When we write ‘Calcutta’ or ‘Rio’ or ‘Manchester’ for instance, even those of us who have not been to these places have some sense of them – sets of meanings produced in films, literature, advertising, and other forms of mediation.

Consider the location 33.325° 44.422°. This location in abstract space marks the city of Baghdad in Iraq. While its location tells us where Baghdad is and enables us to locate it on a map or program it into a Global Positioning System, it does not really tell us much else. Baghdad is also a locale. It has mosques, homes, markets, barricades, and the Green Zone. It has a material structure that, in part, makes it a place. And finally Baghdad has senses of place. Some of the meanings associated with Baghdad are personal and vary according to whether you are an occupying soldier, a Sunni or Shi’ite Muslim, someone who is trying to make a living, or a tourist who visited in the 1970s. But other meanings are shared and are not dependent on having been there. As Baghdad appears on our TV screens almost nightly, many of us in the Western world only know Baghdad as a war zone and a place of danger. Baghdad, like all places, has a location, a locale, and senses of place.

In any given place we encounter a combination of materiality, meaning, and practice. Most obviously, perhaps, places have a material structure. New York has its skyscrapers, Paris its boulevards, Los Angeles its freeways, and Sao Paulo its shanties. Places are often recognized in terms of their material structures which come to stand for place. Think of the Eiffel Tower. Think of the Sydney Opera House. On a more everyday level, towns and city neighborhoods across the world have their material form – libraries, shops, places of worship, streets, and sidewalks. In addition, places have all the material things that pass through them – commodities, vehicles, waste, and people. Even a totally imaginary place has an imaginary form in order to make it place like. The sense of place evoked by fantasy novels, for instance, is usually based on a description of the material environs. Think of the hobbit holes of *The Lord of the Rings* or the magic staircases of *Hogwarts*.

The idea of meaning has been central to notions of place since the 1970s in Human Geography. Location became place when it became meaningful. Meaning marks the most obvious difference between 33.325° 44.422° (a mere location) and ‘Baghdad’ – the place that occupies that location. Cruise missiles can be loaded with information like 33.325° 44.422° but not with ‘Baghdad’ and all the meanings that that place implies. Meanings can be very personal and connected to individual and based on personal biography or they can be shared. Shared senses of place are based on mediation and representation. When we write ‘Calcutta’ or ‘Rio’ or ‘Manchester’ for instance, even those of us who have not been to these places have some sense of them – sets of meanings produced in films, literature, advertising, and other forms of mediation.

While crashing four planes into empty fields would no doubt have been a disaster, it would have had a completely different impact from the destruction of such well known places. It was not just an attack on material structures but an attack on place – on meaning. Now of course, the site of the Twin Towers is acquiring new meanings which are still being contested. Will it be a quiet site of remembrance or a new site of American power projected across the world? While meanings are shared they are never fixed once and for all, and always open to counter meanings produced through other representations.

Finally, places are practiced. People do things in place. What they do, in part, is responsible for the meanings that a place might have. Most obviously places are left with the imprint of notable events such as battles and signings of treaties. A field in Belgium becomes a different place once we learn of the battles that were fought there in World War I. But more mundane practices are,
perhaps, a more significant ingredient in place. Places are continuously enacted as people go about their everyday lives – going to work, doing the shopping, spending leisure time, and hanging out on street corners. The sense we get of a place is heavily dependent on practice and, particularly, the reiteration of practice on a regular basis. Space becomes a place when it is used and lived. Experience is at the heart of what place means.

Materiality, meaning, and practice are all linked. The material topography of place is made by people doing things according to the meanings they might wish a place to evoke. Meanings gain a measure of persistence when they are inscribed into the material landscape but are open to contestation by practices that do not conform to the expectations that come with place. Practices often do conform to some sense of what is appropriate in a particular place and are limited by the affordances particular material structures offer. While it is possible to skateboard on park benches, it is not possible to walk through walls.

While we most often think of place as the kinds of places mentioned so far – Baghdad, New York, Sydney – places can in fact exist at many scales. The corner of a favorite room is a place for a child who has little say in the constitution of the wider world. At the opposite extreme, the whole earth is a place when seen from outer space. Astronauts often commented on how the earth looks like home when it is seen from afar.

**Chora and Topos**

While it is the case that place was only formally conceptualized as a meaningful segment of geographical space by humanistic geographers in the 1970s, it is not true to say that the concept of place was invented by geographers. The origins of a philosophy of place can be seen in classical Greek philosophy and particularly in the writings of Plato and Aristotle. Plato (428–348 BC) developed the loosely defined notions of *chora* and *topos* in the context of an account of the origins of existence and the process of *becoming*. Becoming, in Plato's terms, is a process that involves three elements – that which becomes, that which is the model for becoming, and the place or setting for becoming. This final element is *chora*, a term which implies both extent in space and the thing in that space that is in the process of *becoming*. It is often translated as a receptacle and differs from the void of *kenon* (*abstract space*) in that it always refers to a thing within it – it is not empty. *Topos* is often used interchangeably with *chora* in Plato but is usually more specific. While *chora* most often referred to a place in the process of becoming, *topos* would refer to an achieved place. Later Aristotle would use *chora* to describe a country while *topos* would describe a particular region or place within it. Both *chora* and *topos* would become part of geographical language through the notion of chorology (study of regions) and topography (the shape of the land surface). Both *chora* and *topos* are different from the notion of *kenon* (the void) in that they refer to something more particular – more like place than space. While *kenon* is limitless space *chora* and *topos* are finite and contain things.

If anything, Plato's student, Aristotle (384–322 BC) had even more fundamental things to say about place. To Aristotle, place was a necessary starting point from which it is possible to understand both space (the infinite, the void) and movement and change. Place, he wrote "takes precedence over all other things" (Casey, 1997: 71). To understand change and motion, for instance, it was first necessary to acknowledge that the "most general and basic kind [of] change is change in respect of place, which we call locomotion" (Casey, 1997: 51). The geographical question of 'where' is absolutely fundamental to Aristotle for everything that exists must be somewhere "because what is not is nowhere – where for instance is a goat stag or a sphinx?" (Aristotle in Casey, 1997: 51). To Aristotle, place comes first because everything that exists has to have a place – has to be located. Thus "that without which nothing else can exist, while it can exist without the others, must needs be first" (Casey, 1997: 52). So in Aristotle then we have a very powerful philosophical power of place as the starting point for all other forms of existence. Philosophically, Aristotle marked a high point for thinking about place as philosophers turned to the seemingly more profound notion of space. Indeed, it was not until the late nineteenth and early twentieth centuries that place reemerged as a central philosophical concept – particularly in the work of Martin Heidegger.

**Being There and Dwelling**

Place was not completely forgotten about in the long centuries between Aristotle and Heidegger. In the thirteenth century, for instance, Albertus Magnus, a German Dominican scholar who taught Thomas Aquinas, studied the work of Aristotle (when many versions were banned by the church) and developed theories of the nature of places suggesting, for instance, that things (people, plants, stones) work best when they are in the place in which they belong and weaken the further they are removed from it. In the Arab world, geographers such as Ibn Batuta (1304–68) and Ibn Khaldun (1332–1406) made exhaustive travels through out north Africa and as far afield as China describing the landscapes and customs of different places in great detail. They did, not however, develop general approaches to place in the process. Geographers such as Varanius (1622–50) argued strongly for the importance of a
‘general geography’ that concerned the whole world and its mathematics rather than the ‘special geography’ that focused on the particularities of regions and places. It was the works of Martin Heidegger (1889–1976), however, that proved to be particularly influential on the work of humanistic geographers who were to develop the notion of place in the 1970s. Heidegger, throughout his career, had struggled with the nature of ‘being’. To Heidegger to be was to be ‘somewhere’. The word he used to describe this was ‘dasein’ – or ‘being there’. Note this was not simply being in some abstract sense, as if in a vacuum, but being ‘there’. Human existence is existence ‘in the world’. This idea of being in the world was developed in his notion of ‘dwelling’. A way of being in the world was to build a world. Dwelling in this sense does not mean simply to dwell in (and build) a house, but to dwell in and build a whole world to which we are attached. Dwelling describes the way we exist in the world – the way we make the world meaningful, or place like. Most famously, Heidegger used the image of a cabin in the Black Forest to describe both building and dwelling.

Let us think for a while of a farmhouse in the Black Forest, which was built some two hundred years ago by the dwelling of peasants. Here the self sufficiency of the power to let earth and heaven, divinities and mortals enter in simple oneness into things, ordered the house. It placed the farm on the wind sheltered mountain slope looking south, among the meadows close to the spring. It gave it the wide overhanging shingle roof whose proper slope bears up under the burden of snow, and which, reaching deep down, shields the chambers against the storms of the long winter nights. It did not forget the altar corner behind the community table; it made room in its chamber for the hallowed places of childbed and the “tree of the dead” for that is what they call a coffin there: the Totenbaum and in this way it designed for the different generations under one roof the character of their journey through time. A craft which, itself sprung from dwelling, still uses its tools and frames as things, built the farmhouse. (Heidegger, 1999: 300)

In this cabin everything seemed to have its place and the cabin sat almost organically in the natural world, linking the cosmological to the everyday. Here was the model kind of building and dwelling – a model kind of being in the world. Such a model, however, makes little sense to the modern, urban, hyperconnected life many of us lead. As a model it seems a little regressive and romantic. Indeed, this image has been connected by some to Heidegger’s well known connections with the Nazi Party which often espoused a very similar ideology of rootedness in the deep soils of the Black Forest. The corollary of such a belief was that some kinds of people were unconnected to these deep soils and this manner of dwelling. Jews, gypsies, and urbanites, in general, were all seen as leading rootless and inauthentic existences. Jews, for instance, were symbolized as snakes crawling over the desert sands and the desert became a space where it was impossible to make roots. Authentic dwelling, Nazi ideology insisted, could not happen in the desert or the city.

**Place and Humanistic Geography**

Despite its central role in human geography, place was not self consciously written about until the 1970s and the advent of humanistic geography. The 1960s and early 1970s had been marked by spatial science, the quantitative revolution, and logical positivism, all of which had looked at the world and the people in it as objects rather than subjects. People were most often thought of as rational actors in a rational world. The lexicon of spatial science included terms like ‘location’, ‘spatial patterns’, ‘distance’, and ‘space’. Large parts of human geography had operated more or less as a pseudoscience. The focus on place was a central part of a humanistic critique of this way of thinking about the world and the human inhabitation of it. This critique is made clear in the final pages of Yi Fu Tuan’s *Space and Place* (1977) where he compares the richness of an experiential perspective to more scientific approaches.

What we cannot say in an acceptable scientific language we tend to deny or forget. A geographer speaks as though his knowledge of space and place were derived exclusively from books, maps, aerial photographs, and structured field surveys. He writes as though people were endowed with mind and vision but no other sense with which to apprehend the world and find meaning in it. He and the architect planner tend to assume familiarity the fact that we are oriented in space and home in place rather than describe and try to understand what “being in the world” is truly like. (Yi Fu Tuan, 1977: 200 201)

And later, “The simple being, a convenient postulate of science and deliberate paper figure of propaganda, is only too easy for the man in the street – that is, most of us – to accept” (Yi Fu Tuan, 1997: 203). The term ‘simple being’ brings to mind the ‘rational man’ of spatial science and economics: the man who weighs up all options before making a rational choice about what to do next. Such a view of humanity has no place for meaning and is thus not concerned with place but only with ‘location’ or ‘distance’.

Even though the humanistic engagement with place was the first attempt to define and conceptualize place as we know it today, it did not arise out of thin air.
In addition to the work of continental philosophies of meaning, such as Heidegger's, these geographers looked to what might broadly be called the 'regional geography' of the early decades of the twentieth century that has seen geographers attempting to produce a science of chorology that focused on the way various variables were interlinked in unique ways in space. First, the soil and the climate, then the natural landscape, then the cultural landscape and finally habits, customs, and beliefs. Place as such was rarely the focus of such work, the related concept of 'region' was more central. Of particular significance was the work of Paul Vidal de la Blache (1845–1918) and his followers in France. Vidal's deeply human geography had sought to examine the regions of France in terms of their distinctive ways of life. Region (pays) in Vidal's geography had been about seeing everything together in situ. He connected the physical environment with the cultural way of life (genre de vie). He noted how regions were marked by particular natural environments and cultural forms (clothing, food, architecture, institutions, etc.) that together formed specific regional life worlds. To put it most simply, you would know when you were in the Massif Central that you were in a different kind of place than if you were in northern France because of the unique combination of physical and cultural attributes that marked one place off from another. The physical landscape looks different, people wear different clothes, and people eat different food.

Inspired by philosophies of meaning such as phenomenology, the work of Vidal and elements of the earlier cultural geography of Carl Sauer, humanistic geographers insisted that geographers needed to think about people as knowing and feeling subjects rather than either objects or simply rational beings. To make geography fully human, they argued, geographers needed to be more aware of the ways in which we inhabit and experience the world. Central to this awareness is the concept of place. This conception of place describes a way of relating to the world. It insists that people have the burden of making their own meaning in the world through their own actions. Key here is the idea of 'experience'. It is this notion of experience that lies at the heart of the humanistic approach to place. Ideas such as 'experience' were not in the vocabulary of human geographers in the early 1970s. Spatial scientists were not very interested in how people related to the world through experience. People as objects or rational beings are not 'experiencing' the world and treated people as part of that world (just like rocks, or cars, or ice but with the magic ingredient of rationality added), humanistic geographers focused on the relationship between 'people and the world through the realm of 'experience'. Tuan writes "'[t]he given cannot be known in itself. What can be known is a reality that is a construct of experience, a creation of feeling and thought" (Tuan, 1977: 9). The new focus on place, therefore, attends to how we, as humans, are in the world – how we relate to our environment and make it into place.

What experience does is transform a scientific notion of space into a relatively lived and meaningful notion of place. While space was the favored object of the spatial scientist (and is still the favored object of social theorists), it is the way space becomes endowed with human meaning and is transformed into place that lies at the heart of humanistic geography.

What begins as undifferentiated space becomes place as we get to know it better and endow it with value ... the ideas "space" and "place" require each other for definition. From the security and stability of place we are aware of the openness, freedom and threat of space, and vice versa. Furthermore, if we think of space as that which allows movement, then place is pause; each pause in movement makes it possible for location to be transformed into place. (Tuan, 1977: 6)

This is the most important contribution of humanistic geography to the discipline – the distinction between an abstract realm of space and an experienced and felt world of place.

The humanistic division between space and place became a taken for granted distinction in human geography by the early 1980s. This distinction is still taught to students across the English speaking world. Geographers have continued to develop broadly humanistic notions of place. Robert Sack, for instance, has considered the ways place as a center of human meaning ties together worlds that are normally held apart – the worlds of nature, meaning, and society. In addition, he has developed an ethical and moral framework for human action based on a humanistic notion of place. More importantly, perhaps, many of Tuan's ideas have traveled into geographies which are not explicitly humanistic and indeed to other disciplines entirely. The notion of place, for instance, has been developed by philosophers such as Edward Casey and J. E. Malpas.

The Social Construction of Place

While humanistic geographers developed a rich idea of place as experienced, felt, and sensed, they did not, on the whole, have much to say about how power is implicated in the construction, reproduction, and contestation of places and their meanings. The humans in 'humanism' had a tendency to either remain
determinedly individual or, alternatively, as but instances of a 'universal' humanist subject. Geographers inspired by both humanism and the radical approaches of Marxism, feminism, and post-structuralism began, in the 1980s, to develop a critical approach to place which sought to rectify this problem.

The kind of organic, rooted, and bounded place evoked by Heidegger's notion of dwelling began to be seen as limiting and exclusionary. It was also perceived as a very ecological way of thinking about place as though human places were natural, authentic – the way they were supposed to be. Marxists in particular began to point to the social processes (particularly under capitalism) that are involved in the construction of places. Places, they argue, may seem natural but are in fact anything but that. The material structure of a place, even a log cabin in the Black Forest, is often the result of decisions made by the very powerful to serve their ends. Most of us, after all, only get to build places on a relatively small (but nonetheless important) scale. The meanings associated with these places, insofar as they are shared, are also more likely than not to be meanings assigned to place by people with the power to do so – the people who build the buildings and monuments and in scribe texts on to the material fabric of place. All of these involved choices that exclude people and the meanings they represent. It is observations such as this that led David Harvey to write that "The first step down the road is to insist that place in whatever guise, is like space and time, a social construct. The only interesting question that can be asked is, by what social process(es) is place constructed?" (Harvey, 1993: 5). While humanists sought to show how place was a fundamental and universal in gradient in the 'being in the world' in a way that transcended particular social identities and divisions, Harvey insisted that place was often used in quite regressive and reactionary ways. He points to the rise of gated communities in the United States and other defensive place based definitions of community (such as emergent nationalism in the Balkans at the time) that are, more often than not, based on some threatening outside that is being kept out. This, then, is the dark side of Heideggerian notions of place inherited by humanistic geography.

These tensions can be best illustrated by the notion of home. To humanistic geographers home is a particularly ideal kind of place – the location where meanings and attachments are most intense. Heidegger's cabin is one example of this kind of home place – where everything is where it should be and all is right with the world. Home place is a center of meaning and field of care – a place where (in an ideal world) we feel safe, secure, and loved. Home is frequently used by humanistic geographers as a symbol for universal attachment. Home, like place, can exist on many scales from our individual abodes to the whole earth. Critical human geographers concerned with the way power operated geographically had a very different view of home. To feminist geographers home frequently features as a site of patriarchal authority often associated with extremes of abuse, boredom, and backbreaking labor. To others, home is a place associated with violence against and abuse of children. Home is a place of order where even the children that inhabit it are symptoms of disorder. Consider the following from David Sibley:

Inside the home and the immediate locality, social and spatial order may be obvious and enduring character istics of the environment. For those who do not fit, either children whose conceptions of space and time are at variance with those of controlling adults or the homeless, nomadic, or black in a homogeneously white, middle class space, such environments may be inherently exclusionary. (Sibley, 1995: 99)

Here home as place is symptomatic of the ways in which the social production of place as a site of belonging can reinforce social relations of systematically asymmetrical power relations. It was questions such as these that led critical cultural geographers to explore how places and their associated meanings have been implicated in processes of exclusion. The mapping of particular meanings, practices, and identities on to place, they have argued, leads to the construction of normative places where it is possible to be either 'in place' or 'out of place'. Things, practices, and people labeled out of place are said to have transgressed often invisible boundaries that define what is appropriate and what is inappropriate. We all know that we are not rational people would come to that conclusion, right? Here, Koch links the place, Grand Central Station, to particular practices and meanings as though such connections were natural and obvious and any other...
practices and meanings were simply out of place. In so doing he disconnects the station from the surrounding context of New York City in the 1980s, a place marked by high levels of homelessness contrasting with expensive urban development projects and the intense gentrification of areas such as the Lower East Side where people on low incomes could no longer afford to live.

This process of identifying how normative constrictions of place exclude ‘others’ both physically and existentially has been identified across a whole range of identities including class, race, sexuality, gender, and physical (dis)ability. Geographers and others have also revealed how these social constructions of place are constantly contested, transgressed, and resisted by the excluded. Young people gather on street corners or skateboard on street furniture; the homeless finds ways to live in inhospitable places; artists redecorate well known monuments to invert their established meanings; gay, lesbian, and bisexual people hold kiss ins in public space. Whatever kinds of places are constructed they are never truly finished and always open to question and transformation.

**Placelessness and Nonplace**

In 1976, the humanistic geographer Edward Relph wrote *Place and Placelessness*. In this book he argued that places were becoming placeless. He gives many reasons for this – mass production, an increasingly mobile world, an emphasis on ‘disneyfied’ and ‘museumified’ places that were fake copies of more worthy originals. He described these places as ‘inauthentic’. They are inauthentic, he argues, because it is impossible to be an existential insider in Disneyworld, or McDonalds or on a mass produced housing estate. It is also impossible, he argues, to make significant attachments to place if we move about too much, never stopping to linger and create roots. Variations of this argument are now quite commonplace and have been variously described as ‘McDonaldization’ or ‘Americanization’. More recently, the French anthropologist Marc Auge has used the term ‘nonplace’ to refer to sites such as motorway service stations, airports, and places of transit which never actually go anywhere but endlessly refer to other places indirectly. Auge does not believe such ‘nonplaces’ are inauthentic but simply a condition of the way we lead our lives now. Auge considers conventional conceptions of place as bounded, rooted, organic, and associated with modes of dwelling that are embedded in history. As an anthropologist Auge notes how his discipline has traditionally thought of its purpose as a kind of deep description, excavating all the particularities of a culture in situ. What, he asks, could such a discipline make of a mobile world in which all these characteristics (bounded, rooted, etc.) are absent or weak? A world of shopping malls, motorways, airports, and service stations, he suggests, demands a different kind of anthropology – an anthropology of nonplace. The world of ‘supermodernity’, he argues is marked by three new characteristics. First, the world is marked by a speeding up of communications and information flows that leads to a bombardment of images of spaces and times other than the one a person may be immediately located in. Second, a shrinking of the planet due to time–space compression and third, increased individualism as people, exposed to so much, withdraw into themselves and fail to make sustained social relationships. All of these characteristics of supermodernity, he suggests, can be found in ‘nonplace’.

Nonplace is very different from a traditional humanistic conception of place as a location full of meaning to which people become profoundly attached. Nonplaces are marked by a lack of attachment, by constant circulation, communication, and consumption that act against developing social bonds and bonds between people and the world. These nonplaces are marked by a plethora of texts, screens, and signs which facilitate mediated relationships between people and places rather than direct ones.

One of the alleged prime causes of placelessness and nonplace is increased mobility. This mobility has led some to go as far as to declare the ‘end of geography’ as though mobility itself was not geographical. While it is clearly the case that we live (in the West at least) in a way that is increasingly mobile and uprooted it is surely not the case that place is no longer important. Even Auge remarks that nonplace in pure form does not exist. Rather it is at the end of a continuum with the traditional notion of place at the other end. Real world locations contain varying degrees of both. Even airports have their inhabitants, people that work there, the homeless or frequent fliers who see the same people, at the same time, every workday. The link between the characteristics of nonplace and what Auge calls ‘super modernity’ is also tenuous as many of these characteristics have been commented upon for a very long time in reference to the effects of phenomena such as the stagecoach, the railroad, and the telegraph among others.

**Place, Process, and Mobility**

The concepts of nonplace and placelessness raise the issue of the relations between place and mobilities. Traditionally, place has been quite a static concept. The focus on borders, rootedness, and singular identities has mitigated against notions of dynamism and process. Writers such as Tuan and Relph have frequently argued that too much mobility mitigates against senses of place. Nevertheless, since the advent of humanistic geography
there have been attempts to think through the ways place is in process and how process makes place. Indeed, in Plato's and Aristotle's musings on chora and topos place was very much about the process of becoming – how things come to be. In the 1970s and 1980s, David Seamon, in a series of books and papers, developed the ideas of the phenomenological philosopher Maurice Merleau Ponty to describe place as the product of everyday habitual mobilities. Merleau Ponty is best known for his account of bodily intentionality. Perhaps the most fundamental insight of phenomenology is the notion proposed by the psychologist Franz Brentano and developed by philosopher Edmund Husserl that consciousness is always consciousness of something. Consciousness, in other words, includes within it some object that we are conscious of. There can be no judgment, for instance, without something being judged, no love without something being loved, no desire without something being desired (to paraphrase Brenato). Intentionality, therefore, describes 'aboutness'. This 'aboutness' refers to a relation between consciousness and the world and this relation between consciousness and the world is key to both humanistic geography and to the notion of place. Place, and particularly sense of place, differs from location (for instance) because of its insistence on the centrality of human consciousness and experience. To return to Merleau Ponty, he developed intentionality by moving it away from the idea of a knowing subject where consciousness was purely a mental process. His innovation was to describe this process of aboutness as bodily and habitual – below the radar of consciousness. To be in the world to Merleau Ponty was not primarily about the mind but the body. He described the 'body subject' as a body that has a kind of bodily intentionality toward the world. He described everyday actions, such as typing, as remarkable bodily knowledges. In fact the more we think about such things the less able we become. The body does not just receive data but experiences the world through a certain openness to the outside – a sense of being in touch with the world. In this view, the movements of the human body constitute the most basic form of intentionality: So what does this say about place?

David Seamon developed Merleau Ponty’s ideas to provide a humanistic account of place which was full of movement. He used the term ‘body ballet’ to refer to how the body moves habitually as it is performing some task such as driving, typing, or cooking. When these body ballets are strung together through a day they produce what Seamon called a time-space routine. Individuals, he argued, followed ‘time-space routines’ throughout the day. Often these routines are habitual. We drive to work, walk to the train, or go shopping on an almost daily basis. They are not often the product of great thought. This is what Seamon (following Merleau Ponty) means by ‘habitual’. When these individual ‘time-space routines’ coalesce they form a ‘place ballet’. In the town center or city square there are hundreds of people conducting their individual ‘time-space routines’ but they do so collectively in such a way that recognizable and regular patterns of practice emerge. Examples would be rush hour at a busy interchange, the ‘school run’ in the middle of the afternoon, or outside a workplace at the day’s end. Seamon’s argument is that places exhibit a kind of unchoreographed yet ordered practice that makes the place just as much as the place’s more static and bounded qualities do. Indeed the meaning of a place may arise out of the constant reiteration of practices that are simultaneously individual and social. Places in this sense are intensely embodied and dramatic. While such a view shares many things with other humanistic geographers it is also different in its emphasis on bodily subjectivity and constant process.

Geographers inspired by structuration theory were also keen to develop a more process oriented view of place. Allen Pred, for instance, argued that human geographers had tended to see places as objects that were essentially static.

Until recently, places and regions have usually been treated in ways that emphasize certain measurable or visible attributes of an area during some arbitrary period of observation. Thus, whether presented as elements of a spatial distribution, as unique assemblages of physical facts and human artifacts, or as localized spatial forms, places and regions have been portrayed as little more than frozen scenes for human activity. Even the “new humanist” geographers, who see place as an object for a subject, as a center of individually felt values and meanings, or as a locality of emotional attachment and felt significance, in essence conceive of place as an inert, experienced scene. (Pred, 1984: 279)

What Pred proposes is a view of place as process where the activities of people and institutions produce and are produced by social structures that are saturated with power. Place is produced through action and action is produced in place through a constant reiterative process. In a way that mirrors Seamon’s discussion of time-space routines and body ballets Pred introduces the notion of ‘paths’ from time geography. Paths describe the way people and objects move through space and time over a given period of time. These paths produce human and object biographies that coalesce to produce places.

“Place is therefore a process whereby the reproduction of social and cultural forms, the formation of biographies, and the transformation of nature ceaselessly become one another at the same time that time space specific activities and power relations ceaselessly become one another” (Pred, 1984: 282). Where Pred differs from
Seamon is in his attentiveness to the operations of power. Pred’s paths exist within the context of social structures that provide the context for objects and humans in place. At the same time these social structures are produced through and by these paths. Pred refers to ‘institutional projects’ that have the power to direct and construct the paths of individuals. Some of these institutional projects have more of an impact than others on “the daily paths and life paths of specific people and, therefore, upon the details of individual consciousness development and socialization” (Pred, 1984: 282). These dominant institutional projects override both other such projects and individual paths that fall outside of the remit of any institutional project. Pred, then, thinks of place as produced through process but in a way which is at least partly structured by social relations that are systematically asymmetrical. Process and mobility in place is not just a matter of habit but a matter of power. So while Seamon saw place as produced through an unchoreographed coming together of mobile intentional body subjects, Pred is keen to show how these body subjects are differentiated by social divisions that allow some mobile identities and force impediment on others. Men may be able to move through place in ways that women cannot for instance. Black people are often stopped while driving through cities in the United States on suspicion of having committed some crime. This has been called ‘driving while black’. People who appear to be of middle eastern origin have to think twice before using public transport or taking a flight as they are frequently stopped and treated with suspicion. Young people in ‘hoodies’ are similarly frowned upon when gathered at a street corner.

A Progressive Sense of Place

In both Seamon and Pred’s work the key to understanding standing place is through its relation to mobilities – to the dynamism and flow of objects and people through them. But what about the relationships between particular places and the mobilities of the wider world? Thinking about the world in terms of deeply rooted, fixed places with clear boundaries and stable associated identities can be characterized as a sedentarist meta-physics. Once the world is thought of as a world of such places then other ways of thinking tend to follow. People who lead mobile lives, either through choice or through compulsion are seen as necessarily threatening to this view of place. Thus, the homeless, refugees, gypsy travelers, traveling salesmen, and others who are perceived as mobile are labeled as a threat to place and the moral values associated with it. The more clearly the world is ordered into discrete places the more people and things that exist outside of these places are likely to be labeled as disorder – as out of place. The production of order is simultaneously the production of disorder and deviance.

To some geographers the humanistic conception of place, which has been the predominant understanding of place since the 1970s, is simply too fixed, too bounded, and too rooted in the distant past. As a consequence of these notions of fixity, boundedness, and rootedness, place too often becomes the locus of exclusionary practices. People connect a place with a particular identity and proceed to defend it against the threatening outside with its different identities.

Rather than thinking of mobility as a threat to place Doreen Massey has argued that places are actively constituted by mobility – particularly the movement of people but also commodities and ideas. Places to Massey are not clearly bounded, rooted in place, or connected to single homogeneous identities but produced through connections to the rest of the world and therefore are more about routes than roots. They are sites of heterogeneous, not homogeneous, identities. This conception of place, she variously calls, a ‘progressive sense of place’, a ‘global sense of place’, and an ‘extrovert sense of place’. Here there is no longer a clear inside and outside and therefore it is much harder to make judgments about insiders and outsiders. To illustrate this notion she describes Kilburn High Road in north London. On this street she encounters Irish pubs, Indian sari shops, and a Moslem newspaper seller. Planes from Heathrow fly overhead. The street is thoroughly constituted by its connections to the wider world. This progressive sense of place, which describes place constituted through mobility, can be contrasted with ideas of nonplace and placelessness which pitch mobility against place – as a threat to place. It also calls into question ideas of place which pitch insiders against outsiders. It is hard to exclude the outside when there is no clear outside but, instead, a set of constitutive connections. So while ideas of place as mobile and process oriented have focused on the mobilities internal to place and the way in which they constitute a sense of place, Massey expands this to consider the connections between place and wider world and this opens up place to a more global sensibility.

Conclusion

While place is clearly central to human geography as well as to everyday life, it is equally clearly a changing and contested concept. Places range in scale from the corner of a room to the whole planet. They are, in the broadest sense, locations imbued with meaning that are sites of everyday practice. Beyond that simple definition there is considerable debate about the nature of place. While some think of place as an essential and foundational fact
of human existence others choose to focus on the social processes that produce places in particular ways that serve the interests of some over others. The relationship between place and mobility is also marked by disagreements between those who see mobility and process as antagonistic to place and those who think of place as created by both internal and external mobilities and processes. At the extreme there are those who argue that such are the processes of mobility and communication in the modern world that place is becoming insignificant in a world of placelessness and nonplace. It seems likely that these debates will continue and veer off in new directions.

See also: Humanism/Humanistic Geography; Landscape; Migration; Mobility; Space I; Structuration Theory; Structurationist Geography; Time Geography.

Further Reading


Relevant Websites

http://pegasus.cc.ucf.edu/~janzb/place/

Research on Place and Space Bruce B. Janz.
Place Names

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Glossary

Toponymics or Toponyms The Greek words topos or place and onomia or name refer to the study of place names. The study of place names (i.e., countries, regions, provinces, towns, cities, rivers, mountains, etc.) is a well-developed field of enquiry not only among geographers but also among historians, cartographers, anthropologists, sociologists, folklorists, linguists, and the informed public. The study of toponyms involves essentially queries into three areas: (1) the earliest date of the place name; (2) the meaning of the place name; and (3) how the place name was derived or who bestowed the place name.

Toponymics: Unfolding the Geographies of Landscape Symbolism, Territorialism, and Societal Histories

Introduction: Discovering Place Names

The study of place names or toponyms (topon: place and onomai: name) has been a long research tradition among historical and cultural geographers. However, this is by no means the territorial academic preserve of geographers alone. Archaeologists, anthropologists, historians, folklorists, cartographers, linguists, sociologists, planners, poets, as well as the informed public have all been interested in place names research. The fascination with place names is because it provides invaluable keys and insights into landscape histories, settlement origins and patterns, physical geographies of places, subsequent occupation, ethnic and political changes, nationalistic sentiments, human activities, and cultural diffusion processes.

Given that place names are embedded in and products of languages both past and present, their investigations reflect etymological–linguistic exercises, onomastic (related to names) inquiries, and word meaning investigations. Reflecting the diversity of dialects and languages spoken in the past, older place names thus become difficult to trace in terms of their origins. Putting together the comprehensive listing of Aboriginal place names in Australia was no easy task given that ‘old Australia’ had at least 500 languages or distinct dialects. Margaret Gelling notes on the other hand how painfully difficult it is to trace English place names because it relies on pre-Celtic, Pictish, Greek, Roman, Celtic, Latin, Germanic, Welsh, Old English, Norman French, Cornish, Gaelic, and Gallo-Brittonic languages and dialects. Accepting the multiplicity of meanings of past words, she cautions nonphilologists in jumping to hasty conclusions around sets of similar looking words which may have totally different meanings. Given that linguistic theory and sociolinguistics have been neglected fields in cultural geography the onomastic interpretation of place names remains a fertile field in the discipline.

Geographers note specifically that place names provide evidence of environmental settlement and social conditions at the time the name was coined and hence the utility of place names is limited to periods in which names were being created. Place names are products of only two processes: some names ‘evolved’ from the ‘folk mind’ through an ‘unpersonalized linguistic development’ and become crystallized over time. Other names were ‘bestowed’ in which an individual consciously declared a place name which was documented and preserved. Whether evolved or bestowed, place names become important signs, signals, and symbolisms of evolving cultural landscapes that may take on multiple or different meanings by communities within a period or at various points of time. They also provide a sense of cultural and social continuity between the past and present. Place names remain for many residents the mental maps of meaning involving codified knowledge, historical legacies, and symbolic representations. Given their long history over cultural changes, place names can at times be ambiguous. What is fascinating about the study of place names is why certain names persist historically (over centuries), while other names might be erased, modified, and changed over time. To some extent languages can act to preserve certain place names. For example, folk etymology as underscored by the process of assimilation and phonetic transfer has helped to preserve Indian, English, French, Spanish, and Portuguese names in America. Many Spanish names are easily absorbed into English by phonetic transfer and remain today as place names in America: San Francisco, San Diego, Los Angeles, Sierra Nevada, Colorado River, and El Cerrito.

On the other hand one might seek to find out the variation and density of place names spatially. Several factors explain the density of place names. These include the physical environment and topography: flat areas with no significant physical landmarks would lend themselves to less place names compared to a variegated topography. Population density bears a somewhat proportional relationship to the density of population because of the proliferation of habitation names. Other factors that
affect the density of place names are length of human settlement in an area (new names replacing or added on to old names) and the cultural pattern of people in habiting an area. Stewart argues that Americans and their relatively unpopulated landscapes saw things in a ‘larger way’ and hence names covered large areas of the landscape (representing miles of an area) compared to Europeans who filled their densely populated landscapes with a density of place names in Europe.

Indigenous Landscape Signifiers

The value of place names is that they reflect specific localities, landmarks, and identities in otherwise amorphous spaces and environments. In nonurban landscapes, the imprint of indigenous place names by inhabitants provides significant symbolic signifiers (sacred sites, legendary places, tabooed locations) in a large landscape. With its wide expanse of open space and pristine environments, Australian Aboriginal place names reflect specific aspects of physical geography (landscape morphology, watering places, flora, fauna, insects, etc.), folktales and mythologies, and ancestor experiences. Australian Aborigines embed their place names in their ‘Dreaming’ which connects important sites and pathways for each community’s survival in their desert environment. Unlike most societies where place names are part of public and societal knowledge, among the Australian Aborigines the knowledge of their environment and its identity remains a multilevel secret within a tribal community and kept away from non-Aboriginals and other communities. In New Zealand, Maori place names generally underscore two themes: (1) they stem from myths and early history based on the names from the homeland of Hawaii that have been transplanted to Aotearoa (New Zealand) and (2) they reflect very earthly and natural landscape themes (water, rivers, soils, vegetation, fauna, and landforms). Historic English place names on the other hand define over whelmingly topographical, geomorphological, and bio geographical landmarks (rivers, marshes, hills, forests, springs, valleys, stones, trees) and cultural landscape features (villages, forts, towns, fortified dwelling sites, agricultural fields, burial sites, farms, churches). Place names in China mirror to a large extent cardinal directions (Peking – northern capital, Kiangsi – river west, Shantung – east of the mountains) and physical geographical features (Chinkiang – river market; Hupeh – north of the lake, Szechuan – four streams).

In Australia and Southeast Asia, indigenous cosmologies have bearings on specific geographic landscapes and environments, by signifying places of identity, social experiences, and cultural memory. James Fox notes that cosmologies are unveiled in the form of ‘topogeny’ or “the recitation of an ordered sequence of place names.” Such topogenies may reveal the journey of an ancestor or the migration route of a group. In some cases, Fox notes topogenies may refer to movement of objects as in the case of the Rotiniese (Indonesian) story of two rocks that settled in the north coast of their island. In the case of Australian Aborigines in northern Australia, indegenous sea cosmologies reflect journeys of ancestral ‘Dreaming beings’ across the seas. In the process, the journeys, sites, islands and places of these Dreamings serve as a way of legitimizing claims to lands, resource ownership, and perceptions of territoriality.

Cartographic Representations

One important repository of place names and their changing references to villages, towns, physical landscapes, areas, kingdoms, countries, and regions lies in maps. Maps provide an almost encyclopedic reference point of place names over time from various cultural vantage points. But by far the Western mapping tradition since the fifteenth century had the greatest impact in documenting place names across an expanding oikoumene or in Jane Jacobs’ view the “over determined signifier of the spatiality of the imperial imagination.” In Southeast Asia, two historical map books by Thomas Sua´rez and David Parry provide a monumental testimony to the frenzied Western interest in mapping this region complete with all its indigenous and Western baptized place names.

For historical geographers and cartographers, one of the great exercises has been to try and give place name meanings and current spatial identification to the numerous names of ports, towns, rivers, mountains, islands, and seas of the Old World (Europe and Asia) in Claudius Ptolemy’s (c. AD 90–168) Guide to Geography. Given the supposed reference to a treasure trove in Southeast Asia, many adventurers and scholars have tried to identify Ptolemy’s Aurea Khersonese (Golden Peninsular). Paul Wheatley’s masterly work, The Golden Khersonese is one example of how painstakingly a historical geographer has tried to piece together all the place names in Ptolemy’s Geography on the Southeast Asian region by looking at indigenous, Arabic, Indian, and Chinese names and the natural produce and trading activities of the past. Yet, the debate on Ptolemy’s names and places never ends. Even Wheatley’s thesis, that the Golden Peninsular refers to what is currently West Malaysia (or Peninsula Malaya), is challenged by W. J. van der Meulen in his equally meticulous reconstruction of vernacular names, past trading activities, and physical geography of the region.

In the case of the celebrated French historian, Fernand Braudel in his monumental work, The Identity of France, the study of place names is not only a guide to the history of places and regions but can take scholars back
even further in time to the prehistory of areas. The use of dialects and their many alterations in place names in France he notes provide “many chronological land marks,” that can send “beams of light into the darkest corners of our past.” In a way, place names make history visible because it perpetually elicits historical and cultural curiosity. Braudel saw the study of place names of pays, villages, bourgs, départements, and territorial units as revealing France’s past diversities, a mosaic of landscapes changed and reshaped that informs us of past forces that shaped a “series of different Frances.”

Place names have been important in registering the changing political geographies of areas and regions. What Jane Jacobs calls the “promiscuous geographies of dwelling in places” (Self and Others, past and present), cultural landscapes and their place names often recall spatial struggles, the binary struggles of colonial powers and local populations, or what Edward Said refers to as the “geography which struggles.” In Latin America, Robinson argues that when “regimes fall, empires collapse, or one local elite replaces another, very often a name changing process is initiated in particular places.” In Southeast Asia, many names of places reflect the places of defeats and victories of past battles: Siem Reap or ‘the defeat of Siam’ (in Cambodia) is the place where King Ang Chan of Cambodia defeated the Thai king, Mahachakrapat. On the other hand the adoption of foreign names as place names by local polities can help elevate and legitimize local rulers to a wider civilizing power. Sheldon Pollock argues that the rulers of Angkor by the “wholesale appropriation of its toponymy” became part of the “circulatory space” of the Sanskrit cosmopolis from South Asia. In Taiwan, Hsieh analyzed place names to construct the sequent occupation of colonizing immi-grant groups. More recently (May 2007) it is rival political parties that are replacing old place names and creating politically biased place names in Taipei the then ruling party, the Democratic Progressive Party (DPP) stripped the name of the once revered Kuomintang (KMT) leader, Chiang Kai shek from a Taipei monu-ment and renamed park “Taiwan Democracy Memorial Park”. In retaliation, the KMT elected mayor of Taipei renamed the road outside DPP elected President, Chen Shui bian’s office, the ‘Anti Corruption Democracy Plaza’ as a jab at the corruption tainted President.

**Colonial Impacts**

At a global scale, one can see how colonialism created a new landscape of place names Christianized by European names and Christian relationships: America (after Amerigo Vespucci), Veracrux (Villa Rica de la Vera Cruz or Rich Town of the True Cross), San Salvador (Holy Savior), La Paz, Bolivia (after Nuestra Senora de la Paz or Our Lady of the Peace), the Philippines (after Prince Philip of Spain), Easter Island (discovered on Easter Sunday), Christmas Island (discovered in 1643 but named Christmas Island by Captain Cook on 24 December 1777), and Rhodesia (after Cecil Rhodes). In Africa, the Portuguese trading in the coastal areas of West Africa referred to each area based on its exports hence the names: Grain Coast, Gold Coast, Slave Coast, Ivory Coast, and Diamond Coast.

In a broader sense, the expanding European Biensk von stung was signified by Eurocentric place names. Many places around the world were seen as ‘new’ Western discoveries hence the ‘new’ added to place names. America was the Novus Mundus (New World) and other ‘new’ places fol-lowed in America and around the world: Newfoundland, Nova Scotia (New Scotland), New England, New Guinea, New Zealand, New South Wales. For Indo-nesians, the country’s name Indonesia (meaning Indo: Indian, neune islands) came from Westerners in the region, but Indonesians refer to their country as Tanah Air or ‘Earth and water’. Similarly, the Chinese refer to their country or kingdom variously as T’ienhsia (under heaven), Chung Yuan (central origin or original center) and more recently as Chung Kuo (central country of middle kingdom) while the Europeans referred to the empire as China, derived from the Chin dynastic term, ChIn Kuo (or Chin kingdom).

In colonial cities, street names were meant to char-acterize European towns reflecting their Portuguese, Spanish, British, Dutch, Belgian, or French metropolitan masters. Colonies were not viewed merely as abstracted or conceptual spaces but existential social spaces and Europeanized place names reflect best Doreen Massey’s notion of the “ever shifting social geometry of power and significance.” Each of the colonies carried with them succeeding place names reflecting their colonial masters. In India, it was Portuguese, French, and English; in Sri Lanka and Malacca it was Portuguese, Dutch, and English; and in the Philippines it was Spanish followed by American. In Australia, Jane Jacobs argues that the dominant colonial power in the name of the imperial project evaluated space, drove territorializations, created homely environments, established ordered grids of occupation, mapped areas of their occupation, and marginalized the earlier geographies of Aborigines. In colonial Singapore, Brenda Yeoh observes that competing vernacular representations (Malay, Chinese, Tamil) of street names served as competing representations of the colonial enterprise of governance and surveillance. The Asian populations’ use of their own place names signified a diversity of sociocultural influences, competing repre-sentations of the landscape, as well as a syncretic character of the city. Ironically, while colonial govern-ments were creating new place names to imprint their authority over their colonized landscapes, many colonial
The postcolonial rise of nationalism in many developing countries has seen a reassertion of indigenous place names. On independence, many of the island states in the Pacific reverted back to their indigenous names: Tuvalu (from Ellice Islands), Vanuatu (from New Hebrides), and Kiribati (from Gilbert Islands). In the continent of Africa, the reversion to indigenous country names was widespread after independence from the colonial masters. Benin (from Dahomey), Burkina Faso (from Upper Volta), Ghana (from Gold Coast), Djibouti (from French Somaliland), and Rhodesia (named after Cecil Rhodes) became Zimbabwe. In Burma, the military junta opted for Myanmar (comes from myan or strong and maa meaning hardy) as the country’s new name, its capital of Rangoon was changed to Yangon, and its main river the Irrawaddy became the Ayeyarwady. Similarly, Ceylon became Sri Lanka (1972), British North Borneo became Sabah (1963) and in India, the roll call of city names since independence has not stopped. Every few years, cities named by the British are being renamed: Trivandrum to Thiruvananthapuram (1991), Bombay to Mumbai (1995), Madras to Chennai (1996), Calcutta to Kolkata (2001), and the proposed Bangalore to Bengaluru (2017). Even in the noncolonized country of Siam, the country’s rulers changed the Western derived name to reflect its true national spirit and renamed the country, Thailand (1949), the ‘land of the free’. These name changes in the contemporary world reflect in part the complex processes of deterritorialization and reterritorialization of the histories of connection and disconnection and what Doreen Massey calls the “progressive sense of place.”

Every war of nationalism has also been signified with the erasure of place names. The nationalistic unfolding from formerly developed nations to construct the ‘nation’ and at times underlined nationalist ideologies (e.g., Malayan, dialect and jingin names) to construct the ‘nation’ and at times names were erased in line with the reshaping of national imaginary. In Great Britain, the Council for Name Studies in Great Britain and Ireland saw the importance of place names as a national endeavor and hence encouraged its own members in March 1965 to compile a list of place names covering England, Scotland, and Wales. The result was the book by Margaret Gelling, W. F. H. Nicolaisen, and Melville Richards, The Names of Towns and Cities in Britain.

At the national level, it seems evident that place names provide communities a sense of social belonging, territoriality, and national ownership. As Claude Lévi Strauss observed “space is a society of named places.” A place name gives identity to people as in country names. We refer to citizens by their country or nationality: English, Russians, French, Mexicans, Japanese, Indians, and Australians. Names of nation states carry a sense of deep pride for their citizens. In some ways, country names have become important brand names for food, sports, history, holidays, and other human activities. We think of Thai and French foods, of Brazilian soccer or football, of Italian and French fashion designs, and German and Swiss precision. Place names also carry with them idyllic, Edenic, and relaxing associations: Hawaii, Bali, Tahiti, the Caribbean, and the Maldives.

For the Westerner, the terms, ‘Orient’, ‘the East’, and ‘Asia’ are more than cardinal reference points. The geo graphical remoteness and ethnocentric distance of Asia evokes in Westerners exotic ideas, romantic echoes, fantastic overtones, and by a byword for the marvelous. Asia to the Persians and Europe to the Greeks became counterpart
entities and divisions, a product of names developed in blundering fashion but probably one of the first triumphs of scientific geography. Similarly the term 'Indochina', its mélange of Indian and Chinese elements stirs French imaginary scaffoldings on which Indochina as a fictional place, a lieu de mémoire, and a vision of an exotic utopia were erected and against which the fantasies of artists, writers, filmmakers, architects, political figures, and others emerged. On the other hand, place names like Casablanca, the French Riviera, and Monaco distill romantic imaginations especially for the Western world, a product no doubt of the movie industry. In France, the names of pays are identified with specific types of cheese (Brie, Normandy) and liquors (wines, brandy, champagne: Cognac, Champagne, Burgundy, Medoc). In other cases, place names of pilgrimage cities reveal religious and spiritual connotations: Mecca, Varanasi, Bethlehem, Fatima, and Lourdes.

Urban Cues

For many countries, cities, and places around the world, their names might carry important mythical, magical, and legendary stories. In the Pacific Islands, place names are seen as products of mythologies that the original immigrants carried with them. The process of 'land naming' or 'land taking' referred to newly entered lands assimilated by an immigrant people to its imported heritage of myth. Place names also reflect myths developed from specific places. Singapore (after the Sanskrit name Singapura or Lion City) derived its name when an indigenous ruler, Sri Tri Buana in the fourteenth century saw a supposed 'lion' in the island and decided to call its thalassic kingdom, Singapura (Lion City) from then onward.

Given that cities are the most culturally imprinted and extensively engineered landscapes of human habitation, it is not surprising that cities have the greatest concentration of place names compared to any other areas of human habitation. Cities are defined by their street and road names and less so by their physical landscape, a testimony to the human and cultural transformation of the urban landscape. As Lewis Mumford reminds us, the city is not only the symbol of human civilization it is the ultimate artifact of human engineering, planning, and culture. However, while odology, the science or study of roads and journeys is pertinent to transportation and urban geographers, street names are equally important to historical and cultural geographers. This underscores the fact that roads are no longer pathways to places, they are places. Hence their place names give identity in an otherwise dense and chaotic urban landscape. In urban areas especially, place and street names often provide the most veritable historical geography of a city.

In the streets of Singapore's old Chinatown, the resident and tourist alike have an invaluable guide to Singapore's fascinating cultural and historic district. The Chinese street names of Chinatown provide the cultural, religious, social, and leisure activities of Chinese who lived there in the past. Indeed, the very reference to Chinatown as a Chinese district is defined and encased by a street's name: 'Bullock Cart Water' or Kreta Ayer (Malay), Gu Cia Chee (Fujian or Hokkien), Ngee Chey Shui (Cantonesese), or Niu Che Shui (Mandarin). Ask any taxi driver to take you to 'Chinatown' and he will look at you with a blank stare but state you want to go to Kreta Ayer or Gu Cia Chee and he knows you want to go to Chinatown. At a time when over 60% of Singapore's population lived in less than 2% of the island's total area, streets were the working, recreational, social, food, and open spaces of people. The streets of colonial Singapore contribute to the 'imageability' (meaning, expressiveness, stimulus, and sensuous delight) of Singapore in foreign eyes.

Since the early development of cities, societies have embellished their cities with thousands of place and street names. Place names provide urban dwellers the cues, landmarks, and legibility of the city. Place and street names help the millions of city inhabitants move around effortlessly. More important, they give city denizens a sense of place and identity in an otherwise large, impersonal, and amorphous environment. It is through street and place names that people grow attached to their hearts, their affection for their neighborhoods, and their sense of nostalgia for their city. Street and place names provide invaluable social bonding and place relationships for urban citizens living in a fast-paced, rapidly changing urban environment. The experiences in and attachments to places reflect Yi Fu Tuan’s topophilia defined as the affective bond between people and place or setting. For an older generation of urban citizens, the city’s places and street names are their security blanket in mobility, their cultural beacons and their nostalgic reflections of personal experiences. Older people need more landscape cues to navigate their urban spaces. The personal geography of the elderly requires a coping mechanism within their environment to enhance their lives. While the change of street names have become publicly contested issues, unfortunately, as rapidly developing cities expand and are renewed, replanned, and rejuvenated, streets continue to be expunged, open spaces and landmarks are destroyed, and these dramatic landscape changes inevitably make the city less legible to their long term residents.

Street, ethnic areas, and urban district names are colorful landscape anchors that provide insights into many past activities, trades, personalities, ethnic groups, landmarks, buildings, leisure, and cultural activities of cities. Street names inter alia unveil localized trades
and tradespeople. Indeed one might say that the study of urban street names can lend invaluable insights into the city’s history, its evolving cultural landscapes, its social fabric, and its economic relationships. In her analysis of 'Old Singapore', Maya Jayapal used a whole litany of street and place names to bring out Singapore’s social, cultural, and economic landscape at the turn of the twentieth century. Street names provide evidence of the diverse peoples, personalities, and renowned persons who have helped shape the development of their cities. Hence, street names contribute to our future because the memories of the streets belong to all the children of a particular city.

Research Issues on Toponyms

Notwithstanding its cultural, social, economic, and political insights and perspectives, the study of place and street names is best pursued by scholars with a historical geography inclination and interest. Given that the uncovering of the origins and meaning of place names is a painstaking and tedious process, it is not an exercise that can be rapidly undertaken. It requires patience, a gift for languages, and academic serendipity. Place name research requires work on archival records, old paintings and photographs, antique maps and charts, interviews with pertinent people, on site field work, myths and legends, and published materials (newspapers, journals). Given the long, meticulous, in depth knowledge and historical research of countries, cities, and places, most researchers on place names have little mobility in the spatial outreach of their research. Indeed, most place name researchers tend to spend a lifetime of research within familiar, circumscribed areas they live in (cities, countries).

Despite all the evidence available, the veracity of a place name poses several problems: (1) the earliest recording of a place name may have occurred centuries (with linguistic transformations) before its coining and available records, (2) the interpretation of particular elements from which the place name is derived can be disputed and hence remains uncertain – often there are several possible interpretations for a place name; (3) in dating the original coining of a place name it is important to know when it reflects a feature of landscape or society that is long term (more information and hence reliable) or ephemeral (less informative); and (4) the place name might not be a settlement, field, or feature it now represents, given that mobile villages were common in the Dark Ages in Europe and hence the name of a village may be a feature of some other place it was located formerly. For these above problems, the study of place names by varied researchers remains a slow investigative process in which the end goal is the satisfaction of verifying data and finding the truth to the origins and meaning of a place or street name.

See also: Belonging; Neighbourhood Change; Postcolonialism/Postcolonial Geographies; Sense of Place.

Further Reading

Place Names

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Glossary

Demos The people governed by a democratic state; refers historically to Greek city-states, but is now applied more broadly.
Dualism A conceptual division and usually an opposition.
Externalities Spillovers from a land use or activity that affects other properties or other properties. In economic terms, externalities are not generally reflected in the price of the property that creates the externality, even though it affects surrounding property values – either positively or negatively.
NIMBY Stands for ‘not in my back yard’. Usually associated with political struggles to keep facilities and noxious land uses out of neighborhoods.

Political Opportunity Structure A mixture of the institutions, ideas, political agents, and networks that condition the kinds of political activities possible in a place.
Politics of Turf Often associated with NIMBYism, these politics are often concerned to preserve or to protect a local area, neighborhood, or even a particular parcel of land. It implies a defensive strategy to forestall change.

Rational Choice Theory A normative theory of individual decision-making. It posits that decisions will be made on the basis of an evaluation of self-interest or of what will provide the greatest benefit with least cost to the individual.

Standpoint Epistemology A theory of knowledge that holds that knowledge is positioned, in the sense that what one knows of the world depends on the social positioning of the knower. Usually associated with an argument that members of marginalized groups – e.g., women, racial minorities, subalterns – have a more complete understanding of the world because they must learn how to negotiate the power relations that members of the dominant group can ignore.

Subaltern A marginalized group that views the dominant order ‘from below’.
Transgression Most simply, involves crossing boundaries that, from a normative perspective, should not be crossed. It involves a violation of rules, norms, and/or spaces.
Voluntary Service Organization Often associated with social and human service delivery, these organizations are part of the nonprofit, or nongovernmental, sector. The term ‘voluntary’ is a misnomer in most contemporary societies. It reflects a tradition and time in which many of these organizations were organized on the basis of volunteer labor and voluntary contributions. Many organizations now, however, are highly professionalized and receive significant government and private sector funding.

Introduction

The politics of place are contested. They are contested, in an empirical sense, as conflicts over ownership, the activities in a place, and the meanings or significance of place are waged through public debates, policy, law, and acts of transgression. These conflicts are important not simply because they make and remake spaces, but also because they are implicated in governing: in making a public governed and in constituting the demos. The politics of place are also contested in terms that are more theoretical, if no less political. Here, the debates are about whether the politics of place and space are regressive or progressive, and therefore whether the public that is formed through the politics of place is inclusive and democratic or whether it is riven with power relations that divide, marginalize, and oppress.

Some critical social theorists have proclaimed space to be static, fixed, and therefore better suited as a tool for domination and control than for progressive, radical, or democratic change. Political struggles that are locally waged or that focus on localities have been tagged by these theorists as parochial, limited, and reactionary because they do not contest that larger spatial context. Against this perspective are a variety of theorists – including liberal, communitarian, and radical democratic theorists – who point to the progressive potential for a politics of place, as long as place and locality are understood as standing in relation to other places and as formed out of the operations of broader structural processes and forces. Rather than being static, fixed, and parochial, they argue the politics of place link the struggles of the everyday and of the everyplace to the broad processes that shape our world, thereby providing an entry by which struggles from the margins can influence power relationships at the center, forming the dominant order. From this perspective, the politics of place are about affecting social and political change broadly understood. Theorists from both sides of this
debate, however, understand the politics of place as being manifested in a host of key issues considered within political geography, including nationalism, territoriality, transgression, resistance, place making, and processes of inclusion and exclusion.

In the preceding paragraph, the progressive and reactionary potential of the politics of place are framed as a dichotomy — as being either one or the other, and significantly, as being either ‘good’ or ‘bad’. The politics of place are thus located in the convergence of what seem to be dualistic relationships. They are argued to be particularistic, even as they are shaped by putatively homogenizing processes such as those associated with globalization and modernization. They often involve attempts to create fixity (rather than reflecting it) in a changing, mobile world. They are struggles that are material, as well as ideological and emotional. It is in the tensions between these seeming oppositions that place — as object, as a resource, and as an expression of relationality — becomes political. Indeed, the tensions between these apparent oppositions mean that neither ‘place’ nor the ‘politics of place’ can be easily or meaningfully discussed in the abstract; rather, the politics of place must be understood as grounded in empirical contexts and struggles. Through struggle, the apparent dualisms of place converge to create political opportunity structures that constantly mutate and create openings and closings for political projects of many sorts.

Politics of Placemaking and Place Identity

The perspective just outlined has not been the primary way in which the politics of place have been described. Instead, much of the geographical scholarship has been directed to empirical analyses that address the ways in which ideas about place and its significance are mobilized in various struggles. Sometimes these struggles zero in on particular places and the politics are focused on the people in a place, and the place’s use, history and future. In much of this research, the focus is on politics about place and can often be thought of in terms of place making, whereby political action and debate are intended to make (or remake) the place. In other cases, however, geographers have focused on place as a tool — commonly a signifying tool — in broader political struggles. Very often, the emphasis is on the characteristics of the place that can be used to promote a particular cause. In these cases, the politics of place often emphasize place identity in an attempt to promote a particular vision or goal. In most cases, however, placemaking and place identity are intertwined in political mobilizations, and so authors focus on the resources and opportunities in and of place. Their concern is with the ways that institutional structures, ‘idea sets’, political relationships, and networks within and beyond the place in question shape the possibilities and potential for political action.

Geographical research on the politics of place has included a range of specific topics, including the politics of turf and NIMBYism (not in my backyard), the location of public services, neighborhood and contextual effects in elections, economic development priorities, public space, border studies and boundary making, and to some degree, nationalism. In this research, attention is given to the qualities, characteristics and contexts of a given place and how these affect the particular political topic under study. Attention is often directed to the values, economic conditions, and social relations that may characterize different areas and the ways these influence political goals and the outcomes of political processes. Studies of public service delivery in the context of devolution and neoliberalism, for instance, often consider the varying needs of neighborhoods across the city as well as the capacity of neighborhood based voluntary service or organizations to meet those needs. They may also analyze the ability of local activists to draw attention to their needs, based on their political and economic connections and their ability to mobilize neighborhood residents and others from beyond the local area to draw attention to their plight.

As these examples suggest, political struggles over place are not ‘merely’ local struggles — as the invocation of place might imply — but rather, occur at multiple scales. For example, nationalist movements often use particular sites or monuments as an emblem of broader claims on territory as a nation. Similarly, what might appear to be a localized struggle related to a polluting factory in one neighborhood might be networked into a national or international organization fighting toxins or working toward environmental justice. This is one aspect of the networked, relational nature of the politics of place.

Through political struggles, there is often a hope on the part of participants that the qualities of a place can be changed by new users of the place and of adjacent places, when ‘users’ can be thought of as people, land uses, or activities. This belief suggests that the politics of place are implicated in the making and remaking of places. Sometimes the remaking of place is intentional; in other cases, it is perhaps not an intended consequence of action, but an outcome nevertheless. In still other cases, change in the qualities of a place — or perhaps the fear of change — is a reaction to actions that remake other places, but that have spillovers or that carry externalities. For example, economic development politics — whether at the level of the building, block, neighborhood, city, or region — entail the remaking of place at their core. This remaking is often discussed in terms of regeneration or revitalization, or may be even simply ‘sprucing up’ a place. Because places are interlinked, changes in one
place will have effects on other places. Sometimes that enables neighboring places to ‘free ride’ off the benefits of redevelopment, but sometimes it means that other places have to carry the costs. Redevelopment efforts that attempt to move ‘incompatible’ land uses out of a renewal area – for instance, that move services for low income and homeless people out of areas to be redeveloped in high income housing – often simply force the land uses into other neighborhoods; rarely do they address the underlying reasons those services are required. In such cases, those services migrate to other neighborhoods, with attendant consequences. The ripple effects created through these efforts to change the characteristics of the redevelopment area can set in motion other efforts to ‘protect’ the areas to which services move; these secondary political efforts are often discussed in terms of a politics of turf that reflect a NIMBY attitude and are characterized as reactive and negative. The politics of placemaking, it seems, are characterized by the same power relations as society at large; they often reinforce those power relations, rather than challenge them.

The politics of placemaking often entail a struggle over the ‘important’ or defining qualities of a place. These politics, in turn, rest on a normative vision of place, addressing not simply who or what is in a place, but who or what should be in it. Nationalist movements, for instance, often argue that certain people – usually ethnic or religious groups – have a right to occupy a place and that their culture and identity have a preeminent or even primordial claim to it. Such claims have, in turn, been used as justification for defining and strictly marking boundaries and for other acts of exclusion directed toward people or groups who do not ‘belong’ to the place. Sometimes these can be violent acts of exclusion, such as in ethnic cleansing; at other times, these acts of exclusion can be more subtle, even if relying on violence of a different type. Efforts to move homeless and street people out of redevelopment districts and spaces of consumption, for instance, involve a normative vision of who belongs in those newly made places. Curfews that limit the access of teenagers to shopping malls on evenings or weekends similarly reflect beliefs (and the power to enforce those beliefs) about who belongs in the mall and under what conditions. Laws and police tactics that regulate protest and political speech in certain areas and at certain times are similar statements of who and what belongs in a place. Each of these acts involves the identification and legitimation of the people and activities that can and should be in particular places by promoting – and often valorizing – place identity. Nationalism often mobilizes a place identity and takes extraordinary efforts to preen and maintain that identity. Less spectacularly, but perhaps no less effectively, the ‘small’ or mundane acts of regulating, policing, and managing a place rests on an identification of and with the place and an ability to act on beliefs about who and what belongs in place and, by extension, who and what is out of place. Because the practices that maintain place identity often involve exclusion, they give rise to concerns that the politics of place – and particularly politics that mobilize place identity – are reactionary, parochial, and in extreme cases, construct spaces of hatred and violence.

Geographers have demonstrated, however, that the efforts to claim space and identity are never so complete, finished, or clear cut. Resistance is also part of the politics of place and may also entail a normative vision or identity for place. So, for example, when countries build and maintain border fortifications to keep people from the ‘other side’ out, such as was done by the United States on its border with Mexico and by the Israeli government in the West Bank, the governments are claiming that people belong on one side of the border or the other, but not in both places; the basis of belonging is identity as citizen of a place, an identity that is exclusive and that ‘others’ do not share. The identity of a people, then, is important to the identity of the place. Yet, barrier fences are often quickly ‘tagged’ by graffiti artists, art installations, and political posters that promote a different identity for the area, identities that are accompanied by different understandings of who should be given access to the place, who belongs to the place, and under what terms. Similarly, acts of trespass, squatting, and other forms of transgression are often attempts to take land and to remake place. Community gardens in New York City, for example, were often built on squatted land – land that was formally owned by the City and held as a site for housing redevelopment, but that was claimed by the gardeners as a site of community formation; the gardens provide the basis for political mobilization to challenge what the gardeners believed were sweeping injustices in the distribution of social resources. In other cases, transgressions do not involve taking land, so much as changing the norms as to what is acceptable in a given place. Movements to allow breast feeding in public can be seen as attempts to transform what counts as a ‘public’ activity, shifting and perhaps making more permeable the metaphorical boundary between public and private places. Decisions on the part of Muslim women to wear the veil in public places are also sometimes motivated by a desire to change the boundaries between public and private, to advance a public recognition of the legitimacy of an identity that might otherwise be ‘located’ in private.

While some might romanticize these acts as progresive or as indicative of the ability of the weak or marginalized to challenge powerful institutions and ideologies, it should be recognized that resistance is not the exclusive domain of the oppressed and that people with more resources and power can also resist what they see as inappropriate uses and users of place.
Such resistances can be seen when police and private security agencies patrol neighborhoods or when business districts ‘resist’ the persistence of loiterers, vagrants, or people who do not ‘belong’ in a place. And the putatively progressive or reactionary nature of given resistances is not always clear. When indigenous groups confront governments and corporations that attempt to exploit the resources on indigenous lands, they often claim property rights the land and their culture. These acts are ex clusory at the core, relying on rights that are often assumed to be the domain of the powerful. As this ex ample suggests, acts of resistance and transgression are often paradoxical. Such acts draw on deeply held ideas about what a place should be like and seek to remake place to be compatible with those goals and visions. They are political acts that are dependent on place, but the political goals are not pre given. Whether these are inward looking and regressive or outward looking and progressive is similarly contingent.

**Place and Politics**

While the meaning and signifying use of place is pliable and indeterminate, it is nevertheless the case that it is invoked in a variety of political conflicts and processes. What is it, then, about place that gives it such purchase? Why is it so frequently invoked – as an inspiration for mobilization and as a site – and why is it useful for analyzing political struggle? In answering these questions, it is helpful to suggest a definition of place – of what we appeal to when talking about place – developed by John Agnew in his influential 1987 book *Place and Politics*. Agnew defines place as constituted by three intertwined elements:

- **locale**, the settings in which social relations are constituted (these can be informal or institutional);
- **location**, the geographical area encompassing the settings for social interaction as defined by social and economic processes operating at a wider scale; and
- **sense of place**, the local ‘structure of feeling’. (Agnew, 1987: 28)

These elements of place each plays a role in the politics of place, but in ways that shift or that differ from struggle to struggle. Their real significance is seen when they are combined, but it is useful to discuss them individually at first.

The first element – locale – is significant because it provides a focus for politics, because it grounds politics. For geographers, it is a truism that politics occur in place; it is therefore important to consider the character of place and the relationships in place that shape the ways in which politics play out. The locale, then, may provide a specific example or political issue around which agents can mobilize. The nature of the relationships within a locale – say for example, within civil society or between leaders of local industries and the local government – will shape how those politics play out. Values, goals, idea sets, and the qualities of place discussed previously are included in this concept of the locale.

Places, or locales, do not exist in isolation, however, but are connected to other places through the operations of processes that extend beyond a given place. They are also connected through the networked relationships between individuals and institutions in different places. ‘Location’ is the term Agnew uses to describe these externally oriented relationships and a given place’s position within them. Many recent theorists of place use the language of actor network theory (ANT), instead, to talk about place as being a node in a network of economic, political, and cultural relationships through which power flows; these networks can be mobilized or activated in political struggle. The language used by Agnew and in ANT is slightly different, but they share a conceptualization of places existing in relation to each other and as being constituted through those external relationships in addition to the internal relationships of the locale. In other words, they refuse to separate place from the networks and relationships that operate within and beyond the locale. These relationships and networks create what Doreen Massey refers to as power geometries in which political agents form identities and engage in political projects.

Finally, ‘sense of place’ stands for a shared set of interests that can (but that do not always) link people, even in the face of obvious differences. For example, a shared fate that comes from living together in a place can form the basis for an emergent sense of being a community, a public. While this commonality may not lead to agreement on all issues, it might be the basis for a willingness to work together, at least with respect to some issues. This sense of shared purpose may be vital to a particular political project, but it is also important for the creation of a polity in which diverse individuals form a collective that is capable of working together and capable of being governed. This communal spirit is as important to grassroots social movements as it is to nationalist movements. It is made possible by the social relationships that operate in places, big and small. Its importance, in terms of the meaning of place and in terms of how it may be used in political projects, is conditioned by the same power geometries mentioned above.

So how might these three elements of place come together? A host of studies have combined them in different ways, as scholars debate their relative importance, whether they are likely to lead to progressive or reactionary political movements, and so forth. One recent contribution to these debates is provided by Kevin Cox who discusses the ‘spaces of engagement’ and the ‘spaces of dependence’ that shape political struggles. On thinking...
particularly about urban politics, Cox argues that certain spaces – or to use his term, ‘scales’ – construct the issues or dependencies that are often the focus of local political mobilizations. These might be the broader political and economic relationships and networks that are part of the location of politics (to revert to Agnew’s terms). These spaces are constituted through different relations than are the spaces of engagement, the spaces where political agents can address the issues that affect their lives and are the focus of political mobilizations. So, for instance, a neighborhood within a city may have suffered disinvestment due to decisions taken either in the central business district in the city, or more likely, due to decisions that are taken by people who are networked into the central business district, but also to places far away from the particular neighborhood and city. These far away places might include national capitals and corporate headquarters and might be conditioned by stock markets around the world, by resource availability, and by the emergence of new labor forces in other neighborhoods and cities. Together, these are the spaces of dependence. Yet, people in the newly impoverished neighborhood may not have access to those spaces of dependence. Instead, the spaces in which they can engage in politics might be those of the local community center, churches, or perhaps city hall, in other words, the locale. Yet people in neighborhoods even very poor neighborhoods – often can access networks that may transcend the neighborhood, and that may extend beyond the locale. Their political location, then, shapes the spaces of engagement, or to use the language of social movement theory, the political opportunity structures they can access. These are also part of the power geometries that shape the strategies of various political agents and the directions that political struggles follow.

Conceptualized this way, the politics of place are not inherently local, but rather, are connected to broader relationships, networks, geometries that converge, that link places, and that condition the kinds of resources that various agents may be able to mobilize. Similarly, the politics of place are not inherently inward looking. The elements of place combine to mean that the politics of place are simultaneously introverted and extroverted, thus often giving rise to the paradoxes mentioned earlier. By keeping the introverted and extroverted nature of these relationships in tension, some theorists suggest that we should rejig our language to talk about politics ‘in’ place, rather than the politics of place. Such a shift in language would recognize the role of specific features of place – the locale and perhaps the sense of place – in shaping the ways that political struggles are enacted, but still acknowledge the importance of the networks and relationships that locate politics in multiple places and spaces.

**Tensions in and of Place**

Introversion and extroversion would self evidently seem to be in a dualistic relationship, to form a dichotomy. Yet as we have argued, many theorists of place do not see a necessary opposition between them because of the differentiated nature of place or the multiple networks and processes that construct place, and hold it relation to other places. These theorists see not opposition so much as tension defining the pulls and forces that simultaneously ground relationships and link places to each other. This refusal to adopt dichotomous thinking suggests that other dichotomies that have pervaded debates about the politics of place might usefully be reevaluated. A host of geographers have taken up this task and, in so doing, have addressed some of the core assumptions and ontologies related to place and politics that have underlain social science research in this arena.

A logical consequence of understanding place as simultaneously extroverted and introverted is a reexamination of the assumption that place is particular and unique, whereas space is abstract and therefore capable of being generalized as a basis for either research or politics. Distinctions between space and place for instance, are called into question as geographers attempt to unravel the ways that the characteristics of place – what is often discussed in terms of context – are the basis of connections and networks. As networks link disparate places and struggles, they may also provide access to the resources, audiences, and political imaginations that can form the basis for broader political movements. For example, the so called ‘anti globalization movement’ is probably best understood as a series of movements that link very specific struggles – such as indigenous land rights campaigns, struggles to preserve old growth for forests, labor union campaigns against sweatshops – to each other and to other struggles in the effort to build social justice. Each of these movements has its own tensions – tensions that arise from any effort to work through the complex conditions, networks, and relationships that shape particular conflicts, as well as broader processes of exploitation and resistance. The point is not to sweep away these tensions but to show how place matters to the specific forms they take and to broader efforts to combat injustice. In so doing, the unique and particular (often assumed to be place) and the general and generalizable (often assumed to be space) are reconceptualized as co constituted, rather than distinct.

This approach to place and politics also entails a rethinking of the dichotomy between the material and the ideological or emotional, or the objective and subjective. This can be seen in Agnew’s insistence on including sense of place as one of the three elements of place. Agnew roots his concept of sense of place in Raymond William’s influential arguments about...
'structure of feeling'. Williams developed this concept as a means to explain the lived experiences of people in place. 'Structure' is a key word because such experiences are shaped by the long, historically sedimented social relations that define a place, relations that are always both locally and extralocally derived. Such social relations are not made anew every day and in every encounter but are structured through ongoing – and struggled over – social, economic, and ideological practices. These practices are not invariant, but neither are they necessarily easy to shift: they are 'structured'. 'Feeling' is crucial, for Williams, because it is real humans with real lives who experience these structured practices. The emotional or subjective aspects of peoples' lives are critical to how they live these practices, what they do and do not do with them, and thus, how they may be restructured. For Williams, therefore, the objective (structures) and the subjective (feelings) are inseparable: each is a necessary component of the other. In this regard, sense of place is the affective understanding of structures of feeling, the ways in which people understand and experience the practices and meanings that are built into place; it conditions what those practices and meanings entail, are interpreted, why they are important, and how they make (and do not make) a place somehow valuable. As such, understanding sense of place is critical to understanding how place shapes political processes and debates. Returning to indigenous land claims, what are often claimed is more than property rights and the material stuff that is on some extent of land. Rather, these claims are often based on a different accounting of what the place is, which is the same as saying they are based on a different understanding of what the place means. Furthermore, many of these claims are cultural claims that are inextricably bound up with the differing lived experiences of the land in dispute. The sense of what place is, therefore, matters deeply to how, for example, rights claims of indigenous peoples or transnational corporations are put forward. The material and ideological components of place, in other words, are not dichotomous; each is necessary for the other. Understood in this way, it becomes clear that place is inherently political, rather than prepolitical. For example, if place is understood as being constituted only in the realm of the material, then it can be mobilized in attempts to naturalize place, and thereby to erase politics or at least to neutralize them. At the same time, under standing that places are constructed, rather than pre given may lead to a different kind of politics. Such an understanding is necessary to a recognition that place can be remade in ways that might redress inequality or that reflect different political values and goals. As such, refusing the dichotomy between the material and the ideological is a critical underpinning for analyzing the politics in and of place.

From this perspective, place provides an opportunity for addressing political issues in ways that might challenge the categorical common, settled, understandings of political issues. Returning to the discussion of sense of place, we noted that place is sometimes used to create a sense of common purpose that can be useful in attempting to mobilize people around particular political causes. This is certainly the case in nationalist mobilizations, but also in environmental politics and in the community power agenda from the 1960s and 1970s in North American and European cities. These examples (the first often cast as reactionary and the others as progressive and even radical) demonstrate that place is in political strategizing, but the ends to which those strategies are put can differ dramatically. These examples, though, also demonstrate that apparent depoliticization can also be part of the political uses to which place can be put. Nationalism often presents the claim to territory – to place – as natural, as unchanging, and in that way, as uncontestable. While that may be a strategy utilized by nationalist movements, moving away from the dualism between the material and the ideological exposes the strategy as ineluctably political.

A final dualism in the ways that place is sometimes conceptualized poses the static, fixed nature of place as being in opposition to mobility. In an increasingly mobile world, characterized by movement and flows rather than stasis, the opposition between movement and fixity can seem to make place and the politics surrounding it either irrelevant or reactionary. Geographers who emphasize the networked, relational basis of place, however, have argued that this opposition does not hold. If one assumes that places are networked, then the people, ideas, and activities that occur in one place will have implications for other places – and not simply in the sense of externalities discussed previously. Rather, analysts emphasize the ways in which people move through the world, through networks of places, physically and virtually. In this movement, people carry many of the expectations, values, and understandings of the world developed in their 'home' place or in one place, but each of these may change by virtue of movement. The result, scholars argue, is the need to reconceptualize sense of place to incorporate mobility. This new sense of place combines both stability and movement in ways that deny their opposition, and instead leads to a sense of place that is simultaneously grounded and mobile – that is, a mobile sense of place.

Other Knowledges, Other Politics

The preceding comments suggest an instability with regard to place and politics that reflects the networked, relational quality of place. This language, however,
implies sterility and a dehumanized understanding of place. In emphasizing the positionality of place, it sometimes seems as though the ‘people’ within that place have lost their positionality, and perhaps their humanity. Recent theoretical work in cultural politics, however, has argued that it matters who is in these networked, relational places.

The study of politics has often applied a western sensibility rooted in the Enlightenment. The emphasis is on a universalistic definition of rationality, sometimes described as the ‘view from nowhere’. This view dismisses as irrational any political claims that do not fit into its own philosophy of knowledge. It is one source of the denial of the emotional and ideological, the concomitant elevation of the material, and the continuation of the dualism between those. It has perhaps reached its apotheosis in rational choice theory. This view and definition of rationality, however, is not universal, and might better be understood as a dominant view that is western, masculine, and bourgeois. It is therefore located within the relations that structure societies and that privilege certain kinds of agents and their knowledges. Yet, there are other perspectives, other positions, other knowledges that give rise to other rationalities and other politics. These views have been developed from a number of subaltern positions, including those associated with feminism, antiracist scholarship, queer theory, postcolonial studies, and indigenous studies. They sometimes give rise to arguments that people who come from marginalized subject positions have a better understanding of the world and of politics, because they must recognize and be able to negotiate dominant power structures in order to survive and engage in their political struggles. This is an argument often associated with standpoint epistemology. In other cases, these views have been presented as giving rise to different kinds of politics that are based on the knowledges that come from different subject positions without privileging the margins as a site of knowledge formation.

The political struggles surrounding indigeneity provide clear examples of what these arguments entail for politics and place. Struggles over land and the ability to maintain ways of living and being in place have become common, as corporations and governments seek to gain access to resources in areas long occupied by indigenous groups. As an important tool in these efforts, governments, corporations, and sometimes development agencies have mapped the areas, indicating where resources are abundant and accessible; these maps have often focused on resources that are of economic interest in the broader economy. In resisting these attempts, some indigenous groups have drawn their own maps, with different accountings of the resources in the area. These maps may involve different conceptualizations of what a resource is, identify resources in terms of cultural properties and meanings, and draw from indigenous knowledges about the significance – economic and otherwise – of what is in the place. While one might expect these struggles to remain fragmented and disconnected from each other, indigenous land movements in several places have joined together, sharing strategies and connecting their struggles to other struggles such as the global social justice movements. In so doing, they have sometimes reframed their arguments by couching them in the same languages and arguments about property that are commonplace in capitalist economies. As such, these seemingly local and particularistic struggles are networked into a broader set of struggles and political relationships such that local and global politics converge in particular places. There is no guarantee that such networks and convergences will lead to any greater likelihood of success, however that might be defined. Rather, the significance of these networks lies in the ways that different knowledges and understandings – knowledges and understandings that are often thought to be marginal to international politics and economics – can be connected and become part of the framework for debate in other places. In this way, the local knowledge that is the basis of these local politics moves beyond a given place, even as both are simultaneously grounded in place. The knowledge – no less than the politics – is thereby located.

**Politics in Place**

The politics in and of place are a struggle over how lives are to be lived, within the context of a globally and unevenly connected world. The politics in place – the politics rooted or grounded in particular locales, locations, and senses of place – are never only local, but are inextricably bound with struggles over the fates of people and places both near and far. The politics of place – the political struggles over who does and does not belong, over how the resources and rights of the locale are to be distributed, over which individuals and groups are to be granted the power to determine futures – are shaped both by locally rooted structures of feeling and by larger scale processes over which any one place may have very little control.

Places are storehouses of value and values. Places are crucibles within which meanings are forged and ways of life are shaped. As such they exist in dialectical tension with nationally, regionally, and globally scaled practices of economy, culture, and politics. Understanding this, David Harvey argued in his 1989 book, *The Condition of Postmodernity*, that a simple rule could describe the politics of place. He argued that those who command space – through ownership, regulation, or other forms of power – also control the politics of place, even as
command over space takes some degree of control over a particular place in the first instance. But, as the foregoing has suggested, this simple rule needs to be amended. Recent work on the politics of and in place has made it clear, rather, that those who command space must always contend with – as different from controlling – the politics of place. Command is never settled or guaranteed, just as politics in and of place are never settled. In short, the politics of place are always contested.

See also: Actor-Network Theory/Network Geographies; Borderlands; Citizenship; Devolution; Emotional Geographies; Feminism/Feminist Geography; Gentrification; Harvey, D.; Homelessness; Mapping, Race and Ethnicity; Massey, D.; Nationalism; Neoliberalism; Postcolonialism/Postcolonial Geographies; Public Space; Queer Theory/Queer Geographies; Regionalisations, Everyday; Resistance; Social Movements.

Further Reading


Relevant Websites

Http://www.chej.org
Center for Health, Environment, and Justice, an anti toxins and environmental justice social movement.
Http://www.forestpeoples.org
Forest People’s Programme, organizes indigenous land rights movements.
Http://www.greenguerillas.org
Green Guerillas, organizes gardens in low income neighborhoods in New York City.
Http://ipsm.nativeweb.org
Indigenous People’s Solidarity Movement, organizes indigenous groups making claims to land and self determination.
Http://www.cobbmedia.com
New York City Environmental Justice Alliance, advocates for low income neighborhoods and environmental justice.
**Glossary**

**Development Control** The process of considering and granting or refusing permission for development.

**Land–Use Planning** The regulation and control of land uses through legal and statutory measures, such as zoning or development control.

**Planning Theory** General propositions about the nature of various forms of spatial planning: planning theory includes normative considerations of how good planning should be done.

**Spatial Planning** A comprehensive approach to coordinating policies and dealing with competing demands on the use of land at the regional or national scales.

**Urban Design** Three-dimensional esthetic and functional design of city buildings and spaces, including the master planning of specific large-scale projects.

**Urban Planning** State-related policies and programs for neighborhood, local and metropolitan areas, aiming to: effect broad-scale allocation of land uses to areas; order boundaries between them; manage ongoing uses of land, the spatial aspects of economic and social activities and connections between them; and ensure the optimal functioning of urban economic processes and social interactions.

**Zoning** The regulation of land uses through designation of permitted and prohibited uses in given areas delineated on zoning maps.

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**Introduction**

Many textbooks on urban and regional planning begin with a discussion of different dictionary definitions and derivatives of the verb ‘to plan’, and draw out the connections between ‘city building’ and spaces as designs or representations of physical space or built form. Town and country, urban and regional, city and rural, and physical and spatial planning are accordingly seen as specific instances of general human intentional capacities, that combine both ‘planning’ and ‘plans’ to bring about spatial distributions of built forms and social and economic activities.

While such discussions have the merit of attempting to clarify, at a conceptual level, the nature and purposes of spatial regulation and policy, they tend to homogenize what are culturally specific and historically contingent developments of regulatory systems. But rather than being specifically spatial instances of some universal, human future oriented mode of thought, urban planning, and related forms of spatial regulation may be seen to arise from diverse contexts and identifications of, and attempts to solve, disparate problems relating to space, populations, individuals, and activities occurring in particular trajectories of urbanisation. The ways problems are identified, and processes set in place to solve them, are not necessarily the result of the functional social needs, rational decision making, technical procedures or even participatory deliberation that some versions of planning history or theory would suggest.

Urban planning is temporally and culturally embedded in particular discursive practices that embody and express relations of power, which do not stand outside politics as neutral technical exercises in resource distribution or improvements to a general ‘quality of life’. However, this is not to say that such attempts to bring about spatial order or create spatial connections have had no positive outcomes: but it does suggest that the aims and effects of urban planning need to be examined in relation to the particular historically situated circumstances of their institution.

This overview of urban planning therefore discusses, first, planning as expressed in systems of spatial regulation and the knowledge bases drawn on in relation to these. Second, three of the main strands of theorizing within the discipline are examined; and third, some of the intersecting critical debates about the objects and effects of planning are highlighted. In conclusion, convergences and divergences between the disciplines of urban planning and urban geography are examined to draw out the positive potentials for research and practice.

**Urban Planning**

Urban planning is one of a number of designations for forms of spatial planning that encompass ways in which land, land use, spatial morphologies, resource distributions, and social interactions may be planned and managed. Spatial planning involves attempts to plan socioeconomic processes to bring about certain ends, together with drawing up plans, maps, or diagrams that indicate where these activities should take place. Urban planning more specifically has as the objects of its concerns, metropolitan areas, towns, and localities (e.g., residential neighborhoods).
The very proliferation of qualifying terms for ‘planning’ indicates the diffuse scope, multiple purposes, and changing remits of spatial planning. Historically, the term ‘town planning’ appeared in English around the 1890s (although related terms and practices appeared earlier in Germany), and soon became widespread. Subsequently, town or urban or city planning became linked to a number of other ‘plannings’ – for instance, land use planning, country or rural, regional or spatial, social, and, more recently, environmental planning.

The remits of these planning foci vary in different times and places: in some planning systems, for instance, they include housing policy; in others, the focus is on urban design; in some, on environmental and ecological science; and in still others, planning includes what else where might be considered building regulation. However, in general a distinction can be made between regulatory land use planning – variously known as development control, zoning, statutory planning – and broad level policies seeking to distribute social and economic activities in metropolitan, regional or national space (‘spatial planning’). In policy analysis terms, detailed land use regulation is often considered to be a vehicle for the implementation of broader policies, but this is not universally the case: in parts of the US and of Australia, for instance, zoning regulations can operate separately from broader urban policies and are justified as bringing about good spatial and social order in and of themselves.

Urban planning is also variably positioned in relation to cognate knowledges and disciplines, not only in terms of theory and research, but also in indicating the objects of planning practice. In the UK, for instance, early planning texts in the first part of the twentieth century described planning as an art and a craft – an extension of architecture and design – applied in regulating physical structures and the esthetics of the built environment. But such texts also acknowledged the importance of applied sciences such as sanitary, civil and transport engineering, and technical skills in cartography, demography, and statistics. Over time, these connections and planning specialisms have been augmented by, among other fields, cybernetics and modelling; decision theory and policy analysis; physical and human geography and GIS; conservation and heritage studies; anthropology and sociology; environmental science and sustainability; and by perceptions of planning as a locus of place based conflicts requiring communication and mediation skills to resolve or manage.

This array of fields may reflect the complexity of the objects of study and practice. And yet, in general, the development of planning theories has been more concerned with the processes of planning and how they should best be carried out – data gathering and analysis, decision making, policy formulation, participatory practices, or professional ethics – than with questioning formulations of the problems that planning sets out to solve, or with assessments of its outcomes. The next section, therefore, provides a brief and necessarily simplified overview of some of the main strands of planning theory that illustrate this attention to planning process and normative prescription.

Planning Theories

Planning theories can be considered under three headings: theories that see urban planning as the production of urban design and/or large scale master plans; theories that see planning as a process of decision making or as providing policy advice for political decision makers; and theories that see planning as an arena for participatory democracy. These are not mutually exclusive and coexist in many forms, and the emphasis on each varies with time and place. (It should be noted that the trajectory traced here mainly relates to developments in British planning theorization. Since urban planning is culturally and historically specific, a comprehensive coverage of planning and planning theories, systems, and practice across all English speaking and European polities – let alone the rest of the world – is not possible within the constraints of this essay.)

Physical Planning, Urban Design, and Master Plans

Planning as urban design and master planning or neighborhoods or whole towns shares the assumptions underpinning Ebenezer Howard’s ideas for Garden Cities as antidotes to untrammelled Victorian urbanisation. The idea that the environment of whole communities could be designed to facilitate not only health, but also productive economic activities and moral uplift, informed both the institution of planning legislation and the production of texts on the art and science of planning. Up until the 1960s, especially in the UK, planning texts focused on the technical provision of services and facilities, increasingly calculated through standardized measures of minimum requirements and spatial distributions – for light, air, street layout, traffic circulation, open space, schools, hospitals, shops, and so on. Planning theory was concerned with setting out general principles for bringing about desired physical configurations and social outcomes which could be applied in particular localities. Alongside these considerations were aesthetic prescriptions for the production of appropriate styles of housing and village like neighborhoods, reflecting an anti urban standpoint that resurfaced in ‘new urbanism’, ‘urban villages’, and the generally renewed interest in urban design and master planning.
Systems Theories and Rational Comprehensive Planning

In contrast to concerns with the physical and esthetic qualities of urban development, the core concerns of the systems theories and procedural planning theories which rose to prominence in the 1960s and 1970s saw physical design and planning as too limited in scope to solve wider urban problems. Rather, solutions lay in improving the way decisions could be made about the objects of planning.

For systems theory, based on cybernetic conceptions of the maintenance of homeostatic systems, information about urban processes was the key to successful planning and the nature of that information was fairly unproblematic. In principle, there was no limit to the possible range of information that could be rendered into quantitative form and manipulated by computer. These data would inform planners about the state of the urban system, thus allowing disturbances to systemic equilibrium to be adjusted by suitable means – the provision of more services, adequate roads, better located industry, and the like.

At the same time, procedural approaches argued that planning was a form of rational decision making in which 'rational comprehensive' or even 'disjointed incremental' procedures for arriving at decisions were as important, if not more so, than the substantive matters about which decisions were to be made. In this, procedural theory was aligned with a US literature on general government policy formulation and analysis, concerned with improving policy by ensuring that relevant aspects of a problem were assessed and weighted according to rational criteria before decisions were taken.

However, both these forms of planning theory encountered difficulties in dealing with questions of implementation and with questions of the relation between 'rational' planning, politics, and power. 'Optimal' solutions, based on the scientific 'correctness' of procedures and the 'truth' of the results of measurement and quantification, were increasingly challenged by protests over road building and high rise housing development and similar large scale reconstructions and population displacements in impoverished inner cities in the 1960s and 1970s. Government concerns about resistance to urban development and policy implementation led to public consultation becoming a required part of planning procedures, and planning practitioners found themselves increasingly involved in public meetings and community forums.

Communicative and Collaborative Planning

Communicative and collaborative planning approaches respond to the questions of implementation, politics, and power by exploring the involvement of 'the public' or 'the community' in planning decisions about local issues. Communicative planning theories envision planning's role as extending beyond managed consultation to mediating conflicts around land use and development decisions and fostering participatory inclusive local democracy. Ideas of 'multicultural' and 'insurgent' planning similarly connect planning's aims for the good city in the good society with political themes of resistance to power and transformations to direct democracy. This strand of planning theory has been particularly prominent in the US, where there is a long history of local community political engagement and semi autonomous local government (in which land use zoning is an integral part of local 'police power').

A further development of planning theory and the critique of value free rationality currently takes the form of pragmatism, particularly in discussions of ethical planning and the collective or socially derived nature of truths and moral decisions. Pragmatist perspectives on the aims, purposes, and practices of planning raise questions about the status of truth, knowledge, and action in the world, some of which parallel (but are by no means identical with) post structuralist concerns (see below).

Collaborative planning theory, in contrast, is generally more applicable where issues of 'governance' are related to reconfigurations of the state, such as in UK or European contexts. Collaborative planning thus places emphasis on general processes of bargaining among diverse 'stakeholders' over spatial issues, in which planning plays a mediating role in the shaping of places.

Communicative, collaborative, and pragmatist perspectives on planning act as critiques of technical planning expertise and assumptions about the possibility of 'value free', 'rational' decision making, and seek inclusive participation by diverse social groups. Yet, while questioning the technical rationality of planning, these approaches also position planners as having skills and legitimacy in conflict management, mediation, and situated decision making that can be exercised in arenas where the effects of politics, conflict, and unequal power relations (including that of planners) – if not removed – can be identified and muted, restrained, or negotiated.

These three main strands of planning theory – design and master planning, systems theory and rational procedural decision theories, and communicative and collaborative theories – have in common a focus on the processes of planning rather than the objects or aims of planning, and share a normative prescriptive view of the purpose of theory as being the improvement of planning practice, especially planning as the practice of a profession. Planning is seen to be oriented to taking action, and to have practice at the heart of its theory and education, so although these theories may not be grounded in historical specificities of planning regulation or in actually existing planning practices (such as
development control and application processing), they
tend to support claims to professional legitimacy.

Until relatively recently, much less attention has been
paid to how, and in what ways, planning practice relates
to the improvement of cities and the lives of citizens.
There are a number of studies that have attempted to
unravel the difference urban planning might have made,
and there are imaginings of what a good city could be
like. But by and large, although planning education draws
on a range of related disciplines that might provide bases
for evaluations of planning, planning theories have ten
ded not to problematize planning itself. Here, perhaps,
urban geography and planning studies might fruitfully
interact.

Critical Debates

While in the heyday of positivist quantitative modeling
planning drew heavily on urban geography's develop-
mments of location theory, central place theory, and
Chicago School urban ecology, the links between plan-
ing and geography have become more tenuous, with
perhaps the most direct and currently being the appli-
cation of GIS techniques. However, over the last half
century, much of the critical debate about urban planning
and its ability to produce the outcomes for which it aims
has been propelled by work in the fields of urban studies
and urban geography, particularly evident in critiques of
positivist assumptions about the operations of spatial and
behavioral processes.

Planning and the State

So for instance, in the 1970s and 1980s, Marxist derived
critiques of planning as an instrument of the state argued
that urban and regional planning could not hope to
overcome the uneven spatial development inherent
in capitalist processes, and could only act to smooth out
disjunctures between interests in property markets, cre-
ating abstract homogenizing landscapes of capital and
acting as an ideological smoke screen for the interests of
capital against those of the working classes. Similar dark
views of the state's role in producing visible spaces can be
noted in some versions of surveillance studies that trace
the implication of planning in the management of urban
courts.

These debates are pursued in planning literature, but
they are difficult for planning academics and prac-
titioners to assimilate into notions of professional prac-
tice. Views of the state as an arena for struggle around
class or (Weberian) status interests, along with demo-
cratic theories of liberal government that offer at least
some possibility of altering unequal distributions of
power and resources, find more purchase.

Gender, Sexuality, and the City

In like manner, many feminist studies of urban inequal-
ities faced by women have demonstrated how zoning
and the separation of (paid) work places from residential
areas, commuter oriented transport, and inadequately
supplied or poorly located services directly affect the
lives of women, reinforcing the difficulties of domestic
work and creating barriers to paid employment. Like
other structuralist social theories, radical feminism that
sees the state and the planning profession as expressions
of structurally inherent patriarchal power, implies that,
without fundamental social change, planning cannot
hope to achieve its aims. Liberal feminist views on the
needs for equal political and institutional opportunities,
on the other hand, have had significant influence on
planning education and organizations.

Both of these bodies of critique of the gendered im-
plications of planning policies, regulations, and practices
have given rise to a substantial literature: but despite
policy guidance and some regulatory change, these ana-
lyses have not been taken up in policies that might make
substantial differences to the spatial arrangements of
cities. Similarly, in many policy arenas the spatial and
design barriers for individuals with differing physical
capacities tend to fall, like gender considerations, under
the remit of 'social planning', which historically has been
a marginal concern in conventional planning systems.

Queer theory offers corresponding challenges to the
heteronormative assumptions underpinning the planning
of residential areas, the regulation of public spaces, and
the interconnections of place and sexual identity. By
making gay and lesbian identities and differences visible,
queer theories unsettle the ‘planning imaginary’ that
underpins spatial regulation.

Indications of planning's role in the creating and
perpetuating spatial and social inequalities in the city are,
of course, most starkly illustrated in the case of racial
segregation.

Segregated Cities

The study of racially divided urban and regional spaces
has long been a concern of urban geography, urban
studies, and planning research. The roles of zoning,
land use regulation, urban design, and urban policy in
reinforcing and perpetuating segregated cities have been
examined in almost all countries with formalized plan-
ing and housing systems, from the US and UK to South
Africa under apartheid and Palestinian Arab settlements
under Israeli planning control.

Here again, assessment of whether planning's impli-
cation in these social and spatial divisions is redeemable
through better planning education, strategic knowledge,
commitment to change, and willingness to take action,
or whether such systems require complete social
transformation, has depended on whether or not race is seen as a structuring factor in social relations.

Seen historically in the UK at least, and in concert with other assumptions about individual capacities and identities in relation to the creation of spaces and environments, much of planning’s implication in racial segregation can be traced to nineteenth century projects of sanitary reform of the city. As historical geographers have shown, poor urban conditions – dirt, grime, human waste, lack of light and air – were seen as common causal factors for both disease and moral degradation, which were to be solved in schemes to separate healthful and morally uplifting living areas from industry. Reform of the physical conditions of the working classes sought to neutralize the medical and political threats posed by the ‘rookeries’, and to ‘civilize’ the inhabitants into acceptable modes of living. These conceptions coupled those of class (and gender) difference to racial difference, and informed equally, ‘domestic’ reformatory projects and the control and ‘civilisation’ of colonial populations.

Colonial Planning

Questions of the racial implications of planning’s segregationist impulses are present in planning studies of the circulation of settlement patterns across the British Empire and later, the Commonwealth. But while aware of the inequalities and dominations enacted through colonial planning, such studies have tended toward somewhat unproblematized views of the diffusion of planning practices from ‘originators’ to ‘imitators’. Nevertheless, there have been a few notable examinations of how local practices, legal and land ownership systems, or building styles have produced the particularities of different planning systems in different places; how these differences circulate to become incorporated into the practices of planning elsewhere; and in particular, the significance of colonial urban experimentation for policies, plans, and practice in Europe and the UK.

Post colonial studies of urbanization in, for example, India and South East Asia, unsettle notions of unidirectional colonial impositions of sanitary regulation, urban form, housing provision, or racial segregation. Further developments of such historically informed analyses could provide bases for conceptions of planning attentive to differences that ‘parochialize’ planning systems of the North/West.

Towards Poststructuralist Planning

Most of the foregoing critical examinations of the aims and effects of planning point to the way in which plans, regulations, and spatial policies seek to create order, fixity, and functional divisions of space, and to ensure transparent visibility of subjects and actions. Aspirations to overcome this ‘dark side’ of planning hope to work through participatory, inclusive, multicultural forums, and practices to engender democratic decision making. Within the planning literature, a little explored inter section with ‘community development’ studies and practices in the ‘global South’ is a field that could provide material for further reflection on the importance of theorising historical and cultural specificities.

But from other perspectives, such as Foucauldian approaches for example, participatory exercises are seen to foster and incite subjects to enact forms of liberal subjectivity and to conform to the rules of the game of participation. Therefore, while participation conducted in the name of ‘planning’ is productive of certain forms of liberal subjectivity, it is unlikely to produce the transparent, democratic deliberation between autonomous subjects to which some theories aspire.

Nevertheless, and at the same time, Foucauldian and post structuralist approaches emphasize the instability of discourses and the malleable, performative interrelations of subjects and spaces. Power is not unidirectional; ‘the social’ is an arena of indeterminacy; multiple discourses intersect, reinforce, contradict, and overturn one another; rather than consensus, ‘agonism’ and struggle are the stuff of politics; and subjectivity is open ended ‘becoming’. The implications of post structuralist approaches to ‘the urban’ – space, place, and subjectivity – are being developed in planning contexts, where they present further provocation to policies in search of technical, rational ‘solutions’, and open the possibility that planning might not necessarily be tied to the production of static identities in fixed spaces.

Critical debates in and about planning parallel and draw on those in human and cultural geography, and while the connections between urban geography and planning are no longer as direct as they once were, their objects of research and analysis inevitably intersect. In so doing, they raise questions of significance for the normative aspirations of planning theory and practice.

Conclusion

Urban planning as the preparation of plans for, and regulation and management of, neighborhoods, localities, towns, cities, and metropolitan regions involves attempts to organize social and economic relations in space through different levels of government and ‘governance’; and to deal with the political and social consequences of delineating spatial boundaries and influencing spatial allocations of development and resources. Thus, research in both urban geography and planning into issues such as gentrification, urban renewal, and regeneration, the creation of urban villages, social exclusion, the nature of the state, property investment and speculation, sustain able urban development, or analyses of policy discourses,
are of central importance to understanding the objects of planning. In this, the mundane particularities of zoning, development control, and land use regulation should not be ignored by critical studies in either geography or planning.

Increasingly also, debates about space, place, post coloniality, ‘the social’, and ‘the subject’ taking place in geography more generally illuminate questions about how present configurations of space and social relations have come about, what might or might not need to change, and what urban planning might or might not contribute in any particular instance.

But planning considerations of such issues involve added dimensions of seeking guides to action, and a desire for the convergence of theory, analysis, and practice. The emphasis on normative and prescriptive relevance has influenced how research and theorization about planning is conducted in the discipline, with attention being focused on the processes of planning – whether at a theoretical level or as required by the government of the day. Concerns with what is needed to improve planning processes, especially those related to participatory involvement, tend to presuppose that these procedures will unproblematically result in improved environmental, spatial outcomes.

Geographical research into urban issues might be brought more directly to bear on critical examinations of planning processes, especially highlighting the situated contingency of planning practices, and thus further pro ductively modulating the (global North/West) under pinnings of planning’s normative aspirations. Similarly, geography’s concerns with the interconnections of space, place, power, subjects, and identities could well include closer attention to the aims and effects of planning practice and regulation in discursive and material struggles in specific localities and the creation of places.

See also: City-Region; Gender in the City; Governance, Urban; Historical Geographies, Urban; Imperial Cities; Lesbian Geographies; Place, Politics of; Postcolonial Cities; Postmodern City; Queer Theory/Queer Geographies; Regional Planning and Development Theories; Segregation, Urban; Urban Design; Urban Order.

Further Reading


Relevant Websites

http://www.planning.org
American Planning Association.
http://www.aascp.org
Association of Collegiate Schools of Planning (US).
http://www.aascp.planning.com
Association of European Schools of Planning.
http://www.eunos.org
International Network for Urban Research and Action.
http://www.plannersnetwork.org
Planners Network North America.
http://www.pnuk.wikispaces.com
Planners Network UK.
http://www.whatisplanning.org
Planning Institute of Australia and Department of Environmental Planning, Griffith University.
http://www.planum.net
http://www.rtp.org.uk
Royal Town Planning Institute UK.
http://www.planningportal.gov.uk
UK Government Planning Portal.
Plant Geographies

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Glossary

Actor-Network Theory (ANT) According to the Institute for the Studies of Science, Technology and Innovation, ANT focuses around an actor, sociotechnical entity, or technology, conceptualized as an emerging and increasingly stabilized network of associations between diverse material and nonmaterial elements — artifacts, humans, texts, symbols, concepts, etc. ANT usually follows the network-building strategies of a central actor. It stresses the mutual constitution and transformation of elements in the process, and the generation of social phenomena — agency, knowledges, institutions, power — as effects of network building.

City Forests The sum total of trees and plants in a city while fragmented by space, different plantings and management nonetheless constitute an environment similar to most other forests. They have very specific ecosystemic characteristics and can be manipulated and managed to achieve specific ecological tasks.

Dwelling This concept identifies that human cultures as well as landscapes and natural entities are co-constituted by their specific ties across time and space in specific landscape where they co-dwell and evolve. Dwelling prevents us from treating these entities as separable and explicable outside of their place and time and the other entities they share it with.

Posthumanism This perspective attempts to span the 'great divide' between science and social science by arguing that we cannot view humanity as simply 'humans among themselves' and seeks to produce accounts of relations between humans and nonhumans in which neither forms the controlling center and where agency is widely distributed.

The relationship between plants and humanity is a relatively recent field of study, with a number of important works emerging from the 1990s onward. It is prompted by a broader project to bridge what C. P. Snow called 'the great divide' between the natural sciences and the humanities in recognition of the multiple ways in which the natural and human worlds interrelate. Such a view recognizes there are fields and objects of that interrelation that are routinely missed by the institutional separation of the sciences and humanities.

In this emerging field, topics to date include tree symbolism and culture, trees and place, the agency of plants, gardens and gardening, city forests, bushfires and wildfires, modern forest dwelling, forests, national identity, and memory. While concern about environmental and ecological issues and the broader issue of understanding modern practices and engagements with the natural world underwrite much of this work, there are also important theoretical and methodological dimensions of this relationship that are explored through this research. Again, this has generally resulted in the problematization of the humanism of the humanities and the antihumanism of the sciences or what Nigel Clark calls the “now routine insistence on the porosity of the nature/culture binary.” It has also renewed interest in nature–culture assemblages and concepts, such as Sharma’s work on the forests of Europe, Cloke and Jones’ work on orchards, Ingold’s discussions of landscape and dwelling, Franklin’s identification of the agency of trees in the life of bush suburbs, and Godefroid and Koedam’s discussion on ‘city forests’.

It is arguable that the emergence of our ecological and environmental sensibility only came into being through the work of early phytogeographers such as Alexander von Humboldt. Not only through his unusually broad perspective but also through his experience as an intrepid and prodigious plant collector (von Humboldt, for example, collected 6,000 new plants during one epic field trip across the Americas between 1798 and 1904), he was able perceive something that had not come into view from previously laboratory based and intensive study on specimens: discrete natural environments. His global classification of vegetation zones became the foundation for new models and language for the natural world that would eventually become separable into discrete environments as systems of interconnected and coevolved natural communities. Subsequently, new sub-disciplines of geography emerged around ecological perspectives and, more broadly, biogrophy.

Humanity has proved problematic not only to ecological models but also to ecological politics. Quite where can humanity be properly and ideally fitted into ecological communities and ‘the environment’ has never been certain, even if most identified modern humanity as the source of most of the problems. At the same time, it was recognized paradoxically that modern humanity had also developed a great aesthetic and moral regard for natures of many kinds. It was largely in relation to this paradox and almost no systematic empirical investigations of it that a new human geography of plants (and animals and other nonhumans) began.
It is not only through vegetation zones that plant life has become evocative and constitutive of place. Jones and Cloke endorse a view of place as “local distinctiveness”, as “some form of physical/imaginative space such as a village, urban district, park, wood, forest or region” and having some internal cohesion distinct from that around it” (Jones and Cloke, 2002: 9). Their book *Tree Cultures* focuses on the “place of trees and trees in their place” and documents how trees are central to understanding such places as cemeteries, heritage trails, English urban squares, and orchards—in general terms and in their local specificity. Trees and other plants form very specific backcloths to the design, planning, and symbolism of human spatial arrangements. But plant geography is far more than plant semiotics. People live and work with plants (and other nonhumans) as they all form parts of a sensuous, embodied chain of ‘dwelling’ in specific landscapes. In the ‘dwelling’ perspective, landscapes become accretions and productions of what Haraway calls nat urecultures. In *places* the boundary between nature and culture cannot be seen because natural and cultural life is never lived in a separable way, nor are their specific plant and cultural forms cultivated in isolation from one another. One has only to think of how hedges in England articulate as important cultural and natural objects—simultaneously esthetic and economic, legal and archaelogical, work and leisure, regional and ethnic, habitat and floricultural, boundaries/enclosure, and pathways/freedom. While we can make theoretical points with hedges in general, they are only ever specific hedges in time and space in practice, a point that Schama develops with respect to forests in his book *Landscape and Memory*.

As an antidote to the omnipresent tendency to generalize Western views of nature and environment (e.g., Hay’s notion of ‘Western environmental thought’), Schama’s analysis of forests in Poland, Germany, and England demonstrates how quite specific and even opposed meanings and practices can be associated with trees and forests, even at the national level and even among nations with strongly overlapping cultural and economic traditions. In his analysis of the mythic foundations of forests in the Polish imaginary, it is clear that they emerge as the historic refuge of a nation in trouble from powerful neighbors. His analysis of *Pan Tadeusz*, the Romantic writer Mickiewicz demonstrates that “the truly heroic historians of the drama are trees. Their antiquity gives them an authority that spars the gener ations of Polish history, and they shelter within their woodland recesses the values that keep Lithuania—an idea as much as a place—alive” (Schama, 1995: 56–7). Mickiewicz saw the forest as the mythical origin of the Polish Lithuanian nation and a fortress place that would protect and preserve them. To that end, they were aided by ‘native wood fauns’ or Lebsy who would deceive and punish any enemies who pursued them into its depths. Schama concludes that “landscapes are culture before they are nature; constructs of the imagination projected onto wood, water and rock…. But…once a certain idea of landscape, a myth, a vision, establishes itself as an actual place, it has a peculiar way of muddling categories, of making metaphors more real than their referents; of becoming, in fact, part of the scenery” (Schama, 1995: 56–7). This is tragically true for forest myths of Germany.

By contrast to the Polish Lithuanians, the German people were ‘formed’ by their forests, and it was their specific, unique life and culture as forest dwellers that distinguished them from all other ethnic groups. The original idea of an ethnic purity and a strength that came from that purity is shown by Schama to originate from a backhanded compliment from the Roman historian Tacitus in his *Germania* written in AD 98. After 210 unsuccessful years of trying to subdue and bring the Germanic tribes under Roman rule, Tacitus refer enced their tenacity, strength, and ability to succeed in a place of ‘foul bogs’ and ‘bristling forest’ as a means of chastizing what he took to be a languishing and corrupt Roman culture. In other words, he penned the original noble savage. Schama shows how *Germania*—the ethnography—had an important after life as *Germania*—the constitution—suggesting strongly not only the notion of a pure nation but also one gained through association with the forest. By the late eighteenth century a forest cult, the Romantic Grove League, emerged under the symbol of the oak tree committed to ‘rejuvenate their Fatherland’. It produced an enduring suspicion of urban modernity as unhealthy and un German, sentiments that combined, portentously, with Riehl’s view that Jews dominated urban and commercial life. Following the humiliating defeat of 1918, the Tacitus myth was reworked by archaeologists and prehistorians into an ethic blueprint for an expansive and exclusive warrior culture. This was eagerly used by the Nazi leadership who built themselves gothic lairs in the woods and unified a nation with blood and soil slogans.

In the English Greenwood mythology, forests and trees play yet another important role, this time as the seat of liberty and the bastion of ancient English communal values. During the period of Anglo Saxon kings, the highly worked woodlands had been a critical part of the common lands—a nourishing resource base for an entire rural culture. After the Norman conquest, vast areas of ‘forest’, a very different undomesticated woodland, was created for the exclusive hunts of the Norman kings and their elite. This barbaric act not only created hardship and poverty but also symbolized in a ubiquitous place from the values that had been lost but that would be recovered. It also had a number of lives and manifest ations in the Robin Hood stories, in Shakespeare, and in the romantic novels. “It is a social idyll: …in the sylvan habitat of Merrie England… it is forever green, always
summer. The nightingales sing, the ale is heady, and masters and men are brought together in fellowship by the lord of the jest Robin Hood” (Schama, 1995: 141).

Schama’s examples show just how significant plants are as symbols of social identity, but his analysis goes beyond a purely representational geography to suggest that practice and dwelling are constitutive of, or necessary for, the myth themes themselves. Rival’s edited collection The Social Life of Trees takes this further. The contributors, all social anthropologists, agree that “the long tradition of interpretation of natural symbols as internal representations of external reality has come to a close.” Ever since Mary Douglas disowned her own representational analysis of natural symbolism, anthropologists have followed her lead: identification between nature and social life works both ways. Inspired by Frazer’s Golden Bough which enumerated 36 cultures with tree cults, these authors aimed to find, simultaneously, the local theories and use based practices that give rise to meanings of trees “as similar to those characterising the human life cycle, or the continued existence of social groups.” The collection concludes that there is something both universal and local and theoretical and practical about tree symbolism. Critically, it seems to suggest the significance of a new research methodology: we should no longer merely ask what plants ‘mean to humans’, we should also ask what they ‘do with humans’.

The idea that identification between plants and humans operates ‘both ways’ is illustrated by Philippe Descola, who develops the idea of ‘overarching formulae’ that emerge from the experience of interacting with nature. Descola cites the work of Haudricourt on the radical nature of the Neolithic revolution on relations between humanity and the natural world: “human beings were led to establish bonds of affective coexistence with the species they had domesticated, bonds of the same order as those prevailing within the social sphere.” However, the new pastoral technologies in turn also produced the ‘social’ figure of the shepherd, who became enshrined in Western cultures as the good leader of men or sovereign. The shepherd is a hybrid form, never existing in nature or society before but arising from the experience of the new technology and naturecultures. A similar dialectic example is given of the very great care and attention given to yam growing in New Caledonia. The emphasis on friendship and respect and the avoidance of violence is paralleled by the political institutions that developed around the possibility of their surplus production and the associated but subsequent patronage of ‘big men’ politics.

Similar new directions have influenced the way geographers and sociologists have investigated relations between plant and human cultures. Influenced by the actor network theory (ANT) which seeks to unearth and situate the agency of nonhumans (as texts, narratives, rocks, plants, etc.) in heterogeneous configurations and assemblages with humans, Jones and Cloke show how a variety of trees (as orchards, cemetery plantings, heritage, or urban squares) are co constitutive of place and dwelling. As they argue, “this approach offers a way to deal with the ‘richness’ of places, where the ecological and the cultural, the human and the non human, the local and the global, and the real and the imaginary all become bound together in particular formations in particular places” (Jones and Cloke, 2002: 9). Critically, they demonstrate that without an understanding of what trees ‘do’, such places and cultures cannot be understood either as a formation or as an entity charged with ethical and moral content.

It is not only the tree–place relations that have interested recent scholars. Others working from within the related posthumanist perspective have asked: “what have we always missed from the disciplinary separation of science (say botany) and the humanities (say, sociology)? If their separation is truly foolish, an act that blinds as much as it enables us to see, then what has been missed as we think about trees, plants and humans in different moments, as belonging to different times and processes?”

Franklin’s work on eucalypts and Australia illustrates how entities that at first sight seem supremely distant (primordial climax vegetation and modern city cultures) are intimately related, so much so that they can best be described as dance partners in a ‘choreography of fire’. His analysis shows that the fire orientated (or needing) evolutionary development of the eucalypts was first enhanced and completed by the arrival of aborigines and their fire torch technologies. A relatively minor and spatially confined disturbance orientated group of plants broke free of their ecological constraints as Aboriginal firing intensified and encompassed the continent. The domination of eucalypts in the Australian landscape was only made possible by the geographical spread of humanity, but equally, the spread of aborigines and their manipulation of the environment for hunting was intimately related to the fire agency of the eucalypts. Franklin also shows how the modernizing footprints of the colonial and postcolonial urban settler societies sullied the fire as dance partner in a ‘choreography of fire’. His analysis shows that the fire orientated (or needing) evolutionary development of the eucalypts was first enhanced and completed by the arrival of aborigines and their fire torch technologies. A relatively minor and spatially confined disturbance orientated group of plants broke free of their ecological constraints as Aboriginal firing intensified and encompassed the continent. The domination of eucalypts in the Australian landscape was only made possible by the geographical spread of humanity, but equally, the spread of aborigines and their manipulation of the environment for hunting was intimately related to the fire agency of the eucalypts. Franklin also shows how the modernizing footprints of the colonial and postcolonial urban settler societies sullied the fire as dance partner in a ‘choreography of fire’.
unpredictable but inevitably regular inferno. Franklin shows not only how preparation and fighting of fires provided a unique ordering of Australian society but also how the increasing numbers of deliberately lit serious fires relate to the positive generation of individual and community ties, especially in those areas that remain relatively eventless for most of the time. Both plant and human community, regeneration arises from the ashes of this fiery dance.

A posthumanist approach to relations between culture and plants in the Australian Rangelands by geographers Kay Anderson and Nicholas Gill reveal yet more surprises. Interviews with pastoralists suggest that their close observations of the land allowed them to restructure a pastoral imprint in very arid areas. Against environmentalist claims that the heavy footprints of cattle destroy delicate soils, the pastoralists observed that the craters formed by cattle create a "cradle for new seeds to develop, protected from the wind on the open plains and held little pockets of water when it rained." Far from destroying native grasslands and herbage, many landscapes greened up after stocking. As one pastoralist respondent put it: "a lot of country in Central Australia is no good until it's stocked...it's just like ploughing the land" (Gill and Anderson, 2005: 1).

The hybrid forms that are produced through the interaction of humans and plants are nowhere better illustrated than through the emergence of modern gardening. Franklin argues that modern gardening provided the means by which modern cultures 'renaturalized' themselves after the sudden and violent urbanizations of the early nineteenth century. Such was the force of the new esthetic for the stock of globalized garden plants that it began to influence not only the new forms that cities were to take (garden suburbs being a twentieth century archetype for suburbanization everywhere) but also how cities expanded (very often along railways or under ground railway lines that offered city dwellers an op portunity to live in 'the country', enjoy their garden, but work in town). Recent research by Mark Bhatti and Andrew Church demonstrates how horticultural engagements with plants in everyday garden spaces provide powerful and commonplace engagements with the natural world, which may have far wider ramifications for human–natural relations than the mere pro duction of flowers, vegetables, or esthetic effects. As they argue, there are important and complex elements about relationships established in urban gardens that are fre quently overlooked, namely, the mixing together of domestic social relations with domesticated natural species. Quite what gardeners and plants do, together, has been the subject of Hitchings' enquiries into gardens in London using the ANT. Following Latour's command to 'follow the actors' Hitchings set himself the difficult task of not only following the gardeners into the garden but also somehow following what the plants were doing. In talking with the gardeners they clearly thought the garden was their creation; that 'they' were the designers and that plants were merely passive objects under their control. However, by focusing on what the plants were doing, he discovered "their individual liveliness, beauty and unpredictability. The plants per formed themselves into existence as discrete entities such that they became almost considered as similar to people. And this was something that the gardeners enjoyed." The monolithic humanism that normally characterizes discourses of gardening is thus challenged by Hitchings, but in so doing it exposes the play of power and enrolment that is going on between human and plant actors, not only in gardens but also more or less everywhere.

See also: Biopolitics; Culture/Natures; Nature, Social.

Further Reading


Glossary

Delaunay Tessellation  A geometrical triangulation technique based on Thiessen polygons connecting nearby points, resulting in triangles. This method is extremely useful in determining the neighbors in the direct vicinity of an event.

Monte Carlo Simulation  A process by which a set of events is simulated randomly several times. The ultimate goal is to derive a sampling distribution via simulation of the null hypothesis. Monte Carlo simulations create several realizations of a phenomenon as it potentially varies over space.

Moving Window  A filtering process, in which the value at the center of the moving window is computed as a function of the surrounding cells, or events located within the window.

Poisson Process  A nondeterministic process used to model the locations of random incidents in geographic space. Random incidents are independently occurring. The Poisson parameter $\lambda$ stands for the intensity of the process.

Smoothing  A process (or result of a process) where values are averaged based on surrounding values, following a moving window for instance. Smoothing also refers to procedures that amend an existing grid.

Basic Visual Exploration of Point Patterns

A spatial point pattern refers to data in the form of points, where a point denotes the location of an event. In geography, it is usually desirable to analyze whether these particular events, such as crimes, car accidents, fires, emergency calls and diseases for instance, exhibit a spatial pattern (e.g., hot spot), in the hope to better understand the underlying process that generated the events. Such events are considered discrete, because they occur at specific locations. A visual inspection of a map showing the locations of those events (e.g., scatter plot) may not always bring a correct interpretation of the true pattern, especially when events occur repeatedly at the same location. True clusters may go unnoticed. Events that occur repeatedly in time at the same location can be represented using a bubble plot, where the size of the bubble is a function of the event frequency.

General Descriptive Methods

A wide variety of descriptive statistical techniques exist to describe the geographical characteristics of a point pattern, such as its central tendency (the 'center' of the point pattern) or its dispersion (the degree of separation or clustering among the points). To measure central tendency, a first step consists of computing the mean center of a set of events. The mean center is the central or average location of a set of points, computed as the mean $x$ and $y$ coordinate values for all the events in the study region.

$$x_{mc} = \frac{\sum_{i=1}^{n} x_i}{n}, \quad y_{mc} = \frac{\sum_{i=1}^{n} y_i}{n}$$

where $x_{mc}$ and $y_{mc}$ are the coordinates of the spatial mean, and $x_i$ and $y_i$ are the coordinates of an event $i$, and $n$ is the number of events. The mean center is significantly affected by the presence of outliers as well as the frequency of occurrence in the case an incident happens more than once at the same location. The introduction of weights in eqn [1] can reflect the importance of some events, which extends eqn [1] to the notion of weighted spatial mean. The weight is an interval or ratio value associated with a feature attribute. The weighted mean center is given by

$$x_{wmc} = \frac{\sum_{i=1}^{n} w_i x_i}{\sum_{i=1}^{n} w_i}, \quad y_{wmc} = \frac{\sum_{i=1}^{n} w_i y_i}{\sum_{i=1}^{n} w_i}$$

where the subscript ‘wmc’ stands for weighted mean center. The addition of weight is particularly useful for areal data since some regions can be larger, or simply more important than others. The weighted mean center is an important indicator, especially in locating facilities, which will serve the entire population. The location of a new emergency service is an excellent example since we try to minimize the distance to the population.

Dispersion of Point Distribution

The spatial mean indicates the central location of a set of events, but does not reflect the dispersion of the point distribution. Indeed, two point patterns may have the same mean center, yet one may be very clustered around that mean center, whereas the other may have a highly dispersed, uniform pattern. The standard distance $SD$
indicates the dispersion of point events from the spatial mean.

\[ SD = \sqrt{\frac{\sum_{i=1}^{n} (x_i - x_{mc})^2 + \sum_{i=1}^{n} (y_i - y_{mc})^2}{n}} \quad [3] \]

When point events are very dispersed, the SD value will be higher than when incidents are clustered around the spatial mean.

**Orientation of Point Distribution**

In which direction do events tend to cluster? To illustrate the spatial spread of a set of point locations, the use of a standard deviational ellipse is a common and effective visualization tool, because it captures the directional bias in a point distribution. For instance, events occurring along a road network, such as bike accidents, will exhibit a linear pattern. The deviational ellipse is characterized by three parameters: the angle of rotation \( \theta \), deviation along major axis \( a \), and the deviation along the minor axis \( b \). As a result, we obtain the directions of maximum and minimum spread.

Figure 1 illustrates the mean center and directional ellipse for two distinct point patterns. The point pattern represents the origins of patients being treated at a city hospital in Cali, Colombia for the months of September and July 2004. A larger ellipse denotes that patients are clearly more dispersed in September; the north northeast (NNE) direction of the ellipse is affected by the presence of patients in the northern and northwestern part of the city. In July, however, the ellipse is compacted (closer to a circle), and points in the east northeast (ENE) direction. As a result, the mean center is closer to the hospital.

![Figure 1](image)

**General Clustering Methods**

**Quadrat Analysis**

The general descriptive techniques discussed in the previous section do not inform on the clustering level of events. The absolute coordinate values of event \( i \) \((x_i, y_i)\) are transformed to relative values \((x_i', y_i')\) based on the location of the mean center. The center of the transformed coordinate becomes \((0, 0)\).

\[
x_i' = x_i - x_{mc} \\
y_i' = y_i - y_{mc} \quad [4]
\]

The angle of rotation \( \theta \) is given by:

\[
\tan \theta = \frac{(\sum_{i=1}^{n} x_i' \cos \theta - y_i' \sin \theta)^2}{\sum_{i=1}^{n} x_i' \sin \theta + y_i' \cos \theta} \quad [5]
\]

where a negative tangent implies a rotation of the angle counterclockwise, and a positive tangent implies a clockwise rotation, respectively. Finally, to reconstruct the ellipses, the deviations along the \( x \) and \( y \) axes must be known:

\[
\delta_x = \sqrt{\frac{\sum_{i=1}^{n} (x_i' \cos \theta - y_i' \sin \theta)^2}{n}} \\
\delta_y = \sqrt{\frac{\sum_{i=1}^{n} (x_i' \sin \theta + y_i' \cos \theta)^2}{n}} \quad [6]
\]
the data; rather they indicate the potential spread and orientation of the dataset. One spatial statistical method to measure potential clustering among events is a quadrat analysis. It consists of overlaying a uniform grid, which is made out of equal sized quadrats, onto the map containing point incidents. The number of events within each cell (or quadrat) is determined. Essentially, the analysis compares the actual count of events within each quadrat with the expected frequency of occurrence if the process generating those events was random in nature (known as complete spatial randomness or CSR). Complete spatial random processes, called also Poisson processes, are characterized by the fact that each point is likely to occur at any location. In general, we are interested in the hypothesis that the current phenomenon does not follow a Poisson process – in other words, that points are more clustered or more dispersed than would be expected under a Poisson process.

Define \( P(X = x) \) as the probability of finding \( x \) events within a specific quadrat. Assuming a Poisson process, this probability can be calculated as follows:

\[
P(X = x) = e^{-\lambda} \frac{\lambda^x}{x!}
\]

where \( \lambda \) is the intensity of the process. The true value of the term \( \lambda \) is usually unknown, but can be computed as the average number of events per quadrat. For instance, if a grid of 100 cells is imposed over a study area, and 67 events occur within this area, a good estimate of intensity is \( \hat{\lambda} = 0.67 \). The probability of finding no event within a cell is \( P(X = 0) = 0.5117 \), one event \( P(X = 1) = 0.3428 \), and two events \( P(X = 2) = 0.1149 \).

### Determining the presence or absence of clustering

The variance mean ratio (VMR) is a formula for measuring the degree of clustering within a study region based on quadrat analysis.

\[
VMR = \frac{\sum^{m}_{i=1} (x_i - \hat{\lambda})^2}{\hat{\lambda}}
\]

where \( m \) is the number of cells of equal size, \( \hat{\lambda} \) the mean number of points per cell, and \( x_i \) the number of cells containing \( i \) events. The numerator stands for the variance of the frequency of cells containing \( i \) events, and the VMR index is then used to standardize this variance relative to the mean cell frequency. A VMR value less than 1 characterizes patterns that exhibit a tendency toward uniformity. However, when the VMR value is greater than 1, cells are characterized by either a much greater or a much lower number of events than expected which indicates a highly clustered spatial pattern. A VMR value close to 1 is typical of a random, Poisson process.

#### Example

**Figure 2** illustrates a simulated point process of 100 events. Half of those points are generated in a random fashion, while the remaining half is explicitly clustered within three blocks, two of size 20 by 20, and one of size 7 by 7. The size of the study region is 100 by 100 units. If we divide the area in four rows and four columns for instance, it creates 16 squared cells of 25 side units each. The corresponding VMR ratio is 2.54, characterizing a pattern of strong spatial clustering, since there is a substantially greater and lower number of events in each of these 16 cells than expected.

#### Advantages and limitations of the technique

Besides the relative ease to implement the quadrat analysis and the quick results it provides, the technique has some drawbacks, mostly related to cell size, and the ability of the method to differentiate different spatial patterns of points.

The size of the quadrat is of paramount importance. A cell too small in size may cause a high variability in quadrat counts, which will result in several empty cells and consequently clustering may go unnoticed. When the cell size is too coarse on the other hand, the within cell patterns will be missed. **Figure 3** shows the variation of the VMR value as a function of the cell size. As could be expected, when the cell size is too small, the spatial pattern is unnoticed. It is usually desirable to fix the cell size to obtain an average of 1.6 to 2 events per cell. As opposed to the nearest neighbor approach (see below), quadrat analysis does not look at the interseparation distance between events. Additionally, the technique solely relies on frequency counts and the spatial arrangement of the events is not explicitly measured.
considered. In Figure 4, two distinct patterns of incidents have been simulated. However, their VMR value is exactly the same. In the right Figure 4b, a clear clustering occurs in the northwestern part of the study area, while on the left Figure 4a, incidents seem to be spread out.

Nearest neighbor

The nearest neighbor technique avoids the problem of quadrat size determination. Essentially, the nearest neighbor statistic is used to test whether a set of incidents are closer together than would be expected by random distribution. The statistic computed \( R \) is the ratio between the observed average distance between all events and the expected value if the events were distributed in a random fashion:

\[
R = \frac{\bar{d}}{d_e} = \frac{\sum d}{2\sqrt{n}}
\]

where \( \bar{d} \) is the mean of the distances from incidents to their nearest neighbor and \( n \) is the total number of incidents in the area. The term \( d_e \) is the expected distance between incidents under random circumstances. When the nearest neighbor statistic \( R \) is equal to 0, all points are in one location. When \( R = R_e \), we have a perfectly random pattern. For a square area, when \( R = 2.14 \), we have a perfectly uniform pattern where incidents are spread out evenly.

Example

The point pattern from Figure 2 exhibits a \( R_e \) value of 3.186, a \( R_o \) value of 4.896, and an \( R \) value of 0.651, which confirms that the pattern is clustered. Confirming the presence of clustering can also be accomplished using Monte Carlo methods, by simulating a random pattern many times, and obtaining the \( R_e \) value based on those random patterns. For instance, following 1000 Monte Carlo simulations, an average \( R_e \) value of 3.731 was obtained, and \( R \) was equal to 0.854, which confirms that the point pattern was clustered. The Monte Carlo approach is especially useful when the study area is irregularly shaped.

Advantages and limitations of the technique

The shape of the study area will decrease the nearest neighbor statistic, especially if it is narrow, because events will necessarily be next to one another. Another problem commonly noted in the literature is that...
clustering may only be detected on a relatively small scale. In that case, it is possible to extend the statistic to higher orders (second or third nearest neighbor). It should be noted that it is possible to compute the cumulative distribution of separating distances, which in turn sheds light on the spatial scale of clustering. In Figure 5, a thick line denotes the cumulative distribution of the clustered dataset mapped in Figure 2. Not surprisingly, the curve increases sharply close to the origin since many events are located next to one another, which suggests clustering due to inter event attraction within certain parts of the study area. The curve flattens out beyond a separating distance of 100 units, indicating an absence of spatial clustering at that scale. The dotted line is the cumulative distribution of a random point pattern. At short separating distances, this pattern exhibits a greater amount of pairs of points than in the case of a symmetric pattern. Finally, the last curve represents the cumulative distribution following a perfectly symmetric (regular) point pattern. Since the events are very spread out from one another, the potentiality for a spatial clustering pattern is always below a random point pattern.

The nearest neighbor technique solely relies on the distances between events, not whether there is a high concentration of events next to each other. In Figure 6 for instance, two distinct patterns of incidents have been simulated. Although their nearest neighbor values are exactly the same, their spatial patterns are totally different. Patterns may vary when calculating the neighbor statistic at different orders of distance (second or third nearest neighbor for instance).

Most geographic information systems (GISs) offer the flexibility to compute this statistic. Since a complete search for the nearest neighbor of each point is carried out, the procedure can be time consuming when \( n \) is large. It is however possible to construct a Delaunay tessellation of the \( n \) events and search for nearest neighbor distances within the tessellation.

### K-Function

The \( K \) Function provides an alternative to the nearest neighbor statistic as a technique aimed at determining the amount of clustering at a wider range of scales. To compute the statistic, a circle of a specified radius (\( h \)) is placed over each point in the set (\( i \)). Points within this circle (\( j \)) are counted and the circle is then moved to the next point to begin the process again. When this has been done for all existing points \( n \), the radius is then expanded and the process is repeated until a specified maximum radius is reached.

\[
K(h) = \frac{A}{n(n-1)} \sum_{i \neq j} I_h(d_{ij})
\]

where \( d_{ij} \) is the distance between two events \( i \) and \( j \) within the study region, \( A \) the size of the study area, and \( I_h(d_{ij}) \) an

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**Figure 5** The cumulative distribution of pairs of points as a function of the separating distance (since \( n = 100 \), there are \( n^2 \) possibilities).

**Figure 6** Two very distinct spatial patterns exhibiting a similar nearest-neighbor value.
indicator function defined as:
\[ I_h(d_{ij}) = \begin{cases} 
1 & \text{if } d_{ij} \leq h, \\
0 & \text{otherwise}.
\end{cases} \]  

In general, a high value of \( K(h) \) denotes clustering. The value of \( K(h) \) can be graphed against the distance \( (b) \) to show the scale(s) at which the point pattern exhibits randomness, clustering, or dispersion. These values can be tested using Monte Carlo methods in which \( K \) functions are computed for a large number of randomly generated point patterns. For each \( h \) value, the 5\% highest and 5\% lowest \( K \) values for these random patterns form the upper and lower significance envelopes under the null hypothesis of CSR. Figure 7 illustrates this concept, where the dotted lines represent the 5\% and 95\% confidence intervals, and the thick line represents the observed \( K \) function values (for different \( h \) values) for the dataset of Figure 2. When the observed value for a given \( h \) is between the upper and lower envelopes, we conclude that the point pattern is random at that spatial scale \((b)\). When the \( K \) function is above the envelopes, we observe a clustered pattern, whereas the pattern is spread out when the \( K \) function is below the envelopes. The \( K \) function value increases as \( b \) increases since more observations are counted within the radius \( h \).

Advantages and limitations of the technique

The \( K \) function is superior to the nearest neighbor technique in that it analyzes possible point patterns at different scales, while the nearest neighbor approach uses distances only to the closest events, hence nearest neighbor only considers the smallest scales of patterns. The \( K \) function is however relatively time consuming to compute, and it is recommended to use specific software, such as CrimeStat.

Kernel Density Estimation

Neither the nearest neighbor, nor the \( K \) function, nor the quadrat analysis, identify locations of clusters, rather, they determine an overall tendency toward clustering, randomness, or dispersion. An advantage of the density mapping is that most GIS softwares support the method.

To calculate this density, the entire region is divided into a grid and a search radius is drawn around each grid point \( g \) in a similar way to a moving window average. A suitable window — defined by the radius size \( t \) — is moved over the fine grid of locations, and the intensity at each grid point is estimated from the event count per unit area within the window centered on that grid point. The total number of events \( i \) that fall within the search radius is divided by the size of the window resulting in a density value for each grid point. Kernel density mapping extends this method by assigning weights when per forming the search so that points closer to the center of the window receive a higher weight than those further away. Mathematically, the kernel density at a grid point is denoted \( \hat{\lambda}_K(g) \) and can be estimated as follows:
\[
\hat{\lambda}_K(g) = \sum_{i \in g} \frac{3}{\pi t^2} \left(1 - \frac{g^2}{t^2}\right)
\]

with \( g \) the separating distance between an event \( i \) and the grid point \( g \). The bandwidth \( t \) determines the amount of smoothing. The size of the bandwidth \( t \) will affect the outcome of the map as a smaller search area will result in more distinct events to be highlighted. On the other hand, a larger radius can identify broad zones where a high number of incidents exist. A bandwidth that is too large will stretch the kernel and the surface will appear flat. The choice of the bandwidth may depend on the purpose of the study.

Example

Figures 8 and 9 represent the surface following a kernel density passed on the events from Figure 2, where bandwidths of 5 units and 10 units were used, respectively. The peaks denote regions where there is a strong concentration of events, which coincide with the three blocks highlighted in Figure 2. As expected, the intensity of the peaks is higher when the bandwidth is smaller, and a greater smoothing occurs when the bandwidth increases. Interestingly enough, many small peaks appear on Figure 8 when the bandwidth is \( t = 5 \), which suggests that this bandwidth was not appropriate, as those peaks correspond to a single event. The Kernel map appears more flat in Figure 9, because a greater bandwidth \((t = 10)\) smooths out the concentration of events.
Spatial Patterns on a Network

One drawback to using these aforementioned spatial clustering methods is that they assume that events can be located anywhere in the study area. However, many point events occur on a network, such as car crashes or pedestrian accidents. Such events are most often restricted to the existing road network, so ideally, the analysis should focus solely on the places where it is possible for accidents to occur. Recently, network-based point pattern analysis methods have been developed that provide a more accurate computation of accident clustering. However, such methods remain computationally intensive and to this date they are not supported by any GIS.

Conclusion

The techniques presented in this article are excellent tools to analyze spatial point patterns, and remain relatively easy to perform, either within a GIS or by
programming. However, one must remain careful, and consider the various limitations of each technique. For instance, the nearest neighbor distance analysis is prone to errors associated with irregular boundaries, while quadrat analysis is prone to errors associated with edge effects and variability within quadrat cells. Attention must also be paid to a few key issues such as spatial scale, edge effects, and events occurring on a network. It is usually desirable to conduct a test for clustering at different scales to evaluate the magnitude of this clustering. These issues are being researched now; however, most of them are not available yet in commercial GIS.

See also: Edge Effects; Monte Carlo Simulation; Scale Analytical; Spatial Autocorrelation; Spatial Clustering, Detection and Analysis of; Spatial Data Mining, Cluster and Pattern Recognition; Spatial Data Mining, Geovisualization; Spatial Filtering/Kernel Density Estimation.

Further Reading


Relevant Websites

http://www.icpsr.umich.edu
Inter University Consortium for Political and Social Research (ICPSR): CrimeStat.
Introduction: From the Geography of Crime to the Spatiality of Police Work

The origins of geographical interest in policing can be traced back to studies of the geography of crime. Although early work mapping patterns of crime and deviance rarely considered the significance of the police other than as the source of ‘official’ crime statistics, by the early 1980s a more critical engagement with the interconnections between policing and the study of crime began to develop. For some geographers this involved recognition that the mapping of official crime statistics needed to acknowledge the significant impact of peoples’ behavior in terms of their decisions to report crime to the police as well as the effect of police recording practices and procedures on what crimes appear in official statistics. For others, notably the Canadian geographer, John Lowman, it meant a more radical attempt at developing a ‘geography of social control’ that rejected the analytical separation of crime from the control of crime. For Lowman, crime could not be adequately theorized in isolation from the control system which defines and processes deviance, and thus, a concern with police practices needed to be a central element in any explanation of patterns of crime. Further impetus for geographers to engage with policing came in the work of Susan J. Smith. Determined to move beyond traditional geographies of deviance and the concerns of conventional geographies of crime, Smith focused on the experiences of victims, exploring the importance of fear and examining the role of the police and other agencies in tackling the problem of crime. Moreover, much of her research was conducted against the backdrop of violent clashes between the police and black communities in several UK cities, and thus a concern with many of the strategic policing questions that emerged from these conflicts feature prominently in her work. For example, how is it possible to resolve the tensions between central government and local public interests in the determination of local policing policies? And how is it possible to secure police participation in local multiagency approaches to law and order?

Building on these early contributions, more focused and in depth research into policing began to emerge in the 1990s. Nicholas Fyfe examined some of the key interrelationships between the police, space, and society revealed by research in the rapidly expanding field of police studies. Different spatial patterns of police deployment at a local level, for example, can impact significantly on the distribution of crime, fear of crime, and community relations. In addition, ethnographic research into police subculture (the so called ‘cop culture’) highlights how police offers develop complex mental maps in order to make sense of the places they police. In other contributions, Fyfe drew on his ethnographic research with London’s Metropolitan Police Service to show how Hagerstrand’s time geography can be used to refer to a network of cameras linked to a centralized control room where images can be monitored remotely. Territory A strategy used by individuals, groups, or organizations to exercise power over space. Zero Tolerance A term used to refer to a form of policing which focuses on relatively minor crimes in the belief that this will prevent more serious types of crime from occurring.

Policing

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Glossary

Antisocial Behavior A broad term to capture a complex of thoughtless, inconsiderate, or malicious activity.
Closed-Circuit Television Used to refer to a network of cameras linked to a centralized control room where images can be monitored remotely.
Territoriality A strategy used by individuals, groups, or organizations to exercise power over space.

Listed是一座建筑物的名称。
adventure (which is important in terms of officers seeking opportunities to demonstrate courage and physical strength); and a concern with morality (which informs how the police attempt to construct boundaries between ‘good’ and ‘evil’). Employing this analytical framework provided important insights into a range of territorial police actions, from creating and enforcing boundaries to regulating peoples’ movements in space.

However, while these studies of the police in the 1990s were enormously important in countering what had, until then, been the conspicuous absence of policing from the landscapes of human geography, the research agenda in this field also had three important limitations. First, the analytical gaze of human geographers was firmly fixed on the public police rather than on the broader concept of policing which embraces a multiplicity of agencies and activities that use surveillance and the threat of sanctions in order to ensure security. This conflation of ‘the police’ with ‘policing’ thus created an unnecessarily narrow research focus, one which overlooked the important roles played by a wide range of public, private, and voluntary actors in regulating conduct and maintaining social order. A second and related limitation of these early studies was that, through their focus on the spatiality of police work, there was a tendency to marginalize consideration of the wider social and political landscapes within which policing takes place. As a result, the potential links between studies of policing and broader debates within social and political geography were underdeveloped. A third limitation of these early geographical studies of the police was that they were largely focused on the local scale and on urban environments. This meant that policing at broader geographical scales (such as the global or transnational level) and the policing of other environments (like cyberspace) were not addressed. Against this background, the following sections consider some of the ways in which the research agenda around policing in geography has expanded in recent years – driven both by theoretical and policy concerns – and has begun to address some of the limitations identified above.

**Policing, Urban Restructuring, and the Politics of Space**

An important stimulus in shifting the attention of geographers from ‘the police’ to ‘policing’ came with the plethora of research carried out on urban restructuring in the 1990s. Amidst the various claims and counterclaims that contemporary urban restructuring had spawned a new form of urbanism – the postmodern city – the issue of policing loomed large in vivid descriptions of gated communities, fortified buildings, and intensely surveilled public spaces, shopping malls, and theme parks which are viewed as crucial components of postmodern urban structure. Indeed, for many researchers, one of the defining characteristics of the postmodern city is that it is a place where ‘form follows fear’ – a ‘carceral city’ in which a complex mix of public police, private security guards, and electronic surveillance are used to ensure the security of high income gentrified enclaves and corporate citadels.

Although more recent contributions to analyzing contemporary urban restructuring have shifted the theoretical spotlight from postmodernism to the politics of neoliberalism, questions of policing continue to feature prominently. A key challenge for neoliberal urbanism is the question of how best to secure the commercial success of downtown areas which have witnessed significant capital investment in the bid to create vibrant, entreprenueurial cities. Echoing the insights of postmodernists, analysts of neoliberal urbanism have made much about how the economic vitality of downtown areas is highly dependent on a costly system of surveillance performed through a blend of architectural design, private security, and a technological infrastructure of closed circuit television (CCTV) cameras as well as the presence of the public police. Indeed, reflecting more general trends in neoliberal forms of governance, the policing of entrepreneurial cities increasingly involves complex local ‘security networks’ comprising the public police, municipal policing (such as city wardens provided by local urban authorities), civilian or voluntary policing (such as membership of neighborhood watch or block watch schemes), and the rapid expansion of commercial or private policing. Such local security networks, it is argued, are being actively encouraged under neoliberalism as part of a wider political project which stresses the importance of partnerships between the public and private sectors and emphasizes the need to reconfigure responsibility for social welfare in ways which rely less on the state and more on individuals and communities. Moreover, it is claimed that under the aegis of urban entrepreneurialism the priorities of such security networks are focused on reclaiming the streets for the ‘consumer citizen’ and enforcing patterns of behavior commensurate with the free flow of commerce and the new urban esthetics.

It is not just the downtown, commercial core that is witnessing a reconfiguration of policing. The political spotlight has also been turned on suburban, residential communities, where the drive to tackle ‘antisocial behavior’ and bring back a sense of ‘respect’ has also resulted in the emergence of new forms of social control as governments focus on the politics of conduct. This is most clearly evident in the UK where the Blair Government’s 2006 Respect Action Plan has introduced a range of mechanisms to tackle the problems of anti social neighbors and incivility. At the heart of this
strategy are the antisocial behavior orders (ASBOs), which can be used against anyone causing harassment or distress in their neighborhoods and involve prohibitions on individuals entering certain areas or carrying out specified acts. Through the use of ASBOs, the government hopes to encourage ‘governance through community’ by directly involving communities in the surveillance and regulation of antisocial conduct. While this new battle to confront antisocial behavior is still in its early stages, for geographers concerned with understanding the changing nature of local policing, the introduction of ASBOs, alongside other mechanisms for defining the required civil conduct and disciplining of incivility, open up important opportunities for research. Indeed, when these developments in the policing of residential communities are taken, together with the changing nature of policing in downtown areas, it is clear that a fundamental restructuring of social control in cities is underway in which the public police are now working in complex partnership with a new coalition of individual citizens, local communities, and the private and voluntary sectors.

Policing Difference

The contemporary restructuring of the policing of downtown areas and residential communities, clearly, has significant implications for the social geography of cities. Indeed, a core concern for many geographers is the extent to which the public spaces of cities now appear to be under threat from new forms of policing. Responding to warnings that a consequence of the crusade to secure the city is the destruction of any truly democratic urban space, geographers have drawn attention to the way different forms of policing are implicated in strategies aimed at the ‘purification’ of public space. One example is the so-called zero tolerance policing (ZTP) which was introduced in New York City in the 1990s and has subsequently been adopted in several other US and UK cities. Focused on ‘quality of life’ offences, including drunkenness, begging, public urination, and vandalism, ZTP aims to reclaim public spaces for ‘respectable citizens’ and prevent neighborhoods from entering a downward spiral, whereby minor offences lead to more serious types of crime. Many urban geographers, however, have been quick to condemn ZTP and its impact on the social landscapes of late modern cities, arguing that police targeting of the homeless, panhandlers, graffiti artists, and squeegee cleaners, crushes street spontaneity and vibrancy. Indeed, according to Neil Smith, writing in the context of New York City, ZTP provides yet further evidence of a revanchist urbanism underpinning contemporary urban policy in which the wealthy middle classes in a divided city are increasingly vicious in defending their privileges from the poorest communities.

Similar concerns about the social consequences of new forms of policing have been articulated by geographers in relation to the increasingly widespread deployment of CCTV surveillance systems. The CCTV research literature is replete with allusions to Orwell’s 1984 and Foucault’s discussion of Bentham’s panopticon, drawing attention to the role of CCTV surveillance in processes of social exclusion and in circumscribing the rights of individuals and groups to the public spaces of cities. Indeed, studies of the operation of CCTV surveillance have shown how networks of cameras are routinely used to target the homeless, street traders, young people, and ethnic minorities — all of whom are viewed as potential threats to the ‘orderly city’ and the economic success of urban regeneration initiatives. As a consequence, geographers have argued that under the gaze of CCTV surveillance cameras, any claims that streets symbolize public life with all its human contact, conflict, and tolerance are difficult to sustain. Increasingly, CCTV surveillance is portrayed as an instrument of social control geared towards preserving the public spaces of the city for the consumer citizen, while effectively excluding those whose spending power is low. Some social geographers, however, are more cautious in their assessment of the implications of public space CCTV surveillance, drawing attention to the ambivalent emotional geographies created by surveillance and in particular the ways in which CCTV cameras can make people feel both more secure and more fearful.

It is important to recognize, however, that there are important parallels between the operation of CCTV in public space and the surveillance activities carried out by private security guards responsible for policing areas of mass private property such as shopping malls and office space. Research by geographers on shopping malls, for example, has shown how the use of surveillance by private security teams is particularly aimed at making people who do not ‘belong’ (i.e., those of low spending power) feel uncomfortable. Moreover, any conduct that is viewed as discouraging the custom of other visitors — from illegal trading to begging and loitering — becomes a cause for intervention, with the threat of exclusion for those who persist in transgressing strict behavioral rules of shopping malls.

The approaches to policing social difference revealed by studies of ZTP, CCTV surveillance, and the actions of private security guards in shopping malls raise important questions about the accountability and responsiveness of police organizations to wider audiences. In the case of the private policing of shopping malls, the situation is relatively straightforward in the sense that security personnel are hired by mall owners and have a right to
exclude whomever they wish from their property. With regard to the public police, however, the situation is much more complex and raises intriguing geographical questions about the extent to which local policing can reflect the needs and wishes of local communities. Drawing on a case study of West Seattle, Herbert's *Citizens, cops, and power* probes this issue in some detail. Idealized versions of community policing, Herbert contends, would have the police subservient to the community, but in reality, it is important for the police to retain some autonomy with respect to local demands, in part, to protect the interests of minorities against an unjust authoritarianism. Moreover, the dynamics of police subcultures and the fact that communities themselves are often divided over what they want from the police, significantly weaken the community policing project. For Herbert, this means that it is now time to abandon policies of community policing and look to other mechanisms to ensure that the public police are responsive to local concerns.

**Beyond Local Policing: From Transnationalism to Cyberspace**

As this review reveals, in a relatively short period, geographical interest in policing has developed rapidly and has forged important connections to wider debates within social and political geography. Nevertheless, the focus of geographical interest remains firmly on the local scale and, with only a handful of exceptions, the policing of urban environments. In this final section, therefore, it is important to signpost possible future directions for the geography of policing. One area of potential interest is transnational policing. Against a background of growing concerns about international terrorism, drugs trafficking, corporate fraud, and environmental crime, significant elements of policing can no longer be considered as simply a domestic function of national governments but as part of a realm of transnational practices. Such transnational policing is not, of course, a new phenomenon. Concerns about tackling cross border criminality were raised early in the twentieth century with the establishment of the International Criminal Police Commission or Interpol, although strictly speaking, this was an international rather than transnational initiative given that it was based on promoting mutual assistance between police organizations in separate countries. What has given significant impetus to transnational policing in recent years, however, is the convergence of several major global restructurings, including the opening up of global markets, the information revolution, and the end of the Cold War. Exemplifying the significance of these and other developments is the policing of the European Union. Terrorist activity in the 1960s and 1970s and the dissolution of internal border controls in the 1980s have all been important in creating structures for practical police cooperation, culminating in the establishment of Europol, in 1992, as a supranational police organization. Viewed as a potent symbol of the 'political virility' of the European Union because it embraces the identity of Europe as a single 'security community', the development of Europol is also inextricably bound up with fears that immigration and asylum, terrorism, and organized crime, pose a threat to the common interests and 'way of life' of the European Union. For geographers with interests in geopolitics, the example of Europol and other similar developments in transnational policing offer rich opportunities to examine the structures and processes of globalization from a fresh perspective.

A second area where geographers could potentially make a significant research contribution is in examining the policing of cyberspace and the problems of tackling cybercrime. The importance of this topic was illustrated in dramatic fashion in May 2004 when a Philipino computer science student released a computer virus, known as the Love Bug, on to the Internet. Within 2 hours, it had spread around the world destroying the computer files and data of 45 million users in 20 countries at an estimated cost of $10 billion. Although the offender was identified by the FBI, the investigation was thwarted because, at the time, the Philippines had no cybercrime laws and the US were unable to extradite him because a crime has to be recognized in both the extraditing nation and the nation seeking extradition. For geographers, cases like this raise intriguing questions about the divergent legal responses to cybercrime in different countries and the implications this has for law enforcement in cyberspace. A further issue raised by such cybercrimes concerns the different roles and responsibilities of individuals and organizations in patrolling cyberspace. In addition to specialist units within the public police, there are Internet service providers (ISPs) who can draw up codes of conduct and remove offending material; private security firms with a role in protecting corporate data; grass roots activists, like Cyberangels who provide advice to protect people from becoming victims of cybercrime; and individual citizens who, as internet users, can report the presence of harmful material on websites or evict offensive participants from chat rooms. Mapping the contours and evaluating the impacts and implications of these different forms of surveillance in cyberspace have intriguing parallels with attempts by geographers to understand the local security networks responsible for policing terrestrial space.

*See also:* Postmodernism/Postmodern Geography; Public Space; Surveillance.
Further Reading


Relevant Websites

http://www.police.homeoffice.gov.uk
Home Office Police.

http://www.worldcongresscriminology.com
International Society of Criminology.
Political Boundaries

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Glossary

Artificial Boundary This concept is related to the idea that boundaries made by human beings are artificial if they do not correspond to natural boundaries (see below ‘natural boundary’). The distinction between natural and artificial boundaries has been largely rejected by political geographers since World War II.
Border This denotes the adjacent areas lining boundaries. In the current interdisciplinary literature, this word is often used in a parallel sense to boundary.
Borderland The transition zone within which a boundary (line) is located.
Boundary This is one of the traditional keywords in political geography. Boundaries have been defined by tradition as physical or imaginary lines of contact between the key power containers, that is, states. Nowadays they are understood more broadly, often as social institutions and symbols that exist in social practices and discourses.
Boundary-Producing Practices An idea coined by representatives of critical geopolitics, practices which suggest that instead of mere empirical analysis of concrete boundaries it is important to study the social and political practices in which boundaries and their meanings as instruments of distinction are produced and reproduced. This challenges the views on states and their boundaries as fixed fulcrums of historical destiny.
De-territorialization This expression normally refers to the de-bordering of the world purported to be taking place mainly as a consequence of economic and cultural globalization (see below ‘re-territorialization’).
Frontier A category that usually refers to political divisions (zones) between states or to divisions between settled and uninhabited areas within a state.
Natural Boundary This concept is related to the notion that nature dictates the ‘correct’ locations for boundaries and it is the task of the state to strive to achieve such boundaries. In a more practical sense, a natural border is used to denote physical elements such as rivers or mountain ridges.
Re-territorialization The process of remaking boundaries. A much-used example of such processes has been the violent boundary making in the formerly dispersed Eastern European states. This expression is often used together with de-territorialization.

Introduction

‘Boundary’ has been one of the keywords in political geography since the institutionalization of this subfield at the end of the nineteenth century. Although the words used in various languages to denote the idea of boundary (e.g., German Grenze, French frontière, Swedish gräns, or Finnish rajat) may have slightly different connotations, this category can in general be regarded as the most important single ‘mediating’ keyword in the tradition of political geography. It is a mediating category in the sense that so many other key categories of political geography – and sets of social practices and ideologies – are implicitly or explicitly related to boundaries, for example, fundamental categories such as state, nation, nationalism, territory, territoriality, governance, or sovereignty. Therefore, the meanings associated with the concept of boundary crucially shape not only how these other keywords and their relations are understood but also how we understand the ‘boundedness’ of the contexts of politics and social life in modern states.

The importance and sensitive role of boundaries for human societies can easily be recognized when we think of the traditional nationalist ideal and its famous condensation by Ernest Gellner into the principle that political and national units should be congruent. The fact that the current world harbors some 200 states but perhaps 600–800 groups of people identifying themselves as ‘nations’ clearly displays the vagueness of this ideal and undermines the concept of a neat one to one relation between state and nation. A number of human geographers, political scientists, and anthropologists have challenged this ideal both theoretically and empirically, especially since the 1990s.

A particularly insightful theoretical critique was provided by the political geographer John Agnew, who scrutinized the key dimensions of what he called the ‘territorial trap’, that is, how state centric thinking establishes a dividing line between inside and outside. The territorial trap rests on three assumptions that the sovereignty, security, and political life of the modern state require a bounded territorial space, that there is a fundamental opposition between the internal and external affairs of a state, and that the territorial state functions as a geographical container for modern society, that is, state boundaries are coincident with the bounded aries formed by political and social processes. This way of thinking suggests that the world is composed of firmly delimited, mutually exclusive territories all having their own collective identity.
One important ideological manifestation of the territorial trap is that national cultures and identities are often presented as homogeneous, coherent phenomena, so that territory and mutual exclusivity become naturalized elements in the definitions of culture. The identities of population groups are not ‘natural’, however, but are always created consciously for particular purposes. This holds good for smaller regional communities too, but it is most obvious in the case of states, which usually have developed complex institutions (military forces, an education system, national symbols) that produce and reproduce nationalism and national identity narratives. Political boundaries between states often manifest nationalist feelings, symbolism, or iconographies and performance. This suggests that boundaries are not merely neutral geographical lines but crucial elements in what is generally understood as a national unit. The number of perpetually ongoing more or less open border disputes shows that such lines, both inside and between states, may be deeply contested (Figure 1).

All political boundaries, therefore, require some selection and are inevitably the results of negotiation and reflect power relations. Practically, all boundaries made by human beings – boundaries that in some sense or other divide the communal living space on various spatial scales – are political, giving expression to power relations. It is precisely due to this fact that boundaries are open to dispute. The importance of power relations is reinforced by the fact that boundaries involve the politics of delimitation, representation, and identity. They keep things apart, their meanings are expressed in particular terms, and they allow certain expressions of identity to exist, while often blocking others.

Recent empirical objections against taking state–nation relations for granted often accentuate the challenges raised by the radical increase in border crossings and transgressions of all kinds, whether by human beings (tourists, immigrants, refugees), ideas, cultural influences, or capital that occur on all spatial scales as a consequence of cultural, political, and economic globalization. Political boundaries are therefore seen in an integrating world as being increasingly multifaceted and complex. This fact will doubtlessly arouse both contextual sensitivity and broader theoretical understanding on the part of human geographers.

This article looks at the tradition of boundary studies in political geography, introduces current perspectives, and discusses the future challenges raised by political geographers during recent decades. Political boundaries exist on all spatial scales, from local electoral or administrative units to states and suprastate arrangements like the European Union (EU). Nevertheless, it is state boundaries that have received most attention in political geography, and these will be scrutinized here. The current world harbors some 300 land boundaries between states, and also more than 40 international sea boundaries. Due to the great variety of boundaries and the strong empirical tradition, political geographers such as Victor Prescott have suggested that all boundaries are unique and therefore the development of general theories on political boundaries has failed. In spite of such comments, and in spite of popular ideas on the rise of a ‘borderless world’ and the emerging relational critiques in human geography that challenge all kinds of bounded spaces, boundaries have become notable objects of research since the early 1990s. One aim of this article is

Figure 1  Banal, border-related nationalism performed in front of the national audiences on the India-Pakistan border. Photo by Anssi Paasi.
therefore to show why and how boundaries are recognized as perpetually important theoretical and empirical categories by human geographers. It is suggested that the connotations and functions of boundaries can be understood meaningfully only in relation to broader categories such as state, nation, and territory, and that this conceptual constellation can also help us to understand the persistence of boundaries in the current phase of globalization. It will also be shown that boundaries are significant not only for political geographers but also for many scholars working in fields such as regional, cultural, and economic geography.

_The Tradition of Boundary Studies in Human Geography_

While boundaries seem to mediate the relations between a number of important categories in political geography, boundary studies have for their part sometimes been labeled as one of the most torpid areas of inquiry in this field. This is based on the fact that such studies have often had a very strong empirical, even empiricist focus, and have thus been rather descriptive, atheoretical investigations into concrete, material border landscapes. Since boundaries have been by tradition understood mainly as empirical manifestations of state sovereignty, political geography has been rich in morphological, empirical, and generic studies of boundaries. Early studies in particular concentrated on constructing typologies and classifying boundaries into types. Prescott’s profound review shows that boundaries have been regarded for a long time as unique phenomena, generalizations about them have not been regarded as valuable, and the continual search for means of classifying them has not been seen to be profitable. While some scholars such as Julian Minghi were already claiming during the 1960s that it is important to search for generalizations in boundary studies, it would be no exaggeration to suggest that the empirical orientation prevailed from the beginning of the twentieth century until the 1980s. Such an orientation was originally linked to the more general understanding of geography as an empirical field of research and also to the fact that boundary scholars often had very practical motives for their research.

The impact of boundaries upon landscapes marked a further step away from simple description and categorization of borders. Studies on the functional roles of borders and transboundary interactions expanded the geographical approaches. Much current work – especially applied research – still follows this logic. The cultural roles of borders received more attention in geography only at the beginning of the 1990s, a couple of decades later than in cultural studies, but political geographers were still mostly concerned with concrete border landscapes and interaction across borders.

The rest of this section looks at the roots of boundary studies in political geography, the debates on ‘natural boundaries’, the emergence of a specific language in these studies, and finally the resurgence of boundaries as objects of geographical research that has taken place since the end of the Cold War.

_The Roots of Boundary Studies_

Boundary studies have a long tradition in geography. Friedrich Ratzel’s _Politische Geographie_, the first major book in political geography, already included a long and profound analysis of the versatile functions and dimensions of boundaries, in which he discussed themes such as ‘natural’ and ‘artificial’ boundaries, boundaries as results of mobility and the meanings, and roles of boundaries for human societies. Ratzel regarded the margins of the territory of a state as important elements in the same way as the central regions: the strongest states showed, he suggested, close ties between the border and the core. Boundaries were for him an expression and measure of state power and as such he regarded them as dynamic rather than static elements. Ratzel believed in his organic thinking that all ‘vigorous states’ try to expand in spatial terms while declining states contract to physically easily defensible land contours. Boundaries are in this sense merely a ‘stop’ in mobility. In Ratzelian thinking, the border fringe (Grenzsaum) is the reality and the border line (Grenzlinie) is its abstraction. The border line as such is a supporter of the imagination (Forsträumung) that helps our thinking. He also recognized that there is something symbolic in all boundaries. They can be symbols of peace, for example, or symbols of historical events.

Even before Ratzel, much practical and political discussion has taken place on the role of boundaries and what should be the ideal locations for them. Historically, one of the most influential philosophical notions emphasizing the connection between a territory and its natural environment and culture (in contradistinction to other territories) has been the French concept of _les limites naturelles_, according to which every state has its ‘natural boundaries’ which is natural and justifiable for that state to pursue and to establish in concrete form. As shown by Norman Pounds, the idea of natural boundaries was originally an appeal to historical arguments, and it was only later that recourse was had to a higher authority, ‘natural law’. Where the historical arguments were usually of a specific character, however, and were connected with one given boundary, natural law affirmed the obligation to honor natural boundaries in principle without providing any actual guidance on how these should be identified. The significance of the ‘will’ of nature in this
abstract sense, the notion that it 'wants' to regulate the actions of nations and to prevent them from becoming mixed (while the state tries to do this by means of violence or cunning) attains prominence in the *Eternal Peace* of the philosopher Immanuel Kant, published in 1795, but it is found equally well in the arguments of Karl Haushofer, the major propagandist of German geopolitics between the two World Wars.

A comparable case in the field of culture would be the emphasis placed on 'language' as a 'natural boundary'. Again Kant, in the work mentioned above, is among those who cites language alongside religion as a manifestation of 'the will of nature' to keep the peoples apart and prevent them from mixing. A typical example of a definition analogous to a natural law, although undoubtedly setting out from the people (Volk), is the notion put forward in the early nineteenth century in connection with the strengthening of German nationalism, that language constitutes the only true natural boundary. This is based on the idea that God created the differences between languages and therefore a common language and culture constitute a natural law of a higher order than natural boundaries formed by rivers or mountains. This emphasis on language and Volk as a major starting point for determining boundaries continued to enjoy prominence in Germany throughout the nineteenth century, and the cartographical presentation of linguistic boundaries gained in popularity from the 1840s onwards. This adoption of cartographic methods in effect drew attention to the organic connection between cartography and power, a matter which has been widely emphasized in geographical circles since the late 1980s.

Such debates were thus not only academic but were also crucially associated with questions of war and peace. Natural boundaries were often discussed in relation to what were labeled as 'artificial boundaries', boundaries made by human beings. As this division implies, natural boundaries were regarded as something genuine and original, whereas artificial boundaries were regarded as temporary and haphazard. Such ideas were raised in many countries not only in the geographical literature but also in the sphere of practical geopolitics before and during World War II, in Germany, for example, and in Finland, which was allied with Germany during the years 1941–1944. A number of Finnish geographers and other scientists were involved in efforts generated by statecraft to show that the existing Finnish–Soviet border was not a natural one and that the real, natural border was to be found much deeper into Soviet territory. Since Finland had occupied a slice of Soviet territory at that time, these claims were strengthened by the extensive fieldwork carried out in the occupied areas by a number of scholars ranging from natural scientists to linguists. Some of them were engaged in mapping the Lebensraum (living space) of Finland (and also used this terminology in their scientific publications), thus adopting the language developed originally by Ratzel and later exploited by the Nazis. After the war, the occupied areas and almost 10% of the previous Finnish territory were ceded to the Soviet Union and such geopolitical speculations came to an end.

World War II and the unscrupulous use of geopolitics finally altered the situation elsewhere as well, and both geopolitics and the expansionist boundary terminology were largely abandoned. Since the war, most political geographers have rejected ideas on natural boundaries and have suggested that all political boundaries are human, social constructs in the sense that they are based on human motivations, decisions, and power relations. This also holds good for boundaries that follow rivers, mountain ridges, and coastal areas, as there is nothing natural in them as political boundaries and instruments of social control. In principle, boundaries are therefore nothing more than lines or vertical levels drawn to demarcate state sovereignty, and it is irrelevant what types of terrain or sea areas they pass through. This does not mean that the location of boundaries is as such irrelevant, since these considerations can be important for the fortunes of a state in military conflicts, which often take place in border areas.

Ratzel's discussion showed effectively that boundaries are often associated with another key category of political geography: territory. Indeed, Robert David Sack has defined territory and the associated practice of territoriality partly through the concept of boundary. For him, territoriality is a strategy for affecting, influencing, or controlling resources and people, and this takes place by controlling an area. Circumscribing things in space, or on a map, as when a geographer delimits an area to illustrate where corn is grown or where industry is concentrated, identifies places, areas or regions in an ordinary sense, but it does not itself create a territory. Sack suggests that this delimitation becomes a territory only when its boundaries are used to affect behavior by controlling access. Territoriality is therefore a strategy, not some thing natural, primordial, or unchanging. And as a strategy it can be turned on and off.

**Boundary Terminology and Its Problems**

The first half of the twentieth century was significant for the development and establishment of the terminology of border studies in political geography. This language was partly associated with the emergence of the state as the key institution of modernity and the fact that the institutionalization of geography as an academic discipline was crucially related to this process. It has been noted that the key ideological motives for the institutionalization of geography as an academic discipline were nationalism and imperialism. Such ideologies are very closely linked to the processes of dividing space and to
power relations. Political geographers have observed that it was at the beginning of the twentieth century that the all encompassing nation state system finally transfor med a world that had been characterized by more or less flexible and permeable frontier zones into a world of relatively fixed boundaries, a world that gradually manifested itself in the emergence of guarded bound aries, passports, and other instruments that were needed for controlling state territory. This also manifested itself in maps and atlases, which became increasingly import ant elements in the state centric national socialization that took place in schools and other places of education. In a word, boundaries were ‘drawn’ on the Earth’s surface, on maps, and in people’s minds and social practices in order to produce and reproduce the territorial trap.

The key categories of the emerging modernist language in political geography were border, boundary, and frontier. These categories are still in use today, although their meanings seem to vary between academic fields. In political geography, Victor Prescott in particular struggled to define these categories in relation to each other. He has defined a boundary as a line of physical contact which affords a basis for both discord and op portunities in cooperation between states. A border is a slightly broader category in this terminology and denotes the adjacent areas which line a boundary, while a frontier is a zone that is associated either with a political division between states or with a division between the settled and uninhabited areas within a state. One more important category is Prescott’s term ‘borderland’, which is nor mally understood as a transition zone within which a boundary line lies. We can perhaps add to this list the concept of a ‘border landscape’, which in a way condenses the many elements of traditional empirical approaches: a local perspective, an empirical approach, and attention paid to visual elements. Border landscapes have also been objects of research in many boundary studies focusing on ordinary people’s perceptions of a border.

It is important to recognize that this division between the concepts is by no means the only possible one. Hence the current literature published in anthropology or political science – and even political geography – displays quite free usage of these terms, so that the scholars may be talking about borders at one time and about frontiers or boundaries in a more or less overlap ping sense at other times.

This ambivalent use of concepts is related to the fact that since the collapse of the Cold War divide between the Western and Eastern world, boundary studies have been mushrooming not only in political geography but also in many other fields, so that scholars engaged in research in international relations, anthropologists, his torians, sociologists, and literary theorists, for instance, have all been looking at the concrete, symbolic, and metaphorical meanings of boundaries. One problem in the current boom has been that researchers working in different ‘academic territories’ often operate inside their own territory, without noticing that more or less similar work is being done beyond the ‘boundaries’ of these territories. This crossing of disciplinary boundaries poses a perpetual challenge for border scholars.

The existence of divergent views on the roles of boundaries gives expression to the fact that scholars have a wide variety of theoretical frames of reference available for their work. At the same time, boundaries themselves serve a great diversity of functions: they are administrative tools in the international system of nation states, they are instruments of the political and territorial control exercised by governments, and they also act as structural factors in existing patterns of social identities and/or challenge these patterns. In practice, such func tions are in operation simultaneously.

The meanings attached to boundaries are always contextual and historically conditional. They are not only infused with ideological significance, but also have material practices and consequences associated with them. Most state boundaries are emotionally loaded with bloody memories and recollections of moments of glory that have been achieved or have been left behind. Such memories and related performances are effectively exploited in nationalist ideologies. Like the various forms of nationalism, boundaries are loaded with implications of power, politics, and culture. They are part of the means by which people try to create order in the world on different spatial scales. It is for this reason that boundaries are frequently matters of dispute, so that actors – both individual and corporate – imbued with a multiplicity of passions will attempt to contest their existence.

The Resurgence of Boundary Studies after the Cold War

The post World War II situation in Europe in particular and the period following the Cold War very much fixed the meanings of boundaries in this context, that in which much of the language and practice of border studies had originally been created. A certain status quo as to boundaries was regarded as useful during the Cold War period for reasons of security policy. This claim is still implicit in the EU, which has required from new mem bers that they should not have unsolved border disputes. The EU has now taken more active steps to reduce the impact of boundaries, for example, through a cross border regional policy. While this is taking place inside the EU, its external border has concomitantly become more exclusive.

After World War II new political boundaries emerged, particularly in the continent of Africa, where a number of
new states were established after the end of the colonial period. These tendencies did not arouse much theoretical motivation among border scholars, however, for although they have always recognized the crucial link between boundaries and state power, they have not by tradition been apt to theorize over the relations between the state, the nation, nationalism, and boundaries in terms of social and cultural theory. Such theorization represents a relatively recent phenomenon that has emerged since the 1990s.

It was therefore not until the collapse of the Cold War geopolitical order and the disappearance of the dividing line between West and East at the beginning of the 1990s that a new wave of border research was experienced in political geography and many other fields. The resurgence of boundary studies in this new situation manifested itself not only in academia and in the increasing number of boundary related publications, but also in the rapid establishment of border research institutes in many countries around the world. Contrary to purely academic border studies, such institutes have often had concrete aims, for example, those of creating and maintaining information on various border cases.

The end of the Cold War both created new boundaries and removed some very important existing ones. The dispersal of the Soviet Union and Yugoslavia in particular gave rise to a number of new boundaries and territories that claimed sovereignty. In contrast, the end of the long divide between the two Germanys removed the key symbol of the Cold War, the Berlin Wall, and transformed it – or what was left of it – into a new relict boundary that was soon to become a tourist attraction (Figure 2).

Alongside its many other local consequences, the removal of the East West dichotomy meant in the broader constellation of international relations that both the West and the East lost the 'Other' by contrast with which they had built up their own identity. 'Security' has traditionally been linked with national political identities, which have been perceived as dependent on boundaries defining the Other. In this new situation, the foreign policy elites of many countries developed a need to redefine the core content of their territoriality, their foreign, and defense policies – and naturally also their identity. This became part of a wider rescaling of the state in the globalizing world. In Europe the changing landscapes of security led many of the former Eastern European states to join NATO. The international landscape then experienced another major upheaval in the form of the terrorist attacks on New York on 11 September 2001. New lines of integration and separation were established and new images of threat were exploited in order to do this. Such new lines and Others have often been drawn on the basis of Samuel Huntington’s famous but much criticized ideas on the clash between ‘civilizations’, especially in the case of the line between the Western and Islamic cultures.

Examples of New Themes and Debates

The ongoing social transformations and new inter disciplinary theoretical orientations have fuelled new debates on boundaries. The mushrooming of discussion over the impacts of globalization, for example, has created whole new fields of discourse. The most significant as far as the future roles of international boundaries are concerned has been the debate on the disappearance, or at least retreat, of the nation state and the related ideas on a new ‘borderless world’ that were put forward after the mid 1990s. The borderless world thesis is associated with the name of the Japanese business guru Kenichi Ohmae, who looked on the networks of ‘region states’, often emerging on the border regions of larger states (e.g., Hong Kong, Tijuana San Diego) as the potential motors for the new global economy. Another important figure motivating the debates on the new roles of political boundaries, de/rebordering, and de/re territorialization has been Manuel Castells, whose works on networks and on the space of flows that will challenge the space of places have forced researchers to rethink the contemporary and future roles of national states. Castells has nevertheless perpetually reaffirmed his recognition of the power of territorial identities in social life and in the struggles that occur on various spatial scales.

While the borderless world was perhaps more a metaphor of neoliberal economic thinking than something that was intended as a universal characterization of the current globalization world, Ohmae was on the right track when recognizing the importance of cross border regions. It is no exaggeration to argue that questions regarding border crossings form one of the key areas in boundary studies today. Contrary to many other themes in political geography, boundary studies concentrating on the theory and practice of border crossings are practiced actively outside the Anglophone world, especially on the continent of Europe, where integration and the enlargement of the EU, together with the new cross border policies developed in this context, have made the political boundaries between states very important objects of research and practical politics. Cross border cooperation and new forms of regionalization are leading the EU to an increasing degree into a situation in which, to use the expressions of Oscar Martinez (1994: 1–15), many “alienated borderlands” are turning into “interdependent borderlands”, and may eventually integrate to form a single region. More than 150 cross border regions have been created in the EU with the aim of lowering the boundaries between states and promoting the economic and cultural life of border
areas. Some of these units exist between two states and others serve to integrate a number of states.

In spite of these tendencies and the change of focus toward European borders, perhaps the most iconic single cross border region in the world is nevertheless still the US Mexico border, which has been studied intensively by geographers, political scientists, and even literary theorists. The terrorist attack in 2001 has raised the importance of this border to new heights, since it perpetually symbolizes many problems and research questions that are normally associated with international political borders: a major gap in the standard of living between two states and the resulting exploitation of the labor force on the poorer side, questions of immigration, smuggling, prostitution, or strict surveillance. Similar problems are increasingly being experienced on the new external boundaries of the EU, however, causing the expression 'Fortress Europe' to be adopted to refer to the efforts by the EU to keep non EU nationals, goods, or businesses out of the member states. Although the connection was perhaps unintentional, the use of this expression is grotesque in the sense that the Nazi leader Heinrich Himmler frequently referred in his days to 'the fortress of Europe'.

It was thought in the 1990s that the rise of new information technologies, the Internet, and cyberspace would dramatically change the nature of bounded spaces and somehow reduce their power. In many cases such technologies have doubtlessly helped, for example, in enabling members of diasporic communities to maintain connections across borders. Similarly, social movements based on gender questions, sexuality, environment, or

Figure 2 The Berlin Wall was the key symbol of the Cold War period in Europe. After the collapse of the socialist Eastern Europe the remnants of this border became a famous tourist attraction. Photos: Anssi Paasi.
globalization/antiglobalization have certainly benefited from the new technologies. But at the same time, it is obvious that they have become effective instruments of boundary control and maintenance around the globe. This tendency toward surveillance and security in daily life has led to a situation where boundaries – in the form of control – actually exist not only in border areas but are also distributed all over our societies in airports, shopping precincts, or the streets of our city centers. This has taken place especially after the 11 September 2001.

Human geographers and related scholars have also developed other conceptual ideas in the context of debates on globalization that imply borders or border crossings in the spheres of politics, economy, or culture, examples of which might be ‘ecopolitics’ in international relations (IR) or ‘annihilation of space’ in economic geography. Ecopolitics reminds us of the fact that many environmental problems (e.g., the Chernobyl catastrophe in 1986) do not respect the boundaries drawn by politicians and military officers. Annihilation of space, for its part, points to the fact that capital accumulation perpetually strives to annihilate space (and boundaries) and to reduce turnover time.

A further, more theoretical, inspiration for new academic debates on borders in the 1990s was the purported ‘postmodern condition’ and the post structuralist philosophy that both challenged the existence of permanent truths and at times accentuated the socially constructed character of the world and its nature as a constellation of all kinds of networks and interactions. Such perspectives questioned the whole idea of fixed boundaries and power relations and emphasized the fragmentary, hybrid, and transforming character of the world. This way of thinking is still extant in a modified form in human geography, where the normative pronouncements of the ‘relational thinkers’ have challenged all bounded spaces as regressive and put the stress on hybridity, fluidity, and networks. Similar thoughts are often advanced by border scholars who draw on cosmopolitan thinking.

It is clear that in this new situation different opinions exist on the alternative futures for boundaries. Many researchers suggest that national states and their boundaries have lost much of their significance in the world, in which the new order dictated by geoeconomics and information economics will give priority to mobility, speed, flows of various kinds, and an entirely new type of economic region. Some other scholars maintain that national states and their boundaries will continue to be significant instruments of governance in the international system, but that this will occur in new, less static ways.

A third opinion emphasizes that both the nation and the state will continue to be of significance but the nation state itself will be in trouble. This idea is based on an observation that has become more obvious as a consequence of ethnonationalist activism, immigration, and displacement, namely, that a ‘nation’ is not inevitably restricted to a given territory but can exist on both sides of a border or require bounds of its own that are not congruent with existing state boundaries at all. The ‘nation’ itself is recognized as a social and ideological construct and a product of nationalism that often draws on ideas of bounded territories to maintain the ‘territorial trap’.

**From Boundaries to Boundary-Producing Practices**

In this ambivalent situation characterized by social transformations and new theoretical ideas, political geographers have been paying increasing attention to boundary producing practices as an alternative to the previously dominant descriptive approach and the analysis of unique boundaries, border landscapes, and cross border activities. This line of thought was set in motion especially by the representatives of critical geopolitics who were following the simultaneous debates in the field of IR. The IR scholars had challenged the assumptions hidden in the division between the internal and external aspects of states during the late 1980s. Simon Dalby and Gearoid O’Tuathail suggested that critical geopolitics should pay particular attention to the boundary drawing practices and performances that characterize the everyday life of states. They pointed out that, in contrast to conventional geography and geopolitics, this approach should investigate both the material borders at the edges of states and the conceptual borders that designate material boundaries between a secure interior and an anarchic exterior.

The processes of ‘Othering’ and how such processes become a part of banal or mundane nationalism have been scrutinized in many IR and geographical studies. Paasi, for instance, examined how the Finnish Russian border has been exploited ideologically in Finland in the nation building process as a line separating ‘us’ from the Other (the Soviet Union/Russia) and how this ideology was used effectively—through the media and the national education system—for the purposes of ‘spatial socialization.’ This is the process through which individuals and collectives are socialized as members of specific territorially bounded spatial entities and through which people more or less actively internalize collective identity narratives and shared traditions and memories.

New theoretical approaches have motivated political geographers to become increasingly interested in social and cultural theory when developing new interpretations and approaches to boundary studies. Newman and Paasi looked at the theoretical literature and empirical studies on boundaries and identified four interdisciplinary themes in border studies in which human geographers also had an active interest. First, the emerging debates on
postmodernism and poststructuralism and the related debates on de territorialization and reterritorialization on various spatial scales inspired many geographers in their research. Second, the roles of diverging borders in the construction of sociospatial identities and in the creation of distinctions between ‘us’ and the Other were studied not only in the field of IR but also by political geographers. Third, increasing attention was paid to boundary narratives and discourses that were identified as significant in the construction of spatial identities and in the national socialization process, that is, in the process whereby citizens adopt the narratives of national identities. Correspondingly, geographers have studied various mechanisms that generate boundedness and have identified the important role of national education systems and the media in such processes. Fourth, political geographers became interested in the roles of various spatial scales in the construction of national borders. This theme shows the importance of boundaries as a meeting place for local, national, and international processes, and in fact displays the problematic character of such universally accepted scales in social life.

Indeed, due to the complexity of the spatialities of the globalizing world and the new theoretical orientations in boundary studies, it is possible to widen the horizon on boundaries and argue that it is not only the subfield of political geography that deals with them but also certain other areas of human geography. The boundaries displayed in Figure 3 are ones that are implicitly or explicitly present in many other areas of geographical inquiry in addition to political geography, most notably in economic, cultural, and regional geography. The figure brings together some traditional and more recent ‘key words’ in these fields, words associated with a bunch of social practices that imply bordering or border crossings, or else simply challenge the notion of bounded spaces. Unfortunately, economic, political, cultural, and regional geographers tend to work on these border related questions without knowing very much of what scholars in other subfields of the discipline are doing. This is clearly a challenge for border research within human geography.

This complexity means that instead of taking any of the boundary related categories for granted, one important task for border scholars is to conceptualize the categories in relation to each concrete research setting and to create abstractions that will help researchers to reveal relevant social, political, and experiential dimensions of bordering in such a context. This will require the analysis of relevant modalities as to how the boundary in question exists, what are its social and emotional meanings, and how such meanings have been constituted in social life.

Coda–Boundaries Are Everywhere

This article shows that human geographers have studied political boundaries intensively since the institutionalization of academic geography and that their interests...
have gradually moved from empirical studies of concrete cases and border landscapes to broader themes, for example, the mapping of divergent boundary producing practices and the roles of boundaries as social symbols and institutions that are used to make social distinctions within societies. Political geographers understand boundaries nowadays in a much broader manner than as mere physical lines that separate social entities or power containers, especially states. More often than not boundaries are conceived as discursive formations and processes that have grown up to form parts of social and cultural practices that constitute and are constitutive of territories.

Such broader perspectives mean that notions such as territory, territoriality, sovereignty, nation and nationalism, nationality, and identity are crucial for understanding the meanings and functions of boundaries and the power relations associated with their formation and reproduction. Boundaries can therefore be understood as part of the process by which territories and their identities and meanings are formed and renewed. In the course of this process, which may be labeled as the institutionalization of territories, effective use is made of boundaries, symbols, and the institutions that maintain them in order to produce and reproduce a territory.

Despite the fact that concrete boundaries and physical border landscapes are often loaded with national symbolism, we can think that boundaries exist at the same time in the innumerable practices and discourses that constitute the sociospatial delimitations that place some individuals inside a certain boundary and others outside it. This broader perspective means that boundaries are manifested – either visibly or covertly – in politics, governance, economics, culture, the construction of ethnic relations, the media, educational practices, and other forms of national socialization. It is these practices that lay the foundation for our awareness of the sovereignty of states, of ‘us’ as an abstract, imagined community with a specific identity, and for our understanding of the relations between ‘us’ and ‘them’. Such practices intersect and become fused across spatial scales. Some practices may be local, some national, and others international, which means that both the origins and manifestations of a boundary may exist simultaneously on several spatial scales.

This article also shows that political boundaries are not just neutral lines drawn on maps or through concrete border landscapes, but are actually spread all over state territories, and they can even manifest themselves at times outside states. One example of such an extension is the fact that the UK and French passport controls for Eurostar trains are juxtaposed in Paris and London, respectively. This extension, like the increased monitoring and surveillance at national airports, in shopping precincts or in city streets, is part of the ‘technical’ landscapes of social control that have been created in the name of the often abstract discourse of security.

There is another way, too, in which boundaries exist more broadly within society. This is based on the fact that they are at the same time both symbols and institutions through which social groups generate distinctions and are themselves created through such distinctions. In this sense, boundaries are a part of what can be called the ‘discursive’ landscape of social power, which is manifested in social practices. All states lean on such landscapes, drawing on both the past heritage, current symbolisms, and future societal expectations, when they try to produce and reproduce loyal citizens who will identify themselves with the nation, or at least with the political system.

Both the technical landscapes of social control and the discursive landscapes of social power makes it easier to understand the persistence of boundaries in the networking world and to comprehend why boundaries will not necessarily disappear even though certain social practices, for example, the economy, may produce alterations in the ways in which boundaries function. As Peter Taylor has shown, territoriality may have many shapes in the operation of nation states. Instead of one territoriality we have numerous territorialities that may have divergent functions. This suggests that human geographers working with political boundaries will continue to face a number of interesting theoretical and empirical challenges in the future.

See also: Borderlands; Cold War; Maps and the State; Nation; Sovereignty; State; Symbolism, Iconography; Territory and Territoriality.

Further Reading


Relevant Websites

http://www.dur.ac.uk
International Boundaries Research Unit, Durham University.
Introduction

Political ecology is a relatively new interdisciplinary field that developed initially through the merger of cultural ecology with political economy. Cultural ecology, with its emphasis on ethnographic fieldwork in small, agrarian communities shaped political ecology’s early emphasis on rural, Third World settings. The central concern of cultural ecology in the 1950s and 1960s was to introduce the theoretical constructs of biological ecology, particularly the ecosystem concept, into the study of nature-society relations. A key assumption was that ecosystems are characterized by homeostasis and equilibrium. The homeostatic model of ecosystems held great appeal to anthropologists and geographers interested in demonstrating that cultural adaptation was the key to understanding complex nature-society interactions. Culture was theorized as playing the same role in human society that genetics plays for nonhuman species in evolution and adaptation to the environment.

Scholars began to question the conceptual and philosophical foundations of cultural ecology, noting that even the most remote communities did not function as independent, autarkic systems. A series of studies in the 1970s and 1980s refocused cultural ecology toward an analysis of how agrarian communities dealt with the social and ecological demands of an external capitalist economy. Critics explained that human behavior, reframed in cultural ecology as ‘adaptation’, is rendered crudely functionalist and teleological. Nature-society relations, it was argued, are better understood through political economy, with a focus on the social relations of production under capitalism. This reorientation toward investigating the social relations of production was guided by broadly Marxist political economic scholarship in geography, social history, and agrarian studies.

Development studies provided another root of political ecology. Specifically, within development studies in the 1960s and 1970s, there was a major focus on Third World environmental degradation. In a critical response to neo-Malthusian explanations of environmental degradation, scholars interrogated their empirical and ideological bases. Neo-Malthusianism, scholars argued, is overly simplistic, empirically unsubstantiated, and theoretically barren, ignoring the social relations, economic constraints, and political power structures that shaped land and resource use. Their alternative explanation was founded on the principles and concepts of political economy, including questions about wealth distribution, social patterns of accumulation, interclass relations, the role of the state, patterns of land ownership, and control over access to natural resources.

Out of this political economy approach to environmental degradation emerged a set of methods and questions that provided the foundation for a new field. Although the term had been used in other contexts, two geographers, Harold Brookfield and Piers Blaikie, are widely recognized for initially defining political ecology as linking ecology with political economy in their 1987 book on land degradation. A central premise was that ecological problems were at their core social and political problems, not technical or managerial, and therefore demanded a theoretical foundation for analyzing the

Glossary

Environmental Degradation A catchall term for a range of ecological problems such as desertification, soil erosion, deforestation, and species loss.

Environmental Orthodoxy Highly generalized and simplified explanatory narratives of ecological change that are widely accepted and persist over time despite the accumulation of empirical evidence that would overturn or modify them.

Homeostatic Systems Systems that are self-maintained and self-regulated through complex control mechanisms, energy pathways, and feedback loops in a way that resists change and results in a stable equilibrium state.

Indigenous Technical Knowledge (ITK) Indigenous technical knowledge, a concept emerging out of participatory development initiatives of the 1970s that stressed the importance and relevance of local environmental knowledge and land-management techniques to development planning.

Neo-Malthusian The extension of Thomas Malthus’s theory of the relationship between population growth and food scarcity to contemporary environmental problems, positing that overpopulation is the sole or primary cause of environmental degradation.

Social Relations of Production A term from Marx’s theory of historical materialism that refers to the types of societal structures and relationships that develop from particular production processes, including socioeconomic stratification, property ownership and control, and patterns of socioeconomic dependency.
complex social, economic, and political relations in which environmental change is embedded. Because of the complexity of the phenomena under investigation and the interdisciplinary character of the field, there is no single methodology or set of theoretical concepts that could be used to define political ecology research. Nonetheless, political ecology research does have distinguishable features. Multiscalar analysis has been a hallmark of political ecology, as have political economic analysis, historical analysis, ethnography, discourse analysis, and ecological field studies.

Theoretical Developments

Political ecology emerged and matured as a distinct field in a period of revolutionary theoretical shifts in both the social and biophysical sciences, which challenged many widely accepted ideas of nature–society interactions. Post structural social theory and nonequilibrium ecology have initiated a reexamination of the way we conceive of nature–society interactions, throwing into question much of what environmental managers and scientists previously had taken for granted. As an interdisciplinary field, political ecology has been at the forefront of attempts to integrate the advances in post structural social theory and nonequilibrium ecology into nature–society research.

Science and Nature in Post-Structural Social Theory

Since its coalescence in the 1980s, the field of political ecology has adopted, challenged, or been altered by new developments in social theory, especially those addressing the social construction of nature. The idea of the social construction of nature is a term commonly employed to stress the role of representation, discourse, and imagery in defining and framing our knowledge of the natural world and ecological change. The key debate is between an extreme relativist view of nature and an extreme realist one. Political ecologists have staked out the middle ground, stressing that the idea of the social construction of nature does not mean that nature exists only in our collective imaginations. The prevailing position within political ecology accepts the existence of a material world independent of human consciousness and sensory perception, while at the same time recognizes that our knowledge of that world is always situated, contingent, and mediated. Attempts to link the insights of social constructivist concerns with a scientific understanding of nature have adopted a philosophical position known as critical realism. Critical realism starts from the premise that the world exists independently of our knowledge of it and that its very independence means that human knowledge is not reality, but a representation of it. Nature exists apart as a reality, but scientific efforts to describe or give order to it should not be confused with that reality.

Another important source for the constructivist approaches to nature, feminist theory, must be high lighted here. Feminist post structuralists, of whom Donna Haraway is perhaps the most prominent, present a critique that challenges the assumptions of rationality and objectivity in science. Feminists’ rejection of the prevailing concept of objectivity in science is based on a strong skepticism of scientists’ claims that their observations can somehow be disembodied (removed from all context) to produce an objective and universal empirical truth. Haraway suggested an alternative understanding labeled situated knowledge; the idea that all observation is located, embodied, and partial, and that by recognizing and accepting this partiality, science can better be positioned to understand the limits of knowledge claims. Harraway’s work, along with Bruno Latour’s, has also been important to a branch of political ecology that incorporates science and technology studies’ concepts of hybridity and networks, the former idea being increas ingly important for theorizing the social construction of nature and the latter being viewed as corrective to Blaikie and Brookfield’s ‘chain of explanation’.

Post structuralism also introduced to political ecology an emphasis on new social movements based on socially constructed identities of race, gender, and ethnicity. In particular, it has introduced the idea of discourse analysis in political ecology research and the importance of exploring and revealing the ways in which the environment and environmental problems are discursively constructed. While a great deal of debate about the precise role of discourse analysis in the field continues, over the past decade or so, it has become widely recognized that material analyses in political ecology cannot be conducted in the absence of or separately from discursive analyses. In political ecology’s engagement with discourse analysis, emphasis is placed on a critical perspective toward modernist notions of objectivity and rationality, on interrogating the relationship between power and scientific knowledge, and the recognition of the existence of multiple, culturally constructed ideas of the environment and environmental problems.

Nonequilibrium Ecology

The idea that equilibrium, order, and permanence characterize nature has long held sway in the science of ecology. For most of the twentieth century, the dominant view of environmental change was that ecological communities progressed through a linear series of stages, which ultimately culminated in a final, stable climax stage. Any force, natural or anthropogenic, that upset the normal equilibrium state was characterized as disturbance. It was further theorized that following a
disturbance, the community would progress stage by stage, returning ultimately to the climax stage of stable equilibrium.

In the late twentieth century, the equilibrium view of ecology came under increasing scrutiny as more and more empirical findings were in contradiction with it. A new ecology – nonequilibrium as opposed to equilibrium ecology – subsequently emerged. This perspective suggests that stability is not the norm for many ecological communities and that revised, if not revolutionary, models of nature are required. The new ecology replaces assumptions of equilibrium, predictability, and permanence with instability, disequilibria, nonlinearity, and chaotic fluctuation. Disturbance is no longer assumed to be anomalous, or an event from which a system recovers, but rather is considered sometimes to be integral to the system’s functioning. The development of chaos theory has also influenced the introduction of the notion of nonlinear change in ecology. Chaos theory highlights system complexity, recognizing that chance is inherent in natural systems. Thus, what appears as chaotic change is actually ordered, though not linear or predictable. Furthermore, chaos theory demonstrates that many systems display high sensitivity to initial conditions. That is, small differences in initial conditions magnify into great differences in final conditions.

A final feature to emphasize in nonequilibrium ecology is the importance of spatial and temporal scale in the analysis of ecological change. First, a linear or regular relationship between the intensity of ecological impact and distance in time or space cannot be assumed. Second, nonequilibrium ecology raises the question of how large a spatial scale is necessary before we can confidently identify a system in balance. Third, it further suggests that in complex natural systems, different rates of change, propelled by different abiotic and biotic processes, are occurring simultaneously at different spatial and temporal scales. An important focus, then, is the coupling of subsystems operating under different periodicities and at different spatial scales.

In the wake of these theoretical developments, there have been increasing attempts within political ecology to identify convergences in nonequilibrium ecology and social science that can provide the basis for a synthetic treatment of nature–society research. Among these efforts at synthesis, four themes emerge repeatedly. The first concerns the production and utilization of ecological knowledge in conventional science. Much of this work focuses on the critical evaluation of the production of knowledge on a temporal scale as socially produced rather than ontologically given. The fourth and final theme concerns the critical evaluation of the institutions, policies, and management practices in light of the advances in social theory and nonequilibrium ecology. Allowing for multiple perspectives in society and unpredictability and in determinacy in nature has brought new appreciation for local management systems, demonstrating the roles of local institutional arrangements and cultural practices that emerge in an ecological context defined not by stability, but by extreme spatial and temporal variability.

Critical Approaches to Environment and Development

Political ecology’s approach to nature–society relations has explicitly linked capitalist development with ecological change across multiple temporal and spatial scales. The field has been an important source of critical analyses of the social and ecological effects of development, focusing particularly on the material and discursive aspects of property rights. Specifically, analysis has focused on the way that rights are defined, negotiated, and struggled over among different social groups – class, gender, racial, or ethnic groupings – as a means to explore patterns and linkages between economic development and ecological change. These same analytical tools have been brought to bear on territorially based biodiversity conservation strategies (i.e., national parks and other protected areas), the mainstream political response to ecological crises under capitalist development.

Development for Whom?

To a significant degree, political ecology has operated as a critique of the discourse and practice of mainstream development thought, from modernization theory to sustainable development. A key approach in early political
ecology was to evaluate development initiatives from the bottom up, emphasizing the importance of local and indigenous technical knowledge (ITK) about the environment. The role of ITK in environmental management and regional development has since been widely debated within political ecology. The argument that ITK should provide the basis for development from below depended on a fairly limited conceptualization of knowledge. ITK literature tended to overgeneralize about technological modernization's destruction of local economies and environments and gave too much weight to ITK as a necessary and sufficient foundation for improving livelihoods. What were overlooked are the other types of knowledge that rural producers may not possess, such as market conditions, price variability, and distant institutional constraints, that may be necessary for the improvement of local livelihoods.

In their analyses of development, political ecologists have borrowed from and made important contributions to common property theory and our understanding of tenure relations more generally. In political ecology, property rights are viewed as an expression of the social relations of production, forged in specific places in specific political economic contexts and embedded in locally generated meanings of land and resources. Development interventions that alter ownership, control, and management of land and resources also raise questions regarding labor, production, and surplus appropriation. Several studies have demonstrated that – contra World Bank policy rationale – privatization is neither necessary nor sufficient for the promotion of rural development. In analyzing the consequences of privatization and state appropriation of the commons, the fundamental question in political ecology studies has been, then, which property rights are being secured for whom.

Development in the mainstream literature is conceptualized as the solution to rather than the cause of backwardness, poverty, and environmental degradation in rural Third World communities. For some political ecologists, however, the post World War II project of Third World development is an exercise in domination – of the North over the South and the state over local communities – and therefore should be abandoned. Decades of development interventions, it is argued, have failed to relieve either poverty or environmental degradation while succeeding in strengthening the power and authority of the state and international actors over local communities. For these scholars, development is conceptualized as a discourse, constructed not to liberate the Third World people from poverty, but to subjugate extensive regions in the Global South to the needs of a Northern based capitalist world economy. There is a lively, ongoing debate within political ecology concerning the treatment of development as discourse and the nature of local encounters with development. Based on ethnographic case studies, some have argued that local community resistance politics is not merely a rejection of development, but rather culturally embedded demands for development as a right or entitlement from the state. Several political ecologists have argued that many local social movements are concerned not with halting development interventions, but with managing modernization processes on their own terms and forcing the state to address problems of underdevelopment and inequality.

Who Pays for Biodiversity Conservation?

The twenty first century biodiversity conservation strategy is structured around the idea that the establishment of national parks and protected areas is the best and indeed the only way to ensure the survival of wild species. Critically referred to as the fortress model, this strategy is based on the idea that biodiversity conservation requires large territories where ecosystems are allowed to function undisturbed by human activities. The 1970s saw the greatest expansion of protected areas in history, with the number established between 1970 and 1990 exceeding the number created in all the previous decades. Most of the increase has occurred in tropical Third World countries in the form of the fortress model. Biodiversity conservation is a territorially based strategy that is anchored in the proprietary claims of the state. As such, it raises questions that are at the very core of political ecology, such as how the relationship between nature and society is conceptualized, how access to land and resources is controlled, and how environmental costs and benefits are distributed. Fortress style nature conservation has been highly politicized because the state has claimed ownership over wilderness areas that others considered to be their homeland. Political ecology has offered a powerful analytic to assess both the ecological efficacy of the territorial approach to biodiversity protection and the politics that produce and are produced by it.

Political ecology studies have demonstrated that the establishment of protected areas often functions as a form of enclosure. Forests, bushes, and pastures that were held as communal property for community members to hunt, gather, and graze have been enclosed and converted to state ownership for the conservation of wild flora and fauna and their touristic potential. Historically, this has been conducted with minimum involvement of the people most affected by enclosure. State agents have often resorted to force in order to curtail communal access to the commons and to evacuate residents reluctant to relocate. As a consequence, those communities located on the boundaries – more often than not having been displaced in the process of park establishment – are commonly antagonistic toward
state directed conservation policies. Political ecology is concerned with the issues of political conflict, social justice, and ecological efficacy that surround state directed biodiversity conservation.

Of particular interest in political ecology are the competing demands for material access to biodiversity (in all of its forms) and the various symbolic meanings that the state, international conservationists, and segments of civil society attach to parks and protected areas. Political ecologists have pursued several areas of inquiry related to fortress style biodiversity conservation. For example, what has been the history of human use and occupation of protected areas and how has it influenced biodiversity? Advocates of fortress style parks have tended to disregard or downplay historic human occupation and the role of human use and management on the ecology and landscape targeted for preservation. Recent scholarship, however, details how various peoples had occupied, used, and significantly shaped the ecology of what is purported to be primeval nature. Second, what is the relationship of mandatory evacuations of protected areas to state directed segregations, resettlement, and reservation schemes? Political ecology research has shown that governments have often combined conservation enclosures with other state policies of social control and segregation, including various state schemes of relocation, native reservation, and settlement concentration. Finally, how do ideas of national parks and equivalent reserves relate to the social construction of collective identities? Several political ecology studies have demonstrated the important role of parks and protected areas in the construction of national identities. Others have investigated the ways in which protected area policies and practices intersect with social constructions of class, ethnicity, and race hierarchies.

Political ecology's primary concern with the fortress approach is that it is deeply flawed for both ecological and political reasons. In ecological terms, global biodiversity losses have accelerated during the same period in which the number of parks and equivalent reserves increased exponentially. In political terms, the obsession with the wilderness ideal has meant that communities are displaced and the local commons enclosed on pristine grounds. In the absence of reliable data on human activities and ecological change, the standard procedure has been to evict first and ask questions later, if ever. Local communities thus have borne the costs of protected area establishment but have received few of the benefits.

Partly because of the contentious politics produced through protected area establishment, new approaches to biodiversity conservation have been proposed, emphasizing participatory and emancipatory community based initiatives. Sometimes referred to as nature–society hybrids, these are new conservation territories that, in contrast to fortress conservation, integrate human habitation and resource use with biodiversity conservation goals. Nature–society hybrids go by a number of generic labels, including buffer zones, indigenous reserves, integrated conservation and development, and community based natural resource management. Political ecologists have suggested incorporating both the environmental politics of progressive social movements and the theoretical advances of nonequilibrium ecological science into new kinds of conservation planning. This would take the form of conservation territories with boundaries that are flexible,-multiscale, and overlapping so as to accommodate the spatial and temporal heterogeneity of ecological processes as well as the extralocal geography of social and political movements.

**Recent Trends and Future Directions**

Political ecology is a young field that has rapidly expanded beyond rural, Third World concerns into new research contexts and new areas of theoretical and philosophical inquiry. For example, a strong urban political ecology focus has developed in recent years, partly in recognition of the rapid urbanization of large regions of the Third World and the accelerating expansion of global trade that is intensifying and multiplying the linkages among far-flung places around the world. Urban political ecology characterizes urban environments as the products of the intermingling of social and ecological forces, which results in a hybrid form requiring vast in puts of capital and labor, yet still linked to and dependent upon biophysical processes.

Another new focus of analysis is environmental security. Political ecologists have developed one of the most potent critical assessments of environmental security thinking and a cogent argument for an alternative analysis of the relationship between environmental change and war and armed conflict. The key criticisms of environmental security include, first, that it relies heavily on discredited Malthusian ideas of resource scarcity. Second, in the environmental security literature, resource scarcity is conceptualized in such a way as to encompass very different social and environmental processes and conditions, resulting in a confused and muddied set of variables and causal relationships. The third area of criticism is that environmental security thinking treats conflict as a problem internal to ‘groups’ or ‘societies’ with little or no analysis of interactions with the international political economy. Emerging from this critique are several new political ecology studies that explore the relationships among violence, justice, and the environment.

A third important new direction in political ecology features the incorporation of philosophies of ethics. Recent developments within and outside of the academy
suggest that an engagement with formal ethics will provide an important trajectory in the evolution of political ecology. For example, the rise of new social movements for environmental justice in the 1980s and 1990s pushed political ecology to explore the linkages between environmental concerns and political empowerment and emancipation, and thus closer to an explicit engagement with ethics. Environmental justice movements have challenged technological and managerial approaches to environmental problems by asserting the legitimacy of moral and ethical concerns. One expanding area of concern is the mixing of human and nonhuman genes in bioengineered organisms, raising fundamental concerns about the rights and moral standing of such hybrid creatures. New studies in the field are now probing the ethics of nature–society relations from a variety of philosophical perspectives. New areas of exploration include the possibilities for developing ethical relations in consumer behavior and ethics in the practice of political ecology, both in terms of research strategies and classroom pedagogy.

Finally, debates over indigeneity, property rights, and stewardship have sparked a range of fascinating new works in political ecology that are beginning to probe more deeply the relationship of identity and environment, raising new questions about the way we theorize culture and nature, and about the politics of conservation and resource management. Future political ecology studies will need to be aware of the instabilities and cultural constructedness of group self-identification while at the same time remaining sensitive to the validity of local historical narratives, practices, meanings, and attachment to place. The theoretical complexity and empirical and ethnographic detail of many of the studies constituting a new wave of attention to identity in political ecology have set a high standard and suggest a range of inquiries for future work.

See also: Chaos and Complexity; Conservation and Ecology; Development I; Development II; Environment, Historical Geography of; Environmental Hazards; Indigenous Knowledges; Nature, Social; Natures, Gendered; Peasant Agriculture; Poststructuralism/Poststructuralist Geographies; Sustainable Development.

Further Reading


Relevant Websites

http://globetrotter.berkeley.edu
Berkeley Workshop on Environmental Politics, Institute for International Studies, University of California, Berkeley.
http://www.centerforpoliticalecology.org
Center for Political Ecology.
http://www.stetson.edu
Cultural and Political Ecology Specialty Group (CAPE) within the Association of American Geographers, Stetson University.
http://ipe.library.arizona.edu
http://www.polisproject.org
POLIS Project on Ecological Governance, Law and Political Ecology.
http://www.geog.cam.ac.uk
Political Ecology of Development Group, University of Cambridge, Department of Geography.
http://www.thecornerhouse.org.uk
The Corner House.
**Introduction**

In 1981, the Association of American Geographers held its annual meeting in the new Bonaventure Hotel, downtown Los Angeles (LA). The meeting has stuck in author's memory because it was in the economic geography sessions that he saw for the first time the sharp edge of knowledge politics. He witnessed differences in interpretation over the word structure, in ‘structural change’ and ‘changing structures’. Heated argument in the corridors exposed lines of deeply felt difference. First was the politics of what economic geography was about. Structural change meant alterations in the makeup of the economy, the mix of industries and firms as distributed across space, usually measured by employment because that data was easy to obtain and full employment was the approved goal in the post 1945 long boom. Changing structures was code for structures of social relationships especially the class based relationships that distinguished capitalism where production was organized for profit. A second dimension involved methodological choices; evidence of structural change was produced using analytical techniques such as location quotients and shift and share analysis, while changing structures were summoned into existence by theorizing qualitative shifts in underlying (capitalist) relationships. Third, each group named different authorities in support of their arguments: economics and Keynes, political economy, and mostly Marx. Who counts as friends and from whom inspiration is drawn means a great deal. Finally, looking back, there were hidden ontological tensions. In a challenging way the meeting had a spectre of intellectual alienation. Being asked to defend the premises relating to why and how one sought to produce economic geography knowledge, and not being able to do so when confronted to do so, was akin to being stripped of the means of
producing knowledge as one knew it. What commitments lay ahead for those who chose to engage with the burgeoning literature that was surfacing in economic geography under the name of political economy? Indeed, would openness to influences from within and outside geography be a feature of the yet to be solidified new economic geography practices or would challenge from any quarter be perceived as too threatening and dismissed?

The author's anecdote cut into a particular institutional and geographical context: an ascendant Anglo American geography, past the high point of regional science that informed much economic geography curriculum and research practice, a US conference, a world disturbed by oil shocks, rising unemployment in the flagship industries of the major capitalist economies, a time when many in economic geography were finding their existing frameworks to be underperforming in terms of providing answers about a perplexing and changing world. The methodological individualism of most economic geography could not cope with structural forces that seemed to lie behind developments. Perceptions of economic geography's inadequacies were reinforced by the critique of capitalism that was gathering momentum in the social sciences. That anxiety and confusion as well as new resolve and commitment should reign in LA was hardly surprising.

The reflection on an economic geography encounter nearly 30 years ago raises issues that must be confronted when boldly declaring by label as an encyclopedia entry (the author resists using the abbreviation GPE, it empties the label of its descriptive content) that geographic political economy is an identifiable and distinctive thread of economic geography research and scholarship. A Google search, however, of combinations of words around geographic political economy produces only a handful of links, including ironically for a field with an unrepentant bias toward the urban and industrial one entry from the rural political economy stable and a couple of hits on university research programs, at Bristol and Manchester. This article has to argue the field identifier into existence!

Several richly detailed, penetrating, and geographic ally contained stock takes of Anglo American political economic geography practice are available. These sources are must reads for anyone wishing to learn how early movers and shakers of the field dealt with the trajectory they helped forge and how they worked with powerful crosscurrents arising from preoccupations in the social sciences. Richard Peet and Nigel Thrift wrote in 1989 of a perspective barely 20 years old making its mark. Allen Scott in 2000 offered an upbeat account of 'The great half century' of economic geography aka geography and political economy, followed by a more muted 'Perspective' 2 years later. Peet and Thrift concluded that original contribution of the political economy approach is its interventionary ability, while Scott presciently lays down a gauntlet when he contends that the great testing ground for economic geography in the future will be the central question of development, as a normative project of global significance.

Aims

This article highlights the knowledge production practices of those who have tried to privilege geography into economic geography inquiry in diverse ways, in combination with inspiration from political economy. This aim diverges from earlier retrospectives and field sum maries by its singling out of guiding geographic ideas. Through this focus it is hoped the possibilities and extent of political work and ethical engagements rising from the field will be seen in a new light.

First, a short primer on interpretations adopted. Economy is understood in its broadest sense as social economy, or way of life, founded in production and consumption. Social production and consumption are viewed not as a neutral acts by neutral agents but as political acts carried out by social groupings (including classes), with a variety of, especially, managerial and elite interests, especially in investment and related choices. Geographic political economy seen in this way has intersecting imaginaries at play. These geographic imaginaries emanate from a changing internationally linked community of knowledge workers – academics, students, practitioners, and other supportive actors – who are doing two main things representing the world through conceptualizations, theories, models, analyses, methodologies, metaphors, and narratives, and other approaches and presenting these representations through a wide variety of political and ethical (personal) strategies in different contexts. This conception prioritizes what is available, accessible, and acceptable for assembly and use by economic geography practitioners. It is also concerned to make explicit examples of change when some aspect of a geography–political economy relation could be said to have been understood, in some context, in quite different terms. To consider geographic political economy in this way is to reflect on the extent to which political economic geographers have come to grips with a key post structural insight, stated two decades ago for the audience of the time by Peet and Thrift, as a deep commitment to changing one's self as well as planning out programs to change social structures. The message has been more powerfully restated recently by J. K. Gibson Graham as, if we change the world, we change ourselves and if we change ourselves, we change the world. The poignancy of this statement is the subject of the final section of the entry.
Very obviously, geographic political economy as a whole offers significant resources for the current times. This view was arrived from the mapping of intellectual assets of practice that can be broadly associated into the field. Figure 1 provides a selective but illustrative summary of this mapping. It is a geographically embedded trace of developments in the field showing the gradual appearance of contributions from new nodes. Dividing the figure loosely into three parts portrays the idea of key moments in development and a sense of a trajectory of accumulated practice. The nature of the entries varies in an effort to give something of the different mix of objectives being addressed. The metaphorical and emotive content of some entries in the figure is very noticeable. It reflects practice. The ordering is an approximation at best of a chronology, dates for the most part having been omitted because the timing of publication and uptake of ideas from publication varies enormously. Names are left out so as to maintain a social or more than one identity to the field. Where particular practices originated is signaled only to show the increasingly international endeavor of the field. As with any conceptualization there are problems. One is that Figure 1 unavoidably ‘others’ a lot of geographic political economy and the rest of economic geography into invisibility. Another is the international movement of economic geographers. These said entries have all been important energizers within the field, though their geographic reach varies. Although no direct reference is made to the figure in the rest of the article, it should be kept in mind throughout because it reveals a remarkable spread and depth of actual and implied practices.

**In the Background**

Before exploring how practices have been developed from nearly 40 years, three short sections touch on influences that often intersect with the argued trajectory of geographic political economy.

**The Influence of Regional Science**

What regional science conferred upon economic geography by the 1970s and its subsequent legacy was an

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**Figure 1** Some ways of coming to know geographic political economy.
overwhelming interest in explaining the location and behavior of firms, the geographical organization and patterning of the (national) space economy, and the sources of regional growth as read through a geographic data matrix of economic activities, often elaborated with reference to the input–output relationships of the economy. This was a census using field, often adding data from surveys. While regional science has less steadily declined in influence something of a look alike has reappeared under the label of evolutionary economic geography, which stresses routines and path dependence, the co-evolution of firms, technologies, and territorial institutions and concern with convergence/divergence in spatial systems.

Incorporating and Extending Social Theory
A significant impulse of social theoretic writings taken up by political economy geographers has been the commitment to a relational ontology. Key is the notion that the spatial is not merely a reflection of the social (e.g., the landscape is a mirror of capitalism) but constitutive of what the social is, in multiple ways. The phrasing, ‘the spatial is socially constructed and the social is spatially constructed’, was normalized by the late 1980s. When connected to critical realism project especially by Andrew Sayer space was seen as making a difference to whether the causal powers of particular social relations are activated and the forms which the social relations take. More recently, theorizing involving associating economic geography with post structural understandings has addressed how such activation might be co-constituted with others and performed consciously and reflexively. For some economic geographers, this is a distinctly different basis to the political and the economic, edging toward a geographic post structural political economy.

Reading Geographic Political Economy in a Changing World
Significant changes in world conditions (e.g., oil crises in the 1970s, Middle East conflicts, German unification, the dissolution of the USSR, the Internet, neoliberal politics, the Asian economic crisis, 9/11, climate change) impact on the usefulness of current ideas and trigger new theorectical and methodological directions. This often leads to splintering of effort, sometimes around core propositions and other times around contentious initiatives.

Framing a Field – Opening Narratives
Those who became disenchanted with the approaches of mainstream economic geography and regional science attempted to explain to their peers why they were exploring new directions. This involved two main threads, both motivated by concern about the inability of the existing repertoire of practices to provide answers to wider political economic questions. The first target was location theory which provided little or no purchase on the social. Attention quickly turned to opening the black box of the region. Doreen Massey, in a brilliant play with words that foreshadowed the post structural turn, invited a complete rethink of the nature of the uneven geography of economic activities. ‘In what sense a regional problem?’ is a classic. Her skilfully presented argument socialized the region, not in the manner of the multiregion frame work of regional science, but in a manner that made visible the theorizable interconnections of any region with other regions – through the competitive process. Regions should not be seen as problems in their own right (epitomized in the idea of the regional problem, reinforced by regional growth theory’s emphasis on atomistic models such as export base or growth pole theory). This prompted supportive critiques, including Charles Gore’s Regions in Question, which systematically laid down the logical flaws in different facets of regional growth theory that could be identified from some knowledge of capitalist processes.

The early writings thus utilized political economy to reapproach traditional problems. The result was a recasting of the economic world’s gain/loss, profits/losses, employment/unemployment realities as socially constructed in its geographic patterning, and particular location opportunities. Perhaps the exemplar of this epistemological break was The Anatomy of Job Loss. This methodologically innovative book (it combined data analysis with graphs, excerpts from press coverage, quotes from interviews, theoretical discussion, and empirical analytics) contains a much overlooked figure that goes to the heart of political economy of whatever ilk. Figure 2 should be on the wall of every local economic development practitioner. It shows how growth initiatives in one setting are conditional upon what is happening elsewhere. The wider context of a regional establishment is no longer hidden.

Geographical Imagination in (Largely Nation-State) Political Economy
The initial concern with instating the field around a re-visioning of region rapidly morphed into a much wider research agenda. A series of thought experiments in geographic political economy were implied by the directions followed. These included:

1. Examination of the underlying spatiality that both enabled and resulted from capitalist development at different times and over long periods of time. These included the processes of industrialization, urbanization, and suburbanization.
2. The study of restructuring processes from a range of perspectives. A widely read special issue of *Economic Geography* published in 1982 that sprang from the lively political economy debates at Clark University was a marked departure from the journal’s usual content. What, it was asked, if the dynamics of industries were carefully traced with territory, emerging spatiality, and constitutive effects being from the outset of the guiding propositions of inquiry? The pioneering work in this regard has strong roots in two rather different Northern Californian areas, Silicon Valley (more accurately Santa Clara County and environs) and the Salinas Valley. More than two decades of contribution has come from Anna Lee Saxenian’s theoretically informed research on the microelectronics industry dynamics, at first US centered, then incorporating offshore assembly, overseas state assisted competitor startups, increasingly with interlinked labor mobility and intellectual capital dimensions with Taiwan, China, and India. The Salinas Valley formed the focus of Margaret FitzSimmon’s strategy of investigating the ramifications of an emerging increasingly capitalist agricultural region. Her focus on regional specialization and the growth of agribusiness showed how capitalist agriculture was an expansionary process that quickly led to large scale impacts locally and extra regionally. The two examples from the wider San Francisco Bay area illustrate the intensity and transformative nature of capitalist dynamics.

4. In an ambitious project Richard Walker and Michael Storper formulated a model of geographical industrialization. The special merit of this strategy was that some of the futility of competition could be visualized within a theoretical framing. The diagrams they use in *The Capitalist Imperative* to depict geographies of industry emergence (heavily influenced by the microelectronics industry) can be read as showing how success is spatially contingent – a great deal depends on what is going on elsewhere!

5. A contrasting agenda characterized the UK scene. Would fruitful exchanges come from setting side by side conventional economic geography and political economy approaches? *Politics and Method* does just this, effectively demonstrating that when the disciplinary and wider social politics of research questions are opened to scrutiny, it takes some effort to design and align methodologies that actually provide answers to questions posed.

6. A vein of research examined capitalist processes in terms of responses by unions, in a range of settings including North America (John Holmes), the UK (David Sadler), and Australia (Bob Fagan).

**Exploring the Political – in Geographic Political Economy**

Where the going got tough was when political economy geographers attempted to frame strategies of intervention using their new knowledge production practices. Two contrasting experiences expose some of the difficulties.

In the UK, the Economic and Social Research Council (ESRC) funded Changing Urban and Regional Systems or Localities project sought to examine local restructuring experiences with special attention to critical realist propositions. Considerable skepticism soon mounted as the project began to be perceived as yet
another series of detailed inductive studies, albeit enriched by commentary on local politics. The belief that too much empirical was taboo meant analysis would swiftly become detached from experience. This impasse sprang from competing intellectual ideas (empirical and critical realist positions in the context of regulation theoretical framings). However, the enor mity of industrial restructuring in the British context, the spectre of the politics of Thatcherism, and the distance of geographers from levers of power must be recognized. Looked at through contemporary lenses the challenges of politicizing the knowledge of difference and the implications of difference were hardly addressed and with that the political potential of the project slipped away.

During roughly the same period Australasia’s eco nomic geography was also energized – by equally revolu tionary politics (though with quite different conditions and with people seeing the world in very different terms) and by the 1988 International Geographical Union (IGU) in Sydney and the meeting of the IGU Commission on Industrial Geography in Tasmania. A research project, dubbed GOER (Geography of economic restructuring) by Bob Fagan at Macquarie University, dovetailed with efforts by the late Steve Britten and Richard Le Heron in New Zealand to articulate a geography of political economy perspective. The New Zealand initiative, assisted by the New Zealand Geographical Society, produced two books, Changing Places: A Geography of Restructuring in New Zealand (dealing with the spatial impacts of state led restructuring) and Changing Places: New Zealand in the Nineties, focusing on new interactions by actors in changed circumstances. Each book was a collaborative (49 and 72 contributors, respectively) among geographers in and outside the academy. Although widely read in and beyond geography and the academy in New Zealand, the book lacked demonstration of techniques to engage with people. Actual dilemmas experienced by people in the new regime and the nature of their political conundrums were absent.

**Toward a Globalizing Geographic Political Economy**

Since the early 1990s political economy geographers have had to come to terms with working in and on a globalization world. Indeed, while Nigel Thrift exhorted British economic geographers in 1985 to take the rest of the world seriously, it was not until 1991 that Doreen Massey again provided inspiration with her short note on ‘A global sense of place’. Viewed in conjunction with Peter Dicken’s textbook Global Shift, then subtitled, ‘The internationalisation of economic activity’, geographic political economy seemed doubly empowered. An over view and a lived example of globalizing processes was available for scrutiny.

In this context a plethora of cross cutting ideas, from the social sciences and more recently the sciences, have swirled through geographic political economy over the past 15 years or so. These have strained at the underlying premises and met varied resistance on the one hand and reinvigorated and stimulated existing and new avenues of research on the other. Again, for brevity, only indicative points are highlighted for each of a number of stra tegically valuable influences. Some added mostly to the representational capabilities of the field. Others are considered to be more active, denoting deeper political dimensions, with a focus on developing knowledge about emerging possibilities. The interpenetration and in some instances co constitutive aspects reflects the vigor of the field and the continuing reassessment that comes from fresh cohorts of researchers addressing new substantive issues. The explicit international vision of the IGU commission framework is also considered.

**Representational Contributions**

**Regulation theory (and flexible accumulation)**

This body of knowledge forced a re look at the state and led to greater respect for and awareness of the com plexities of institutional change during what became to be known as the era of globalization. The multiplicity and geographical variability of capitalist processes was picked up in the ideas of geographies of economies (which marked a shift from industrial to economic geography as the focus of the field and was reflected in the title of a book edited by Roger Lee and Jane Wills) and geographies of accumulation and more recently in the concept of global production networks. The European institutional thickness literature (e.g., Anders Malmberg, Bjørn Asheim) derived from wide interest in Third Italy had a geographic political economy emphasis but did not embrace the social capital thesis. Another direction was work on financialization by David Harvey, Andy Leyshon, Adam Tickell, Gordon Clark, and Nigel Thrift. Notably it led to little political engagement or development in political practice, especially as it was soon swept up in efforts to understand neoliberalism.

**Cultural economy**

The cultural turn exposed the Cinderella status of con summation activities as an object of study in economic geography at large, the growing importance of con summation inspired infrastructure investment on massive scales and the changing profile of work with the expan sion of female participation in the labor force and busi ness and other services (e.g., shopping malls, dockland revitalization, gentrification, coastal international devel opment, sporting professions, international consultancies.
in accountancy, law, management, architecture, construction, and so on). However, a consumption focus has yet to be mainstreamed in geographic political economy despite efforts by researchers such as Louise Crewe, Louise Johnson, Peter Jackson, Nigel Thrift, and Neil Wrigley. As a carrier of post structural technique geographic political economy can be thankful for cultural economy. The capacity to frame problems has been immeasurably enhanced and this lies behind some of the latest developments in the field.

City-regions in a world of regions

In what some would contend is slippage toward an apolitical representation of capitalist processes the field has re embraced many conventional economic ideas. This has seen an explosion of research around the new economy, new regionalism, and more recently city regions. The lengthy catalog of accomplishments includes the topics of regions as sources of competitive and creative advantage, built up from work on informal cultures, conventions, and untraded interdependencies that sustain the functioning of localized production; and learning, innovation and creative processes and the way they shape institutional change. More recently, this work has begun to consider sustainability issues. What is less clear is the political content attached to these initiatives. Noticeable lacunae are the growing patterns of industry concentration and the distribution, however, lay in the different questions placed on the field there are few comparisons. Its real contribution, however, lay in the different questions placed on the table that could redeploy insight from the field in new ways. What would the world of political economy begin to look like if it was framed to include the full variety of social relations that go into constituting the economy? This trajectory has gradually leveraged more interest, especially from agri-food and development studies researchers.

Rethinking agri-food commodity chaining

The feminist critique enabled significant developments in the agri-food sphere of geographic political economy. These have confronted how value is appropriated in the roundabout of connections from field, paddock, and farm to the table, fork, and finger in the globalizing food economy. This has several foci; understanding the power relations and implications of value appropriation in conventional agri-food activities (by a diverse field of researchers including Bob Fagan, Bill Pritchard, Niels Fold, Charles Mather, Terry Marsden, Jonathan Murdock), the Berkeley and Santa Cruz tradition around Michael Watts, Margaret FitzSimmons, David Goodman, Bill Friedland, and more recently Julie Guthman, attempts to understand the potentialities and limits of alternatives (e.g., fair trade, organic, ethical production) especially contributions by Alex Hughes, Michael Goodman, and Sarah Whatmore, and links to political ecology through writers such as James McCarthy, Paul Robbins, Scott Prudham, Karen Bakker, and Becky Mansfield. The research has cross continental dimensions, exploring particularly the Latin America–North America and Africa–European connections.

Following the commodity

A related line of research has focused on following the commodity and re presenting the encounters that come from such a research methodology (e.g., bananas, beans, chicken, coffee beans, cut flowers, papaya, and tomatoes). This approach involves much international field work, often over many years and has been spearheaded by geographers who reside in the space between the socio-cultural and economic (e.g., Suzanne Freidberg and Ian Cook). These studies, many using the actor network approach, give new meaning to the geographies of global commodity chains and throw new light on political possibilities.

Firms (organizations) as temporary coalitions

A special issue of Economic Geography (2000) reopened the investigation of the firm. The enterprise had been rejected in early geography of political economy as a black box and a misspecification of social relations but defended by Peter Dicken and Nigel Thrift because of the role of the firm in the organization of production and the production of organization. Recent work by Mike Taylor (who has promoted the idea) and John Bryson on theoretical issues and manufacturing firms blends with initiatives by Erica Schoenberger and Linda McDowell on corporate investigations, Gerhner Grabher on project based studies and Peter Dicken and Henry Yeung on TNCs. Interpreted more generally the idea of temporary coalitions of people and resources facilitates a re look at the politics as well as the power relations of...
segmentation among small and medium enterprises (SMEs), multinational corporations (MNCs), and TNCs, Roger Hayter's studies of large firms as big firms locally, the structuring of governmental and policy frameworks and public–private partnerships and joint ventures.

**Building diverse economies**
Using the orthodox classification of the economy as transactions, labor, and enterprise J. K. Gibson Graham showed that the lived range of content for these categories is substantial. Thus, what is discernible are market, alternative market, and nonmarket; wage, alternative wage, and unpaid; and capitalist, alternative capitalist, and noncapitalist social arrangements. This conceptual work opens up new avenues for geographic political economy.

**Governing at a distance**
A notable feature of neoliberal experience has been the fashioning of systems of comparison. These include techniques of benchmarking, best practice, standards, audit, certification, and so on. The investigation of these phenomena through the lens of post structural political economy has revealed to political economy geographers how spatialities, temporaliaces, subjectivities, and socialities linking places and their economies, and therefore the accountabilities and responsibilities that could ensue, can be explored using the governmentality literature.

**Making industries and co-constituting political projects**
Recent work on the New Zealand designer fashion industry (led by Wendy Larner) takes the post structural political economy direction further. The study traces the making of New Zealand designer fashion as an industry, and relates this process to four political projects of the state in which designer fashion is understood to have different possibilities – globalization, the knowledge economy, creative cities, and social development. It shows that the industry is a space in which political projects are mobilized and harnessed co constitutively.

**Other Voices**
The economic geography community has been actively supported by the commission structure of the IGU. Commissions on Industrial Change, Organisation of Industrial Space, Organisation of Economic Space and Dynamics of Economic Spaces have, for example, provided dedicated annual residential conferences in which to explore themes as diverse as ‘Local development: Issues of competition, collaboration and territoriality’ and ‘Enterprising worlds: Entrepreneurship and ethics for sustainable futures’. The various Commission chairs have come from the UK, Australia, Italy, Korea, and New Zealand and the annual meetings have enjoyed considerable support from German, Dutch, Scandinavian, Korean, Japanese, Chinese, South African, and Australasian economic geographers. The Commission's strong publication series with Ashgate is illustrative of the coexistence of a range of related research agenda in economic geography. A new summer institute for emerging researchers under the auspices of the World University Network has recently provided new impetus. The Commission meetings have been an outlet for sharing and subjecting empirical evidence to interrogation from a variety of frameworks, invaluable in maintaining the identity of economic geography as a field and for transcending geographic political economy ideas.

**Critical Reflections and the Politics of Possibilities**
It is not an overstatement to say that the small complement of economic geographers committed to the field has been extraordinarily productive in moving forward understandings about the emergence of capitalism. The Marxist political economy tradition has been integral to this advance. Indeed, recent efforts to highlight the growing crisis of reproduction and human rights violations, as exposed by the Iraq situation and the aftermath of Hurricane Katrina in New Orleans, reconfirms the insight of this tradition. The field, however, is presently at a watershed. One is left with the impression of a rather splintered field, with tensions akin to those in the early 1980s. The insight of three decades is being cycled into the latest textbooks. Many still conceive of an economic geography wedded only to a political economy of capitalism. This constrains what politics is possible because emergence is circumscribed by assumptions about the immutability of capitalism. An economic geography where the interpretation of capitalism is less hierarchical and instead plural offers at least the promise and prospects of creating conditions for expression of possibilities however they are imagined in different sites/places. This will give new content and enlarge interest in the field. Those exploring the performative directions have mostly graduated since the early 1990s and influenced by the post structural and cultural turns.

The watershed is exemplified by two internationally visible events in the 2000s. The first, the inaugural global conference on economic geography held in Singapore in 2000 and supported by the National University of Singapore, attended mostly by economic geographers from wealthier countries and universities, led to critical reflection on how global the conference (and the field) really was. The follow up in Beijing in 2007 (co organized by Henry Yeung and Weidong Liu) shifted the center of gravity of international economic
geography participation even further. The second event was a workshop organized at the 2004 Association of American Geographers meeting on economic geography pedagogy. Articles published in the *Journal of Geography and Higher Education* attracted a critical assessment that identified several concerns: that it was unclear how far the North American geographic political economy is thinking beyond the nation state, that there was little appreciation that globalizing economic geography is caught up in globalizing higher education, and that there is much ambivalence to embracing post structural in sights. Depending on how we try to frame globalizing geographic political economy at the moment, the futures we make in geographic political economy, and the futures of geographic political economy’s interactions with other communities of knowledge production inside and outside the academy could look very different. With this might come new identities and community in economic geography. Recognizing the current condition of geographic political economy is critical to identifying priorities. Thinking geographically reveals our inherited and prized frameworks for what they are...governmentalities.

See also: Capitalism; Competitiveness; Consumption; Cultural Economy; Global Commodity Chains; Neoliberal Economic Strategies; Poststructuralism/Poststructuralist Geographies; Regional Science.

**Further Reading**


Introduction

Political geography as a systematic branch of human geography has a long, but not always distinguished, history. Like other branches of the discipline a precise definition is elusive with the nature of political geography, the issues explored, the approaches adopted, and the methods utilized displaying considerable breadth and variety. The nature of the subdiscipline has changed over time and its fortunes have waxed and waned for a variety of reasons. While being mindful of over simplifying, it could be said that political geography is concerned with the interface between politics and geography. To be more precise, there is a focus on the spatial dimensions of power and with political phenomena and relationships at a range of spatial scales from the global down to the local. Another way of viewing this is to see it as revolving around the intersections of key geographical concerns of space, place, and territory on the one hand and issues of politics, power, and policy on the other. From this it follows that contemporary political geography encompasses a wide variety of themes. Rather than rigidly defining political geography it is perhaps best to think in terms of geographical approaches being brought to bear on a wide range of political issues. For some the study of spatial political units is central, for others there is an emphasis on major processes such as colonialism, while for still others it is concepts such as territory, state, or nation that are key. The diversity of issues and approaches means that it is more meaningful to talk of political geographies rather than a single unidimensional political geography.

Evolution

In the late nineteenth century political geography was effectively synonymous with human geography. While physical geography was concerned with delineating regions on the basis of climate and topographical features, human geography was concerned with political divisions. Hence we still have a basic distinction between maps in dictating physical features and those indicating ‘political’ features. However, in the late nineteenth and early twentieth century as the discipline evolved political geography became a more clearly defined arm of human geography running alongside commercial and colonial geography. Subsequently, and reflecting divisions within the broader social sciences, we can see political geography coexisting alongside social and economic geography.

Over the years the main preoccupations of political geography have changed. One hundred years ago key practitioners such as Halford Mackinder in the United Kingdom were concerned with international relations in what was then a colonial world. During the mid part of the twentieth century, the key focus became the state and its associated geographical characteristics most notably territory and borders. To a considerable extent this phase was strong on description of political phenomenon but weak on analysis. The last few decades of the twentieth century, however, saw something of a rebirth of the subdiscipline as a consequence of the introduction of more radical and politically engaged perspectives. More recently still, elements of social theory have been incorporated both deepening and broadening its conceptual base. There is now a much more critical approach and a more diverse one being brought to bear on a subject matter that extends well beyond the realms of the state. While much contemporary political geography maintains a focus on what might be seen as ‘big’ politics (states, governments, etc.), there has been an increased concern with ‘small’ politics (local issues, gender, ethnicity, social identities). In this way, a whole swathe of topics have been added to the more traditional interest in territory, borders, and states.

Ideas and Developments

The German geographer Friedrich Ratzel has been attributed with the first major work to include political
geography in its title – Politische geographie, published in 1897. Ratzel likened the state to an organism which needed further space or lebensraum in order to expand. This organic theory of the state could be said to reflect two main characteristics of much late nineteenth century and early twentieth century political geography. First, it employed ideas derived from biology and other physical sciences and applied these to politics and society. Second, it reflected the view of Ratzel and others that geography and other branches of academia should be put into the service of the state. Ratzel was a supporter of German imperialism and his theories and his politics went hand in hand.

In the UK perhaps the most famous political geographer of the era was Halford Mackinder. He has been credited with attempting to shape the nature of geography in Britain in the early twentieth century and argued that the discipline should have objectives which were not just academic and educational but which should also serve the needs of politicians and business people. This vision of geography was a reflection of his own political views and he was at one time an MP and served as a British government advisor at the Versailles conference at the end of World War I. Mackinder is most remembered for his heartland theory or geographical pivot of history in which he suggested that, while sea power had served Britain well, technological changes, most notably the expansion of railways, meant that control over major land masses was of crucial importance. He argued the Eurasian landmass (essentially Russia) was of crucial significance and containing Russian expansion was of the utmost importance for Britain in its wish to maintain political prominence. Mackinder, like Ratzel, wrote from what can be seen as an imperial point of view. For all these ‘imperial’ political geographers their ideas were bound up with the influence of both physical features, such as mountains and rivers, and human geopolitical considerations on politics and their role in affecting the strategies of states. Their task, as they saw it, was the devising of practical geostrategies which could be utilized by political leaders.

Like his European counterparts, the US geographer Isaiah Bowman was an adviser to the government. Following World War I, he played a role in the redrawing of European borders in his capacity as a member of the US delegation at Versailles. While Bowman tended to see his contributions as detached and objective, his view of the world was mediated through the lens of US geostrategic interests. With his anticommunist views he endeavored to fashion a political geography reflective of US interests. At about the same time the German geographer Karl Haushofer utilized and developed Ratzel’s ideas of lebensraum. Hitler’s subsequent use of the concept as justification for German territorial expansion meant that both Haushofer and his ideas were heavily criticized. The subsequent significant decline of geopolitics has been at least partly attributable to this tainted episode in its history.

In the 1930s and 1940s the American geographer Richard Hartshorne attempted to delineate the field of geography. More specifically he also sought to outline the sphere of political geography as a subdiscipline. He saw political areas, most obviously the state, as a central concern, which dovetailed with his broader view of geography as an ideographic discipline in which the region was the central object of study. The discrending of geopolitics and the retreat of geography into a largely descriptive regionalizing phase meant that for much of the mid part of the twentieth century political geography became preoccupied with the study of states and their borders. Issues of natural and artificial borders and theories of state evolution which likened these human creations to ‘natural’ phenomena were devised. While it would be simplistic to dismiss all of the work produced at this time, it has been seen as largely descriptive and politically conservative in its ‘naturalizing’ of the role of the state.

Recent decades have seen a significant rebirth of political geography stimulated by a number of methodological and theoretical developments. The dawn of a more quantitative approach in the 1960s saw political geographers work much more extensively with large volumes of data. This is most obviously reflected in the development of an electoral geography which cast light on such things as the importance of place and locality in voting patterns and the intersections of national issues with more local concerns. In exploring voting patterns attention was drawn to the ways in which neighborhood effects cut across broader political issues to produce particular spatial patterns.

Geography’s radical revolution brought about two key political geographic changes. Firstly it saw the introduction of more overtly structuralist perspectives into political geography and secondly it resulted in a very politicized geography. In the first instance a range of human geographical phenomena were analyzed within a broader framework. The impact of overarching social, economic, and political processes on people and places was emphasized. An example of this is the application of Wallerstein’s world systems theory in the work of Peter Taylor. Here, rather than seeing states in isolation, there is an emphasis on the complexities of an interstate system and the connections between long term cycles of economic change and state stability and state structure.

The radical revolution within geography saw an intense politicization of the discipline. The 1960s saw the promulgation of the idea that everything is political and hence all areas of geographic inquiry were infused with political connotations. Radical geographers began asking intensely political questions about the distribution of wealth and power, control over resources, issues of...
discrimination, development and so on, while advocating radical political change in order to eradicate inequality in its various guises. Territorial social justice became a key concern, while the idea of academic objectivity and neutrality was eschewed in favor of a politically committed geography designed to radically transform the unjust structures which resulted in gross inequalities. This development reflected broader social and political turmoil in an era of US involvement in Vietnam, struggles against racism in various parts of the world, and the growth of the women's movement and environmental concerns. The resurgence of interest in political geography and the emergence of politicized geographers were reflected in the launch of the journal *Political Geography Quarterly* in 1982. This has subsequently increased its annual output and is now known simply as *Political Geography*.

More recently the influence of social theory in its broadest sense can be detected in some branches of research. Some geographers have explored aspects of everyday life and the ways in which political processes impact on people and inform their sense of identity. It is clear that politics affects us all in a myriad of ways. While older political geographies tended to focus on the world of formal politics and happenings in the 'corridors of power', more recent versions explore the everyday consequences of power and challenges to it. There has been a growing emphasis on the politics of identity, whether framed in terms of nationality, gender, ethnicity, sexuality, or other divisions. Alongside this, and closely connected to it, a postmodern influence has focused on the discourses employed by different groups in relation to political space. There is an emphasis on diversity and allowing different voices to be heard. This has helped bolster earlier concerns with those at the receiving end of unequal power relationships. Similarly, using the ideas of Foucault and others, there have been explorations of the ways in which power operates and diffuses across geographic scales.

**Major Themes**

While political geography now embraces a wide range of concerns some core themes can be identified. Chief among these are:

- Territory and territoriality.
- State.
- Geopolitics.
- Nation.
- Identity and citizenship.
- Electoral geography.
- Environment.

These themes are not discrete and they cross cut the more general geographic themes of space and place. As noted earlier the themes examined and the approaches adopted owe a lot to shifting paradigms within the broader discipline. The regionalist, empiricist, structuralist, and postmodern perspectives in particular are all apparent within the work produced within the past 50 or so years. By the same token, the scales of analyses have varied from the global through the national and regional down to the local. More recently, the interconnections between different scales of analysis have been emphasized. The local impacts of more national or global political processes or policies are one example.

**Territory and Territoriality**

Territory refers to a bounded geographic space with territoriality referring to the attempts to control that space. Traditionally 'formal' political territories (most obviously states) were the main concern of political geographers but more recently territory at a more formal level has come into scrutiny. Thus, we can think not only of territory defined by the borders between countries but also reflected in everyday life when we are confronted with signs saying 'authorized personnel only', 'keep out', 'no trespassing', 'strictly no admittance', and so on. The idea of the home as private space and territorial divisions in the home based on divisions between adult and child space or on gendered divisions of labor are examples of more micro scale territoriality.

Some strands of thought have 'naturalized' territorial behavior as something innate in humans. In this view the claiming of geographic space is seen as natural and defense of territory is seen as a biological urge. Others have viewed this in more social terms and, utilizing the ideas of Robert Sack, have seen territory as a key organizing device and territorial behavior as a means of retaining or resisting political power. From a political geographic perspective, territorial behavior might be viewed as a geographic and political strategy designed to achieve particular ends. In this way, the control of geographic space can be used to assert or to maintain power, or to resist the power of a dominant group. It follows from this that territories, whether, states, regions, counties, workplaces, the home, are not natural entities but the outcomes of a variety of social practices and processes in which space and society are linked. It is easy to regard territories as spatial containers but they are much more than that. They serve to convey messages of authority, power, and control. Issues of territory and territoriality are seen to be key underpinnings for many political geographic issues.

**Geopolitics**

Geopolitics is sometimes defined as the geographical dimensions of power (and hence seen as synonymous with political geography). It has tended to be concerned
with international relations and in particular with the geostrategic concerns of major powers. The work of Ratzel and Mackinder are early examples of geopolitical writing with an emphasis on the geographic bases of political strategy. Different geopolitical eras can be identified characterized by changes in hegemonic power from the colonial era dominance of the likes of Britain and France, through the USA–USSR rivalry of the Cold War, to the current military dominance of the United States. As well as examining the geopolitical strategies of states and political leaders, geographers have pointed to the role of maps and mapping, together with ideas of environmental determinism (closely linked to scientific racism) as mechanisms through which colonialism was facilitated and justified. Within the Cold War there are clearly demonstrable geostrategic elements within US thinking. These included the invoking of the Monroe Doctrine (with the Americas as the US sphere of influence), the propounding of domino theory (that once one country fell to communism others would follow), and territorial strategies of containment (prevention of communism spreading beyond its existing ‘borders’).

Much traditional geopolitical writing tended not just to be written from the perspective of a particular geo graphical and ideological standpoint but also from an assumption of inevitability. The development of a more critical geopolitics through the work of people like Gearóid Ó Tuathail and Simon Dalby has created a more politically challenging perspective on global political issues. Here the emphasis on realpolitik is challenged by a critical geopolitics which refuses to accept the inevitability of current power relations and which affords the possibility (and desirability) of radical change. A strand of this is exploring the geopolitical discourses used by governments and political leaders. The ways in which places and regions are reduced to their strategic significance within global power politics is reflected through the use of particular terminology. For example in the 1980s former US President Ronald Reagan referred to the then USSR as an ‘evil empire’. In a similar vein, the current Bush administration in the US conjured up an ‘axis of evil’. These constructions and others such as some Islamic fundamentalist characterizations of a ‘decadent’ West can be read as geopolitical discourses designed to frame events in particular ways. The current ‘New World Order’ has been viewed in various ways ranging from Samuel Huntington's famous (and somewhat reductionist) ex position of a ‘clash of civilizations’ to David Harvey’s political economy perspective in which current US geopolitical strategy is seen to be driven by territorial and capitalist imperatives and closely linked to resource control.

As well as the more obvious discourses emanating from politicians, geopolitical discourse has also been explored through film and other media. The ways in which events such as the Vietnam War have been framed by filmmakers or the worldview refracted through publications such as Reader's Digest are examples of the ways in which people, places, and events are represented and through which particular ideologies (often using simplistic representations of ‘good guys’ and ‘bad guys’ and particular constructions of concepts such as ‘freedom’) are disseminated and reproduced.

State
The division of the world into bounded political units, commonly referred to as states, is the best known example of formalized territories and of political–territorial organization. As a consequence, the state has long been a central element in political geography with a focus on various facets of the state including its origins, spatial development, key properties, roles, and functions. Traditional approaches in political geography have tended to take the state for granted. However, while it may be the dominant form of political territorial organization in the contemporary world, it has not always been so. Nevertheless, the state has been naturalized in much political geography. Geographers such as Ratzel developed ‘organic’ theories of the state which likened it to a natural entity which needed living space. Others devised theories of state growth in which it was argued states evolved through phases from youth to maturity, similar to rivers. These ideas can be seen as part of the broader trend of devising theories of political behavior analogous to natural processes. Ideas of state stability or instability were often linked to state size in terms of either land area or population and the extent of internal regional differences, whether physical, economic, or cultural. These centrifugal or centripetal pressures would help to determine state stability or instability.

Conflicts between states, especially border disputes, have also been a focus of attention. While earlier consideration of borders tended to explore distinctions between natural boundaries (such as rivers) and artificial boundaries (lines of latitude or longitude, for example), more recent perspectives have broadened to examine borders, not just as lines dividing territories, but as social and discursive constructs which can have important ramifications in people's everyday lives. They may have a profound impact on people's ability to travel and on a whole range of 'ordinary' activities. For some, such as nomadic groups, borders may be irritants that disrupt their social practices. Some borders are more significant than others; the French–Spanish border is less significant than the Polish–Russian one as the former separates two member states of the European Union (EU) while the latter marks the Union's eastern boundary. The collapse of communism led to a weakening of the borders of the Eastern European states many of which are now
incorporated into the (theoretically) borderless EU. The Italian–Slovenian border became relatively open with the accession of Slovenia to the EU, an event symbolized by the removal of the border fence separating the Italian town of Gorizia from its Slovenian counterpart Novo Gorica (Figure 1). Alongside the easing of border controls within the EU there has been an increased hardening of its external perimeter. Various measures have been implemented making it more difficult for migrants to get into the EU, particularly those attempting to enter from African countries. Similarly, while the US–Mexico border is relatively permeable for those traveling South, it remains a sizeable barrier for Mexicans heading North.

Geographers have also been instrumental in exploring the role and functions of the state. While some have concentrated on the visible role of the state as regulator and service provider, others have delved into political theory to explain its functions. Questions about the relationship between state, society, and the role of the state within a capitalist economy have been addressed. Ideas of the pluralist state as a neutral arbiter between various competing interests have been challenged by those who see its role intimately bound up with a capitalist system. Gramsci’s ideas of hegemony have been used by some to indicate the role the state plays in reproducing dominant ideologies.

The various processes sometimes conflated under the generic heading of globalization have led some to herald the end of the state as a meaningful political entity as a world of demarcated political spaces is replaced by increased flows of capital, labor, information, etc. It is suggested that the state’s role as the sovereign authority over its own territory is much diminished. Contemporary political trends have focused attention on the ways in which sovereignty is asserted and contested whether through global processes, secessionist nationalism or suprastate institutions such as the EU leading some to predict the end of the state as a viable political–territorial entity. However, others argue that, far from disappearing, the state will continue to play a key role. At the time of writing, the US (a state) has recently invaded Afghanistan, Iraq and, appears to be contemplating the invasion of another, Iran, with a view to reshaping these in a way that suits its geopolitical ambitions. This hardly signals the demise of the state as a territorial phenomenon.

Recent decades have also seen the ‘rolling back’ of the state in many countries as public services have been increasingly privatized. In countries such as the United Kingdom, this has been accompanied by an emphasis on partnership arrangements between various statutory and nonstatutory bodies, alongside an apparent attempt to involve community groups in decision making. This reflects what some see as the fragmentation of authority from the central state and has led to a shift in emphasis in research from government to governance reflecting the increasing range of organizations involved to a greater or lesser extent in service delivery and decision making. While this has resulted in more diffuse patterns of service provision it does not in itself diminish the role of the state as an arena of political socialization or as a regulator of economic (as well as social and cultural) activity.

While the state remains a central object of study within political geography, it is now recognized that states are historically contingent, they are dynamic, and they reflect processes through which territory (and those living in that territory) are controlled. More recently there has been a move away from the more traditional

Figure 1  Wire fence separating Gorizia and Nova Gorica.
'taken for granted' view of the state. More structuralist approaches have focused on the broader context in which states exist. Here the incorporation of world systems theory by Peter Taylor has focused attention on an interstate system and the interactions of states. The complex web of power relationships within which states are embedded led some such as John Agnew to be wary of state centered thinking and he cautions against falling into what he has termed the 'territorial trap'.

**Nation**

Alongside a focus on the state, geographers have also explored ideas of the nation, national identity, and the political-territorial ideology of nationalism. A nation can be seen as a collection of people bound together by some sense of solidarity, common culture, shared history, and an attachment to a particular territory or national homeland. While history (whether actual or 'invented') is central to the nation's being, its right to exist usually rests on claims to a particular national space and, within this, particular places and landscapes often assume a symbolic importance. In exploring the connections between place and nation, three different levels can be identified. First, we can see the connections in allusions to the 'generic' territory of the nation. References to the national soil, the area of land seen to belong to the national 'imagined community', abound within such discourses. In this way fighting for, or even dying for, the land are seen as supreme acts of patriotism, ensuring that the land does not fall into 'foreign' hands.

The second territorial element is the importance attached to generic features which acquire huge symbolic significance. In this way particular landscape features such as rivers, lakes, or mountains, take on a much deeper meaning. Otherwise 'ordinary' landscapes are imbued with huge symbolic meanings to the extent that they come to be seen as emblematic of the nation.

A third territorial component of relevance to dis cussions surrounding the nation is the significance at tached to particular places, not just generic features. In this way, the White Cliffs of Dover come to symbolize England (and, by extension, Britain) thereby acquiring a meaning which extends well beyond their geographical location. In some instances this can have quite serious ramifications with particular places seen as worth de fending due to their national symbolism. For example, Kosovo has assumed almost mythical status for many Serbs as it is seen as a region central to Serbian territory and identity. In this way its loss would be likened to a rupturing of Serb identity. The breakup of Yugoslavia in the 1990s witnessed the phenomenon of ethnic cleansing justified under the guise of purging 'others' from land seen as being 'Serb' or 'Croat'. This can be seen as an attempt to 'purify' places and territories of those not seen as possessing the appropriate ethnonational identity.

The territorialized manifestations of national conflict are not just about the nation's macro territory but also about its micro level outcomes. In this way the geographies of ethnic division, such as the religious divides which run through Northern Ireland, become important objects of study along with the territorial markers which signify those divisions. The proliferation of 'peace walls' and of wall murals in the religious and politically divided city of Belfast signifies territorial defense and separation from the 'other side' (Figure 2). Equally support for secessionist nationalism is reflected in the landscape through political graffiti in places such as the Basque country where slogans and posters in the Basque language call for independence from Spain (Figure 3).

**Identity and Citizenship**

Geographers have also been interested in changing no tions of citizenship and the relationships between indi viduals and the state. Established ideas of rights (granted by the state) and duties (obligations to the state) have been extended to encompass broader questions such as relationships, duties, and obligations to those beyond the borders of the state (distant others) or to the environ ment. Similarly questions have been raised, not just about individual rights, but collective rights in respect of par ticular groups (such as ethnic minorities, people with disabilities, sexual minorities) and attention has been drawn to the ways in which political structures, processes, and policies impact on such groups. Rather than the traditional notion of the relationship between the indi vidual and the state, geographers and others have begun to explore the contested spaces of citizenship.

Overt discrimination against particular groups denies them 'real' citizenship and these divisions in terms of social identity are often manifested spatially. Some forms of discrimination are overtly obvious such as apartheid in South Africa from the 1950s through to the early 1990s with its designation of particular spaces for racially defined groups. Some lead to extreme outcomes as with ethnic cleansing in the former Yugoslavia designed to secure territory for specific ethnonational groups or the massacres of Rwandan Tutsis by the majority Hutu in 1994. Religious identity (closely intertwined with polit ical affiliation) in Northern Ireland has created highly segregated social spaces with well defined residential divisions separating Protestants from Catholics (see above). The banlieues of Paris are both physically separate and socially distant from the heart of the city, cut off by a ring road (the périphérique) from the center and isolated from each other. Urban riots in the poorer banlieues on the edge of Paris in 2005 spread to other French cities. In these areas of high unemployment younger residents,
many of North African immigrant origin, gave violent expression to their feelings of social and spatial alienation.

A concern with social identities and with minority groups has intersected with broader political questions of the relationship between the state and those who live within its borders. If citizenship relates to ideas of democracy and participation then legitimate questions can be asked about the barriers or constraints placed on some groups limiting the extent to which they can participate. Such concerns overlap with a heightened interest in questions of identity, social movements, and diversity. Cultural geographies, influenced by a post modern emphasis on difference and diversity, have focused attention on both the multitude of social identities and the unstable, contingent, and relational nature of these identities. Groups have arisen with the aim of highlighting concerns over the attainment of particular goals linked to equality and esteem. Quite often these are identities which have been suppressed or largely ignored.
whether sexual, ethnic, or religious. The ways in which
groups negotiate the political landscape or create polit
ical spaces are of interest. The emergence of gay spaces
such as the Castro district in San Francisco or West
Hollywood in Los Angeles has both enhanced the pol
itical power of sexual minorities through place based
politics and may also have served to diminish the nega
tive perspectives of others toward these groups. That the
emergence of such gay spaces is also associated with
commercial factors (and forms of gentrification) may
have mixed benefits.

Within this there is a risk of promulgating essen
tialized or fixed ideas of identity rather than a recognition
of multiple or many layered identities. A person may be
French, black, gay, and the relative importance of these to
the individual may vary from time to time and from place
to place, depending on the circumstances in which they
find themselves.

Ideas of more active citizenship have been encouraged
by government through what might be seen as ‘approved’
channels, such as Neighbourhood Watch schemes in the
UK or through involvement in community groups. The
emphasis placed on community development, partner
ship working, and local capacity building reflects this.
However, other versions of active citizenship may be less
welcome by governments. Political protests in the form of
such things as anti war marches, anticapitalist protest,
and attempts at reclaiming private space from com
mercial development are less likely to enjoy government
support (Figure 4).

Increasingly, citizenship is seen as multilevel and
as not just national but both supranational (through
attempts to create a sense of Europeanness, for example)
and international (such as promotion of ideals of global
citizenship with responsibilities for those beyond our own
borders). Rather than a state centered view of citizenship,
there are attempts to view it at spatial scales both below
and beyond the state.

Electoral Geography

Probably the strand within political geography which
most overtly followed a quantitative approach has been
electoral geography. Within the geographical study of
elections three broad concerns can be identified. These
are the geographies of elections (forms of transfer of
power), of representation (types of electoral system), and
of voting (spatial patterns of voting behavior). The first
explores the ways in which power is transferred, whether
through elections or through more ‘irregular’ processes
such as a military coup. Geographies of representation
examine such things as the nature of electoral systems
(e.g., first past the post or proportional representation),
the existence of centralized or federalized systems, and
the construction of electoral boundaries and associated
issues such as gerrymandering. Ideally electoral bound
aries should be constructed in such a way as to ensure
roughly equal numbers of voters. However, population
changes may render this difficult and political parties
may have vested interests in maintaining levels of over
or under representation in certain cases.

It is perhaps the study of voting behavior where
geographers have raised the most interesting questions.
Spatial analysis of voting patterns has revealed that
voting behavior is not just a function of party allegiance and ideological disposition. There are neighborhood or locality influences which may reinforce or override other factors. Events such as the closure of a local industry or the reputation of a candidate and her family in an area may be strong determinants of voting behavior. Ron Johnston and colleagues have examined the shifting geographies of voting in the United Kingdom where broader national trends intersect with more local factors. In Worcestershire in England, the election of an independent MP campaigning against the downgrading of a local hospital in UK elections in 2001 and 2005 is an example of the potential impact of local factors. More broadly the extent to which some parties have a broad national appeal while others have a more local or regional support is also of interest. This is particularly evident in countries such as Italy (with a north–south split) and Belgium (with an entrenched linguistic division) where some political parties have an explicit subnational focus.

Environmental Politics

Growing environmental concerns of recent decades have prompted interest among some political geographers in a variety of themes. These include issues of conflicts over resources and the role that resources such as oil or indeed water may play in generating political conflict whether at regional or global scales. A concern with global issues such as climate change and global warming has emerged alongside a consideration of such things as campaigns against road building programs in parts of Britain. While these latter might be seen as local place specific issues they can also be viewed as part of broader environmental campaigns bringing together issues of pollution, land scape aesthetics, and the preservation of biodiversity.

The growth of green politics has led to the study of environmental organizations, their nature, composition and tactics, and the environmental discourses used by various groups (including both campaigners and political parties). Other areas of interest include political events such as the Earth Summits and the subsequent filtering down of environmental policies to regional and local authorities, the general rise of green political parties, and the incorporation of green concerns into the policies of mainstream parties. Policies such as those of the French state in carrying out nuclear tests in its Pacific territories rather than in mainland France combine a set of issues linked to environment, place, and politics.

A good example of an issue in which a range of political arguments can be seen to coalesce and which links places together and is multiscalar in nature concerns plans by the Shell Oil Company to bring natural gas onshore at Rossport in the west of Ireland for processing via a high pressure pipeline. The plans, which enjoy the support of the Irish government, have met with popular local resistance with overlapping concerns related to land ownership (some local farmers have been faced with compulsory purchase orders by the state), health, and control of resources. Local opposition is linked to broader national arguments within Ireland over who benefits from the exploitation of national resources (Shell is a multi national company and the Norwegian state company Statoil has a stake in the gas field) and to environmental campaigns outside the country. In addition, links have been forged with Nigerian activists where Shell has been a focus of opposition due to its activities in Ogoniland and elsewhere in the Niger delta (referred to below). In this example issues of local and national politics intersect with questions of place, resources, and environment.

Politics of Geography

Another take on political geography is to examine the interventions made by geographers into ‘live’ political issues. It should be obvious from what has already been said that much political geography is far removed from the model of detached academic neutrality much touted in various circles. Instead, the imperialist leanings and political biases of the likes of Mackinder, Ratzel, and Bowman have been obvious. The ways in which political geographers have interacted with those in the world of ‘real’ politics have varied over time. It could be said that many geographers, particularly in the past, saw their role as supporters of those in power and their work as serving clear political ends. More recently many geographers have seen their role more as one of a critical observation and a questioning of accepted orthodoxies rather than a willing subservience to power. Among other things this has involved focusing attention on the complicity of geography in colonialism, for example, and casting light on the political agendas underpinning some geographical research and the ideological nature of much ‘objective’ research.

Here are three relatively recent examples of geography and politics intersecting in a very direct way:

Shell in Nigeria

Throughout the Niger Delta region the activities of Shell have proved controversial in terms of allegations of environmental damage and human rights abuses. In the region of Ogoniland local activists and environmental campaigners have argued that Shell brought little if any benefit to local people and that their activities were detrimental to the environment. The execution of nine Ogoni activists (found guilty of hotly disputed murder charges) by the Nigerian government in 1995 precipitated a debate among members of the Royal
Geographical Society – Institute of British Geographers (the body to which many professional geographers belong). Shell was a corporate sponsor of the organization and debate centered on whether a learned society or professional body should continue to accept sponsorship from Shell. Those opposed felt that the company’s environmental record and its questionable benefit for the people of Ogoniland rendered it inappropriate to retain such links with the company. In the event the sponsorship was retained but many academics left the society as a consequence. The episode precipitated debates over (among other things) the links between activism and the academy, the implications of commercial sponsorship for academic integrity, and the moral and ethical values held by geographers.

**Academic Boycotts**

The issue of an academic boycott of Israel has recently exercised the minds of some geographers. Calls for a full academic boycott of Israeli academic institutions have been circulating for some time. These have emanated both from Palestinian groups and from academics in other countries. There have been repeated calls in some quarters for a series of sanctions (of which an academic boycott would be one component) designed to isolate Israel as a consequence of its policies on the Palestinian question. The argument rests on the view that Israeli academic institutions have done little if anything to question the policies of their governments in relation to the Palestinian question. Some point to the earlier boycott of South Africa during the apartheid era as a basis for such a tactic in trying to bring about political change.

More specifically the academic boycott issue intruded directly into the policies and workings of the journal *Political Geography* in 2005. Controversy over whether or not to accept an article by Israeli based academics prompted a flurry of media coverage and an exchange within the pages of the journal itself. On the one hand there are arguments surrounding academic freedom, the primacy of free speech, and the need to engage in open dialog, while on the other there are calls for a recognition of the legitimacy of boycott as a tactic to try and bring about pressures for change. Debate continues over the issues of the morality, equity, practicality, and effectiveness of such actions.

**Elsevier and Arms Fairs**

A recent political issue with which some geographers wrestled concerned the links between Elsevier (publishers of this encyclopedia) and the arms trade through two associated companies which, among other things, organize arms fairs. Elsevier are a major international academic publishing company which produces a range of books and academic journals including *Political Geography* and many saw their connections with arms fairs as a very unsavory activity. A number of academics signed a petition calling on the company to sever its connections with this trade while others (many geographers among them) called for a boycott on publishing in, or subscribing to, Elsevier publications (including this one). Following this pressure and disquiet from the public and company employees, the firm has agreed to withdraw from this activity. In engaging with these and similar issues, geographers are dealing with the messy realities of ‘real’ politics and tensions that emerge involving issues of personal and career motivations to publish and disseminate ideas, political beliefs, and matters of conscience, ethics, idealism, and pragmatism.

**Summary**

Political geography is a diverse and ever changing field of geographic enquiry. As such it defies easy definition. It has moved from being an account of the distribution and arrangement of power at different (though overlapping and interdependent) geographical scales to a consideration of how power diffuses across different scales. The workings of political networks, the drugs trade, terrorist organizations, environmental campaigns, and many other political issues operate across geographical scales. While this account has perhaps given the impression that political geography has evolved in a linear fashion, that is not the case. People like Elise Reclus and Peter Kropotkin wrote geographies heavily influenced by their anarchist beliefs and critical of big power politics as long ago as the late nineteenth century.

A key criticism of traditional political geography has been its state centeredness. The uncritical assumption of the state as a ‘natural’ political unit has been replaced by attempts at a deeper exploration of the nature of the state and its reasons for existing. Another criticism is linked to the focus on a traditional politics centered on the state and ignoring other political issues. The state is now seen as only one of a number of actors (albeit a very powerful and resilient one) to which attention needs to be directed. Another key change within political geography (and human geography more generally) has been the shift from the supposedly objective ‘view from nowhere’ to the clear acceptance of the idea of positionality on the part of the academic. While many may accept the ‘situated knowledge’ approach, it is not universal with some academics continuing to promulgate an academic objectivity that many others see as unsustainable.

Political geography has been shaped by a variety of influences including intellectual currents within the broader discipline and political events and practices beyond the academy. It continues to evolve and displays
considerable vibrancy both in terms of the range of issues now considered and the variety of approaches brought to bear.

See also: Apartheid/Post-Apartheid; Bowman, I.; Community; Difference/Politics of Difference; Hartshorne, R.; Harvey, D.; Identity Politics; Kropotkin, P.; Mackinder, H. J.; Maps and the State; Nation; National Spatialities; Nationalism; Neoliberalism; Political Boundaries; Postmodernism/Postmodern Geography; Radical Geography; Reclus, E.

Further Reading

Political Representation

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Glossary

Descriptive Representation A principle of political representation in which the social and/or demographic composition of an elected body is similar to that of the population or voting constituency.

Gerrymandering The manipulation of electoral district boundaries intended to affect the outcome of elections.

Independence Theory of Representation A theory of political representation in which the representative is free to act independent from, and even contrary to, the preferences of her/his constituents.

Mandate Theory of Representation A theory of political representation in which the representative is bound to act strictly in accordance with the preferences of her/his constituents.

Proportional Representation An electoral system in which voters cast ballots for parties rather than candidates, and representatives are selected from lists generated by parties in accordance with the proportion of votes received by each party.

Territorial Representation An electoral system in which candidates are elected from geographically defined constituencies.

Substantive Representation A principle of political representation where the interests of social, demographic, and/or political groups are represented in an elected body.

Vote–Seat Ratio The ratio between the proportion of votes a party wins and the proportion of seats the party receives.

The Meanings of Political Representation

Nearly 40 years ago, political theorist Hannah Pitkin argued that only a constellation of meanings could adequately describe representation, and political representation in particular. The concept is so complex because representation is an apparent absurdity: to make present something that is not literally present. This would be difficult enough if the ‘something’ in question was a simple object in the world, but an act of political representation more typically calls the something into being. In other words, an election or the formation of a legislature constitutes the ‘object’ being represented, for example, the people, the will of the people, the nation, the national interest, etc. At the same time, political representation (at least in functioning democracies) must also be a practical activity providing the means of governance. The relationships among representation and geography involve both the constitutive and the practical dimensions of representation.

All democratic political representation relies on a kind of political fiction, the existence of ‘the people’ as a sovereign holding, but abstract entity. That is, the people hold power, but it is never possible to actually identify a particular set of the population as the people. Indeed, every less than unanimous vote reveals the fictitious nature of the people because any resulting representative or policy will have the support of (at best) a majority of voters. Democratic political representation presents a particular dilemma because the people are simultaneously rulers and subjects. As rulers, they are free to act according to their political will, but as subjects, they are bound by their own decisions. Political representation, and its practice in electoral systems, resolves this dilemma by delegating power to representatives who carry out the activities of governance. These representatives are typically restrained by constitutional provisions and previously established laws – as well as by future elections.

The creative or constitutive nature of political representation means that all systems of political representation have both actual and imaginary geographies. That is, geographical studies of political representation involve issues such as voting patterns and the division of state powers, but also issues such as the right to vote, a question that fundamentally defines the nature of the state or nation.

Issues of political representation have attracted increasing interest in political and electoral geography in the last 20 years. The roots of this renewed interest lie in historical, technical, and disciplinary developments. First, the fall of communism in Central and Eastern Europe (1989–90), the breakup of the Soviet Union (1991), and the end of apartheid in South Africa (1991–94) led to a renewed ‘wave’ of democratization that often required careful negotiation over both the institutional forms of electoral systems and the nature of the political communities to be represented. Second, the increased power and sophistication of geographic information systems (GISs) have brought new analytic power to the practice of political districting and the analysis of voting patterns. Finally, electoral geography is also moving beyond the analysis of spatial patterns of voting, instead focusing more on place specific or ‘neighborhood’ effects on voting preferences. These developments mean that political
geography in general, and electoral geography in particular, has had to reexamine its assumptions about political representation and related concepts.

**The Mandate–Independence Debate**

Debate over the role of the representative, the so-called mandate–independence debate, is one of the central issues in political representation. Under the mandate theory, a representative must always act in accordance with the will of her/his constituents, and indeed, ceases to represent them if s/he goes against their wishes. Strictly speaking, the mandate theory holds that a representative is simply a delegate, acting as a conduit to convey the actions and interests of voters to an assembly. In contrast, the independence theory characterizes the representative as free to act according to her/his own judgment and will, recognizing representatives as having unique skills and expertise unavailable to a typical constituent. This perspective would recognize a person as a representative even if s/he acts contrary to the expressed wishes of the constituency. The common meaning of democratic political representation lies somewhere between these two extremes, and relies on a reciprocal relationship between the represented and the representative.

Putkin in particular argues that a proper understanding of political representation requires elements of both theories. The represented must be seen as capable of understanding and expressing their own interests, rather than simply being the subjects of caretaking (like children or the mentally infirm). There should not typically be conflict between the wishes of constituents and the actions of the representative, but such divergence must be possible. When differences arise, the representative must be able to explain and justify them. Democratic states institutionalize this reciprocal relationship through periodic elections, where voters can (in principle) replace inadequate representatives.

**Descriptive and Substantive Representation**

Another major debate involves the relationship between the identity of the representative and the composition of her/his constituency. Political theorists typically characterize this as a conflict between descriptive and substantive representation, sometimes described as the politics of presence versus the politics of interests or ideas. (Such discussions occur most often in the context of gender, racial, ethnic, or religious minorities, but are not necessarily limited to the role of such groups.) Descriptive representation or the politics of presence requires the physical presence of women, ethnic minorities, etc. in a representative assembly. In a sense, a body is representative when groups are present in the assembly in the same proportion as in the population. Some argue that descriptive representation has a value in and of itself, and/or that it helps confer legitimacy to an elected government, particularly in societies with significant in equality and stratification. More sophisticated defenses of descriptive representation suggest that the presence of women and minorities actually changes the quality and nature of deliberation in legislative bodies. A number of representative democracies, such as India, have institutionalized the politics of presence by instituting quotas for women and minority groups in legislative bodies. The US also imposed gender quotas for elections in Iraq, although it eschews them at home.

In contrast, substantive representation regards the identity of the delegates as irrelevant because representatives are seen as agents protecting the ‘interests’ of constituents. While voters may consider the identity of candidates while voting, the demographic composition of the legislature per se is not important as long as representatives are chosen in a way that allows the effective expression of the interests of voters. A male, for instance, would be seen as representative of females if he consistently supported women’s interests. The concept of such objectively defined interests, however, can lead to an apparent absurdity. If interests exist objectively, substantive representation suggests that a constituency need not have a role in electing their representative, as with the caretaker of a child or incapacitated adult. Consequently, in its extreme form, substantive representation poses problems that are similar to those found in the independence theory of representation. This issue was one of the major disputes during the American Revolution, where the colonists objected to their ‘virtual representation’ in Parliament by representatives for whom they had not voted.

As a practical matter, democratic representation seldom involves either descriptive or substantive representation exclusively. Even among voters who might reject the idea of legislative or party list quotas, the gender or ethnic identity of candidates can be a concern if they feel that a member of their own group is better able to understand and represent their interests. Much like the mandate–independence debate, the extreme version of each form of representation violates the principle that – within limits – both representatives and constituents must be able to act freely and to exercise judgment.

**Critics of Democratic Representation**

Marxist critics in particular argue that such theoretical debates are irrelevant because ‘democratic representation’ is impossible under a capitalist system. The interests of capital too easily determine elections, and debates between parties and candidates simply serve to disguise how the state acts in the interests of capital. The
idea of candidates and parties competing with each other is simply a political version of free market economic ideology. For these critics, structural forces rather than individual merit or effort determine the winners and losers in each realm. Insofar as political debate takes place through the media, major corporations can easily control the content and structure of political discussion and identify only favorable candidates as legitimate and 'serious'. Similarly, the funding required for political campaigns means that wealthy individuals and organizations exercise a disproportionate impact on elections. Moreover, elections themselves may be largely irrelevant because those with the most influence over representatives – lobbyists, institutions, corporations, and so forth – are not affected by elections. The interests of capital are represented regardless of the form of 'democratic representation'.

Electoral Systems and Political Representation

Disputes over political representation generally take place in conflicts over electoral systems, rather than in abstract policy debates. An electoral system is the mechanism through which votes are translated (or not) into political power. Within liberal democracies an enormous variety of electoral systems exist in pure or mixed forms, although most are variations of either proportional representation (PR) or territorial plurality representation. Each system translates votes into power in slightly different ways. Each offers particular tradeoffs in the relationship between representatives and constituents, and in the stability and responsiveness of the political system. The choice of an electoral system reflects the institutionalized political values of a society – or at least the values of those in a position to choose the system.

Proportional Representation

PR is the most common electoral system in the world. It attempts to translate the proportion of votes for a particular party into the same proportion of seats in the elected assembly. Typically, parties establish a list of candidates who win seats in proportion to the number of votes the party receives. For example, in a parliament with 200 open seats, a party receiving 50% of the vote would place the first 100 candidates on its list in the assembly. All proportional systems, however, have limitations. The total number of contested seats determines the minimum percentage of votes required to elect a representative. In a 200 seat parliament, a party would need at least 0.5% (1/200) of the vote to place one candidate. In practice, however, most jurisdictions using PR establish a minimum threshold for electing candidates (typically around 5%) regardless of the theoretical minimum. Any party receiving less than the threshold cannot place candidates in the assembly, and the remaining seats are allocated to the other parties. Table 1 shows the results with five parties contesting a 200 member assembly with a 5% minimum threshold for election.

In this example the remaining seats are allocated proportionally, rounding up to the nearest whole number, but other methods can be used as well. The example illustrates that proportional systems may not produce proportionality; the top three vote getting parties receive extra seats, and the two smallest parties, representing 8% of the voters, are completely shut out. This problem of disproportionality is worse in elections where a large number of small parties fail to meet the minimum threshold, or where the minimum threshold is very high. States typically require minimum thresholds to limit political fragmentation by forcing small constituencies to find common ground in one party or another. In parliamentary systems, very low thresholds can give excessive influence to small parties who hold the balance of power in coalition governments.

Territorial-Plurality Representation

The other common electoral system is territorial plurality representation. In the simplest version of such a system, two or more candidates compete for a single seat from a specific territorial unit (districts, ridings, boroughs, etc.). In such single member, first past the post systems, the candidate with a plurality (or majority) of votes wins the election. The major advantages of such systems are (in principle) greater accountability and closer
ties between a representative and her/his constituents because representation is tied to a specific geographic region and to a specific territorial constituency. All territorial plurality systems, however, suffer from the so-called 'vote-seat' problem: the proportion of votes gained by a party as a whole may not correspond closely to the proportion of seats they receive in the legislature. Table 2 illustrates how territorial representation can lead to such disproportionality in a five member assembly representing five districts with equal numbers of voters.

In this example, candidates from Party A win close elections in four of the five districts but the party loses the fifth district badly. The four narrow margins mean, however, that Party A wins 80% of the seats in the assembly with just over 40% of the total vote. (Under PR, Party A would win just two of the five seats or 40%.)

Departures from proportionality can be even more severe if three or more parties contest each district and winning candidates only achieve pluralities rather than majorities. Perhaps the best known recent example of the vote-seat problem was the 2000 US presidential election, in which George W. Bush received fewer votes than Vice President Al Gore, but won the election with narrow victories in several states. Although the vote-seat problem is endemic to all territorial systems of representation, it is of particular concern when it leads to the exclusion of political (gender, ethnic, or religious) minorities.

Territorial systems are also highly vulnerable to gerrymandering, a technique that influences the vote-seat ratio by manipulating the boundaries of electoral districts, boroughs, or ridings.

Variations of the single member, first past the post system can either ameliorate or exaggerate the vote-seat mismatch. The voting system in multimember or at large districts (where candidates run for several seats simultaneously) can either completely exclude minority parties and candidates, or can provide a mechanism for proportionality. In the former case, election rules might require candidates to run for particular seats, and require voters to cast one and only one vote for each seat. A cohesive political plurality could then elect all representatives. Alternatively, candidates might all run against each other simultaneously with the top vote getters winning election. Such an arrangement prevents the exclusion of a political minority, but allows the election of candidates who have a relatively narrow base of support. If the top candidate attracts 70% of the vote, for example, the remaining representatives would be elected with less than 30% support among the electorate. Nor do such systems guarantee proportionality since (as in the above example) a single candidate might win the lion’s share of the vote.

Numerous electoral mechanisms have been proposed and employed to overcome the seat-vote mismatch and to address the problem of minority exclusion. The single transferable vote (STV) (called instant run off voting or IRV when used to elect candidates to a single seat) identifies the candidates with the broadest support by having voters rank them in order of preference. Ballots that would otherwise be wasted (either because the first choice candidate received more votes than needed for election, or too few to be competitive) are transferred to the voter’s second (third, etc.) ranked candidate until all seats are filled. STV attempts to ensure a closer match in proportionality between votes and seats while still retaining a territorially based system of representation.

**Mixed Electoral Systems**

States and other jurisdictions use a wide array of proportional and territorial electoral systems, and scholars have proposed an even greater variety to address the practical and theoretical shortcomings of the existing ones. PR and territorial plurality systems are not necessarily mutually exclusive, however, and many jurisdictions use some combination of them. Some seats in a legislature, for example, might be elected from territorial units while the remaining seats are assigned by proportion of the total vote. Proportional systems may also be used within a set of districts, where parties designate separate lists for each territorial unit. The effect on proportionality in these cases depends on the particular design of the electoral system and on the distribution of votes in any given election. Mixed systems often

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Territorial-plurality representation in a five-member assembly</th>
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<tbody>
<tr>
<td>District</td>
<td>% Votes for candidates from party A</td>
</tr>
<tr>
<td>1</td>
<td>51</td>
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<td>2</td>
<td>52</td>
</tr>
<tr>
<td>3</td>
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<td>4</td>
<td>52</td>
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<tr>
<td>5</td>
<td>10</td>
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<tr>
<td>Total votes</td>
<td>43.2</td>
</tr>
<tr>
<td>Total seats</td>
<td>80</td>
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<td>(4 seats)</td>
<td>(1 seat)</td>
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reflect practical compromises among political factions who would benefit disproportionally from either PR or territorial representation. As such, they embody mixed principles and concepts of representation.

**Principles of Representation in Electoral Systems**

Arguably, PR can promote both descriptive and substantive representation more easily than territorial representation because it is simpler to regulate the composition of party lists than the composition of territorial electorates. It is easier, for example, to require that women or minorities constitute some minimum percentage of the candidates on party lists, than to create electoral districts where the same percentage of women or minorities are likely to be elected. PR used with such regulated party lists can thus easily guarantee descriptive representation in an elected body. The profusion of parties in a PR system may also increase the chances that a particular constituency or interest group will have representatives in the assembly.

PR (especially without regulated party lists) suggests a bias toward the independent model and substantive representation because representatives generally have weaker ties to a particular constituency – even one that is concentrated geographically. Representatives are not personally tied to a set of voters because voters cast ballots for a party rather than individuals. Representatives thus embody the interests and positions of the party, rather than a specific constituency per se, and are consequently freer to act according to their own judgment (within the limits of party discipline) and are (arguably) less accountable to voters.

Although territorial representation is typically less effective in creating proportionality and descriptive representation, district systems ensure a strong tie between representatives and their constituencies, and in principle increase accountability. Such a system encourages a mandate model because voters can remove specific incumbents in favor of candidates who will more accurately represent their wishes. More generally, territorial systems allow for a distinct concept of the object of representation: the geographic community. Rather than representing the agglomerated will of individual voters (as in PR), a representative comes from and embodies a particular, identifiable community that is – or is imagined to be – more than the sum of its individual members.

**Responsiveness and Stability in Electoral Systems**

Electoral systems must also balance responsiveness and stability. These refer to the relationship between a change in voting patterns and the consequent change in the elected assembly. PR systems are (in theory) perfectly responsive; a 5% increase (or decrease) in the votes for a party will translate into a 5% increase (or decrease) in the number of seats held by that party. In practice, changes in vote totals may not translate perfectly into changes in seat totals because of threshold requirements and limited assembly size.

The balance between stability and responsiveness is more complex in territorial representation because the vote–seat ratio of a particular set of electoral districts can produce outcomes that are either too stable or too responsive. In the former case, even large changes in the overall vote total do not change the composition of the elected assembly, whereas in the latter case, small changes in the vote produce huge swings in the legislature. Overly stable systems result when parties have either large majorities or small minorities in districts. Even relatively large losses or gains by one party or another in total votes are not sufficient to change the majorities or minorities in many districts, so the composition of the assembly remains unchanged. In contrast, a set of districts with very narrow margins may be overly responsive because a tiny shift in the electorate may cause one party to lose every seat. A particular set of electoral districts may also be asymmetrically responsive: a large loss of votes by one party may not produce any change in the assembly, but a small gain in votes may result in significant gains.

Stability and responsiveness raise final dilemma of territorial representation. The principle of accountability holds that voters should be able to remove an incumbent from office, and elected officials are presumably more responsive to their constituents if they are in danger of losing the next election. At the same time, legislatures benefit from some degree of political continuity and stability. Thus a situation that is desirable in an individual district – accountability ensured by narrow election margins – may produce excessive responsiveness when applied in every district.

**Political Representation and Political Communities**

Concepts and principles of political representation are fundamental not only to the structure of electoral systems, but also to the relationships among the franchise, the polity, and citizenship. In nation states, the right to vote is one criterion of membership in the nation, but in all states, this right is a measure of full citizenship. Full citizenship, including the franchise, confers membership in ‘the people’. A full citizen therefore carries both the right of sovereign power and political interests that require representation. In short, only full citizens are full participants in the political life of a state. In this way, acts...
of political representation create political communities rather than simply reflecting the will of preexisting ones. Consequently, analyses of political representation ultimately involve issues of citizenship, exclusion, and power. While systems of territorial representation present clear geographic questions, all systems of political representation – even pure PR – raise significant issues for political geographers.

See also: Citizenship; Democracy; Electoral Cartography; Electoral Districts; Electoral Geography; Gerrymandering; Governance; Identity Politics; Private/Public Divide.

Further Reading


Relevant Websites

http://www.fairvote.org/
A site with many election related resources, sponsored by the Center for Voting and Democracy.

A site with many worldwide election results and electoral maps, especially of recent elections.

http://www.redistrictinggame.org/
An interactive redistricting site from the Annenberg Center at the University of Southern California.
Polycentricity
P. Hall, University College London, London, UK
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Glossary

Edge City A ‘new downtown’ at the edge of an urban area; generally American.

Functional Polycentricity Polycentricity in terms of the functions performed by an individual urban unit in a system of cities; such a unit can, at least in part, perform independently of the First City or cities in that system.

Geographical Polycentricity Polycentricity in terms of the existence of independent and separate urban units in a system of cities; they may also exhibit a flat hierarchy, that is, there is no dominant city or cities.

Mega-City Region A region including a number of separate cities or urban units which are functionally related.

Morphological Polycentricity See Geographical Polycentricity.

Multiple Nuclei A city with more than one commercial nucleus, over and above the Central Business District (CBD).

Polycentricity An urban system (city; city region) with more than one constituent unit.

Space of Flows The pattern of flows of information between units or agents in an urban system.

Introduction

The term ‘polycentricity’ is widely used in urban academic literature, and in Europe it has become embodied as a policy objective in the 1999 European Spatial Development Perspective (ESDP). But there is considerable confusion about both its meaning and its policy significance. This article seeks to unravel the concept, distinguishing first, different ‘scales’ of polycentricity: local (urban), regional, national, and continental; second, different ‘kinds’ of polycentricity – geographical or morphological, and functional.

Scales of Polycentricity: Local, Regional, National, and Continental

It is important to appreciate that the concept of polycentricity may operate at different spatial or geographical scales, and that polycentricity at one scale may mean monocentricity at another. Polycentricity was first used at the ‘intra urban’ or ‘local’ scale: in the work of Chicago sociologists and land economists, from the 1920s onward, as an analytical device to capture the structure of urban areas, it referred to the possibility of additional urban centers or subcenters which might supplement or even compete with the role of the dominant central business district, whether for retail or commercial office development. But the early descriptive models of urban activities and land uses, like the ring or annular model developed by the sociologists Ernest Burgess and Robert Park or the sectoral model developed by the land economist Homer Hoyt, all assumed a fundamentally monocentric pattern dominated by a single strong central business district (CBD); the sole exception was the interesting multiple nuclei model developed in 1945 by the Chicago geographers Chauncy Harris and Edward Ullman. Since then, though several basic urban models have been developed using a monocentric basis (such as those of William Alonso and Richard Muth, in the 1960s), observers like Kevin Lynch and Catherine Bauer Wurster simultaneously noticed that cities could develop, and indeed were developing, a more polycentric structure with the emergence of multiple business centers (in London: the City, Westminster/West End and Canary Wharf; in Paris: the Étoile Champs Élysées and La Défense; in New York: Downtown, Midtown, and Battery Park City; and in Tokyo: Otemachi Marunouchi and Shinjuku). Indeed, as early as the 1960s it was suggested that western American cities like Los Angeles or Phoenix, which had grown up largely in the age of mass automobile ownership, were developing a distinctly polycentric urban structure with many subcenters rather than a single dominant center. More recently the American journalist Joel Garreau has observed the phenomenon of such new downtowns, or Edge Cities, developing in suburbs such as Tysons Corner outside Washington DC.

Simultaneously, from the 1960s, geographers and planners noticed that polycentricity could also occur at a ‘regional’ scale: regions such as Randstad Holland in the western Netherlands, or Rhine Ruhr in Germany, exhibited a structure wherein there was no dominant city, but rather a number of cities of roughly equal size and importance (Amsterdam, Rotterdam, the Hague and Utrecht; Bonn, Cologne, Düsseldorf, Dussburg, Essen, Bottrop, and Dortmund); further, such an arrangement could have real advantages in urban functioning, since it avoided excessive concentration of activities and associated congestion, while allowing different cities to specialize within a spatial division of labor. (This represented a considerable distortion, even contradiction, of...
the central place system first identified by the German geographer Walter Christaller in 1933, which posited a regular spatial distribution of a hierarchy of smaller cities around a larger central city. At the same time, urbanists noted that the same principle applied to the ‘national’ urban structure of these countries: the Netherlands had never had a single dominant city like London or Paris, while Berlin in Germany had lost much of its importance due to the post war division of both the nation and the city. Even after reunification and the return of the capital from Bonn to Berlin, the German urban system remains characterized by strong provincial capital cities (Hamburg, Bremen, Hannover, Frankfurt, Stuttgart, Munich, Leipzig, Dresden, and others) reflecting the fact that the nation emerged only in 1871 through the reunification of many smaller principalities. Again, this pattern has been seen as offering decided advantages in avoiding excessive congestion and, equally important, in the diffusion of metropolitan features (culture, the media) among a number of cities rather than concentration in the capital.

Even more recently, within Europe – where the question has aroused the most intense policy discussion – polycentricity has been defined at a ‘European’ or ‘continental’ scale: ‘polycentricism’ in the 1999 ESDP meant actively promoting alternative centers, outside the so called central Pentagon bounded by Birmingham, Paris, Milan, Hamburg, and Amsterdam, into Gateway cities elsewhere in Europe, many of which are national, political, or commercial capitals serving wide territories in Ireland, the Iberian peninsula, Scandinavia, and eastern Central Europe. But paradoxically, this may help promote greater ‘monocentricity’ at the ‘national’ scale in these more peripheral European countries, as capital and labor are drawn to leading cities, thus creating regional imbalances between core and periphery within each country: a situation observable in and around Dublin, Lisbon, and Madrid in the 1980s and 1990s, and around eastern Central European cities like Budapest, Prague, Warsaw, and Tallinn in the 2000s. As a further complication, in the largest such national capital regions – especially in the Pentagon – population and economic activity may decentralize at a ‘regional’ scale from the First City (the largest city in each region, a term chosen to avoid the term ‘primate’) to other urban places, as evident in the formation of polycentric mega city regions (MCRs) like Southeast England, Central Belgium, Rhine Main, or Northern Switzerland. Such regions, first recognized in the mid 1990s in Pacific Asia, and later in the work of the geographer Allen Scott, essentially consist of a number of discrete cities and towns, physically distinct but networked together. In this process, though decentralization of population may commonly entail actual physical migration, economic activities decentralize much more through a process of differential growth and/or decline: empirical observation shows that even when First City employment grows, the rate of growth in other cities is much higher, partly because much of it takes the form of growth of residientary services to cater for population growth. In addition, however, the evidence suggests the progressive emergence of a spatial division of labor within the region: higher level services, particularly those networked into global systems of information exchange, continue to grow in the First City because of its unique advantages for face to face exchange, while lower level service functions (generally with a more regional orientation) disperse out from the highest order central city or cities to lower order cities. Thus, an extremely complex regional structure of cities may emerge: in the extreme case noticed in Europe, Southeast England, no less than 51 cities and towns with their surrounding urban commutes form an MCR, as depicted in Figure 1, with some 19 million people stretching up to 160 km (100 miles) from Central London.

Two Kinds of Polycentricity: Geographical (Morphological) and Functional

Geographical or Morphological Polycentricity

A polycentric region, or nation, or continent, by definition, is a geographical unit consisting of more than one urban place. Polycentricity thus may simply be ‘geographical’ or ‘morphological’, in the sense that physically separate urban units exist. As noted, a region such as the Dutch Randstad and the Rhine Ruhr area of Germany, or a country such as Germany, were identified as polycentric in this sense from the 1960s. But the clear implication was, and is, that such regions are characterized not merely by a number of different cities, but also by a weak or flat hierarchy: there is no single dominant city, but rather a set of cities within a fairly restricted size range. One well known way of measuring this is the rank–size rule (see Figure 2): if cities and towns forming part of a system (which can be a continent, a nation, or a region) are arrayed on double logarithmic paper, by rank on the x axis and by (population) size on the y axis, then a truly polycentric system would produce a distribution along a line at 45° to both axes, the largest place having a population double that of the next, and so on, without evidence of primacy at the top of the distribution. Analyzed in this way, the city systems of countries like Germany and the Netherlands have indeed been found to be polycentric in comparison with those of the United Kingdom or France. More recently, analysis of ‘polycentric’ city regions in Northwest Europe has confirmed that some (the Paris region, Dublin) are
relatively monocentric as compared with the Randstad or Rhine Ruhr; however, even the Randstad (together with Rhine Main and Northern Switzerland) is more accurately described as semiprimate, whereby one or more dominant cities are superimposed on a predominant lognormal distribution.

Functional Polycentricity

This however relates purely to the physical morphology of a national or regional system of cities, as measured superficially by size; it says nothing about how the constituent urban units relate to each other. It is more significant to seek to identify ‘functional’ polycentricity, whereby such units interrelate in complex ways, through exchanges of people and goods and information. Measuring these relationships obviously depends on the quantity and quality of the available information to be measured.

One of the commonest ways of measuring functional polycentricity, because data are readily available for most countries and most times, is through patterns of ‘daily commuting’. Since the 1930s, American urban researchers have used and successively refined a concept now known as the metropolitan statistical area (MSA). This is essentially based on a central city (or cities), plus a surrounding ring from which significant numbers of commuters (typically 15% or more of the resident workforce) travel daily to that city. Such a concept which uses functional urban regions (FURs) as the basic statistical building blocks has been used widely in the UK and the European urban studies since 1970.

Two recent European studies of polycentric city systems have adopted semi arbitrary definitions. In the first, ESPON, potential urban strategic horizons (PUSHs) were defined on the basis of contiguous 45 min isochrones from the center of the leading city; in the second, POLYNET, a Polycentric MCR was defined simply on

![Southeast England mega-city region, 2001: Constituent functional urban regions (FURs) and degree of self-containment.](image)

The region, with 51 constituent functional urban regions (FURs) all, apart from London, medium-sized or small shows a very high degree of self-containment beyond a radius approximately 70 km (40 miles) from central London; here, FURs are 75-85% self-contained, in that the great majority live and work within the same local commuter region. 


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the basis of contiguous FURs, without any evidence (positive or contrary) of relationships between these FURs, in order then to permit statistical analysis of commuting data to identify possible functional relationships. First, commuter flows were mapped and inspected to identify strong relationships that ‘bypassed’ the First City or cities. Such flows do appear in some regions, sometimes unexpectedly. In Southeast England, where London attracts remarkably strong commuter movements from quite distant places up to 140 km (75 miles) away, there is a west–east split: the area west of London shows a strong superimposition of criss cross flows bypassing the capital, while the area to the east (which admittedly is bisected by the Thames estuary) shows no such pattern. In the Dutch Randstad, there are relatively weak flows between the northern ‘wing’ (Haarlem–Amsterdam–Utrecht) and the southern ‘wing’ (Leiden–Den Haag–Rotterdam–Dordrecht), and also between areas in Brabant south of the Randstad and the Randstad itself.

Second, the study analyzed the relative self containment of the individual FURs. It found that, beyond some critical commuting distance from the First City in each region – typically about 120 km (75 miles) – FURs became quite strongly self contained, with some 75–85% of working people living and working in the same FUR. The study then used commuting data to produce a ‘general polycentricity index’, defined as follows:

The expression for ‘general functional polycentricity’ is:

$$P_{gf}(N) = \left(1 - \frac{\sigma_\Delta}{\sigma_{baseline}}\right) \cdot \Delta$$

where $P_{gf}$ is special functional polycentricity for a function $F$ within network $N$, $\sigma_\Delta$ is the standard deviation of nodal degree, $\sigma_{baseline}$ is the standard deviation of the nodal degree of a two node network derived from $N$, where $d_{12} = 0$, and $d_{ij} = 1$ for the node with highest value in $N$. $\Delta$ is the density of the network.


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Remarkably, it found very weak polycentricity in all eight regions under study: the index varied from only 0.02 for the traditionally ‘monocentric’ Paris region, to 0.15–0.20 for the traditionally ‘polycentric’ regions of the Randstad and Rhine Ruhr. But it noted that any figure higher than that might imply a pattern of cross commuting so extensive that the region would become operationally dysfunctional and environmentally unsustainable. Indeed, previous Dutch research as well as German and British comparisons suggest that polycentric urban regions in Northwest Europe may exhibit features that conflict with ESDP sustainability objectives. This conclusion is significant, because the ESDP (1999) has as a central policy objective, the active ‘encouragement’ of polycentricity, or ‘polycentrism’.

Measuring the ‘Space of Flows’

To measure what Castells calls the ‘space of flows’, however, different data and different methods are required. One is to adopt the quantitative method developed by the Globalization and World Cities (GaWC) Study Group at Loughborough University to measure the connectivity between cities through study of cross border service networks across multiple city based offices worldwide. This, further, is capable of measuring connectivity at four different geographical scales: regional, national, European, and global. But, it is important to stress, it cannot measure the strength or importance of the ‘actual’ flows of information between the towns and cities of a polycentric region, or between one such region and another. Such information – virtually by e mail, or telephone, or in people’s heads through business travel – requires the direct capture of vital primary data on the actual flows of information passing within and between the MCRs. But this proves difficult: email traffic in particular is increasingly infected by spam and phishing, and it proves extremely difficult to obtain statistically significant samples of either e or personal traffic, either directly (for reasons of commercial confidentiality) or by asking respondents to maintain records. More significantly still, however, the problem is that such surveys of this type can never hope to convey the ‘quality’ of the information that is exchanged, either in e traffic or in personal business traffic; quantitative measurement has definite limits, both of practicability and of the quality of the output.

Given these limitations, the limited research on information flows in such MCRs does suggest that some are functionally more polycentric than others: in them, a proportion of all information exchanges (telephone calls, e mails, business trips) bypass the First City of the region, suggesting that other centers have a degree of functional independence. Thus, in Europe, Southeast England, Central Belgium, Randstad Holland, and Rhine Ruhr appear to have greater functional polycentricity than the Paris region, Greater Dublin, or the Rhine Main region. This finding, albeit based on some what fragmentary data, may be significant for strategic planning of such regions because it suggests that perhaps such independence may be induced.

This research concerns information flows within the advanced producer services that increasingly dominate the urban economies of nations and cities in the developed world, and that have underpinned polycentric urban structures recently researched in Europe (ESPON, POLYNET) and in the United States. It may however, provide an equally important clue to the interpretation of economic structures in the even larger MCRs of Pacific Asia, where the phenomenon was first recognized, best exemplified by the Pearl River Delta (Hong Kong–Guangzhou) and Yangtze River Delta (Shanghai–Suzhou–Nanjing–Hangzhou) regions of China, which function as complex networked systems of manufacturing. Similar regions in Latin America, such as the Golden Triangle of Brazil (Rio de Janeiro–São Paulo–Belo Horizonte), may represent a mixture of networked manufacturing and producer services. The underlying principles may be the same production, whether of goods or of services, is organized through the First City which operates as a global gateway to and from the rest of the world; the other cities are in a sense, tributary to it, but may over time acquire a degree of functional independence from it.

See also: Space I; Space II; Space-Time.

Further Reading


Glossary

- **Gaze**: The gaze refers to how an audience views the visuals. It was made popular by French intellectuals, for example, Michel Foucault around the 1960s, in postmodern philosophy and social theory, particularly in feminist scholarship; however, it is not simple viewing as the gaze is seen as imbued with socially constructed meanings and biases.

- **Homo Economicus**: It refers to man as economic man who is rational, informed, and interested in the self alone, whose yearnings are for wealth, who avoids unnecessary labor, and who is able to make judgments toward those ends.

- **Positionality**: It is a person's position not as an autonomous self but as shaped by multiple as also overlapping social processes embedded in historical-geographical locations.

- **Situated Knowledge**: As against the concept of universalistic knowledge, situated knowledge acknowledges social, relational, and contextual specificities of knowledge formation. Thus, no particular knowledge takes precedence over the other.

Defining Polyvocality

'Poly' is usually a prefix meaning 'much', 'many', 'more than one', or 'of many kinds or parts'. 'Vocal' refers to 'uttered or produced by the voice', 'having a voice, capable of speaking or making oral sounds', 'full of voice or voices', or 'speaking freely'.

Interestingly, 'poly' in combination with quite a few words occupies several columns in any standard dictionary and yet there is no such term cited as 'polyvocal' in these works. Similarly, the term vocality does not appear in the *Webster's Dictionary of the American English* nor does it find place in the latest edition of the *Cambridge Dictionary*. The Dictionary of Human Geography also does not carry an entry on 'polyvocality' as is also the case with *A Feminist Glossary of Human Geography*, although the latter has an entry on 'polyphonic'. It is not surprising, therefore, that the 'google' search for the term 'polyvocality' per se yields no better result.

Simply put, 'polyvocality' means multiple voices representing multiple viewpoints and discourses coexisting without privileging one voice over the other. This is contrary to 'monovocal' style of the narration – often seen as single voice of omniscience – wherein the singular voice not only subsumes but also overrides and subordinates other voices; it also becomes hegemonic, justified, and legitimized in lending authority to a particular viewpoint as dominant, concealing, and often manipulating, in the process, diverse and conflicting voices and realities.

Acknowledging Polyvocality

It may be said that the polyvocality essentially emerged and sustained on the terrains of various modes of thought and intellectual practices of postmodern philosophy, and the subsequent spatial turns in social theory that inform much of the contemporary geographical thoughts. A brief on postmodernism philosophy is, therefore, in order.

One of the precepts of what is understood as modern worldview was the historical moment called the Enlightenment in the postmedieval era of darkness. Being modern stood by and large for having rational and objective viewpoints – the 'enlightened' way of seeing the world as orderly, organized, and causally generalized. The central concern therein has been the public use of reason to change human society and to demystify the world as relatively homogeneous with quite precise temporal definition – in a way, a world where the *Homo economicus* responds to certain impulses as a rational human being.

In such pursuits, modernist scholars tried to transfer physiological properties of organized matter, the forms and conditions of existence of life which usually follow definitive evolutionary track to the realm of social. They did so in terms of looking for spatial localization of function, hierarchy, regulation, and norm in society similar to that found in the body. This was, in part, a product of what has been called as particular 'practices of reason'. It was in this genre of scholarship that one can place Brian Berry's 'equifinality' that he so infamously conceptualized while discussing about Chicago and Calcutta acquiring over time identical profiles in terms of status based residential ordering, among other characteristics.

It was against such overarching meta narratives, the 'grand theory', the 'universal truth', sometimes called 'god's eye view' that postmodernism arose, not as replacement, but as reaction, skepticism, and resistance, initially in the domain of architecture and planning, linguistics, literature, and philosophy and subsequently spreading to theology, the arts, and medical and social sciences, including geography.
Although postmodern positions are highly contested and disputed, there is a general consensus that postmodernism is not only about questioning meta narratives or the grand theories, but also about questioning the construct of human as rational being independent of social and cultural embeddedness, completely overthrown by hegemonic structures.

Since modernism saw the world as essentially rational and orderly, production of ‘truth’ entailed use of methods through overarching theorization which could ‘prove’ that rationality and order without providing for any biases and/or of those seeing the reality. It was not surprising therefore that objectively produced knowledge that could stand scientific rigor, scrutiny, and validation took precedence over other forms of indigenously produced knowledge. That such objectivity is not only impossible but it may in fact be unnecessary and problematic as well was never a question. A certain hierarchy in knowledge production was inevitable. The so-called ‘representative scientific knowledge’ thus becomes the knowledge of a ‘chosen few’, the privileged gaze of white Anglo Americans, essentially males – given the overwhelmingly androcentric nature of ‘scientific’ research – researchers with a view – what can be termed also as ‘ethnocentric universality’.

Scholars began to point out that the so-called objective statistics are essentially produced within the framework of preconceived categories in the minds of researchers, and however dispassionately this viewing of the field is done, it still remains a viewing from a vantage point. Representing the viewing is thus not free from the cultural baggage the researchers carry with them. Therefore, texts and landscapes which get represented are constructed, authored, and only partial and not even true.

The postmodern critique of the modernist view thus concerned the latter’s singularity as well as its privileged position – the fact that it allowed for only one truth and one story, whereas there can be many truths/stories and even one truth/story can be told in myriad ways. That is, there can be no hegemonic or monolithic text; no objective truth to discover, but many voices – articulated individually as well as collectively – to hear.

Polyvocality and Its Implications for Research

As the overarching theories were essentially architectured on the basis of masculine views as the norm, much of the initial discourses on polyvocality in geography were particularly informed by feminist scholarship who, in influenced by concurrent debates in other disciplines, have been questioning the androcentrism of geographical enquiries and the links between theory, power, and knowledge, among other issues.

Acknowledging the presence of polyvocality also warranted researchers’ sensitivity and responsibility toward opening discursive spaces to ‘others’, especially those whose vulnerabilities were such that their voices were routinely marginalized or suppressed both in thought and in social practices by elite compromises. It also meant celebrating differences, bringing upfront multilocality as well – struggles, experiences and voices of women, people of color, queers, subalterns, and so on. Importantly, it was also pointed out that representational texts may be read variedly, what Spivak called ‘the pleasure of the bottomless’, in the process of which the perceived certainties are decentered and the authority by which all knowledge claims are made is questioned.

Scientific research looking for neatness and order had devalued personal experiences and histories as legitimate sources of informed enquiry, which stripped the ‘personal’ from writing and research. As against such presumably detached objective authors ‘at a distance’ dispassionately capturing the truth, polyvocality necessitated active engagement with the subjects – blurring the typically unequal power relations/boundaries between researchers and the researched. However, interlinked were the issues regarding authenticity or inauthenticity of ‘representational’ voices – who ‘speaks to’ or ‘speaks for’ and who ‘reps’ and ‘interprets’ these voices – these were brought forth and intensely debated. It was pointed out, for example, that the presumably commonsensical shared among women (and men) researchers – often from academia – can get fractured because of their privileged positionality vis-à-vis the researched in the field resulting in ‘otherness’, which may be as important as their gendered identities.

Polyvocal voices necessarily implied polylocalities as well, spatialities of experiences – ‘speaking from’ and ‘speaking of’ acquired new meanings. Since ‘representational’ voices would necessarily be contextually and choreographed, it was emphasized that the ‘personal’ into public discourse be admitted. This required that the authors make their personal, intellectual, social, and political locations explicitly known. That is, the author could no longer be absent from the text, but makes the authorial presence felt, in order to understand the author’s gaze. Discourse analysis techniques that expose knowledge and power by deconstructing texts, institutions, and landscapes have also become commonplace. Polyvocality brought a new vocabulary such as the ‘other’, situatedness of knowledge, positionality, diversity and differentness, and the deconstructions became the hallmark of all discourses. What is often called ‘emancipatory geographies’ no longer refers to doing research about others but to doing it in a participatory mode with the subjects.
With the myth of absolute objectivity – the 'gaze from nowhere' – busted, it was increasingly recognized that the 'truths' do not need validation and legitimation through data, mostly quantitative in nature, of the sort as in hard sciences, and that they can sustain on localized mix of cultural politics, knowledge, and power and can be obtained through equally legitimate means of qualitative or ethnographic research methodologies. These methodologies include detailed interviews, case studies, focus group discussions, oral histories and personal narratives, and participants’ observations, etc., besides collaborating with participants in the development of research questions, the interpretation of data at both the descriptive and interpretative levels, and the writing of research reports.

**Critical Interrogation of Polyvocality**

Polyvocality questions universalization of theories and essentialization of meta narratives and thus rejects priorities built around flawed conceptual categories and politics of representation. It has also generated critical debates about norms that constitute dominant referential universes. Yet the concern for polyvocality has its share of critiques. It is argued that polyvocality has created considerable anxiety among scholars about not being ‘authentic’ in trading alien territories to the extent that it has even created an occasional ‘apology’ by researchers for being ‘the other’ because they cannot be ‘authentic’ voices. Some have pointed out that such self reflexive exercises amount to mere ‘havel gazing’ intended to gain legitimacy as ‘authentic researchers’ and that such pressures and fears have led to an impasse increasingly reflected in avoidance of fieldwork by researchers.

Polyvocality deals with the question of representing voices, particularly marginal and subaltern voices, and yet serious researchers have become painfully aware that true or authentic voices cannot be retrieved, primarily on two accounts. First, experiences of the researched at an existential level are mostly private vis-à-vis even the most sensitively inclined researchers’ theoretical frameworks, methods, and concepts that are primarily addressed to public domains. To that extent, the original narratives do get transformed into the researchers’ overarching agenda. How then the researchers treat their own interpretative voices – as one among many or would they enjoy a privileged position? How does one differentiate between the author’s and the participants’ voices? Even as the possibility of multiple voicing is accepted, each individual participant can be polyvocal. There is an issue therefore as to which and whose voice is authentic? Second, even as researchers recognize differences and try to include the multiple voices of subject and object within the text, their own identities continue to be a part of the very structures of power that are being deconstructed.

It has been argued that polyvocality can make it appear as if other voices had been allowed a say whereas, even in pluralistic narratives, the author/researcher always retains control over other voices, however subconsciously it may be. It is quite likely that in order to replace a modernist singularity with a multiplicity, the dominant continues to occupy the center without adequately recognizing the reality of multiplicity of others with their own trajectories.

Speaking for others may often be value laden and epistemologically violent – a way also to overcome guilt for being privileged. The most ideal situation is that the researched should speak for themselves, but what if they cannot speak in the language that can be heard and responded to by those who matter? Do the privileged remain silent even if their speaking, however tinted and biased their voices might be, makes a difference?

Polyvocality insofar as it mutates collectives in stand alone singularity of perspective has been severely critiqued, especially by scholars working with people of color or in non Western contexts as politically debilitating fragmentation. Apart from the fact that the problem of voice is a vexed problem of multiplicity as well as a problem of representation, the major argument is how it undercuts any basis for collective action. Rooting for polyvocal postmodernism, these scholars argue that in stead of playing out identity politics drawn on differences and multiple voices, the differences can be selectively appropriated. This is to build strategic alliances resulting in multiplicity of resistance toward the desired political end in recognition that certain of the differences reflect and reinforce broad structures of social domination that need constant contestation and overturning rather than one grand dismissal of singular voice. Thus, subsequent discourses on multiplicity of subjects and voices tend not to seek deconstruction of subject along differences as much as reconstruction of a critical subject.

**Further Reading**


Bell, D., Sinnie, J., Cream, J. and Valentina, G. (1994). All hyped up and no place to go. Gender, Place and Culture 1, 31-47.


See also: Embeddedness; Eurocentrism; Feminist Methodologies; Postmodernism/Postmodern Geography; Subaltern.


Meanings and Origins

Popular culture is a contested term that is defined by commentators in myriad ways. In general, however, most definitions include within the term popular culture the whole spectrum of activities involving mass consumption. Thus, everything from cinema and television to the Internet and fashion magazines, as well as the advertisements promoting these other manifestations of popular culture itself. To trace the genealogy of the term it is necessary to go back to the origins of ‘popular culture’, in which the term was used to contrast (derisively) the culture enjoyed by the working classes with the ‘high culture’ enjoyed by social elites. This distinction is critical to understanding the often designating use of the term popular culture in mainstream cultural critiques and also often, unfortunately, in academic discourse. However, the line between ‘high’ and ‘popular’ culture has become in increasingly blurred with the general undermining of cultural authority structures throughout North America and Europe since the 1960s and 1970s. Indeed, now cultural authority is more often associated with those occupying roles in the popular culture industries, such as Hollywood, MTV, and Rolling Stone magazine than with ‘high culture’ journals such as The Paris Review or professors of film studies.

Of course, the relationship between ‘popular’ and ‘high’ culture is socially contested at all times, as the categories themselves are social constructions. In practice, the border between these forms of culture is highly malleable, with each pulling from the other for inspiration (most famously in the Pop Art movement of the 1950s and 1960s). Particularly difficult to categorize are cultural artifacts occupying the same media, such as ‘art’ films and Hollywood cinema, or romance novels and ‘literature’. Despite the fact that categorization of cultural artifacts is ostensibly about the ‘quality’ of the artifact, categorization is usually made via the market mechanism: the more popular the artifact (in terms of sales), the lower the artifact is perceived on the spectrum of ‘popular’ and ‘high’ culture. This illustrates a central point to be made in any discussion of popular culture, which is that debates about popular culture have more to do with identity and the subject than they do with the actual cultural artifact itself.

Popular culture as a source of modern debate and anxiety can be traced to the rise of the printing press and other forms of mass media. Because of this multiplicity of media and messages, elites became concerned about the effects of media on the masses; soon they would learn to co-opt those media and messages to their own purposes. Nevertheless, with the end of World War II, post war affluence in North America (and later in Western Europe) led to the rise of the consumption society, in which popular culture figured particularly strongly in young peoples’ processes of identity formation. With allowances and other sources of income empowering young people, the market adapted to their preferences, providing entertainment deemed unacceptable by many parents who associated ‘high’ culture with their socioeconomic hopes and aspirations for their children and ‘popular’ culture with the underclass, ignorance, and crime.

Glossary

Geographical Imagination  The way in which an individual imagines the world to be, both in terms of the relative positioning of places and also the characteristics and normative values associated with places.

Globalization  The process by which global flows of information, goods, and people are accelerated by the time–space compression associated with changes in transportation technology, information technology, and regimes of trade and governance.

Hegemony  A theory developed by Antonio Gramsci in which the capitalist state is protected from overthrow by the institution of middle-class culture and values as commonsense, thereby alienating the working class from their own culture and identity.

Material Culture  Any tangible product that is rooted in cultural preferences.

Pop Art  An Anglo-American visual artistic movement from the 1950s and 1960s that linked visual popular culture of the time with the abstract expressionist movement.

Post-structuralism  A broad term for a shift in philosophy and cultural theory beginning in the 1960s that denied the existence of meaning outside of culturally specific frames.

Structuralism  A broad term for the intellectual approach that seeks fundamental structures on which culture and society are built, and through which meaning can be derived.

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Geographies of Popular Culture

Popular cultures vary over time and space, especially in their emphases on individualist traditional forms of culture (literature and visual art), mass media (such as cinema, television, radio, advertising, and periodicals), and participatory culture (sports, fashion, and speech). The scale of production for each of these popular cultures varies, from the corporate macroscale of the mass media, to the artisanal scale of the traditional forms of culture, to the embodied microscale of participatory culture. These scalar differences, however, are not absolute, with each form of popular culture being influenced by the others (e.g., embodied fashion is also influenced by corporate decision-making and vice versa). These influences wax and wane over time, as the capitalist nature of most popular cultures leads to a constant need to rearticulate the popular and shift fashions to expand markets. Thus, popular cultures are often defined by their transience. Some locations emerge as privileged sites of this rearticulation, for example, Manhattan and Los Angeles in the United States, London in the United Kingdom, and Mumbai in India. These sites emerge out of historically contingent processes to dominate the macroscaled cultural production associated with the mass media. However, as described below, these sites of popular culture production often draw on culture from less privileged sites, as in the phenomena of denim jeans (from the American West) and reggae music (from the Caribbean).

Technological innovations over the past 100 years have enhanced the dissemination of popular cultures, both in terms of distance from their hearths and also in terms of the permeation of popular culture into society. This can be traced back to the invention of the printing press, which then enabled the creation of vernacular Bibles and the consequent changes in Christianity and increases in literacy rates. Since then, other forms of mass media have emerged, with similar effects. For example, periodicals, radio, television, and their associated advertising industries have revolutionized public and private spaces through the seemingly inescapable commercialization of everyday spaces. With technological advances carving out new media to be colonized by the popular culture industry, concerns over the content of popular culture have increased even as the possibility of separating oneself from popular culture has declined. The rise of Internet culture on the backs of the various technological platforms created by the telecommunications/entertainment complex (such as instant messaging, ‘video to phone’ capability, etc.) has created a new host of concerns for parents and cultural commentators because the technology has often excluded older, less technologically savvy citizens from full participation. The following two sections titled ‘Popular culture in studies of globalization’ and ‘Audiences and cultural studies’ will discuss how academic geography has traditionally dealt (or not dealt) with the perceived crisis in society over popular culture.

Popular Culture in Studies of Globalization

Globalization is theorized most commonly in geography as the intensification of the social relations in the global production complex, resulting from, among other reasons, the transportation revolution and its ensuing round of time-space compression. Among general populations, this is most perceptible in the circulation of goods and services from all over the globe to their localities. Goods from all over the world are available for purchase, and people from all over the world can be found in what had previously been isolated, seemingly homogenous, places. Alongside increasing cultural heterogeneity comes increasing difference in both goods desired and goods consumed. Popular culture has come to reflect this in increasingly global outlook, incorporating elements of disparate cultures into the products sold by the culture industry. Some view this as a normative good, as increased interaction with ‘the other’ will necessarily increase understanding and decrease conflict and bigotry. Examples often used in this perspective include the Taoist symbolism of yin and yang, the spiritual/physical exercise of yoga, etc. Others, however, view this as the co-opting of folk culture for the service of the profit imperative, stripping context, authenticity, and locality out of culture. Examples often used in this perspective include the American version of Chinese food and ‘world’ music. The common denominator for both of these views of popular culture is that these artifacts come out of supposedly ‘unmodern’ contexts and are incorporated into a cosmopolitan modernity.

This idea has been critiqued by many as constructing a normative geography that scripts the West as advanced, rational, and progressive while scripting the ‘ethnic’ parts of the globe as backward, sensual, and timeless. Globalization is deemed an attempt to advance a universal Western culture that is accented by cultural difference as proof of its inclusive nature, but only on the terms of Western consumers. This charge is often associated with the United States, the dominant force behind the structural changes that enhance the effect of globalization, such as the promotion of free trade. When associated with one country in this way, or with a limited set of countries, this accusation is known as cultural imperialism. Cultural imperialism is seen as negative by disempowered groups because it seeks to establish norms of consumption that are favorable to the exporter of culture and unfavorable to local producers of culture. Because
cultural consumption is so closely linked to identity, this is seen as threatening the very underpinnings of society.

Thus, the idea of ‘popular’ culture can be seen not just in opposition to ‘high’ culture but also to ‘folk’ culture, which is defined as the culture of a relatively unchanged locality dominated by so-called ‘traditional’ beliefs, building styles, cuisine, modes of production, familial relations, etc. The contrast here is different than that of ‘high’ and ‘popular’ culture, which are differentiated normatively. Rather, it is a contrast of temporality, as folk cultures are perceived to be pockets of underdevelopment within the capitalist world system. The contrast of ‘folk’ and ‘popular’ cultures is one perspective that has dominated geographic literature, particularly in the subfield of cultural geography. The conflict between local folk culture and the seemingly inexorable advance of Western popular culture around the world as embodied in goods such as Hollywood films, Coca-Cola, McDonald’s, and the ‘t-shirt’ has been a common leitmotif for both academic geographers and journalists such as Thomas Friedman. Among many cultural critics, this would lead to the very destruction of geography itself as social difference becomes flattened over time with American market dominance leading to cultural homogeneity.

Several flaws have been identified in this perspective. Most flow from its initial assumption: market domination leads to cultural homogeneity. The first critique argues that culture and commodities are not entirely linked; you are not necessarily what you buy. The assumption identified in this critique limits the definition of culture to material goods, excluding rituals, dialect, religion, and all else from the equation. The second critique questions the assumption that using identical forms of material culture (i.e., getting coffee at a Starbucks in Seattle vs. in Jakarta) equates to identical cultural practice. This critique differs from the first in that it deals specifically with the meanings associated with particular manifestations of popular culture. To draw the example further for the purposes of explanation, it is hypothetically possible that Starbucks consumers in Seattle derive feelings of cosmopolitanism and elite social status from their purchase, while Starbucks consumers in Jakarta purchase coffee in solidarity with rural coffee workers in Sumatra. Hence, the meanings associated with popular culture are not necessarily being Americanized even if the goods originate in the United States.

Thus, the globalization discourse that has been so significant in academic geography for the past 20 years has led to an impoverished view of popular culture as material goods that circulate around the world. Within cultural and political geography, however, a different but related concern has existed alongside questions of globalization: how does popular culture create or influence ideas of place and citizenship?

**Audiences and Cultural Studies**

As described above, there is much anxiety voiced in society about the effects of popular culture on audiences. This dates back to World War I and the widespread use of propaganda as a method of waging war. The ability of mass media (such as radio or leaflets) to undermine elites’ preferred geopolitical visions was startling to these elites and sparked the first academic studies of audiences. These studies assumed that the public was essentially passive and vulnerable to the power of suggestion. These concerns were amplified by the rise of fascism in Europe, which was perceived to be the result of a combination of charismatic leadership and the growth of the mass media as a multiplier of that charisma. Following World War II, fear of communist subversion motivated the same types of studies that had sought to understand the rise of fascism prior to the war. Of particular importance to these studies was the work of the Frankfurt School, especially Theodor Adorno and Max Horkheimer, who together shaped the idea of the ‘culture industry’, a massive complex of entertainment industries that claim to respond to the consumers’ desires but rather shape those multiple and complex desires into a standardized (and therefore profitable) set of goods. The effect of this culture industry is that consumers become sated and docile, placated by the popular culture that captivates them. This has sometimes been referred to as the ‘bread and circuses’ effect, dating from the Roman Empire’s policies of free wheat and entertainment to prevent uprisings.

The ‘bread and circuses’ critique of popular culture dovetails nicely with a Marxist conception of social relations, and particularly with the work of Antonio Gramsci, who has been influential with many political geographers because of the explicit connection he made between culture and the state. In particular, Gramsci was concerned with the ways in which capitalism had become so entrenched in the state despite the teleological view of most Marxists that revolution should be forthcoming. He argued that something very similar to Adorno and Horkheimer’s culture industry had constructed a hegemonic ideological culture that promoted bourgeois values as superior. Thus, Gramsci’s theory of hegemony and that of the Frankfurt School both hold that popular culture is like a pill that is provided by elites to the masses as a vehicle for inculcating preferred values. The only difference between them is that Gramsci allowed for some degree of accommodation, elites have to incorporate some (but not all) bourgeois and working class culture to maintain hegemony. For Gramsci, it was necessary for revolutionaries to first create a hegemonic culture of the working class that would create an obvious fault line between the ‘popular culture’ of the working class and the bourgeois culture of the middle class and...
elites. In this formulation, the denigration of ‘popular’ culture by advocates of ‘high’ culture, as described at the beginning of this essay, can be seen as an ideological discourse promoted to keep the working class engaged with the status quo.

Over the past few decades the field of study known as ‘cultural studies’ has taken root as an interdisciplinary project. Including sociologists, scholars of literature, anthropologists, geographers, and others, it has taken as its object of study popular culture and the ways in which audiences impact, or are impacted by, it. Theoretical shifts within cultural studies have largely been away from the structuralism of the Frankfurt School toward post structuralism. In these post structuralist accounts, the audience is re theorized as an active agent in the construction of popular culture. The work of de Certeau seeks to recenter the production of popular culture in the audience by arguing that meanings are not fixed through authorial intent, and instead are often read differently by various audiences. This critique of structuralist theorizations of popular culture is similar to the example of Starbucks coffee given in the above discussion of cultural imperialism. The use of popular culture for ends not intended by the creators of culture in the culture industry effectively subverts the entire paradigm of structuralist cultural theory, as audiences can be shown empirically to not react in ways that are consistent with the goals of producers. Classic examples of this re reading can be found in gay and lesbian culture, where cultural artifacts originally intended as tacitly heteronormative such as the television show *Xena Warrior Princess* and the comic book relationship between Batman and Robin are effectively queered by audiences, often in the face of authorial complaints.

This post structuralist view of popular culture is also critical of the dichotomy between folk culture and popular culture described above, although for different reasons. Whereas traditional cultural geography perceived folk culture as normatively good in that its extinction at the hands of a globalizing Western/ American culture led to a loss of cultural diversity, post structuralist cultural theory, especially the work of de Certeau, argues against this sense of nostalgia for folk culture. Instead, he posits that (post)modern culture is no less ‘cultural’ than folk culture, and indeed that interpretation of popular culture is critical to the constitution of its meaning, the expansion of popular culture artifacts and forms from the United States (or the West) do not lead to cultural homogeneity, but instead to a diversifying number of interpretations of that artifact or form as it is reinterpreted by different communities.

This perspective offers new theoretical spaces for geographers to map, as it ties in well with much of the state centric work that has traditionally been done in political geography. The role of national identity in shaping interpretation of popular culture is a fertile ground for research. However, national identity is but one form of identity through which interpretive communities can crystallize, as other identities such as ethnicity, gender, and sexual orientation may be more salient for various groups. Interpretive communities are based on a critique of post structuralist theory in which the infinite potential readings assumed by a purely post structuralist view is deemed unlikely. Instead, audiences make sense of texts using the cultural resources that they have at their disposal. Through the regular arrangement of linguistic and other cultural references, common meanings are established within interpretive communities; for effective communication to exist within a community a system of norms must exist that effectively narrows the field of possible readings inherent to any text.

Thus, the communal myths of national identity help shape the ways in which new artifacts of popular culture are consumed. In the critical geopolitics literature this phenomenon, when applied to the news or other forms of new knowledge, is known as geopolitical scripting; in literary theory it is often referred to as a narrative frame. Both terms refer to the way in which context helps shape interpretation of events. Geographies of popular culture can easily be seen to connect to geographies of nationalism, such as in the work of Benedict Anderson. Anderson argues that the rise of nationalism over the past several centuries is directly tied to the rise of mass media (i.e., the printing press) in conjunction with the overarching social movements associated with the decline of religious authority and other authorities derived from religion. Thus, ‘imagined communities’ come into being as the result of a common experience of consuming printed material. This problematizes interpretive communities because Anderson claims that interpretive communities arise from consumption of popular culture, while in general interpretive communities are seen as predating the popular culture that they consume.

This tension between the impact of popular culture on identity and behavior and the role of the audience in providing meaning is the subject of ongoing academic debate. However, in the popular press there remains very little consideration of the interpretive process. This is most visible in recent debates over phenomena such as rap music (deemed misogynistic by many) and video games (likewise deemed ultraviolent).

See also: Art and Cartography; Children/Childhood; Critical Geography; Critical Geopolitics; Critical Theory (After Habermas); Cultural Politics; Cultural Studies and Human Geography; Cultural Turn; Culture; Cyberspace/ Cyberculture; Film; Globalization, Cultural; Identity Politics; Imperialism, Cultural; Literature; Material Culture; Material, The; Media; National Spatialities; Orientalism;
Poststructuralism/Poststructuralist Geographies; Soundscapes; Structuralism/Structuralist Geography; Visuality; Youth/Youth Cultures.

Further Reading

Relevant Websites
http://www.americanpopularculture.com
http://www.horowitzfreedomcenter.org
David Horowitz Freedom Center.
http://www.popularculture.org
Popular Culture Association/American Culture Association.
http://www.popcultures.com
Sarah Zupko’s Cultural Studies Center.
http://www.ncge.org
The National Council of Geographic Education.
Introduction

Population geography is the subdiscipline of human geography that has concerned itself with describing, analyzing, and reflecting upon the geographical organization and growth of human populations in their environmental and social settings. It thus distinguishes itself from demography which, as the mathematical science of the human population, focuses on the processes of fertility, mortality, and migration and how these create predictable populations. Put another way, population geography emphasizes how populations and population processes appear and change across space, while demography emphasizes change over time. This article explores the disciplinary basis of knowledge, reviews three major approaches to knowledge creation, and closes with a brief résumé of outstanding debates. It argues that while spatial science approaches have lent credibility and vitality to intellectual debates within and beyond the field, and structural approaches have offered important insights about inequalities, a further integration of these with emerging cultural approaches is needed to tackle contemporary knowledge challenges.

Disciplinarity

Like other clusters of knowledge in geography, population geography frequently presents itself, and is criticized, as an institutionalized subdiscipline of geography. The advantage of such a ‘disciplinary’ view is to draw attention to the structures, norms, and intellectual bases of such an enterprise, including the extent to which developments outside geography (notably in demography, but also economics, sociology, mathematics, and cultural studies) and within geography transform the field. The potential disadvantage with this organizing view is to divorce the activities of the field from their broader social and political context – that is, we must pay heed to how the activities of population geographers always reflect, and sometimes influence, events in the ‘real world’. Indeed, some of the outputs of the field are closely allied to political agendas, such as nineteenth century population maps that showed the national distribution of racial and ethnic concentrations and helped legitimate the idea of a natural community which was contained within the bounds of the nation state. Certainly, taking the long view, human societies have consistently had a use for knowledge about their people, how they occupy the surface of the earth, and what such patterns of organization might mean for political and civic organization, military security, commerce, inequality, environmental depletion, resource use, and well being. Yet, while population geography has cross cultural and interdisciplinary roots, it is still dominated by its Euro American intellectual pedigree, which is not to say this will not nor should not change.

It is the conventional view of the disciplinary development of the field that the comments of the then president of the Association of American Geographers, Glenn Trewartha, at the Cleveland annual conference in 1953, provided a nucleus around which some key concepts began to cluster. Trewartha believed in a unitary and synthetic geography, and spoke of a holistic vision to highlight the importance of studying areal differentiation and geographic diversity. Trewartha wrote: “Physical and cultural, systematic and regional, general and special, are dualisms which appear at times to fog the oneness. As geographers I believe we are committed to the study of earth regions” (Trewartha, 1953: 71–97). Rejecting dualistic thinking within geography (human–physical, physical–cultural, production–consumption), his approach placed population at the apex of geography’s concerns, buttressed by analyses of the cultural earth and the physical earth: “The here suggested tri nomial organisation results in giving man his deservedly explicit and important position within the unitary geographic structure. The only final value is human life or human living, and this being the case it is difficult to understand why geographers should judge the creation of man, and the environment out of which he creates them, relatively more important than man himself” (Trewartha, 1953: 71–97). Students of this new subdiscipline would study regional variations in population distributions and look at explanations for diversity in terms of demography, the potential for livelihood, and settlement systems. Furthermore, historical population geography would serve to place regional variations in their historic context. The key characteristics of population included the gross patterns of numbers, fertility and mortality dynamics, measures of under and over population, density of population and settlement and migration patterns. They would also study the physical characteristics of populations. Informed by mid and late nineteenth century anthropological and sociological classifications, these included body type, race,
nationality, sex, age, and health status. Relevant socio-economic characteristics included religion, education, occupation, family structure, urban/rural residence, development level, and customs.

This rather detailed vision was to have an enduring legacy for how population geography developed. Although discussions by Preston James and David Hooson also adopted a unitary view of geography that emphasized the importance of looking at both human and environmental explanations, developments elsewhere in geography and sciences led researchers to focus on that part of Trewarth's work that said that population processes can be understood from description and analysis of population patterns. In short, this inspired the field to cross disciplinary boundaries in a quest for ideas, concepts, and theories that could help explain, or at least bring some sense of order to, the population diversity they saw. Crucially, this was an overt foundation of the spatial science approach that was to exert a powerful influence on human geography during the middle part of the twentieth century.

**Spatial Science Approaches**

In its purest form, a spatial science approach to population concerned itself with three questions. First, research would describe the distribution and composition of the population. Thus, an opening chapter of the Peters and Larkin text (one of the most widely circulated texts in the field which reached its eighth edition in 2005) includes discussion of: patterns of global distribution of population broken into the ecumene (livelihood supporting) and nonecumene; patterns of population density as represented by arithmetic and nutritional density measures; national and international variations in sex structure; local, national, and international variations in age structure, including the baby boomers and elderly in the US; the distribution of race and ethnicity in the US including a discussion of measures of segregation. Second, research would uncover processes of change, both inductively and deductively, paying close attention to spatial variations and spatial contexts in their accounts. According to demographic analysis, populations changed as a direct result of the changing balance between fertility, mortality, and migration; by appreciating the spatial patterns and trends in these determinants, analysts could comment upon aggregate patterns, distributions, and compositions. Third, having commented upon causes of population change, research would examine the consequences of population structures, distributions, and dynamics. Here, spatial science approaches exhibit a diversity of focus, but links between population and resources, food, ecological change, pollution, economic development, socioeconomic standing and poverty, urbanization, and planning (national and local government but particularly private sector and commercial) continue to be explored.

Such spatial science approaches dominated population geography scholarship during the second part of the twentieth century to the extent they became synonymous with the field. By 1966, Wilbur Zelinsky enthused that population geography defined itself as the systematic study of: (1) the simple description of the location of population numbers and characteristics, (2) the explanation of the spatial configuration of these numbers and characteristics, and (3) the geographic analysis of population phenomena (the interrelations among areal differences in population with those in all or certain other elements within the geographic study area). The spatial science approach thus "deals with the ways in which the geographic character of places is formed by, and in turn reacts upon, a set of population phenomena that vary within it through both space and time as they follow their own behavioral laws, interacting one with another and with numerous nondemographic phenomena" (Zelinsky, 1966: 5). The somewhat hierarchically organized methods of inquiry – pattern, process, con sequence – both clarified the field's position with respect to an internal debate within geography about focus, and fitted with a wider view in society that social science should break the big social issues of the day into their smaller parts and build specialist understanding from these components.

While population geographers drew on the techniques of geography to describe and classify population diversity, they increasingly looked to other disciplines to understand and explain population patterns. For example, from demography, the insights of stable population theory helped researchers build credible population projections and form a picture of how many people of which ages they would expect to find in a national population. Differentiating closed systems (societies where population change over time is only caused by differences in fertility and mortality) from open systems (which also include the impacts of population migration), a simplified 'model' population structure, with predictable numbers of persons at different ages, can be derived by assuming that fertility and mortality inputs remained relatively constant over the long horizon. Widespread use is still made of the fruits of this framework for calculating life expectancy and applying life tables and actuarial methods, synthetic measures of fertility including the total fertility rate, regional demographic accounting models, and in population projections, as applied to future populations and 'backward' to historic reconstructions. Population geographers and demographers began what proved to be a long and productive relationship.

The search for order and regularity in a world of complexity and messiness increasingly turned to a
series of influential categories of study and analysis. In
deer, urban sociology had by now established a
rich tradition of describing and explaining patterns of
neighbourhood change and succession in urban areas by
applying ideas and metaphors from botany and ecology
to their study of population. In turn, other relevant
characteristics to study were inspired by the categoriza-
tions of populations by skin color and racial phenotype.
What were once regarded as common sense categories
(white, black, male, female, young, old, etc.) quickly
became an established – and largely unquestioned – part
of the field’s toolbox. In a similar manner, the way in
which researchers took environmental and social context
into account became increasingly formalized. Bailey
argues, for example, that while broader scholarship on
populations and their geographies have long seen context
through multiple lenses of place, environment, and space,
at this time the field focused exclusively on spatial ideas.
Thus, space could be a container of areal differentiation;
a way to build synthesis, such as used in the regionali-
zations that inspired the demographic transition theory; a
surface where concentration and proximity foregrounded
and prioritized some explanations over others; a barrier
to interaction and diffusion that slowed down some
processes and sped up others.

What did this approach add? Many spatial science
contributions took – and continue to take shape as de-
scriptive accounts concerned with patterns of distri-
bution. Frère de Montizan’s population distribution of
France in 1830 and Harness’s population density map of
Ireland in 1837 are examples of how population distri-
bution maps helped political states project territorial
integrity. Ideas from social physics helped the field
describe the density and hierarchical organization of
populations. This includes concentration (including the
gini coefficient), distribution (e.g., population centroid,
or center of gravity), hierarchy (including the rank size
rule), and interaction (including the family of gravity
models, and intervening opportunities framework). De
pictions of a population’s notiona1 “center of gravity” were
originally used as snapshots of complex underlying
processes but now have their own cultural notoriety as
places of pilgrimage and web discussion. John Snow’s
map of cholera cases around a water pump in London’s
Soho district went further by suggesting a cause (dirty
pump) for an effect (cholera outbreak) and foreshadowed
spatial epidemiological investigations of disease clusters.

While descriptive accounts of spatial variations in
populations and their characteristics continue to provide
a naturalized starting point for much work (as indeed
Hettner had foreseen in 1927), it was the field’s ability
to contribute to and lead theoretical development that
attracted funding, new students, and practitioners, and
built confidence. Major contributions followed from the
development of process understandings and theory.

As Zelinsky (1966) noted, “If a regularity or pattern is
suspected in certain geographic aspects of population,
and if this suspicion survives trial as a working hypothesis
to blossom into a full blown theory that seems to fit all
known causes, then such a formulation could be ex-
tremely valuable.” Continuing work on the demographic
transition illustrates this well. The belief that the onset
and diffusion of modernization triggers a sequenced
mortality and fertility decline remains at the heart of the
widely circulated classic demographic transition model.
The field’s sensitivity to space and spatial analysis has
critiqued and influenced the development of the classic
demographic transition model in at least three ways.
First, the technique of regionalizing areas (countries)
with similar mortality and fertility dynamics lay behind
Landry’s 1934 La Révolution Demographique, which pro-
ceeded to link regions with low population growth rates
to the characteristics of public health interventions and
fertility reductions attributable to the widespread prac-
tice of birth limitation. Regionalization continues to
be used to infer causality and to refute hypotheses in
both contemporary and historical settings of population
change. Population geographers have also explored the
extent to which social processes underlying transition
could be modeled in a diffusion framework. An appre-
ciation of the rapid and intense spread of public health
norms and, more recently, family planning prerogatives
(often undertaken as part of structural adjustment pro-
grams) to countries with large rural and impoverished
populations has enabled the universal nature of the
model to be questioned. Similarly, a greater appreciation
of how particular forms of fertility limitation became
legitimized and used in particular communities at
specific historical moments has provided another critique
of applying the experience of a few Western European
countries in the nineteenth and early twentieth century
to the contemporary majority world. This has also shifted
attention away from the individual as an autonomous
and rational actor and onto broader social structures
including community and, for John Caldwell, tropes
of Westernization and culture more generally. More
generally, diverse work continues on the fertility
transition, the mortality (epidemiological) transition, the
gap between the two (sometimes discussed as a form
of demographic convergence, the mobility transition,
and the plurality of household types as part of a second
demographic transition. The influence of cross
disciplinary is in evidence, with neoclassical (marginal)
economics permeating not only individual level rational
choice models of fertility determinants and mortality
differentials but also macro analyses linking population
growth and development and economic development
and demographic transition.

Such concerns with actively theorizing how both
demographic and nondemographic elements were part of
a broader system of processes driving demographic transition led some spatial analysts to adopt a systems (dynamics) approach. The work by another demographer, Kingsley Davis, proved pivotal. He noted:

the process of demographic change and response is not only continuous but also reflexive and behavioural reflexive in the sense that a change in one component is eventually altered by the change it has induced in other components, behavioural in the sense that the process involves human decisions in the pursuit of goals with varying means and conditions. (Davis, 1963: 345)

While analysis had long recognized the importance of urbanization and the urban milieu for changing the relative benefits and costs associated with raising children and for affecting the status of women in the household, Davis's multiphasic (or, change and response) framework inspired greater attention to the diversity of family formations and population age structures as reflexive elements that changed behavioral strategies. Van de Kaa's formulation of a 'second demographic transition', attention to the relationship between demographic aging and transition theory, and elaborations of the roles of migration and ethnicity take this tradition forward.

Systems approaches borrowed strength from the popularity of the framework within human geography in the 1970s, and sparked several applications to the study of human migration. One landmark application was the Brown and Moore model of residential mobility. This behavioral model separated out the decision to move from the decision about where to move, and attributed the first to factors including characteristics of the immediate environment (encroachment, blight, change in ethnic composition, change in relative location) and characteristics of the household (including job change, family size, marital status, retirement). Once a decision to move, in principle, had been made, the model focused on how individuals within households acquired information about alternative opportunities, assuming that the quantity and quality of information decayed with increasing distance. A lack of appropriate or affordable options either triggered a series of 'in situ' changes to an existing premises, a change in aspirations, or a new search; like wise, decisions to move affected the composition of neighborhoods at the origin and new destination and fed back into the decisions other households would be making about mobility. Another influential systems application, also published in 1970, was Mabogunje's depiction of rural to urban migration. This recognized positive feedback effects between urban areas and potential migrants and unpacked the environments of the urbanite (including wages, consumer preferences), the urban control subsystem (including communit cations), the rural control subsystem (including government policies and agricultural practices), and the potential migrant (including education, social development). As Mabogunje (1970: 241–260) wrote “one of the major attractions of this approach is that it enables a consideration of rural urban migration as no longer a linear…cause effect movement, but as a circular, inter dependent, progressively complex, and self-modifying system.” Approaches to migration that specify such factors of cumulative causation have an important legacy in sociology and economics.

Of the three demographic elements to drive population change, migration has received the field's greatest attention. Like mortality, morbidity, and fertility, the study of migration has proceeded with the development of a large number of measures and categories. Many of these can be traced to the seminal work published by Ravenstein at the close of the nineteenth century. Such measures of migration help classify diverse flows on the basis of their direction (e.g., in and out migration, and return migration), the scale over which they occur (e.g., within urban areas/intra urban, regional, and international), and on the balance of flows between an origin and a destination (e.g., net migration and gross migration). Ravenstein's so called 'laws of migration' combined the empirical observations that most moves (in to the rural to urban population redistribution that Britain had experienced with the intensification of industrialization in the late nineteenth century) occurred over short distances and up the urban hierarchy with social physics views about forces of attraction and repulsion to stimulate further empirical research, promote a push–pull view of migration, and spark the development of the family of gravity (spatial interaction) models.

A wide array of data and models help build forecasts on migration trends. This is important because in many countries with low fertility and mortality rates (including many in Europe and Oceania) migration is the key driver of population change, particularly at the regional and local levels. The involvement of such countries in global systems of international migration means that demographic destinies are increasingly interdependent issues. Much empirical work summarizing new international migration regimes appeared in origin countries of the former Soviet orbit, Asia, Africa, and Latin America, and the transformation of some countries of emigration into countries of rapid immigration. Elsewhere, burgeoning work on diasporas and transnational communities suggests that many migrants expect (and are expected) to live outside their home areas for indefinite periods of time and adapt particular patterns of settlement, integration, and economic activity accordingly. At a finer scale, research also describes trends in urbanization, rural depopulation, regional shifts in population concentrations (e.g., Sunbelt growth in the US), sub urbanization, counterurbanization and nonmetropolitan...
growth, neighborhood growth and decline within cities, and gentrification.

As with the study of mortality and morbidity, migration scholarship has become increasingly specialized. For example, broader links between migration and health and migration and HIV/AIDS have recently formed new poles of activity. Such specialization has tended (although not exclusively) to follow the lines of inquiry prompted by early typologies of migration. For example, Peters and Larkin identify research on primitive migration (groups overwhelmed by unfavorable natural forces); mass migration (groups larger than families moving en masse); individual voluntary migration (those willing and able to move); restricted migration (individual migrants somehow constrained or guided by institutional context); and forced migration (those impelled by social and political institutions to relocate). As with any typology, while these ideal types may help to clarify what is an extremely complex picture, they can also obscure some processes and realities. This has led Skeldon to reinvoke the migration systems approach to understand dynamics across the contemporary Asia and Pacific region and examine settler migration, contract labor migration, skilled migration, student migration, and asylum seeker migration.

The study of migration differentials explores how some individuals are more likely to migrate than others. Migration selectivity has been described at particular ages (for example, around the time young adults leave childhood homes), when workers change jobs, when couples marry and divorce, and so on. Such insights spur the development of particular theories. For example, the human capital theory argues that individuals choose migration as an investment that can lead to better opportunities in the future, and uses as supporting evidence the observation that individuals in their twenties often have the highest propensity to migrate at a time when they have the longest time horizon over which to recoup the initial investment cost. Gendered migration theory notes that, in different settings, men and women have different rates of moving overseas. In many countries, including Mexico, cultural norms are associated with the numerical dominance of young men in migration flows to the US in the 1950s and 1960s. In other cases, including the Philippines, women have dominated out migration flows, leading Jim Tyner and other researchers to focus on how government development policies might be linked to such sex selectivity.

Migration theory building exploited cross-disciplinary insights. For social physics and human capital approaches, the search for process became a search for those socioeconomic and environmental variables that could capture the costs and benefits of migration to rational individuals. But while human capital theory seemed to be supported by what was known about the age selectivity of migration, a growing feminist critique that the category ‘sex’ should not only be visible in these analyses but also be reconsidered through sensitivity to gender and gender relations has changed migration theory. Scholarship on family migration illustrates this development well. Family migration scholarship is rooted in the aggregation of individual human capital theory to the household context, with Jacob Mincer arguing that partners moved wherever their joint expected future earnings could be maximized, even if this meant one partner lost out or ‘was sacrificed’ for the common good. Because women, historically, had had less access to higher education, and some gender roles restricted their access to paid employment, many researchers found that wives sacrificed more than husbands from moving, at least in the short term. However, evidence accumulated that place and historical context matters, with factors including the direction of migration (particularly if it was to a new area or a returning move), the set of resources available in the destination, the nature of the gender roles within the household, and the ways in which women and men negotiate ‘the trauma of migration’ all identified as important.

Growing interest in the diversity and pluralization of household types in many societies of the global North and South led population geographers to connect their formerly separate research on family migration, employment and educational strategies, housing choices, travel and commuting behavior, and health experiences. Much of this work in turn sees households as important formations where complex social processes collide, are negotiated, and help restructure the social and cultural norms of society. For example, lifecourse analysts are interested in the connections between ‘linked lives’ of household and extended family members, in the sequence and timing of key events in these lives, in the effects of previous experiences upon current and future activities (path dependency), and in the interactions between the biographies of individual lives, the transformation of institutional rule sets and norms, and the slower passage of generations, formations, and epochs. Calling up Hagerstrand’s earlier time–space geographies, and making use of biographical and longitudinal data and new techniques of analysis including microsimulation, studies have explored the links between single social processes and a demographic outcome (e.g., how does marriage affect migration?), the deeper interdependencies between individual characteristics and life course changes (e.g., what is the likelihood of being trapped in poverty because of early life experiences?), and the wider implications of economic changes for social systems (e.g., how do changing energy costs affect patterns of household organization and feed into housing markets and economic growth?). The impulse to better understand the changing dynamics of the contemporary
household is partly linked to high profile debates about social policies on flexible working, work–life balance, child care, medical insurance, and social welfare in general which have changed the context within which household formations operate. In turn, this has profound implications for populations, including social diversity, patterns of low fertility and childlessness, and post-penomation, adult–child proximity, and migration decisions. Yet, as Buzar et al. (2005: 413–436) note "the conceptual importance of household demography in understanding contemporary patterns of urban transformation in the developed world…has often been marginalized in the geographical mainstream…we argue that a deeper understanding of these dynamics can improve the quality of social, cultural, and economic theorization within geography.”

While research on migration and household demography increasingly stresses the interdependence of demographic and nondemographic factors and integrates cause and consequence in ways consistent with Zelinsky’s earlier reading, spatial analyses that link population to environmental and resource issues have been more formulaic. For example, the well known ‘IPAT’ equation, which proposes that environmental impacts like pollution are a function of population size and growth, population Affluence and consumption activities, and the Technologies used to support this system of production, is an outshout of such thinking. The ‘resource region’ proposed by Ackerman in 1967 is one attempt to add a richer understanding of spatial variations in context to this debate through regionalizing the population–resource–technology relationship and through high lighting spatial interdependencies like trade. While the systems inspired ‘limits to growth’ model further explored feedback effects, it generally underplayed the role of policy and policy changes in influencing causal relationships. Similarly, approaches to the development consequences of population have been criticized for not adopting more integrated analyses.

Where the field’s research has gained traction is in the assessment and critique of public policies that aimed to, or did impact upon population patterns or processes. Mapping spatial distributions of variables of interest proves a quick and effective way of demonstrating how one size fits all public policy may have very different local and regional repercussions. Examples relate to sex ratios that show the prevalence of female infanticide and demonstrate that cultural norms have an important translation effect upon fertility limitation policy, abortion ratios that show how religion can mediate policy translation, and low birth weights that show how isolation and segregation continue to drive significant ethnic variations in health outcomes. Analyses of diffusion of diseases including influenza, measles, HIV/AIDS, and foot and mouth have informed the development of, and critique of, public health policies. Political transitions in the former Soviet Union have produced morbidity and mortality conditions that undermine the epidemiological transition framework. Rural to urban migration in China has long been affected by the hukou (registered permanent residence) system that undermined the ability of urban migrants to be legally resident and which now contributes to planned patterns of ‘return’ migration to rural areas.

As an example of more applied scholarship, spatial analysts have labored to improve the quantity, quality, and reliability of the data used in demographic analysis (particularly those data that can be georeferenced). Data and census systems are seen as a basis for the democratic functioning of institutions within society, including those concerned with taxation, representation, and drawing attention to human suffering. The eleventh century Domesday Book collated information on the size, location, and wealth of the English population. Snapshot type counts (censuses), retrospective (event history) surveys, and panel (continuous) data form the basis of analysis, and this has spawned and been promoted by developments in measurement, recording, storage, processing, and analytical methodologies (longitudinal data analyses, maximum likelihood estimators, agent based modeling, microsimulation, and GIS). Such data and models provide important applied inputs for local planning processes and are used by geodemographic and other commercial institutions for marketing, product placement, and locational analysis.

Using newly available population data, showing in intellectual innovation and delivering policy advice that informed housing, transportation, and health decision making, spatial science approaches helped lend respectability to the field and human geography more generally. However, one of the concerns associated with a data intensive approach is the reliance on information that may have a short half life and may suffer from reliability (and thus inference) problems. Indeed, White and Jack son’s now infamous critique of population geography calls attention to an over reliance on quantitative data, with a tendency to accept its categories at face value. Several traditional census categories – including race, ethnicity, sex, and age – attempt to capture deeper concepts (including identity, gender, generation, and so on) that are socially constructed, cross cutting, and varying between places and over time spans. Taken alongside the questioning of the behavioral and positivist approaches in human geography and the rise of social and political movements in the 1960s, 1970s, and early 1980s that questioned Cold War, interventionist, and establishment ideologies, concerns such as those articulated by White and Jackson arose with a flourishing of what Allan Findlay calls a more pluralistic population geography. In particular, this gave more elbow room to
other approaches – some structural and some cultural – that were already present in more out of the way parts of the field.

**Structural Approaches**

Structural accounts emphasize how population matters are an intrinsic part of the economic and social in equalities that characterize contemporary patterns of capitalist accumulation. More widely, within human geography, structural accounts have been particularly interested in how inequality and unevenness arise, appear within, and are passed on through the spaces and scales of capitalism. While the geographical materialism of David Harvey traces its lineage to Marxian views of the labor theory of value, a diverse panoply of inter-disciplinary contributions on dependency relations and world systems theory, uneven regional development, differential patterns of urbanization, global systems, and the articulation of network society touch population geography. Other neo Marxist critiques have exposed the ideological assumptions behind neo Malthusian readings of population crises and resource issues. Radical feminist scholarship drew attention to the gender relations in gender inherently in patriarchal society and how these gender systems intersect with class systems to circulate inequality.

Population appeared in these accounts in different ways. Population phenomena like the overurbanization of many cities in the majority world may be read as ‘symptoms’ of deeper contradictions within capitalism: for example, the systematic overproduction of workers by both natural increase and migration that has the effect of driving wages down. Increasingly, however, structural accounts conceptualize population activities as ‘social processes’ that reproduce structural inequality in inter-dependent ways. For example, flows of skilled migrants benefit metropolitan economies in the global North by assembling a class of innovators and future leaders of the economy, but have negative impacts on sending countries of the global South which cannot realize the potential of their systematic overproduction of workers. Increasingly, however, structural accounts conceptualize population activities as ‘social processes’ that reproduce structural inequality in inter-dependent ways. 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bifurcated and polarized labor markets that have been observed by Friedmann and Sassen in the economic control and coordination nodes like London, Paris, and Tokyo. The rise of producer services, the demand for cheap, flexible, and expendable labor, rising levels of female labor force participation, and unwillingness of many native born workers to fill menial jobs creates a structural demand for immigration. Much of this demand is sector specific and, combined with the emigration policies of sending countries like the Philippines, creates the impetus for the arrival of female target migrants in activities including sweatshops, domestic work, health care services, retail, and prostitution. The gender and class dimensions of these flows in most metropolitan areas of Australia, the US, and Europe turns on economic and ideological principles that associate such work with women of particular class and nativity backgrounds, and leads to segmentation and entrenchment. In a similar vein, and in deference to neoclassical and household economic theory, Baudet argues that rather than labor markets driving migration, it is migration that structures the trajectories of particular labor markets.

Third, research explores how decisions about how to organize and care for households deepens social in equalities. Many middle income households in the global North hire live in sannies and domestic workers to balance their own work–life priorities. Permissive government regulations (often amounting to turning a blind eye to this unregulated sector), nonavailability of native workers, and the segmentation of foreign born workers in need of jobs has led to the staffing of such work by young immigrant women. Moreover, such work obliges many of these immigrant women to maintain split households of their own and endure not only separation from their own children, but added pressure to remit and support extended family in distant origin regions. Such transnational families arise as complex global care chains connect working families of the global North and South together in new, but unequal ways. Further examples concern the organization of elder care, of increasing significance in aging societies where fertility rates fell dramatically over the past century. Again, working families (often with their own children still at home) are obliged to move closer to one or more ailing parent and not only forego economic opportunity but also take on additional care demands. These fall disproportionately on the working class and, because of gender ideologies, women, further deepening social divides in the absence of social support from the state. The suggestion made by Gibson Graham (1996: 261) that “nonmarket trans actions (both within and outside the household) account for a substantial portion of transactions, and that there fore what we have blithely called the capitalist econo my...is certainly not wholly or even predominantly a market economy, perhaps we can look within and behind the market to see the differences concealed there” places tasks of social reproduction – caring activities – as key social processes that intersect and circulate inequality.

Fourth, political economy and political ecology work has highlighted how state policies on population per petuates inequality. For example, research on the context of family planning policies in China and Indonesia reveals how patriarchal and imperial relations inform the model and techniques of policy delivery, variously resulting in female infanticide and the nonsanctioning of abortion for unwed women, and perpetuating some women’s low status in their respective communities. Reproductive rights frameworks have been discussed as ways to address the issues identified in this research. The continuation of patterns of inequality – and in some cases the widening of poverty gaps and demographic divides – lends credibility and legitimacy to structurally based accounts of population. However, as scholarship has integrated economic, political, social, and cultural pro cess, views of particularity – of how context matters, of contingency, and of space and place – have become in increasingly fragile. One response has been to unpack the ways in which culture (often, but erroneously, associated with agency and institutions acting from the ground up), and political economy (structure, again erroneously con flated with top down) influence each other. The merits of the structurationist approach of Anthony Giddens are often debated within the field but the approach has proved difficult to operationalize. Another response, from within human geography, considers how culturally in spired forms of difference arise and circulate, and this forms the core of a range of cultural studies research.

Cultural Studies Approaches

A key focus of an emerging cultural studies tradition concerns the diverse ways population circulates power and difference within society. While rarely recognized (or intended) as a discrete and fixed terrain of inquiry, those inspired by this framework tend to acknowledge and integrate an appreciation of geographic diversity that stems from spatial analytical research and to work toward a narrative that takes account of the systematic inequities and ideological content articulated by structural ac counts. At the same time, research aspires to avoid functional and essentialist treatments of categories that are acknowledged to be socially constructed and to probe the meanings, and potential for transformation, of categories. Appreciating the contingencies of place has emerged as a key focus, with accounts stressing richly textured and nuanced treatments of space and most of all its relational nature.

Such approaches do have a faint but discernable ‘culturalist’ legacy within the field itself, as well as being
more directly inspired by developments in human geography and beyond. Within human geography, and by the close of the 1980s, two influential texts (Harvey's *Condition of Postmodernity* and Soja's *Postmodern Geographies*) were signalling an intention to fold in the ‘trialectics of space, time, and social being’ to accounts of modernity. Despite possessing arguably limited spatial imaginaries, these interventions, along with works like Jackson’s *Maps of Meaning*, did seed what Elspeth Graham has recently termed “a flowering of spatial imaginations within geography,” although one might add that parts of the geographic garden were in bloom sometime before the others. Population geography was one such late bloomer, although connections with earlier intellectual sympathies are apparent. Indeed, for Bruhnes it was only through ‘the cultural landscapes of place’ that population issues were worthy of study. “It is in the connection with the house, the village, and the city that the questions of others were worthy, and indeed in ‘ways of life’ (genres de vie) were worthy, and indeed in presumptive objects of attention. In turn, Paul Vidal de la Blache and Jacqueline Beaujeu Garnier were among those to attach central (but not singular) import to matters of culture and population in accounting for in equality in society. Perhaps paradoxically, the influence of French theorists continues through the attentions given to authors such as Foucault, Lefebvre, Bourdieu, and Deleuze.

One way to begin to appreciate the scope of this current article is to loosely distinguish those analyses concerned with governmental and disciplinary power, those concerned with population and the production of space, and those interested in participation. As links between classification and power became acknowledged, views on how populations were made and maintained, and for what purposes, have greatly expanded. Foucault’s ideas about ‘biopower’ as a political technology of the state centers on the inscription of the human body as a machine (to do specific types of work in optimal ways) and on the disciplining of population groups (like refugees and undocumented immigrants) to accomplish a broad range of tasks of production and reproduction. The use by states of certain forms of discourses – that is, the construction and circulation of forms of knowledge that separate out some groups from others on the basis of seemingly objective and naturalized categories (including race, ethnicity, nationality) – has sparked research on constructions of outsiders and others and the use of medical facilities by refugees.

While the not inconsiderable literature in population geography on transnationalism exhibits diversity of approach and focus, a good deal is concerned with how identity and institutions transform each other under globalization. For example, research on remittance flows and transnational connections between Mexico and the US points to ‘transnational social fields’ (most generally, communities stretched over national borders) that both extend the reach of the origin state (Mexican nationals exert increasing influence in many US cities) and the destination state (increased dependence of many communities in Mexico on the availability of US jobs); transcend the reach and legitimacy of these states (by changing the support for traditional opposition parties and new political movements, and by vesting more influence with family networks and commercial service providers, including coyotes and parasitic economy establishments); transform the social institutions that facilitate daily life (split families, new faith based communities); and precipitate new cultural constructions of what is experienced as proximity (network space), affection (often mediated through the economy of gift giving), and anxiety (heightened and exploited by immigration authorities to discipline potential workers) with the promulgation of new meanings of space and time. These transformations may become codified in language, food, popular culture, and other ‘soft’ cultural formations. Research continues to explore how contingency affects the production and circulation of difference in these new and networked spaces and times.

A third pole of activity combines lifecourse insights on how biographies unfold across linked lives with aspects of nonrepresentational theory that explore how repeated activities define social and cultural norms. Both approaches come together around ideas of relationality, arguing that all social processes are fluid and in various states of becoming, and critiquing ideas of stable categories. The profound implications for such insights on the basis of passage and the definitions of generation and childhood, gender, and disability have been discussed. Moreover, relational thinking opens up new questions about mobility, migrancy, and sedentarism, and how a range of institutions (including government immigration laws, and educational curricula) help regulate cultural norms that in turn define deviance, difference, and power. For Rosi Braidotti (2006), “the differences in degrees, types, kinds and modes of mobility and – even more significantly – of non mobility need to be mapped out with precision and sensitivity…Grounded, historicized accounts for the multiply positioned subjects of postmodernity are needed for people who are situated in one of the many poly located centres that weave together the global economy.” More work considers population events and processes like mothering, dating, dyng, and racialization.

While it remains too soon to establish clear research agendas that will produce sustained trails of knowledge,
it is already apparent that much interdisciplinary and some intrafield boundary crossing is in evidence (studies of transnationalism, and childhood, for example, are increasingly informed by hybrids of the above collations). Yet, despite trading on conceptions of difference, diveristy, and inequality, the gap between cultural approaches and structural/spatial analytical readings remains rather wide.

**Ongoing Debates**

A confluence of internal and external forces has given the field’s practitioners continued opportunities to reflect on collective directions forward. These include the launching of a specialized journal *(International Journal of Population Geography, New Population, Space and Place)*, the advent of the fiftieth anniversary of ‘founding father’ Trewartha’s rallying cry for more attention to be devoted to population geography (see the special issue of *Population, Space and Place* in 2003), the institution of a biannual international population geography conference series, and public intellectual concerns around questions of security, vulnerability, ecological catastrophe, food security, economic collapse, and so on. One reading of the current state of the subdiscipline is a field characterized by diverse approaches with some practitioners opting for continuity of approach, some turning to more critical frameworks, many mixing and matching in a celebration of plurality. Other (and not oppositional) readings are that the field needs to pay more attention to pressing societal concerns such as famine and vulnerability and sustainable development. Communicating results more effectively to diverse audiences and participating more equally with diverse populations are part of this. For example, relatively few population geographers use the power of visualization to communicate their findings, with US geographers Jim Allen and Eugene Turner and British geographers Danny Dorling and Bethan Thomas being recent exceptions.


**Further Reading**


*See also*: Census Geography; Demography; Health Geography; Migration.

Relevant Websites
www.igu.net.org/uk/what_is_igu/commissions.html
www.prb.org
Population Reference Bureau.
www3.interscience.wiley.com/journal/106562735/home?CRETRY=0&ISRETRY=0
Population Space and Place (leading journal).
www.unfpa.org
UN Population Fund.
Introduction

A port is essentially a gateway with facilities for receiving and transferring passengers and cargo between water and land transport. As such it is also a place where related industrial activities are found giving rise to port industrial complexes. To identify the nature and development of these complexes, attention must first be paid to the nature of ports and the economic activities associated with them.

Analyzing Ports and Their Industries

A port is an intermediate location in the global flow of passengers and freight (on which we shall concentrate). These freight flows can be construed as steps in commodity, value, or supply chains and as elements of the
logistic systems put in place to manage them. A commodity chain is a functionally integrated set of production, consumption, distribution, and exchange activities extending from the acquisition of raw materials through to the sale of finished goods and services. At each stage in a chain, there is a pressure to drive down costs and add value. The organization and management of these sequential processes involve the development of complex logistic systems which embrace all of the activities involved in the physical movement and handling of raw materials, goods, and services and the related information flows: ordering, scheduling, loading, movement, transshipment, warehousing and storage, inventory management, and so on. As in the case of commodity or value chains as a whole, these logistic systems (whose costs amount to some 10–15% of world ‘Gross Domestic Product’ (GDP)) are subject to strong pressures to secure time economies, eliminate inventories (in a context of just in time supply chain management), integrate activities (to permit door to door freight distribution), and ensure reliability, among other things. As shipments by sea account for about 80% of international trade by volume, seaports are vital nodes in global supply/logistic chains, as well as in supranational and regional trade.

In the framework of these ever changing economic and logistic systems, each port serves and/or competes for a share of the traffic generated in its own hinterland and in the market area made up of ports and port hinterlands throughout the world with which it is connected. To survive in market societies, ports must engage in a competitive struggle to expand their market shares. The outcome depends on the capacity/quality of the ports and their infrastructures, of the road, rail, and water communications infrastructures linking port with their hinterlands (land access), of their maritime interface (length of berths and quays), and of their conditions of maritime access (tidal range, and channel and berth depth, protection from wind, waves, and storm surges). These capacities/qualities are themselves the result of massive investments, and involve frequent redevelopment and relocation of the port itself, as is indicated by successive phases in the development of Europe’s major port of Rotterdam (Figure 1). As a result of this expansion, Rotterdam’s port (which concentrates on trade in oil and chemicals, containers, iron ore, coal, food, and metals) and its industrial complex cover 10 500 ha and stretch 40 km from the city to the Maasvlakte along the Nieuwe Waterweg canal.

The development of individual ports also depends on a range of technological factors, geopolitical developments, trends in regional/world trade and passenger movements (reflecting the degree of global economic integration), and shifts in the relative economic strength of the areas ports serve: shifts in the center of gravity of world economic development (measured by GDP per capita of market areas and hinterlands) have a profound influence on the evolution of ports. The development of the port of Yantian (Figure 2) in southern China reflects the outsourcing, from the 1980s onward, of manufacturing, processing, and assembly operations to China. Opened in 1994, a second phase of development was completed in 2000, a third in 2006, and a further expansion project is due for completion in 2010. By the end of the first three phases, Yantian had been transformed from a small fishing village to the fourth largest container port in the world by throughput. At the root of its vertiginous expansion lay the way in which the growth of processing activities in Mainland China, the increasing development of Mainland Chinese port infrastructures, and rising handling costs in Hong Kong’s container ports (it costs about US$400 more to ship one twenty foot equivalent unit (TEU), the size of a standard 20 foot container, from Hong Kong to the US or Europe than from Yantian) are seeing more and more major transnational corporations (TNCs) ship their goods directly from their subcontractors in southern China to Yantian for loading into container vessels and export to major European and North American destinations. To cater for the expected growth in demand, a logistics park 3 km from the port of Yantian is under construction.

In general what has resulted is the development of regional port systems and associated industries comprising a major hub port, several feeder ports and their hinterlands, and a strong process of concentration of traffic on a small number of major gateways (due to the existence of high fixed capital costs, scale economies, and

Figure 1 The phases of development of the port of Rotterdam.
Table 1 records the 2004 cargo and container traffic of the world’s most important ports, while Table 2 reports the strong increases in container traffic of the largest gateway ports. Among other things, these tables also indicate the remarkable share of Chinese and East Asian ports, which is largely due to the growth of manufacturing industries in these areas. Alongside these developments, there have been important changes in the structure and governance of port, transport, and logistic systems with, in particular, movements in the direction of de regulation and a withdrawal of governments and public authorities from the ownership and management of ports.

All ports are also focal points for economic activities and for associated industrial development. This combination of activities is sometimes formally recognized in the designation of ‘maritime industrial development areas’ (MIDAs). The economic activities associated with ports fall into several groups. The first includes cargo and passenger handling and storage and distribution activities directly related to the port function, ship repair, and a host of transport related services located in the port itself and in its city centers. A second group comprises a set of processing industries that transform imported materials before their onward shipment/re export taking advantage of the intermodal, transshipment, and break of bulk functions of ports. A third group of industries located in port industrial complexes are those whose inputs comprise bulk commodities imported through the port. Examples include oil refineries and related chemical industries, iron and steel mills, and sugar refineries.

Alongside the direct attraction of port related industries, two more general mechanisms also shape the development of port industrial complexes. The first is the existence of external economies: the availability of shared infrastructures generates external economies that can attract other economic activities and encourage processes of agglomeration, although ports and their associated industrial areas also generate a series of negative externalities in the shape of noise, pollution, and visual blight that can also deter further economic diversification and development. The second relates to the way in which the concentration of port dependent economic activities can itself attract customers and suppliers. Indeed the existence of backward and forward linkages was often seen in growth pole theories as creating the possibility of cumulative processes of industrial development. In practice, the degree of downstream diversification actually achieved was quite limited, making employment in port industrial complexes particularly dependent on the fortunes of a few industries.

Monopolvilles: The Development of Maritime Industrial Development Areas

The development of port industrial complexes was a striking feature of economically advanced and rapidly industrializing economies in the 1960s and 1970s.
### Table 1: World port ranking, 2004*

<table>
<thead>
<tr>
<th>Rank</th>
<th>Port</th>
<th>Country</th>
<th>Measure</th>
<th>Tons</th>
<th>Rank</th>
<th>Port</th>
<th>Country</th>
<th>TEUs</th>
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<td>Germany</td>
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<td>Spain</td>
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</table>

* The cargo rankings based on tonnage should be interpreted with caution since these measures are not directly comparable and cannot be converted to a single, standardized unit.

MT metric ton; HT harbor ton; FT freight ton; RT revenue ton.


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### Table 2: Container throughput in TEU (twenty-foot equivalent units)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Container throughput in TEU</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
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<td>21,329,000</td>
</tr>
<tr>
<td>Hong Kong</td>
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<td>Shanghai</td>
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<td>Pusan</td>
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<td>Kaohsiung</td>
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<tr>
<td>Laem Chabang</td>
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<tr>
<td>Tokyo</td>
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European examples included Teeside in the UK, Dunkirk and Fos sur Mer in France (Figure 3), Taranto, Brindisi, and Gioia Tauro in Italy, Huelva and Cadiz in Spain, and the never completed Pylos port and industrial project in the Peloponnese in Greece. In the Americas, the development of a coastal chemical complex in Puerto Rico was the subject of a classic study in regional science by Isard, Schooler, and Vietorisz.

At that time, projects for the development of MIDAs were a result of a coming together of developments in industries producing intermediate goods such as steel and chemicals and a restructuring of maritime transport and seaport systems on the one hand and state strategies of support for national champions (in different industrial sectors) and (often) for the development of economically disadvantaged areas on the other.

In a context of increasing demand, intermediate goods industries experienced strong processes of concentration and centralization of capital. The emergence of a smaller number of larger groups was designed to permit the devalorization of outdated plants and the creation of a smaller number of large integrated complexes capable of reducing handling and transport costs, speeding up the turnover of capital, and realizing scale economies. As these new complexes drew on imported raw materials (for reasons related to the availability or the comparative cheapness and quality of imported materials), coastal sites with undeveloped flat land and natural deep water channels were sought out. The creation of these plants encouraged, in turn, the growth of upstream industries providing energy and gas and downstream metal and chemical using industries, although the degree
of diversification and of long term employment creation were often limited, with some zones remaining largely mono industrial.

In the maritime transport and port sectors, a related quest for scale economies and a competitive struggle to reduce the speed of turnover of capital saw a series of related developments: a growing use of extremely large and specialized vessels whose time at sea had to be maximized to secure a better rate of return on the large amounts of capital locked up in them, and the development of ports capable of receiving them and of ensuring rapid access and fast turn around times, so that the amount of time they spent in the port was minimized. To meet these needs, ports required deep access channels and berths, specialized handling equipment, and large amounts of space. The associated reorganization of port operations, in turn, provided the occasion for an often conflictual recomposition of the dock workforce.

These projects also involved significant state intervention. MIDA projects were, in many cases, major components of corporatist national or sectoral economic development plans. At the same time, many MIDA projects were promoted as growth pole projects for depressed or less developed areas. As a result, these projects were often co-planned by regional planning agencies, and were financially supported by regional development funds: state funds financed infrastructural investments receiving less than the normal market rate of return and/or provided grants and low interest loans to companies located in these zones.

MIDA projects diminished in importance after the mid 1970s’ economic crisis. The stagnation of demand for intermediate goods along with the creation of new capacity for refining oil and for producing primary chemicals and steel in less developed and newly industrialized countries saw the rationalization of the industries that underpinned MIDA development in the advanced world and a movement of investment into other areas of economic life. As a result, port development projects were refocused, at the same time as increased globalization saw large increases in the volume of international trade and in international freight (and passenger) movements.

Supply-Chain Management and Port-Industrial Complexes

In the last five decades, two other waves of significant innovation in sea freight transport have had profound implications for the supply chain management and for the development of port industrial complexes.

Containerization was the first wave of innovation. The idea of a container was conceived in 1956, when an American trucking magnate (Malcom McLean) calculated that the cost of loading his ‘cargo contained metal box’ onto a ship was less than US$8.16, compared with the US$58.83 for loading cargo piece by piece. The widespread adoption of containers in cargo transport led to the containerization of significant parts of the logistic network. The deployment of supporting infrastructure, such as gantry cranes, warehouses, and rail, motorway, and canal/rivertine connections promoted new industrial sectors dedicated to port development.

In addition, the introduction of dedicated container vessels in the 1960s, in turn, demanded deep water container ports. In the pursuit of economies of scale, the capacity of container vessels has increased significantly over time. In the late 1960s, the largest container vessel had a capacity of 1000 TEUs. By the early 2000s, vessels with the capacity of 7000–9000 TEUs were the norm. It is estimated that the per container operating costs of a 6000 TEU vessel are some 20% less than those of a 4000 TEU vessel. These developments facilitate the deployment of information and communications technologies (ICT) to improve the efficiency of logistic management, maximizing the throughput of ports and minimizing the time that containers are sitting idle in vessels or on quay sides.

The second wave of innovation involved the application of ICT in the operation of ports. As well as places for transshipment and storage, established global ports are cities with ICT based logistics management hubs, the city hub, with Singapore being a typical example. As a result of ICT advances, customs declarations and transactions are conducted electronically, speeding up transactions and shortening container storage time. It is estimated that more than 30,000 container trucks travel each day between Kwai Chung container terminal in Hong Kong and various locations in China (as in contrast to most global hubs, there is no direct rail link between Kwai Chung and major Chinese cities). The temporary storage and trucking cost savings can be substantial.

Gioia Tauro: From Planning Disaster to Container Gateway

In March 1970, Gioia Tauro (Figure 4) in Southern Italy (an area of rich citrus groves) was selected as a future MIDA and more specifically as the site for state owned Italsider’s fifth integrated shore based steel plant. By the late 1970s, 7500 jobs were to be created in an area of high unemployment and underemployment and very limited industrialization. State regional development funds were devoted to port construction and site preparation which started in 1975–76. Although the construction of a port capable of receiving giant ore and coal carriers was completed, after several revised plans the steel project was quietly
dropped. The reason lay in the steel overproduction crises of the 1970s and their devastating financial con-
sequences for Italsider. A subsequent electrical power
station project designed to make use of Gioa Tauro’s
notorious white elephant was dropped for environmental
reasons. In the mid 1990s, however, this large and still
modern port finally found a use as a container port and
as a pole for the transshipment of containers from ocean
going to Mediterranean vessels (a classic hub and spoke
network), not least due to its situation along the route
connecting the Suez Canal to Gibraltar. Starting from
16,034 TEUs and docking facilities for 50 ships in 1995,
its operations expanded at breathtaking speed to more
than 3 million TEUs in 2004 and 3060 ships, making
it the largest container transshipment terminal in the
Mediterranean.

Industrial Agglomeration and Port
Hinterlands

After containerization, the size of the hinterland over
which agglomeration effects were exercised increased,
in part, as successful ports themselves occupied more
space, and, in part, due to reductions in transport costs,
creating extended and discontinuous port industrial
complexes. Agglomeration economies derived from the
clustering of manufacturing sectors, which were, in
turn, attracted by accessibility to overseas markets. John
Dunning and the UNCTAD both recently argued that
spatial clusters of (foreign financed) firms in comple-
mentary sectors profited from agglomeration/positive
external economies, including improved access to shared
infrastructures, factor inputs (especially skilled labor),
established distribution networks, and regional markets.
One of the most successful examples of port development
(from a transshipment port to the city hub of Pacific
Asia) with agglomeration economies in its hinterland is
Hong Kong.

Because of its strategic location and its ice free 12.5 m
deep harbor, Hong Kong has long been the leading
gateway in East Asia, especially to southern China. Hong
Kong developed from an entrepôt in the early to mid
1900s to become the largest container port by throughput
in the world by 1987. In addition to being a significant
node in regional distribution networks in East Asia
(in particular for cargo originating from and destined
to southern China), Hong Kong was made into a vital
logistic center for TNCs in Pacific Asia.

Hong Kong was a relative latecomer to container
ization compared with two of its major, Asian com-
petitors, Japan and Singapore (which started to handle
containers in the late 1960s). In contrast to Singapore,
where the Port of Singapore Authority (PSA), which
directed port operations and development, is an au-
tonomous government agency, incorporated as a com-
mercial port operator in 1997 directed the development
and operation of port, the Hong Kong government only
provided the land and certain infrastructures (mainly
motorway) for the development of a dedicated container
port in Kwai Chung, allowing private operators to run it,
of which the most important are Modern Terminals Ltd
(MTL) and Hong Kong International Terminals (HIT).

After China implemented economic reforms and
opened up to foreign investors in 1979, there was a
massive relocation of manufacturing industry from Hong

Figure 4 Gioa Tauro port.
Kong and other Southeast Asian countries into four special economic zones and 14 coastal open cities in southern and eastern China. As the only developed container port that shared land physically with Mainland China, and the transshipment port for China–Taiwan trade (there were no direct links between China and Taiwan until 1997), Hong Kong enjoyed annual double digit growth in throughput and developed as a regional hub for the (foreign financed and) export-oriented manufacturing firms in the Pearl River Delta. In the mid 1990s, the government estimated that ‘port related’ activities (broadly defined) accounted for about 21% of employment in Hong Kong.

Hong Kong, along with Singapore, Busan in South Korea, and Kaohsiung in Taiwan accordingly came to dominate container handling in East Asia. More recently, Hong Kong’s dominance as a regional hub has been challenged by the growth of dedicated container terminals in Mainland China. One of the mainline operators, Global Alliance, started to call at Yantian in Shenzhen directly in 1995. With a draft at 14 m at the quayside and a direct connection to the Beijng–Kowloon railway, Yantian in the Pearl River Delta is well equipped to handle container vessels with capacities of more than 7000 TEUs. As mentioned earlier, it is thought that it costs US$300 less to ship a TEU from Yantian to West Europe or North America than via Hong Kong. As mainline operators are increasingly calling at ports in Mainland China to handle China’s booming exports, especially Yantian and Shanghai, it is expected that the annual, double digit growth rates registered in Chinese ports since the late 1990s will lead them to overtake ports in other East Asian countries in the near future. In 2005, the throughput of container terminals in Yantian reached 16.1 million TEUs (up from 5.1 million in 2001), making it the fourth largest in the world, just after Singapore, Hong Kong, and Shanghai.

The extraordinary growth of investment and output of China’s export oriented manufacturing sectors contributed to the double digit growth in ports’ throughput. The investment in port development in China has been driven by the need to handle new generations of larger and faster ferries and larger cargo ships. The success of this investment depended, however, on complementary investments in industrial complexes.

Competition and Port Development

The development of leading port and industrial complexes should not divert attention away from the other side of the coin: the rationalization and run down of smaller and less favored ports with all of their consequences for port and industrial decline, job losses, dereliction, and attempted regeneration. A striking example relates to the recent development of Franco-British ports not least for the differences it reveals in the scope for public action.

In 1994, on the French side of what was until the arrival of the Channel Tunnel the main Paris–London rail route, the Dieppe Chamber of Commerce and Industry put a large amount of investment into a new cross channel passenger and freight port capable of handling new generations of larger and faster ferries and larger cargo ships. The success of this investment depended, however, on complementary investments in
Newhaven on the other side of the channel in comparable facilities. On the cargo side, for example, James Fisher's modern cold store facilities in Newhaven was constantly losing contracts due to insurance problems associated with the restricted depth of the Newhaven port. On the United Kingdom side, however, the former British Rail ports (Folkestone, Harwich Parkeston Quay, Newhaven, Heysham, Fishguard, Holyhead, and Stranraer) and fleet had been privatized in 1984. A Conservative government sold all of British Rail's ports and ferries to Bermuda based Sea Containers for £66 million. Six years later, most of the ferry operations acquired from British Rail were sold to Stena Line for £259 million. (Stena Line had been a party to a hostile takeover bid for Sea Containers.) Sea Containers was left with the port facilities, its Hoverspeed operation, and a massive privatization windfall, as well as its containers activities and its property development, hotel, and publishing interests.

As the owner of the Newhaven port, Sea Containers did secure planning permission for port modernization and the construction of a new outer harbor (complicated by the inclusion of a controversial housing development in the submitted plans). To support these plans, East Sussex County Council secured approval for £6.8 million of capital challenge credit and £1 million of European Union INTERREG funding for a new road connecting the planned outport with the national trunk road network. The situation was, however, that the local authorities would not construct the road (or the modified road agreed to when Sea Containers suggested a revised interim plan of deepening the existing harbor) until Sea Containers made a firm commitment to port development, while Stena Line (soon to be involved in a long drawn out merger with P&O) would not make a commitment to the route, and Sea Containers themselves showed no inclination to proceed with the port development.

In the late 1980s and early 1990s, there was relatively rapid investment and growth in North Sea and cross Channel ferry operations after the negative impact of the Herald of Free Enterprise disaster of 1987, as the ferry operators prepared to confront the opening (finally in 1994) of the Channel Tunnel. One reason was the positive impact on traffic and passenger movements of the internal European market. Another was that the ferry operators anticipated a cost advantage due to the partial amortization of their fleets and the high debts of the Channel Tunnel operators. Early in 1999, however, the new R&O Stena Line joint venture withdrew from the loss making (in part, due to its diversion of traffic onto its Dover-Calais route) Newhaven–Dieppe route. For several years, Hoverspeed ran a summer passenger service. Traffic on the route collapsed with negative consequences for the port of Dieppe itself and threats of relocation by local transport operators in the Dieppe area. Two years later, in 2001, the Conseil Général de Seine Maritime (a French departmental council) responded by purchasing the port of Newhaven (via a Société d’Economie Mixte). The aim was to reduce their dependence on private companies, and to reinstate passenger and freight ferry services between Newhaven and Dieppe. Additional money was spent to improve Newhaven's dilapidated facilities; a cooperation agreement was made with United Kingdom local authorities and, together with three French Chambers of Commerce, the Conseil Général estab-lished Transmanche Ferries and restarted the cross Channel service. In spite of many difficulties on the Newhaven side, it carries some 450 000 passengers per year, and, in 2006, planned to introduce two new ferries specifically designed to operate on the route. In 2007, however, the ferry operation was transferred to a private operator (Louis Dreyfus Armateurs) after the intervene-tion of the European Commission. As this example indicates, a complex set of interests and economic and political mechanisms come into play to shape port development and port rationalization and decline.

See also: Agglomeration; Cassa per il Mezzogiorno; East Asian Miracle; Export Processing Zones; Global Commodity Chains; Growth Poles, Growth Centers; Trade, International.

Further Reading


Relevant Websites

http://www.pdc.gov.hk
Hong Kong Port Development Council.

http://www.mpa.gov.sg
Maritime and Port Authority of Singapore.

http://www.marseille.port.fr
Port of Marseille Authority.

http://www.portofrotterdam.com
Port of Rotterdam Authority.

http://www.porttechnology.com
Port Technology.

http://www.yict.com.cn
Yantian International Container Terminals.
Introduction

Positivism, positivist, positivistic, positivist science, positivistic science, positivist geography, positivistic geography – these words have been used widely and frequently in human geography over the last 30 or so years, and hardly ever in a positive sense. Usually, they are used so that some preferred philosophical, epistemological, ideological, or political stance can be propagated as positivism’s negative, somewhat similar to the Canadian construction of identity as ‘not American’. The tone is often pejorative.

Positivism's home territory is philosophy, specifically philosophy of science. So, that is where we start, by describing its historical, intellectual, and social contexts, where, when, how, why, and by whose actions it came to be, what its claims, concepts, and necessary doctrines were, what its problems and failings were, and what it left behind. One of geography’s myopias is the view that geography changes, philosophy changes, but science stays the same. In fact, science as theorized and as practiced is not the same in the times of Comte (1798–1857), of the logical positivists (1920s and 1930s), of positivist geography (1953–73), and of postpositivist geographies (mid 1970s to late 1990s: there hasn’t been a new one for a while). Much has changed since Newton developed the first fully fledged scientific metatheory. In his time there was one science, natural philosophy. Newton's universe was deterministic and certain. Chemistry, biology, geology, psychology, and the social sciences have since brought increasing levels of complexity, to which the relatively simple analysis appropriate to Newtonian physics may be of limited direct applicability. The biggest change to the theorization of science has been the adoption of explanation based on probabilities, and the acceptance that there are immutable limits to the processes of producing knowledge. By the time the Vienna Circle officially dissolved in 1938, physics in particular and science in general had started to come to grips with the fallout of the Einsteinian revolution, quantum theory, Heisenberg’s indeterminacy principle and Goddell’s incompleteness theorems, all scientific products, with the fallout of the Einsteinian revolution, quantum theory, Heisenberg’s indeterminacy principle and Goddell’s incompleteness theorems, all scientific products, all pointing to the impossibility of ever completing a science whose endpoint is certainty.

The biggest change to the practice of science has been one of scale, its industrialization and corporatization. After World War II, the goal directed research and development model honed in the Manhattan Project continued in the post Sputnik arms race and NASA’s project to put a man on the moon before the end of the 1960s. This was a rearrangement of the relationship between science and the state which led to the situation that now seems ‘natural’. In Scientific Knowledge and Its Social Prob lems, Ravetz says that applied science had become the basic means of production in a modern economy. Science and technology are now mass activities. The process of discovery is itself now industrialized, carried out within large, hierarchical institutions which exist to do this kind...
of work, orientated more and more toward applications which are defined first, with the research necessary to bring them about following on.

It might reasonably be supposed that positivist geography would be any and all geographical considerations which are underlain by the epistemological principles and methodological practices of positivist science. In the same vein, positivist science would be any and all science underlain by the epistemological principles and methodological practices of positivism, logical or otherwise. Thus, positivist geography would connect to positivist philosophy. This is, in fact, not so. Following the path from philosophy into geographical usage, we see that positivist geography was not particularly connected to positivism. Hardly any of the aspects of science which are described as positivist by geographers can be traced, even indirectly, to logical positivism. The core of logical positivism is an incredibly parsimonious and extreme empiricism which can be summed up in one sentence: ‘The meaning of a proposition is the method of its verification’. That is it. The putatively objectionable aspects of science – such as objectivity/disinterested, value freedom, and rationality – described by unsympathetic social scientists are neither necessary parts of positivism, nor necessary consequences of positivism for science.

Logical Positivism in Philosophy
Aims of the Positivist Project
Logical positivism asks the question: what does it mean to say that a proposition is correct? Essentially, logical positivism is empiricism pushed to the extreme, absolutely as far as it can go. It is antimetaphysical, anti idealist, and convinced that science alone can provide knowledge. Knowledge exists only in the form of empirically confirmed propositions. All else is belief or opinion, and belongs to the enormous category of statements which are deemed to be nonsense or meaningless, in the sense that Wittgenstein defined meaning (see below).

Logical positivism is a robust and vigorous defense of science as the Vienna Circle (Wieners Kreis) understood science to be conceptualized and practiced in the late 1800s and early 1900s, a defense mounted explicitly to stymie the influence of Germanic idealism which the positivists held to be deeply irrationalist and necessarily prone to making unexamiable knowledge claims based on an intuitionist epistemology. There was a small group of like-minded activist philosopher scientists in Berlin, led by Hans Reichenbach (1891–1953). They held the same anti idealist views and attitudes toward science as did the Vienna positivists but the two groups remained distinctive in membership. The Wiener Kreis was by far the more influential. From now on this account treats logical positivism as synonymous with the Vienna Kreis.

The logical positivists wanted to establish that only empirical, publicly examinable evidence could furnish statements of belief with the warrant necessary for them to become truths. In the view of the positivists, Germanic idealism had all kinds of potential for social, cultural, and political intolerances, based on private and putatively superior claims to have access to or create knowledge. The positivists lay in direct line of descent from the Enlightenment and British empiricism, which is perhaps why they had more impact in Anglo America than they did in continental Europe. Their values were such that they would have been quite at home in England or America of that time, so much so that they probably would never have existed as a distinctive movement in either of those countries, as there was no threatening public acceptance of idealism as a practical mode of thinking for them to fight against. Idealism was confined harmlessly to the arcane world of the universities, where it dominated, rather than being the dominant component of public discourse, as it was in the German culture realm.

Contexts
In 'replacing positivism in medical geography', Bennett argues that a fuller understanding and appreciation of logical positivism may come from trying to see the world that the positivists saw, by trying to envisage their place in the broad intellectual contexts and more local and specific geopolitical situations within which they lived and worked. He suggests that positivism can be understood as the constructed philosophical architecture arising out of an engagement with the perennial issues of empiricism versus rationalism as played out in the immediate social, cultural, and political circumstances in interwar Vienna.

Philosophy and Knowledge
The broadest context for positivism is the history of post Medieval Western philosophy which consists of conflicts between idealism in its various forms and materialism as ontologies, and rationalism and empiricism as epistemologies.

Idealism is a metaphysical theory about the nature of reality. It holds that what is real is in some way confined to or at least related to the contents of our own minds. There are three major forms of idealism: (1) the subjective idealism of Bishop Berkeley, (2) the objective idealism of Schelling and Hegel, and (3) the transcendental idealism of Kant. They have in common the fundamental view that there is no access to reality apart from what is provided by the mind, and further that the mind can provide and reveal to us only what it contains. Note that this imagery suggests that 'us' are outside of mind, looking in/on. This is a problem. Nevertheless,
reality consists in ideas. This is not the same as saying that reality is known via ideas: it is much stronger than that. Reality is ideas; ideas are reality. The extreme form is solipsism.

A materialist or physicalist ontology stands in utter opposition to idealism. It holds that the only thing that really exists is matter in its various states and configurations. Naive materialism is an extreme form of robust commonsense which has a superficially reassuring, but unsustainable, headstrongness, rooted in classical physics. However, as concepts of matter evolve post Einstein, crispness segues into fuzziness. And common sense turns out to be culturally specific.

Rationalist epistemology holds that knowledge can come only from the exercise of pure reason; the method is to set up a proposition that is beyond doubt—or about which it is possible to be ‘virtually’ certain—then see what further propositions this can be said to justify. Knowledge is said to be a priori, meaning that it is a category known to the mind without benefit of sense experience, which clearly resonates with idealism. It is a category about which sense experience can tell us nothing, and to which sense experience could not have led us. It is, therefore, an idea inherent to mind, and as such is something that mind ‘imposes on’ experience rather than being something which is known ‘because of’ experience. Space, time, and causality are examples of such ideas—say the rationalists—the mind knows intuitively, and which once known can be used to organize and interpret sense data. To the rationalist, no amount of sensory information could lead to the mind forming the ideas of, say, causality or determinism—which it is possible to be ‘virtually’ certain—then see what further propositions this can be said to justify.

To the empiricist, the basic credo is Locke’s (1632–1704): Nihil in intellectu quod non prius in sensu—there is nothing in the mind but what entered it by way of the senses. Empiricism holds that our immediate knowledge, or at least the propositional materials from which our knowledge is constructed, are delivered to the mind through our five bodily senses. It explicitly rules out any sixth sense, intuition, or extrasensory access to the mind. Naive empiricism is the notion that all we are ever entitled to know about the world is what the world cares to tell us, on the world’s terms. The mind is a tabula rasa, a blank tablet. In this view, the apprehender is completely passive and cannot (indeed, should not attempt to) influence the delivery of data via the senses. The empiricist tradition runs from Bacon, through Locke, Hume, J. S. Mill, and into the logical positivists.

Empiricists argue that the truths of mathematics are analytical and, therefore, cannot tell us anything about the world; they mostly agree that these truths are indeed a priori but they are not synthetic; that is, they do not define anything else but their own terms. They are an empty calculus, devoid of content about things in the real world. Empiricists claim that the things which science knows are synthetic—they tell us about more than just the terms in which they may be expressed—but they are based on experience, and so are synthetic a posteriori.

Neither naive empiricism nor Cartesian rationalism—the extreme versions of each epistemology—is entirely coherent or persuasive, but no intermediate position is any easier to occupy. Coupled with the observation that deductive reasoning—favored by rationalists—can only reveal what is contained in its premises, and inductive reasoning is logically insecure, it is clear that knowledge—if defined as complete and certain—is not possible. Yet individually and collectively humans claim to have it.

Running throughout the post Copernican period is the related conflict between philosophy—as metaphysics—and science—as empiricism—over which of them addresses the really important questions, and which deserves the greater respect as a provider of deeper explanations, and as a repository of truth. The metaphysicians are the builders of great all encompassing philosophical systems, primarily exploring questions of ‘being’, God, mind, and freewill, self evidently important topics, worthy of the attention of only the most powerful minds. They are contemptuous of the analysts as nihilistic technicians, incapable of capturing the grand sweep of speculative thought as it seeks to find humanity’s essence, to preserve the soul. Thinkers such as Plato, Descartes, Spinoza, Hegel, and Sartre fall into this group. Their opponents are the critical or analytical philosophers who regard the propositions of metaphysics as neither misguided nor wrong, but as fundamentally meaningless. Among the analytical philosophers are Moore, Russell, Wisdom, Wittgenstein (of the Tractatus) and Ayer, and, of course, the logical positivists. Analysts regard metaphysical puzzles as illusory. From their viewpoint concreteness is something that we bestow on these topics by our failure to see that they arise from the use of inadequately specified language. They are not ‘real’ problems at all but meaningless puzzles which exist only because we are hopelessly entangled in our own creation, language. Analysts, the logical positivists among them, analyze metaphysics out of existence. Naturally, metaphysicians object that this is some kind of trick, a solution achieved by sleight of mind.

The metaphysician makes no claim to be able to establish truth as it relates to fact. He or she sees no need for empirical confirmation. A proposition takes its place in the edifice of thought only because it fits with the rest of the structure and not because it conforms to an external ‘fact’. The metaphysician’s test is one of ‘coherence’. The critical or analytical philosopher, on the other hand, sees no reason to accept any statement unless it is either empirically confirmable or is an analytically (that is tautological) truth. That is, (s)he favors a
‘correspondence’ theory of truth. These styles of philosophizing are incommensurable.

Political and Social Contexts

Logical positivism was constructed in the discussions and publications of the Vienna Circle between 1907 and 1938. Although membership changed over that period, Schlick, Neurath, and Carnap were central. Many of the Circle were Jewish, Marxist, or both. After World War I, Vienna was a socialist city, almost a city state, within a territorially much diminished Austria, a fragment of the multi ethnic Austro Hungarian Empire that had entered the war. The city was in the hands of the socialists between 1919 and 1934, whereas the federal state was dominated by a coalition of reactionary pan Germans and Christian socialists who kept alive traditional anti Semitism and ideas of Aryan superiority which became fertile ground for Nazism. In the 1930s, Europe seemed to be gearing up for an ideological showdown. Fascism was on the rise in Germany, Italy, and Britain, and Marxist totalitarianism was firmly established in the Soviet Union. Right and left in Austria had private armies, streetfighting militias ready for civil war.

Uniquely in German speaking Europe, philosophy had long informed much of public life, through the formation and expression in actions and institutions of shared values rooted in a culturally and linguistically distinctive form of idealism. German metaphysical idealism – as expressed in the writings of Kant, Hegel, Schelling, and Fichte – had as its goal the vindication of belief in an a priori, extra empirical knowledge of time, space, God or the absolute, and the advancement of the Volk and the interests of the ethnically homogenous nation state. Prior to the logical positivists the only German language philosopher to criticize idealism was Schopenhauer (1788–1860), whose assessments of Fichte, Schelling, and Hegel as ‘ sophists’, ‘ charlatans’, ‘shams’, and debauchers of language and logic is unsurpassed for vitriolic invective of one eminent philosopher against another. Schopenhauer was also the first philosopher to speak out against his profession’s penchant for obfuscation and pseudo profundity.

Logical positivism was heir to Schopenhauer’s position. It developed to defend science against the repressive potential of idealist claims to have privileged access to knowledge, intuitively and therefore unexaminably known.

Although the logical positivists were not overtly politically motivated, by setting themselves directly against German romantic idealism they had inevitably entered political territory. They had taken themselves into the broader politico cultural arena in which idealist claims of epistemological superiority supported theories of social and ethnic superiority. The Vienna Circle came to be seen as dangerously subversive.

Neurath accepted this and urged the Circle to act in the manner of a political party whose platform was the destruction of traditional metaphysics, which he considered to be socially and politically reactionary and oppressive. Ironically, this is the current conventional perception of positivism among the leftist establishment in the humanities and social sciences.

Science of the Day

The members of the Vienna Circle were either scientists or mathematicians with philosophical interests, or philosophers with interests in understanding how the natural sciences seemed to be able to produce knowledge, which is defined as warranted belief. Neurath was the only social scientist. Most of the scientists were physicists. At the theoretical level, it was hard to distinguish whether an individual was primarily a physicist or a mathematician. When the logical positivists referred to science they meant experimental and theoretical physics as practiced in the late 1800s and early 1900s. The science of their day was craft science, involving a relatively small inter national community, where it was possible for any one practitioner to know, or to at least know of, just about all the other members. Communication was personal, slow, and often involved traveling to meet. The role of the state was minimal. The technology was largely mechanical. It was unique and home made. Scientists were for the most part either amateurs or university based experimenters who really did share many of the values such as disinterested interest, neutrality, a belief in objectivity, supranationalist openness, and sharing of information which contemporary postpositivist critics of science mock.

Logical positivism can be seen as the endgame of the philosophy of pre Einsteinian science. The science that the members of the Vienna Circle knew and believed in was the Baconian–Newtonian view that laws of nature were available to be discovered, which science could do by compiling observations in an unconceptualized and disinterested way, and in these data patterns could be discerned, materials for the construction of an edifice of correct, universal, reliable, and certain knowledge. The materiality of the Industrial Revolution and the ability of laws and theories to predict gave practical support to this view, although this merely avoided and did not solve the problem of inductive inference. So, the positivists sought certainty, led no doubt by their attachment to the deductive certainty seemingly offered by mathematics and logic, underpinned by the tangible successes in physics which led some to predict that science would soon come to an end.

Logical Positivism: The Vienna Circle

In 1902 Hans Hahn (mathematician), Philipp Frank (physicist), and Otto Neurath (sociologist and political
an informal study group focusing on Ernst Mach’s work. They met in coffee houses in Vienna. Mach was a radical empiricist who believed that what science had to say was anchored in and restricted to its observations which are known only as direct and immediate sensations, delivered by our bodily senses. He made significant contributions to mechanics, optics, acoustics, cosmology, and the philosophy of science. He opposed obscurantism in all fields.

Frank left to take a chair in theoretical physics in Prague in 1912, and Hahn was away from Vienna between 1915 and 1921. Mach died in 1916. In 1922 Moritz Schlick was invited to take Mach’s old chair in Inductive Philosophy at the University of Vienna. Schlick established the Wiener Kreis in 1924: the Circle’s official name was the Verein Ernst Mach (the Ernst Mach Society). Hahn, Frank, and Neurath joined the Circle, along with Weissman, Zilsel, Feigel, and Kurt Godel. The Circle never had more than 20 members, a core group and a penumbra who attended for a time, left, sometimes joined again. In 1926 Rudolf Carnap joined the Circle: he was effective in disseminating the group’s ideas, but not as effective as A. J. Ayer. The positivists invited Ayer to sit in as a guest during his visit to Vienna on his first honeymoon during the winter of 1931–32 and out of that experience came *Language, Truth and Logic*, published in 1936 when Ayer was 26 years old. It is not an original philosophical work, yet it established Ayer’s reputation and career as an analytical philosopher. Ayer’s contribution was as a spokesman: he introduced the logical positivists’ ideas to the English speaking world. In a paper published in 1931, Blumberg and Feigel had given the Circle the name by which it has been known ever since, the logical positivists.

Between 1931 and 1938 the Circle gradually declined as members died, moved away to Britain or America, or as in the case of Schlick were murdered – shot on the steps of the university by a student variously described as ‘deranged’ or as ‘a Nazi sympathizer’. Many German philosophers, including Heidegger, pressed for restrictions on who could teach subjects, such as philosophy or history of science, which had any bearing on German culture. Only pure Germans, they said, should be allowed to teach German youth. This was part of an official antipathy to the circle, which gradually disintegrated. In 1938 the Ernst Mach Society dissolved itself, and in that same year its publications were banned from sale in Germany and Austria.

**Influences**

The logical positivists’ project was similar to Comte’s in that both made universalist claims for ‘science’ and both are called positivism. However, there is no evidence that the logical positivists were even aware of Comte’s work. The logical positivists had little knowledge of and no use at all for traditional philosophy except insofar as they saw themselves as continuing the tradition of classical British empiricism in the style of Hume. More immediate and strong influences extended into the Vienna and Berlin groups from the work of Moore, Russell (of the *Principia Mathematica* period), and Wittgenstein at Cambridge, and of Gottlob Frege at the University of Jena in mathematics and logic.

Russell continued the empiricist tradition of Hume. He shared Hume’s view of causality, basically favored the primacy of evidence for our beliefs, and gave favored status to the deliverances of our senses in adjudicating between beliefs. He had a degree of natural sympathy for the logical positivists, as he shared their goal of banishing all talk of superior worlds and metaphysics, but he never joined or even visited the Circle. Russell and Frege created modern logic, and Russell influenced Wittgenstein. Collectively they influenced the logical positivists, who in turn had contact with and influence on, first the analysts who turned their attention to the use of language – as in the Ordinary Language school at Oxford – and second, critical rationalism as created by Popper as an attempt to deal with the problems of verifiability and induction which stymied the logical positivists.

The positivists were impressed also by Einstein’s relativities, particularly the way in which they built on the Michelson–Morley experiment (1885) by taking an experimental result which was at odds with Newtonian physics to be correct, which meant that Newtonian theory was incorrect, or, at least, insufficiently accurate. When observations of the solar eclipses of 1919 and 1922 confirmed that light rays were indeed bent in the vicinity of a massive object (the sun), and that the bending was by the amount predicted by Einstein’s theories, they took this to be vindication of their faith in the empirical and empiricist basis of knowledge. As a bonus Einstein showed that Kant’s assertion that certain basic concepts, such as time and space, are wrong.

**Wittgenstein**

The strongest influence on the Vienna Circle was Ludwig Wittgenstein, specifically his *Tractatus Logico-Philosophicus*. Wittgenstein was born into one of the wealthiest families in Vienna in 1889. An unexceptional student at school, he did well enough to train as an engineer in Germany before going, at the age of 19, to Manchester, England, to carry out experimental work in the infant subject of aeronautics. From the applied mathematical problem of designing a propeller he was drawn into pure
Wittgenstein produced two major and contradictory works, the Tractatus and the Investigations. They have in common a concern with language. They start with the almost banal assertion that thinking involves language; indeed, thinking takes place in language or, at least, the external expression of thought does. Wittgenstein radically shifted the course of English language philosophy onto the explicit analysis of what philosophers said (or wrote): thus, philosophy became the activity of analyzing rather than the mastering of a body or tradition of knowledge.

The Tractatus is not a book one 'reads' in the conventional sense. It is a dense, deductively argued introduction. The Tractatus was written under great physical duress, an extraordinary feat of sustained concentration. It is a radical break with philosophy as it then existed. Wittgenstein was largely unconstrained by precedent and authority, having initially been educated outside of traditional philosophy. In the preface to the Tractatus, he says, "I do not wish to judge how far my efforts coincide with those of other philosophers. Indeed, what I have written here makes no claim to novelty in detail, and the reason why I give no sources is that it is a matter of indifference to me whether the thoughts I have had have been anticipated by someone else" (Wittgenstein, 1974: 3).

Wittgenstein thought that he had resolved the essential problems of philosophy by showing that they lay in the insufficiently precise use of language as the vehicle of thought – that is, they were pseudo problems – so after his release from captivity he turned his back on philosophy, gave away his family fortune, and worked as a village schoolmaster in Austria from 1920 to 1926. As the Tractatus became more widely known, attempts were made to persuade him to rejoin the academic world, and in 1929 he returned to Cambridge, to a fellowship in Trinity College. In that same year he submitted the Tractatus as his thesis for the PhD degree at Cambridge. His examiners were Russell and Moore. Moore's report is said to have been: "It is my personal opinion that Mr. Wittgenstein's thesis is a work of genius; but, be that as it may, it is certainly well up to the standard required for the Cambridge degree of Doctor of Philosophy." Until 1935 he taught a small group of students whom he repeatedly exhorted to find something more useful to do than philosophy. Wittgenstein felt compelled to do philosophy, but he seems to have been quite skeptical about what it could achieve. He ends the preface to the Tractatus by saying: "I therefore believe myself to have found, on all essential points, the final solution of the problems. And if I am not mistaken in this belief then the second thing in which the value of this work consists is that it shows how little is achieved when these problems are solved" (Wittgenstein, 1974: 4).

His post Tractatus ideas were more widely circulated in the form of notes made by these students, without his approval. The 'bootleg' notes became the 'Blue Book' and the 'Brown Book'. The ideas of the post 1929 period stand in sharp contrast to those in the Tractatus. In a sense there are two Wittgensteins. 'Wittgenstein the Younger' influenced the positivists. 'Wittgenstein the Elder' is favored by those who are fascinated by the ambiguities in natural languages as they are used. In 1939 he was appointed to a chair of philosophy at Cambridge which he resigned in 1947. He died of cancer on 29 April 1951. Philosophical Investigations was published posthumously in 1953.

The waving of a whole hand is not a pen stroke. It is not a book one 'reads' in the conventional sense. It is a dense, deductively argued
structure of numbered propositions, a mere 74 pages in the 1974 Routledge edition, which requires a sophisticated knowledge of symbolic logic in places, and a level of concentration in the reader well beyond the ordinary. Even then, much of it is likely to evade one's grasp. At the end it is truly enigmatic.

However, the main themes can be stated roughly. First, Wittgenstein developed a pictorial theory of language in which word elements correspond to elements in the facts which make up reality. Thus, “Proposition 2.02: Objects make up the substance of the world” (and) “Proposition 2.02: Objects are simple.” Word elements can be put together to form significant sentences, but the structural principles of the language cannot be expressed in language. They can only be ‘shown’. For two people to understand the same thing by what is said is for them to see the same picture. The ‘simples’ correspond to elements of the world (“Proposition 1: The world is all that is the case”) but in language they must ‘cohere’.

Second, Wittgenstein created the picture theory of language so as to draw a line between meaningful and nonsensical statements. Thus, the following propositions:

4 A thought is a proposition with a sense.

4.001 The totality of propositions is language.

4.002 Man possesses the ability to construct languages capable of expressing every sense, without having any idea how each word has meaning or what its meaning is – just as people speak without knowing how the individual sounds are produced.

Everyday language is a part of the human organism and is no less complicated than that.

His third theme is that philosophy is an activity, a process, not a body of knowledge at all, and certainly not a science. It is the job of philosophy (now rid of meta-physics) to elucidate and clarify…although how this is possible without making interpretative statements which are nonsensical has never been clear! Thus:

4.1 Propositions represent the existence and nonexistence of states of affairs.

4.11 The totality of true propositions is the whole of natural science (or the whole corpus of the natural sciences).

4.111 Philosophy is not one of the natural sciences.

4.112 Philosophy aims at the logical clarification of thoughts. Philosophy is not a body of doctrine but an activity. A philosophical work consists essentially of elucidations. Philosophy does not result in ‘philosophical propositions’, but rather in the clarification of propositions.

In this the logical positivists saw the authority to authenticate their predisposition to valorize ‘science’ and denigrate philosophy. To them the boundary was clearly drawn: only science could manufacture true propositions, and it could do so because it had access to empirical verification. All else was nonsense, save tautological truths. The positivists followed Wittgenstein in holding that mathematics was a universe of tautological truths in which there was no meaning at all: it was seen as an empty calculus, whose truthfulness came not from tapping into some essential current of higher and purer truth, but rather from our having created it and having ‘bestowed’ this property on it.

The argument that only an ideal language modeled on the statements of logicians and scientists permits us to make meaningful statements means that Wittgenstein could not expect the Tractatus itself to be accepted as containing truth. Russell saw this immediately: in his introduction to the Tractatus he wrote that he had some “…hesitation in accepting Mr. Wittgenstein’s position, in spite of the very powerful arguments he brings to its support. What causes hesitation is the fact that, after all, Mr. Wittgenstein manages to say a great deal about what cannot be said, thus suggesting to the skeptical reader that possibly there may be some loophole through a hierarchy of languages, or by some other exit” (Wittgenstein, 1974: XXI). Wittgenstein had put forward a ‘verbal’ argument that meaningfulness depended on a ‘pictorial’, that is nonverbal theory of correspondence. We cannot stand outside of our own minds in order to examine our minds: there is no place to stand. Wittgenstein pointed out that we cannot think of what lies outside thought, and that we cannot speak of what lies outside of language. That is, we must be silent, but not about anything. According to Ayer, the Cambridge philosopher Ramsey cheerfully pointed out “What you can’t say, you can’t say, and you can’t whistle it either.”

Wittgenstein confronted the problem of distinguishing between statements that are genuinely meaningful and those which are nonsense. No doubt much of what is said inside and outside of philosophy is nonsense, and it was an act of great courage to say so and then to go on to try to work out a method for making the distinction. He failed. Everyone does.

Wittgenstein was well aware that people would not stop using everyday language just because it did not fit the mold of cognitive truth. People learn language and use it to communicate emotional, ethical, or other exhortations, which can be claimed to be truths, but which cannot enjoy empirical verification. Wittgenstein was also well aware that almost all human discourse takes place in this world about which nothing meaningful can be said. Wittgenstein obviously lived a life in which he routinely said things that were not in his terms meaningful, as we all must. He had a strong mystical streak which breaks through periodically in the Tractatus.

By 1929 when he returned to Cambridge, Wittgenstein had decided that his picture theory of language was
wrong. He abandoned his view that language had a level of essential meaning. He then sought to study language as it is used by human beings to communicate, rather than concentrating on the logic of the statements that philosophers made. He argued that the purpose and context in which something is said is vital to appreciating what it is that is being said. He also reached the conclusion – very dismaying for positivists – that it was not possible to clarify a statement by translating it into another statement in the same language. His extreme reluctance to publish his thoughts or see others discuss them in print lest they be misunderstood or misconstrued eventually brought him to repudiate much of what the positivists made of his one written statement, the Tractatus Logico-Philosophicus (1921).

The method of proceeding suggested by Wittgenstein was for philosophers to devise language situations or games where the ways in which words were used could be studied to see how confusion arose by the same word being used in slightly different ways. Russell came to disagree profoundly with the later Wittgenstein and he thought that the exploration of language for its own sake was trivial.

Logical Positivism: Concepts and Problems

Schlick alone of the logical positivists considered what they were doing to be philosophy. The others agreed with Mach's claim that he was not constructing a philosophy but trying to unify science as something different from philosophy. Carnap was adamant that there could be no accommodation with philosophy. Philosophy (meta-physics) had to be destroyed. In this they were reflecting back the hostility that Germanic idealism directed toward science. The basic problem facing the logical positivists – which neither they nor anyone else has ever solved in any final sense – was how to fashion a conceptual tool which would cleanly separate scientific knowledge from metaphysics without destroying science.

The positivists rejected metaphysics because its pro nouncements such as 'The absolute is beyond time' could not possibly be confirmed by anything we could experience. As an example (quoted by Quinton, 1982: 168) of the sort of thing they declared meaningless, consider the following, from Heidegger's Hegel's Concept of Experience "...the absoluteness of the Absolute – an absolutation that being absolvent absolves itself - is the labour of unconditional self certainty grasping itself." It is hard to tell, but the statement seems to be grammatically correct, but what does it tell us? Meaning does not necessarily follow from grammar. To dismiss the statements of metaphysics was not novel; they had often been described as useless, empty, or unscientific, but the positivists raised the acrimony level to a new high by adopting Wittgenstein's view that the statements were meaningless.

Likewise, they dismissed conventional epistemology because no number of experiences could confirm the presence or absence of an external world. Realism and idealism were considered to be equally meaningless. The existence of an external world was a necessary 'assumption', not an empirical conclusion. They saw in Wittgenstein's work the legitimation of their predispositions to throw out all that was not empirically knowable. They took from his work the view that accepting a proposition means the set of experiences which together are equivalent to the proposition's being true. They also believed that Wittgenstein had given a satisfactory empirical account of mathematics and logic by showing that they are analytical – that is, tautological truths. This was pleasing to them because the traditional rationalist view had been that mathematical truths are of a higher order than those based on experience. The positivists did not want there to be any other source of truth, certainly not a superior one, so they embraced Wittgenstein's demonstration that logical and mathematical truths are independent of experience only because they are empty of meaning. This did, however, come to cause them problems in connection with verifiability and the more general problem of inductive reasoning.

They thought they had found what they needed in the Tractatus. At their weekly meetings held around a rectangular table in a room at an institute near the university, they read out loud and discussed the entire Tractatus, line by line. Wittgenstein had, by this time, concluded that the ideas in the Tractatus were wrong, and he was headed in the opposite direction. Hints of this possibility are found toward the end of the Tractatus where Wittgenstein makes some enigmatic and somewhat mystical comments which indicate that he believed that all the important things in life lay in the realm of what could not be 'said' – that is, they lay outside of cognitively meaningful statements. This ran counter to the positivists requirements, so they simply ignored it.

They accepted the Kantian division of a priori and a posteriori, which when cross-classified with analytical and synthetic yielded a four category taxonomy of all logically possible knowledge. They were persuaded by Russell and Wittgenstein that analytical a priori statements were true because they were tautologies. Analytical a posteriori statements were logically impossible. That left the Kantian synthetic a priori and the synthetic a posteriori. The synthetic a priori is what they wanted to get rid of by denying its possibility in the first place. In a philosophical version of last man standing, that would leave only the synthetic a posteriori, the category of empirical truths, those of science.

To demarcate the synthetic a priori from the synthetic a posteriori, they proclaimed the essential notion which defines positivism, the verifiability principle, justification
for which they found in the Tractatus. The verifiability principle is the key to the positivist doctrine that "the meaning of a proposition is the method of its verification." Only those assertions which can be verified by experience can have meaning.

To their chagrin the positivists found that the verifiability principle did indeed hit metaphysics, but it was more a shotgun blast than a rifle shot and it hit science too. In trying to drive a wedge between metaphysics and science, they would have to rule out as meaningless the very scientific laws they had set out to defend. They realized that scientific laws are not conclusively verifiable, for there is no set of experiences such that having these experiences is equivalent to the truth of a scientific law. The laws of science could not themselves be verified empirically. They were subject, as are all empirical truths, to the limits set by the general problem of inductive or ampliative inference. This limit is intractable in logic. Popper found a way of making it go away, rather than solving it in the conventional sense, by developing a philosophy centered on falsificationism with all this implied for the end of certainty as an achievable goal of science.

Another set of problems arose out of the questions of what sorts of things would qualify as verifiers. In pursuing their goal of unifying all knowledge, the positivists were anxious to remove the division between external and internal worlds which seemed to set psychology apart from the physical sciences and they tried to do this by saying that in both instances the raw 'stuff' of a person's construction of the world consisted in experiences. But how can one show that one person's experiences are identical with another's? If one cannot, then an experience based science is fundamentally subjective.

The ultimate content of science, lying in experiences, is forever and in principle private. That seems to be no improvement over idealism, as public observation is logically necessary to counter exclusive and unexaminable claims to have access to truth.

During the meetings of the Circle, Schlick and Neurath sat at opposite ends of the table. In all the time that Ayer sat in as a guest, discussion centered week after week on Protokolätze, basic perceptions which Schlick insisted are delivered by sense experiences, about which the knowing subject could not be mistaken. Neurath argued that one must start (and stay) at the level of physical objects, that no beliefs were sacrosanct, not even those which seemed to be delivered by one's own senses. He was eventually forced to conclude that experiences are, ultimately, private so they could not be the verifiers of statements. Only a proposition can verify a proposition: a statement can only be significantly compared with another statement. Not only is this sterile and circular, it drove Neurath to uphold a coherence theory of truth: positivism was supposed to do away with that touchstone of the metaphysicians' coherence – because it permitted the most elaborate structures to be built metaphorially in midair if only the parts of the structure fitted together. Neurath could not justify a correspondence theory of truth except by invoking criteria of coherence.

But it was that realization that the verifiability principle was flawed that proved fatal to the positivists' project. The positivists held that it was not necessary to be able to specify how a proposition could be subjected to the court of experience right now, but it was essential that it be amenable in principle to being so tested. The technology might not exist, or the necessary experiment might be of a scale, cost, or complexity such as to make it unlikely or currently impractical to carry it out. But that was seen as quite different from assertions that were in principle and forever beyond the reach of empirical verification. Unfortunately, the verifiability principle seemed to be just such an assertion. The positivists tried several ways to salvage the principle. But whether they called it a 'proposal', a 'recommendation', or an 'explication of a concept' they could not wriggle around the mortifying realization that the principle was being weakened from being an imperative to something that a metaphysician could simply choose to ignore.

They realized, then came to accept, that there were no conceivable experiences which would lend empirical security to the verifiability principle. They concluded that the verifiability principle was by their own criterion not a meaningful statement. It was itself a metaphysical statement. In crafting a wedge to cleave meaningful from meaningless statements, the positivists found that in being logically consistent they had to exclude statements such as the abstract statements of science which they wished to protect. Hoist on its own petard, positivism began its long fade out.

By the end of World War II, all the surviving original positivists – now scattered to Britain and America – had abandoned the more extreme positions of the doctrine as being logically untenable.

**Positivist Geography**

Positivist geography is characterized by the central and explicit role given to the relationship between science and human geography in the context of the production of scientific knowledge. Although 'positivist geography' has a clear meaning, established by prolonged and consistent usage, it is nevertheless a considerable misnomer. It is generally used to signify the kinds of geography that emerged – first in the US and then in Britain – between the early 1950s and the early 1970s. This was a period of theoretical and methodological exuberance committed to transforming human geography into a nomothetic spatial science, urban and economic rather than cultural, social,
or historical. Deeper philosophical correlates of the methods and techniques adopted remained largely unexamined until critiques of so called positivist geography emerged in the early to mid 1970s.

The Positivist Era: An Overview

Between the publication of Hartshorne’s *The Nature of Geography* in 1939 and Harvey’s *Explanation in Geography* in 1969 the dominant project in Anglo American human geography was bringing science into geographic practice along with the adoption and development of spatial theory. Human geography was recast as spatial science.

Change in this period can be made to look orderly, rational, and inevitable when interpreted with the benefit of hindsight, but David Livingstone in *The Geographic Tradition* warns against writing history backwards, constructing it from a presentist starting point – so called ‘Whiggish history.’ At the time events seemed unguided by any conscious shared purpose or plan. Statistical techniques introduced at the research level filtered down into the undergraduate curriculum. Statistical analysis – univariate and descriptive to begin with – was aided by the increasing availability of large data sets, a by product of the technocratic state’s monitoring of society as part of large scale social engineering. Efficiency criteria gave way to issues of equity, mostly racial in the US, social class in Britain. Early statistical work was computationally constrained; mainframe computers (large, slow, expensive, difficult to use by today’s standards) only became widely accessible in universities in the 1960s. Nevertheless, the cumulative effect of essentially technical innovations was to propel human geography into acting as if it were a science. Or, more accurately, acting in a way that the geographic revolutionaries thought was proper for a science.

There is an extensive literature on whether or not the positivist and postpositivist episodes should be inter preted as paradigms in the Kuhnian sense, or should be seen more as a proliferation of chaotic conceptions. Kuhn’s notion of paradigm refers to changes along a single pathway – in which successive paradigms swallow previous paradigms – whereas geography is pluralistic, maintaining multiple coexisting parallel pathways which have quite different objectives. This suggests that a paradigm based historical interpretation is inappropriate.

Whether driven by a perceived need for intellectual respect, or as part of a spontaneous intergenerational movement to oust the old guard and to usurp power within the discipline – a sociological interpretation suggested by Peter Taylor in 1976 – or propelled by a profound dissatisfaction with the forms and standards of explanation employed in geography – a point of view often expressed by Peter Gould – human geography changed drastically in the positivist years. The change was initially referred to as the Quantitative Revolution. Only later, and in critique, was it labeled ‘positivist geography’. In 1963 Burton proclaimed that the quantitative and theoretical revolutions were over. Actually, resistance to quantification is still with us over 40 years later. Peter Gould argued that in concentrating on quantification, the traditionalists failed to see that the essence of the new geography lay not in the numbers but in a new way of looking at the world, seeking to make law like generalizations rather than see only particulars.

Until the 1950s geography identified itself with the idea of the region. Geography’s claim to distinctiveness lay in conceptually integrating layers of phenomena so as to construct regions, the geographical equivalent of the historian’s period. Starting with the geographical base, layers were added – surficial geomorphology and landforms, drainage, vegetation, settlements, economic activities, and so on – as the geographer worked through a checklist of ingredients. “… and when you got to the bottom of the list you were finished. So nearly was the field as an intellectual discipline…” said Peter Gould (1979: 139–151). The epistemology of geography was naïve realism – not that geographers of that time talked about such things as epistemology or ontology. The world was considered to be simply and essentially what it was. It awaited discovery. It was considered to be discoverable because it was unproblematically accessible via our senses, which were assumed to add nothing to what was sensed.

The philosophy of geography resided in one book, Richard Hartshorne’s *The Nature of Geography*. Hartshorne insisted that geography should have no truck with change, time, sequence, and dynamics. Geography should concern itself with a chorological approach, addressing areal differentiation as it existed at one instant in time. However, physical geography moved on from morpho logical concepts to processes and made contact with cognate disciplines, such as hydrology and meteorology. Ever since, the physical geographies have aligned themselves with science with scant questioning about its nature, positivist or otherwise.

In 1953 Fred Schaeffer challenged Hartshorne’s notion of geography by setting out an anti excep tionalist philosophy drawing heavily on logical positivist ideas, as transmitted by Bergman, one of the Vienna Circle’s participants who had fled to the USA. Schaeffer and Bergman were colleagues at the University of Iowa. Schaeffer argued that geography could share the methodological ideas – or that it should – because it deals with events that are unique in their manifest detail, but all events can be regarded as members of classes about which general statements can be made if we are prepared to stand back a little and see them as related in some relevant ways. The only thing one can do with an event we choose to see as unique is contemplate its
uniqueness. Schaeffer argued that geography should generalize about its phenomena, should seek explanations of a law like character and he saw no necessary impediment to so doing in the concern with the particular, because scientists apply to each individual concrete situation all the generalizations that they believe are relevant. Without generalization, language itself would be impossible. A law is simply a descriptive generalization of a high degree of reliability: it need not be perfect, it may be probabilistic, and it may or may not need theoretical amplification. Schaeffer died just before his paper was published and it fell to Bergman to shepherd it through to publication.

The scholarly as distinct from the power relations aspect of the dispute centered on the idea of uniqueness, but this was confused with the idea of singularity. A singularity is an event to which the generalizations of science do not apply. For example, inside the event horizon of a black hole lies a singularity: there are many such phenomena in the universe so any one of them is not unique, it belongs to the class ‘singularity’. In *Theoretical Geography* Bill Bunge argued along similar lines in asserting that locations are not unique. There is a contemporary echo in the claim that law like generalizations about human beings are not possible because each human is unique. This claim is only correct if each human is singular. Being unique in possessing a particular combination of general characteristics does not prevent an individual from being treated as a member of classes defined by criteria held in common but in different degrees and distinctive mixtures. The argument really is about the bases of classes such as gender, race, ethnicity, sexuality, etc.

James Bird has gone so far as to say that the only truly revolutionary change brought on by the new geography was the desire to make generalizations which enjoyed a high degree of empirical support, and that arguments over theory are about which theory – not theory versus no theory – and arguments over quantification are arguments over forms of evidence – not evidence versus no evidence. According to Bird, this revolution happened in 1966.

Although Schaeffer and Bergman were locally in fluenental – Les King says that Bergman was *de rigeur* reading for graduate students at Iowa – only in a whimsical history does the Hartshorne/Schaeffer face off become the spark from which positivist spatial science grew. So called positivist geography actually came about quite independently of this specific debate.

Positivist geography in the form of spatial science developed in the USA during a time when science enjoyed great public trust and respect, largely because as applied through technology it was socially, economically, and politically fruitful. In World War II, science had produced radar, the jet engine, rocketry, plastic surgery, the industrialization of antibiotic manufacture, plastics, rudimentary computers, aerial photography, atomic bombs and nuclear power, the mass production of planes, ships, trucks, cars, and so on. American prosperity and Cold War security relied on science. In Europe, recovery involved rebuilding entire cities, industries, and transportation systems. Science provided cheap, plentiful medications, foremost the range of antibiotics and vaccinations which took much of the risk and fear out of childhood in North America and Western Europe, and high tech health care at first seemed to be capable of miracles. Mankind seemed to have entered an age of dominance over nature in which infectious diseases would one by one succumb to the power of science – or so it was thought. It turned out to be short lived and hubristic. By the early 1970s science's honeymoon was over: social and racial inequity in the USA persisted, spilling over into annual summer unrest culminating in the National Guard patrolling the streets of Detroit in 1969, echoes of Budapest in 1956. The Vietnam war was seen as an immoral high tech corruption of science in the service of the military industrial complex that President Eisenhower had warned about in his farewell address back in January 1961. Only one disease (smallpox) was a serious candidate for eradication, and science's intrusion into daily life seemed to be becoming less benign, altogether more sinister. Public skepticism became the norm, and in geography spatial science was equated with the inability to speak to social and political problems, and the whole lot was hitched to positivist science and thus to positivism. The critiques of so called positivism in the 1970s are very much children of their sociopolitical times.

**Spatial Science**

Human geography as spatial science began in multiple centers of innovation, more a post war sea change in intellectual objectives and expectations than an organized, coordinated, or planned movement. It began in America, spread to Britain, and made common cause with a similar movement that had started quite independently in Sweden. In the USA, the main centers of innovation were the extraordinary coterie of graduate students working under Bill Garrison at the University of Washington in the late 1950s who came to be known as the space cadets, and smaller and less influential groups at the University of Iowa, and Northwestern University in Evanston, Illinois.

The revolutionaries were open to theory from outside of geography: they had to be, geography had no theory of its own. Ever since, geography has been a net importer – one might say, a plunderer – of theory: spatial, behavioral, Marxist, humanist, social, structurationist,
There are several comprehensive interpretive accounts of this period, so the following is only a sketch, thematic rather than chronological.

The spatialists were influenced by the new discipline of regional science that came out of Walter Isard’s pioneering work at the University of Pennsylvania, particularly *Location and the Space Economy* in 1956, and *Methods of Regional Analysis* in 1960. Isard was dissatisfied with traditional economics’ blindness toward the role of space. He drew attention to the ideas of Losch, von Thunen, and Walter Christaller, who all worked within the traditional deductive framework of rationalist reasoning in a world simplified by sweeping assumptions, aided by mathematical and statistical techniques. Spatially oriented geographers adopted the regional scientists’ isotropic surface as the starting point for model construction. The model actor was economic man, ungerdered, rational, a maximizer, infinitely sensitive to changes in the information environment, omnisciently surveillant, computationally perfect, and unencumbered by family or emotion, and above all one who acts alone.

Peter Christaller, geographers – Brian Berry the fore most – found ranges and thresholds of goods and services, described and predicted settlement sizes, understood the distribution of settlements, calculated basic/nonbasic employment ratios, found hexagons – perfect and distorted – in the landscape, especially in the Great Plains of America and the prairies of Canada where life and landscape most closely imitated theory.

Settlements could be nodes at one scale, areas at another. If cities formed systems, then within cities there were systems too. Models of organization based on social and ethnic cohesion and exclusion, played out against a backdrop of land use controlled by bid rent curves, gave us Burgess’s concentric rings, Hoyt’s sectors, or Harris and Ullman’s multiple nuclei model. The whole world’s urban areas were seen through spectacles made in and of America and the prairies of Canada where life and landscape most closely imitated theory.

In the 1960s, spatial science and quantification crossed the Atlantic, carried by Peter Haggett from his summer school visits to America, and by Richard Chorley, the Cambridge geomorphologist who did his graduate work in the US. What sympathizers and converts saw as the diffusion of exciting innovation, many of the old guard, such as Haggett’s head of department at Cambridge, regarded as being more akin to a process of contamin ation. The ideas in *Models in Geography* co edited with Chorley, *Network Analysis in Geography* written by Haggett and Chorley, and *Locational Analysis in Geography* written by Haggett on his own galvanized British geography. David Harvey had finished his Ph.D. (on the geography of the nineteenth century Kentish hops industry!) at Cam bridge in 1961 and was a teaching colleague of Haggett and Chorley before moving to Bristol where he wrote *Explanation in Geography* in 1968, publishing it in 1969. The climatologist/meteorologist Stan Gregory had introduced statistics to undergraduates at the University of Liverpool in 1963, the year he published *Statistical Methods and the Geographer* and the year I began to read for my own bachelor’s degree in geography in that depart ment. We students couldn’t see why we should have to do statistics: most of us were ‘artsie’ mathophobes. By the time I started my postgraduate research at Liverpool in 1967, we had changed our minds, embracing the new ideas, methods and techniques, enjoying the discomfort they caused some of our more traditional professors, young and not so young. Simulations, Markov chains,
factor analysis, principal components analysis, canonical correlation, general systems theory, numerical taxonomy, and allometry – from the work of Von Bertalanfy and D’Arcy Wentworth Thompson, via D. Michael Ray – ‘quantifiers’ took them all on board.

Assume a landscape, assume a decision maker, start the model, watch the outcomes. Androgenous match stick people move over bleak landscapes, guided by superb reasoning and information gathering powers, bent on finding optimal solutions to highly constrained problems, only occasionally diverted by a troublesome cost curve or resource constraint. This conceptual emptying of the world and its repopulation with an army of robotic actors was repugnant to many: it seemed inhuman, and unfruitful to boot. If this was science, if this was positivism in action, if you embrace positivism, then this is the world you get, probably the world you deserve.

In a macro sense the only possibilities to preserve spatialism lay in reducing the gap between the world as it manifestly can be described empirically and the world as predicted from models, by either making the assumed world or the spatial actor more realistic. Behavioral geography attempted to humanize economic man. Gradually, the two elements in this conceptual model, the world and the actors, became more sophisticated. The world became more plural and actors embraced new empiricisms, informed by more realistically complex domains of experiences – gendered, aged, sexualized, oppressed, etc.

Julian Wolfpert investigated the decision making behavior of a sample of farmers in southern Sweden, focusing on rationality and optimality. He found that they actually behaved in a rationally suboptimal fashion, choosing a strategy which Wolfpert called “satisficing” – settling for “enough” with a reduced risk of failure, rather than going for “the most” with an elevated risk of losing.

In Behavioural aspects of the decision to migrate Wolfpert brought concepts from social psychology to bear on the quintessential spatial process, human mobility. Here, decision making based on calculating and choosing among place utilities is rational with respect to the information available to the decision maker, largely a function of location within formal and informal information fields.

**Positivism in Geography**

By the end of the 1960s, theory, method, and technique had made their ways into human geography. Philosophy was notably absent, despite it being widely recognized that the new methods at least implicitly brought along a relationship with science. Michael Hill in *Positivism: a hidden philosophy in geography*, argued that positivism entered geography by piggybacking on quantification, and that it needed to be ‘exposed’. Hill even developed a question and answer self diagnosis test so that students could find out if they had become unwittingly infected with positivism.

Human geography as spatial science reached its zenith in Ahler, Adams, and Gould’s *Spatial Organisation: The Geographer’s View of the World*, published in 1971. The first full and explicit account of the methodology underlying spatial science – David Harvey’s ‘Explanation’ – had been published 2 years before.

By the end of the 1960s, many geographers had come to treat science and positivism as synonymous. The image which human geographers hold of science rarely comes from close acquaintance with original ideas in or about science and philosophy. It emerges from a few guidebooks, attempts to make coherent stories out of issues in science, philosophy, and geography. So, to some extent it was inevitable that these interpretations became opinion leaders. Geographers were grateful that someone had carried out the task of interpretation and summary for them, but it put them in a relatively dependent position, unequipped to question and challenge the new orthodoxy.

What do geographers believe science to be? Science, positivism, and logical positivism are spoken of in the same breath, and while they are related they are far from being the same thing. The images of science and positivism in geography were established early and once established they endured. By now they are largely taken for granted, part of the furniture. They were largely created by two works – Harvey’s 1969 *Explanation in Geography* a leader, and Johnston’s 1986 *Philosophy in Human Geography*, a chronicler.

Harvey’s ‘Explanation’ was the fullest statement of how the new geography should be done. It addressed the scientific method while categorically eschewing any need to consider explicitly the objects, orientations, values or domains of geography. David Smith has described this indelibly influential book as at once a milestone and a tombstone. It summarized a way of looking at the world that was coming to an end even as it received its first thorough expostulation. It was the starting gun of the race to postpositivism.

Harvey felt the individual personal need to write *Explanation in Geography* in much the way that quantitative geography collectively evolved beyond an infatuation with specific techniques. Starting with statistical analysis – which he cheerfully acknowledges he some times inadvertently misapplied, as did Ron Johnston, David M. Smith, and Peter Gould – Harvey came to see that although a philosophy of scientific method was implicit in quantification, it was not a necessary accom paniment to quantification. As he said, “Although it was no accident that quantification was forcing us to up grade our standards of argument, we could, if we so wished, up grade those standards without any mention of
quantification. The issue of quantification per se there fore faded into the background and I became much more interested in the general issue of the standards and norms of logical argument and inference which geograph ers ought to accept in the course of research” (Harvey, 1969: vii). 

Harvey’s main concern was similar to Gould’s, not a desire to see geography necessarily become quantified but to see it put onto a decent intellectual foundation shared with other disciplines, rather than continuing to claim to have a privileged exceptionalist epistemology which not only separated it from other intellectual enterprises but set itself up as superior. Adopting the scientific method meant at least the setting up and observing of decent intellectual standards for rational argument. He claimed that he was concerned solely with method, not with philosophy. Harvey equated philosophy with metaphysics, with value judgments and speculation, with inwardly directed criteria of knowledge. Basically he equated philosophy with rationalism.

Harvey claimed that what we believe to be the objects and objectives of geographic study cannot be contested on logical grounds, because this belief reflects our a priori judgments about what is and what is not worthwhile. This in turn constitutes our personal philosophy, and so he gave the label “philosophy of geography” to ruminations about the nature of geography, its objects and its goals. These, he claimed, cannot be analyzed away, but they can be clarified, and their coherence can be challenged and (possibly) improved. The aim of the geographer is to describe or explain the things that his or her philosophy designates as being geographical and worthwhile. Harvey saw little difference between description and explanation. But he saw a great deal of difference between ‘phil osophy’ (as he used the word) and method: explanations arise from method and are not value based. They are essentially logical, are at least standardized, and can be contested by comparison with ‘objective’ criteria. He claimed that methodology is value free, and is amenable to be judged to be correct in some final sense. The touchstone for establishing correctness is ‘the’ scientific method. Harvey discussed hypotheses, laws, models, theories, and explanations. He outlined inductive and deductive forms of inference as they relate to the logic of con firmation. He described two routes to knowledge, the Baconian way of working back from the myriad events in the real world toward generalizations based on pattern recognition, and the method of hypothesis formulation and testing based on a priori knowledge. And he described some major model forms which explanations can take. Overall, he argued that science produces relatively cer tain knowledge, that this knowledge is most elegantly captured by high level abstractions which we call theory, which rest in turn on layers of laws, hypotheses, and facts, the whole having an internal coherence which comes from having a methodology in which things can be shown – empirically – to be so. Harvey’s clear preference was for the deductive nomological form of explanation wherein the conclusions which follow necessarily from premisses must be correct if the premisses are also cor rect. He briefly acknowledged – but did not develop further – the difficulty that the information content of premises (which basically are about the real world) arises from our believing that we already ‘know’ some things to be true, before we embark on the process of deducing other things that we then believe to be demonstrably, logically true. The foundation can only be provided by inductive inferences about the world, based on sense data, and to this extent they cannot fit with the standards by which truth can then be established. This sort of circularity is unavoidable in our reasoning.

Harvey further separated explanation from the ‘human’ acquisition of knowledge by concentrating only on the logical ‘form’ of explanation. The price of this is that the ‘human’ activities which lead to knowledge are ignored, and the social processes of getting and communicating knowledge are shunted to one side. The behavioral aspects of science as an organized activity, the product of a community with rules and practices that are neither self evidently appropriate nor universally unquestioningly shared, remain unexamined.

The kinds of geography that are possible in the world according to early Harvey have been criticized for being (1) mechanistic, (2) unable to account for human actions because the motivations, perceptions, and intentions of actors are not included, (3) based on unsustainable ideas of value freedom or objectivity, (4) unable to ‘really’ account for social and political deprivations and injustices, (5) supportive of the status quo, and so on. All these sins have been lumped together in geography as being the necessary outcomes of positivism, the brand of epistemology allegedly put forward by Harvey.

In the early 1970s it became easier and easier to question the social appropriateness of technology, of science, of the epistemological respect given to empirically verifiable knowledge. In geography the ques tions grew out of the relevance debate – a response in part to the persistent and deepening social and eco nomic divides within affluent nations – and focused on an examination of positivism as geographers had understood it. The annual meeting of the A. A. G. in Boston in the spring of 1971 was a watershed. By 1973 Harvey, in an about face of Wittgensteinian surprise and courage, repudiated Explanation, and has never returned to it. Explanation in Geography is generally seen as the definitive positivist statement in geography. Yet nowhere in its index ‘positivism’, ‘Comte’, and ‘logical positivism’ are found. The bibliography shows Carnap on prob ability, Bergman on the philosophy of science, three
papers and one book by Hempel (one of the Berlin group), and three publications by Reichenbach (the leader of the Berlin group). On page 8, the expressions ‘logical positivists’ and ‘logical positivism’ make their only appearances. If positivism is there, it is implicit.

Harvey’s book was original in that it brought many intellectually ‘foreign’ ideas into geography as part of a long and coherent argument concerned with changing the way in which we should ‘do’ geography. It was a formidable attempt to persuade us to change our minds. The second book which played a major part in forming geographers’ collective image of science is Philosophy and Human Geography, which passed rapidly into a second edition, an indication of both the pace of change and of the demand for guidance in this difficult area. Johnston drew the more philosophical threads out of his earlier book on Geography and Geographers and attempted to survey and interpret the enormous surge of material in post explanation geography, and to link this to the trends in the philosophy of the social sciences. This is a self described ‘primer’, a survey and interpretation rather than an extended original argument, but its influence was probably all the broader as a result.

According to Johnston, the origins of positivism lie in the works of August Comte, published between 1830 and 1854. Comte believed that science was the only valid method of investigation and that science developed natural laws, the understanding of which gave scientists the means to manipulate phenomena because they were able to intervene in natural systems with confidence that the effects of their interventions would be predictable. Comte claimed that the same capabilities were, potently, available in the social sciences; that is, the model of investigation should be the same even when the subject matter was markedly different, and the goal of uncovering laws as a sound basis for action was similarly ubiquitous. This sort of sweeping confidence was not uncommon in the Victorian era, and it reflected in part the feeling in the natural sciences at the time that the correct view of the universe was Newtonian, deterministic and mechanistic, and that the natural sciences were drawing to a close as the finishing touches were being applied to the church of reason.

Johnston stated that although the emerging social sciences were influenced by Comtean positivism, the major impact of positivism came from the logical positivists working in Vienna between the World Wars. “The logical positivists very largely accepted Comte’s scheme of a positive science. They codified it with regard to current practice and focused most of their attention on how scientific enquiry might be conducted so as to lead to firmly established generalizations.” In fact, as we have seen, the connections between Comtean and logical positivism are neither as direct nor as explicit as Johnston suggests.

Johnston (1986: vii) suggested that “…three competing philosophies (termed approaches here because each embraces a variety of related viewpoints) dominate contemporary human geography.” They are positivist approaches, humanistic approaches, and structuralist approaches. In the positivist approach Johnston mixed together Comtean positivism, logical positivism, the “scientific method”; the “positivist conception of science”, the “standard view of science”, and the “positivist attitude”.

By his own admission Johnston constructed his account of positivism entirely from secondary sources: there is no direct engagement with the ideas, writings or history of the logical positivists, positivism’s inventors. There are no positivists in the bibliography. Popper is there, and Ayer, neither of whom were members of the Circle. Johnston relied heavily on the views of Russell Keat, whose opinions on Social Theory as Science (the title of the book he coauthored with John Urry) were geared anted to put him at ideological odds with positivism, somewhat like asking the fox for advice on how to defend the hen house.

Where Harvey provided the first substantial account of scientific method for geographers, all too glibly labeled positivism, Derek Gregory developed the first substantial discussion of possible alternatives to positivism. Gregory focused almost exclusively on Comtean positivism, not logical positivism. He chose to locate his case for a critical social theory in a detailed critique of positivism in which he gave primacy to the Comtean rather than the logical variety. Gregory worked through a closely argued examination of the theory of scientific knowledge developed by August Comte in the 1830s, which made claims for a unified science of the natural and social worlds and which clearly conceived of mankind’s passage through phases of knowledge in terms of evolutionary, unidirectional maturity. He linked Comtean positivism to logical positivism which he clearly considered to be derivative and of lesser importance, so gave it scant attention. He wrongly identified Wittgenstein as the dominant figure of the logical positivist movement, and gave the logical positivists credit for developing the distinction between analytical and synthetic statements when it is actually Kantian. Ideology, Science, and Human Geography is critique: a certain image of positivism is necessary to launch and justify Gregory’s championing of radical social theory.

Gregory’s early exploration of science as ideology has grown into one of modern geography’s major intellectual explorations, of social theory, of the geographic imagination, of writing and representation, so it is perhaps a little churlish to point out that it started out by giving undeserved prominence to a form of positivism with faults and limitations quite different from those of the more relevant positivist variety. But Gregory seems to be
a little uncomfortable with his own framing of positivism: he warns that his account is a “caricature” of positivism's more striking features, and that such a “casual dismissal of one position” hardly justifies “the adoption of another” (Gregory, 1978: 48).

What’s Next?
Harvey gave us a treatise on method with scarcely a mention of positivism, Johnston said it was all second hand, Gregory said his account was caricature. So, why did we buy into the standard version of positivism – as Bennett describes it in Replacing positivism in medical geography – as the blending of Comtean positivism, logical positivism, science, empiricism, science politics, scientism, quantification, and so on into one unholy mix where the subtext is that positivism is shallow, reactionary, oppressive and on the side of the status quo?

In The Geographic Tradition, Livingstone (1992: 321) concludes that “…the label “positivist” within the geographic tradition has simply been used as a convenient term of reference under which to subsume its modern scientific aspirations, namely as a designator for a parsi monious orientation toward a mathematized account of the distribution of observable entities. Geography rarely engaged in any profound way the positivist epistemological logical program.” Perhaps it is past time that it did so engage.

Positivism is a philosophy of meaning, of what it means when you say that something is true, when you offer it as something which others ‘must’ also accept because it is, according to some allegedly neutral standard, true. It seems that the reaction in geography to positivism was misplaced, and was really a reaction to the particular sorts of work being done in the name of science. Spatialism and positivism became linked in the geographer's mind, but they do not necessarily imply each other at all. The real question is: is the kind of science which was done under the heading of spatial science the kind of positivism we claim to know it only for ourselves. There is little chance of harm in this. But to claim to know how things really are based only on intuition – which by definition is private – is potentially dangerous because it is, as the positivists clearly understood, a claim that is social, that others must contend with. History is a sorry chronicle of miseries inflicted by those who know on those who know something different. Pluralism in the sense of epistemological richness is no guarantee of tolerance. Positivism says we should beware of those – geographers among them – who just know, and who proclaim rather than demonstrate the propositional truthfulness of what they know. Claims to know are coercive: intuitionist claims to know are dangerously coercive.

In A Short History of Philosophy (1996: 276), Solomon and Higgins pitifully put the case for engaging directly and explicitly with positivism. “The positivists were not…narrow minded science fanatics and logic choppers. They were… champions of sanity in a world going insane…There is more than enough nonsense in the world, claimed the positivists and it is the job of phil osophers, to the best of their abilities, to make sure there is no more of it.”

In philosophy, a cyclical rather than a unidirectional interpretation of change suggests that a swing away from the current dominance of epistemological constructivism back toward some form of positivist empiricism is not out of the question. So perhaps it is fair to ask what can come next in a geography currently infatuated with a host of ‘posts, postcolonialism, postpositivism, post structuralism, and postmodernism’. What can be post the ‘posts’? Perhaps many extremes are being reached, and they claim to know it only for themselves. There is little

Further Reading


Possibilism
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Glossary
Determinism Broadly speaking, the view that all events and actions result from knowable laws and processes.
Environmental Determinism The view that culture or human action is determined by the characteristics of the environment.
Genre de vie A relatively stable way of life which relates environmental and cultural resources.
Neo-Kantian Conventionalism A philosophy of science which insists on the conventional aspect of scientific statements.
Possibilism A theoretical approach to the study of the human relationships to the environment whereby human initiative is recognized as significant.

Introduction
As an explicitly formulated theoretical approach, possibilism was first forged by French geographer, Paul Vidal de la Blache at the end of the nineteenth and early twentieth century. However, as it encompasses, or cuts across, many of the various ideas which have been developed about culture/nature relationships throughout history, the term is often used in a loose sense, that of an approach which sets forth human freedom of action vis-à-vis the environment. Although too loose a definition, it refers to a rich repository of ideas which extends back to ancient times. The issue of environmental influences on culture was already interestingly formulated in the Hippocratic corpus and it continuously inspired students of history and places. As shown by C. J. Glacken in his 1967 masterpiece, *Traces on the Rhodian Shore*, three major themes have been used throughout the history of Western thought on culture/environment relationships. The first one is based on the idea of a designed Earth, whether for human purpose or not; interestingly enough, determinism of human action is not always implied by this theme, because the issue of the human responsibility for caring or managing the Earth is often invoked as a consequence of living on a well organized Earth the functioning of which should not be disturbed. The second widespread theme is that of environmental determinism on human life, and it is more precisely the theme which possibilism takes an issue with. It also builds on the third theme, that of the human transformation of the Earth, taking into account the ancient, but growing, impact of culture on its aspects and functioning. In other words, environmental determinism has rarely been considered as the sole explanation of human differences on the surface of the Earth, even among authors who are cited for having made significant use in their writings of this type of argument (e.g., Hippocrates, Herodotus, Machiavel, Botero, Bodin, Montesquieu, Ratzel, Semple, Huntington, Toynbee, etc.). There were always arguments in favor of other explanatory determinisms, whether spiritual, social, or economic.

Even though the attitude which demonstrated reluctance for giving primacy to environmental determinism had always been widespread, it was rarely formulated within a theoretical approach. However, this issue strongly came to the forefront of scientific thought in the nineteenth century, when the various strands of evolutionism attracted attention toward the environment as a key factor in the becoming of species and cultures. If the environment is the motor of historical and social evolution, can we establish a geographic science outside of an environmental deterministic approach? This is why possibilism as conceived by Vidal de la Blache took on such importance in the history of geographic thought and must be focused upon first, in order to give perspective to subsequent interpretations by historians and geographers and to contemporary attempts to address similar issues. What is most interesting with Vidalian possibilism is the grounding of the culture/environment debate on firm epistemological foundations.

Vidalian Possibilism: Its Neo-Kantian Conventionalist Foundations
Paul Vidal de la Blache (1845–1918) was a prominent figure of French intellectual life at the end of the nineteenth and beginning of the twentieth century. While founding what came to be known as the French school of geography and institutionalizing this discipline in the university system, he was influential in societal and political issues (such as education, colonization, region alization, city planning, World War I peace negotiations, etc.). His key positions held first at the Ecole normale supérieure and then at the Sorbonne, as well as his numerous journeys abroad, especially in Germany, placed him at the crossroads of many philosophical and scientific currents. Those provided many of the elements of the possibilism which he put forth, and they facilitated his formulation of an approach which had the originality
of combining up to date scientific breakthroughs with a well informed philosophy of science.

The importance of epistemological issues for studying culture/environment relationships is well illustrated by the deterministic trap set by a rhetoric of the scientific law. It has frequently been observed that environmental determinism is present in texts by authors who definitely do not have it as their general philosophy of culture/nature relationships. This is a methodologically induced determinism, resting on a positivistic conception of scientific laws, that is, universal and necessary relations which explain cause and effect among phenomena and allow prediction; a phenomenon is thus explained when it can be conceptualized as an instance of a more general, lawful relationship. In this positivistic perspective, an observed influence of the environment on culture is methodologically treated as significant insofar as its explanation can be couched within a lawful statement. Thus, the positivistic concept of a scientific law as a universal, necessary relationship contributes to environmental determinism in geography. It also induces a fragmentation of the field into restricted, separated branches, where it is easier to use or find laws bearing on the studied phenomenon. The diverging of physical geography (resting on natural laws) and human geography (resting on economic or other laws) can often be related to this rhetoric of laws. This positivistic view of science could not give epistemological foundations to Vidalian possibilism.

In the 1870s, when historian trained Vidal de la Blache was beginning to build his conception of geography, a new philosophical milieu was being brought by the ‘return to Kant’ which affected France (especially through the philosophical essays of Lachelier, Renouvier, Boutroux), as well as other countries, including Germany, with specific styles and concerns in each national context. Although it was primarily intended to provide modern political and moral bases for the new French republic, it brought a significant revision of the positivist philosophy of science. Its emphasis on the cognitive capacities of the human mind made neo Kantianism provide a framework in which the autonomy of the mind, and thus human freedom, could be enhanced at the same time as science would not be depreciated. This approach led to ‘conventionalism’, as heralded by scientists and philosophers such as Henri Poincaré, Pierre Duhem, Paul Tannery, Edouard Le Roy in France, or Ernst Mach in Germany. For them, especially for the best known Poincaré and Duhem, scientific theories were like pigeonholes for classifying facts, for storing observed information – the main criterion for the appropriateness of a particular pigeonhole being simplicity. Building on Kant’s idea that the mind imposes order on the world, the general view was that the scientist gives to his thoughts the form of a hypothesis about the reality of things, while at the same time it was accepted that there was some real, essential agreement between nature and the mind. This epistemological orientation showed the relativity and arbitrariness of scientific theories with respect to reality; it also integrated the creative role of the scientist, con sequently, it emphasized the hypothetical and heuristic character of all scientific generalizations.

It has been shown that Vidal belonged to the same ideological position in French society as the philosophical, scientific, and political promoters of neo Kantianism, and that an intellectual affinity was uniting them. The contention that Vidalian geography was consistent with French neo Kantian conventionalism is illustrated by comparing Poincaré’s definition of science given in his 1905 book La Valeur de la Science. "Now what is science/… it is before all a classification, a manner of bringing together facts which appearances separate, though they were bound together by some natural and hidden kinship. Science, in other words, is a system of relations," with Vidal’s definition of geography in his 1913 paper on the ‘caractères distinctifs’ of the discipline: “What geography can bring to the common fund, in exchange for the help it receives from other sciences, is the ability not to break apart what nature has brought together, to under stand the correspondence and correlation of phenomena, be it in the all encompassing terrestrial environment or in the regional milieus where these phenomena are located.” Vidal’s conventionalist attitude is further reflected in his writings. He did not claim an absolute reality for the groups of phenomena which he identified and investi gated, as he was imbued with the idea of the relativity of concepts and theories, which were viewed as heuristic devices to approach the study of relationships. For example, he took care of talking of only the ‘notion’, or the ‘idea’, of milieu. He also referred to milieu as a ‘guiding principle’, that is, according to the terminology of the time, a higher order convention, a convention which has not been disproved. Vidal talked also of the Darwinian ‘theory’ formulated by Moritz Wagner on the migrations of organisms and of Ratzeu’s ‘theory’ of the growth of States. This attitude is clear in Vidalian regional geography. The concept of region represented the reality of relations existing within a certain set of phenomena, but the region thus distinguished was not given an absolute reality. Instead, several types were distinguished according to the type of relations focused upon: the natural region, the historical region, the economic region. A similar conventionalist attitude is most clearly revealed in Vidal’s discussion of the principle on which to found a general geographical approach it is what he termed the ‘idea of terrestrial unity’, and referred to as a ‘principle’ on which a certain point of view and related methods could rest. It bred the notion of ‘terrestrial organism’, which always remained
for Vidal – he made it clear – an idea, a sort of validated working hypothesis.

Then, how was explanation achieved? How was the environment included in the search for causal relationships? Most noteworthy, if the words cause and effect are found in Vidal’s writings, the expressions which appear most frequently are ‘series of phenomena’ and ‘enchainment’. This stress on causal series and causal successions or sequences was a basic tenet of Vidalian methodology. By bringing geography into close contact with the natural sciences, Vidal hoped to contribute to the social scientific endeavor, as it was well stated in his 1904 lecture on the ‘relationships between sociology and geography’: “The study of human societies will certainly acquire new in sights if it situates itself in the line of perspective of physical and biological phenomena, upon which and by means of which man’s intelligence acts,” as claimed. In short, human geography derives its explanatory power from its close association to physical geography. However, explanation of a phenomenon comes from placing it in a sequence, rather than from striving to subsume it under a universal law: In Vidal’s 1905 paper on ‘La conception actuelle de l’enseignement de la géographie’, he made it clear that the geographer “will have given facts their explanation, or at least what one may designate by this word in the human sciences” when “he will have assigned to facts the place which belongs to them in the sequences of which they are a part,” as claimed. This view presented the advantage of providing an explanation for a singular, unique phenomenon, which was often called an ‘individuality’. Most of all, it allowed Vidal to dissociate the idea of law from that of causal explanation, that is, necessity from causality. Possibilism could be scientific without rejecting determinism.

However, a problem then arises. A phenomenon results from complex relationships, as underlined by Vidal in his 1913 paper ‘Des caractères distinctifs de la géographie’: “The eminent thinker Henri Poincaré, very attentive to things geographical, expressed himself thus in one of his last writings: ‘The state of the world, and even of a very small part of the world, is something extremely complex and depends on a great number of elements’.” As it is clear that the combination of all the causes which produce a certain effect can never be repeated, how are causal explanations possible? Should not some role be given to chance? In fact, the debates among French neo Kantian philosophers focussed on contingency, its definition, and its extent in nature. Suffice it to say here that contingency echoed the neo Kantian solutions given to epistemology: the emphasis on the delicate interplay between empirically given nature and the ability of the mind to conceive it inspired the view that relative freedom and creativity could be noticed in all other ways of human activities. According to Vidal’s conception of science, geography selects certain phenomena out of the mass presented by nature, and it studies their interrelation ships from its own disciplinary viewpoint. Similarly, Vidalian possibility stated that human beings select uses of the environment out of the many possibilities presented by nature, that is, human activity is not bound to an optimum, determined use of the Earth. The type of use depends on culture, which is both inherited and continuously elaborated through the interaction with the environment. Thus, different uses – all of them economically valid – could be made of the same portion of the Earth’s surface. In other words, according to particular culture, and associated technological knowledge, human action selects certain elements (i.e., possibilities) in nature and relates them to each other to create new forms of social, economic, or political organization to serve its needs. As Vidal put it in his Tableau de la
Geographie de la France, published in 1903, “a geographical individuality does not result simply from geological and climatic conditions. It is not something delivered complete from the hands of Nature. It is man who reveals a country’s individuality by molding it to his own use. He establishes a connection between unrelated features, substituting for the random effects of local circumstances a systematic cooperation of forces.” This human structuring of nature operates at all scales. For instance, in his 1911 important papers on ‘the genres de vie in human geography’, Vidal writes that “a field, a pasture, a plan tation are typical examples of associations created to suit mankind.” Other examples are regions, pays, countries, cities, and most importantly, ‘ways of life’ (genres de vie) which were to become one of the privileged concepts in Vidalian possibilism. Noticeably, all these notions or concepts are both constructs and mediations: they are constructed through human action from a mix of material and social elements, and they mediate the human rela tionship to environmentally given nature.

Vidalian possibilism did not rule out environmental determinism any more than scientific determinism. For Vidal, the search for environmental influences in human activities always remained a relevant question, however among others and within a possibilist framework which encouraged a focus on mediations rather than on direct influences. In addition, human freedom to organize the Earth’s surface according to the perceived needs is bound by environmental limitations and associations which derive from the deterministic laws of nature. Further more, human activity had the power to cause or originate ‘enchainments’ which then necessarily obeyed scientific determinism, because, as Vidal wrote in his 1889 review of Ratzel’s work on political geography, “[man] triumphs over nature only by means of the strategy which it imposes on him and with the weapons which it provides him.” In other words, possibilism was set within an ecological viewpoint, and this was facilitated by Vidal’s effort to take advantage of natural sciences. He was particularly interested in the self organizing power of ‘milieu’, insisting in his book Principes de Geographie Humaine, published posthumously in 1922, on the idea of “a composite milieu, endowed with a power capable of grouping and holding together heterogeneous beings in cohabitation and reciprocal correlation.”

The originality of possibilism was that it approached the contribution of natural sciences through the lenses of neo Kantian epistemology and philosophy. The most significant outcome of this approach was the way neo Lamarckism informed Vidal’s theoretical outlook on evolution. Although he refused to debate the various nineteenth century evolutionary theories, he necessarily leaned toward aspects of them when he had to borrow from natural scientific theories in order to deal with the role of milieu in the evolution of species and human activities. In fact, although the opposition of Darwinian and Lamarckian theories structured part of the debates, Vidal chose to borrow from both of them. Actually, they often were not perceived as contradictory and, above all, it was much more neo Lamarckism which inspired the framework that plant ecologists were elaborating for this new science. Vidal took inspiration from it in order to give scientific legitimacy both to his overall ecological view of human geography and to his emphasis on human initiative in relation to the environment. He took from Darwin the idea of a milieu which is complex, unstable, often fragile, and always subjected to chance. However, he demonstrated a definite reluctance to make use of the mechanistic concept of environmental selection (survival of the fittest). In line with the neo Lamarckians, he briefly mentioned the struggle for existence but definitely preferred to focus on adaptive processes. For them, nat ural selection – to the extent that it played a role – explained the elimination of species but not their creation. Vidal stressed the fundamental idea of neo Lamarckism that adaptation is a key process which is not mechanical but rather depends on the initiative taken by the organism. Through this active view of adaptation, neo Lamarckism reinforced the neo Kantian emphasis of the autonomy of the subject.

Thus moral neo Kantian considerations could find an echo in the theoretical framework fit for neo Lamarck ism. It insisted on effort, and therefore will, which could be determinant in the interaction with the environment. The primary issue was not natural selection, but rather adaptation. Furthermore, this active adaptation process usually relies on cooperation in order for a group to meet its needs. Again, neo Lamarckism echoed neo Kantian moral considerations on society, as the latter promoted the ideology of solidarity as the major social, economic, and political process to be reckoned with. Moreover, adaptation is a reciprocal process: a species or a culture makes efforts in order to adapt to its environment, but, at the same time, the former transforms the latter. These are major tenets of possibilism: reciprocal interaction, the construction of new mediations, and their moral dimension. It is both interactionist and constructivist in its conception and outlook.

Neo Lamarckians tried to offer new perspectives on evolution by stressing the role of habits of life in causing new body structures to emerge. Although this aspect of neo Lamarckism was submitted to severe and growing scientific attacks at the end of the nineteenth century, the very idea – whether proved or not – that acquired characteristics could be inherited just reinforced already existing and widely held opinion on the force of tradition in human history. In Vidal’s view, this mix of philo sophical and neo Lamarckian views converged toward the ‘force of habit’ which presides over the relative sta bility of ‘ways of life’, once they have emerged from the
adaptive process to new environmental conditions. Nevertheless, the most significant aspect of possibilism is much more related to human initiative than to a static view of human culture. This is because both neo Lamarckism and neo Kantianism converged in the effort for taking into account the apparent finality which is at work in adaptation. However, this is a finality which is, in Kant's terms, internal to the beings considered. Thus, in *Principes de Géographie Humaine*, Vidal spoke of 'intention' in order to show mankind's general will to transform nature in certain directions, as 'one may observe, despite the variety of materials provided by nature, a resemblance among the processes of transformation employed ... This reveals that it is intention which prevails over the transformation of matter, and that it is through his inventiveness that man makes his mark,' and he adds, in a very neo Kantian way: 'The unity of the human spirit is sufficient for its manifest ations to be nearly similar.' Vidal stressed, by associating them, the notions of intention, initiative, will, and artistic sense, showing that the human transformation of nature is analogous to "what sustains the artist in his struggle against matter, in his effort to communicate to it his inner feeling." (ibid) Vidal noted that art was an example of intentionality in the human interaction with the en vironment. The idea of a significant role devoted to human initiative in the evolutionary process became in increasingly important among followers of Vidal, as views on 'creative evolution' were being developed in the early twentieth century by Bergson and various thinkers.

In other words, neo Lamarckism served the purpose of giving scientific legitimacy to the possibilist theoretical approach formulated by Vidal de la Blache. It allowed him to stress the role of milieu, *genres de vie*, and all other mediations between nature and culture. At the same time, making use of neo Kantian epistemology and moral philosophy, he could acknowledge the role of contingency, while enhancing free will, initiative, and cooperation. Clearly, Vidalian possibilism was not anti deterministic; rather, it provided a balanced theoretical approach to the study of the nature–culture relationships. Paradoxically, possibilism has often become associated with human freedom of action vis à vis the environment and sometimes quite synonymous with antideterminism. How did such a semantic diversion in favor of a radical possibilism occur? There were several sources for this paradoxical shift.

**Historians of the Annales and the Great Diversion**

An important element in the becoming of possibilism was its promotion in intellectual and academic life by French historians. The impact of this interest is paradoxical, in that it gave great diffusion and respect ability to the approach among the human and social scientists at the same time as it restricted its significance for the development of geography.

Possibilism was heralded by Lucien Febvre (1878–1956) in his book on *La Terre et l'Évolution Humaine*. Introduction Géographique à l'Histoire, which contributed foundations of what came to be known as the Annales school of history, and it set the types of relations that this discipline planned to establish with other human and social sciences. Febvre's book was a plea for Vidalian possibilism as the best way for approaching human interactions with the environment, an approach fit to define the contribution of geographers in relation to other human and social sciences. His enthusiastic glorification of Vidal's contribution had a two fold sequence: On the one hand, it drew historians closer to the contribution of Vidalian geographers, and later on, favored exchanges among them. However, on the other hand, it framed geography in a reduced intellectual role vis à vis the study of society: this is because the role of geography is viewed as that of identifying the deterministic influences of the physical environment when they are important, that is, mostly at the beginning of the historical processes responsible for the various forms of society. This recurrent difficulty in defining the relative role of geography and history was detri mental to the development of possibilism by geographers.

Vidal had been careful in avoiding this pitfall, especially as he was a historian by training and made sure to develop rich intellectual relationships with them. When he was asked to write a *Tableau de la Géographie de la France* as the first volume of historian Ernest Lavisse's *Histoire de France*, he was trekking in the tradition that many nine teenth century historians had to clarify the stage on which history develops. He especially had a famous precursor, Jules Michelet, who wrote a well known *Tableau de la France* in 1833 as part of his *Histoire de France*. He was convinced of the importance of the 'geographical factor' in the historical evolution of France, that is, in the early Middle Ages, when the various 'races' which had migrated into former Gaule had intermixed and settled permanently. This is why the *Tableau de la France* con tributed only the second volume of the *Histoire de France*, the first volume stressing the early ethnic history. Finally, starting with the late Middle Ages, institutions came to the fore as a determining factor. Thus Michelet's idea was that ethnic and environmental determinisms were important only in the early evolution of a country. Then, freedom (liberty), which manifests itself in laws and social institutions, overcomes fatalty: "Freedom is strong in civilized ages, nature in barbarous times, when local determinism is all powerful, and mere geography is history." Even if possibilism did not exclude the search for environmental influences which were thought to be
more perceptible in isolated, primitive groups, it could not follow Michelet on such a deterministic slope for characterizing the task of geographical research. Michelet's enthusiastic emphasis on freedom had led him into radical possibilism, whereas Vidal's acute interest for the then developing natural sciences made him gain a sense for the complexity of environmental conditions.

Febvre was well aware of this, and his direct know ledge of Vidal's teachings made him want to develop a new conception of history, whereby this discipline should also adopt a more complex view of society (including environmental factors) than focus on mere political facts. Vidal's broad outlook on society, with all its material and spiritual complexity, was more fundamental in the emergence of the Annales school than the possibilism which the latter celebrated. However, in the historians' effort to transform their discipline into a full human and social science, the issue for them was again to characterize the role of environmental conditions. Febvre, like Vidal and others, was then attentive to the relative role of determinism and chance in human history. They all demonstrated interest for the attempts to give theoretical and methodological significance to contingency and probability. Picking up on the contribution of Henri Berr, one of the historians who gave him inspiration, Febvre insisted on developing a broad view of contingency in order to give Vidalian possibilism more significance in this respect. Berr distinguished clearly chance from another form of contingency – 'individuality' – which was viewed as the result of a fortuitous combination of conditions, that is, a relatively stable outcome of the intersection of independent causal series. His discussion was especially relevant for geographical issues, and he gave as examples of individualities the 'pays' and the 'region': they result from the intersection of causal series of the natural and human realms – the pays being identified by the inhabitants themselves, the region by the geographer.

Especially through the concept of individuality, the theory of contingency became a way to capture the idea of creative evolution scientifically. In this perspective, another example of individuality was stressed upon by Febvre: the 'genre de vie'. For him, this conceptualization was a way to integrate human creative evolution into a scientific framework. He suggested just this when he stated that human creativity can be given a place in science in the same way that vitalists gave place in biology to 'spontaneity', the 'faculty to create something new.' Referring to Berr, as well as to Bergson (known for his treaty on L'Evolution Creatrice published in 1907), Febvre tried to show that this place for creativity can be handled as a contingent fact, that is, in terms of probability, and he related it to the biological theory of preadaptation: “Under the cover of this theory, there reappeared in scientific studies a vitalism which revived, to the great scandal of a number of scientists brought up in the blind and uncompromising mechanistic faith, the fruitful and by no means unscientific idea of chance.” Thus, for Febvre, “was not the theory of ways of life, in geography, as Vidal de la Blache formulated it, also a fitting translation of intellectual needs of just the same, or at any rate of a similar character, whether its author was fully aware of it or not?”

In addition to the epistemological extension given by Febvre to possibilism, his illustration of it as encapsulating what is significant in the geographers' contribution to knowledge had several consequences detrimental to geography in the long run. Clearly, geographers first benefited from the prestige of an alliance with leading historians of the future Annales school; they particularly avoided the strains of fighting for their contribution against the sustained attacks made by the newer and ambitious school of sociologists founded by Durkheim, since most of the violent critiques written by Febvre in his book were primarily addressed to them. However, the quality and polemical force of Febvre's arguments weighed on the geographers' conception of their own discipline. As they worked on themes which were not fully recognized in Febvre's defense of possibilism, their contributions became marginalized, somewhat at odds with what had given them respectability and good relations with historians. As far as the presentation of possibilism was concerned, the emphasis placed by Febvre on contingency and detailed regional monographies gave it significance within an idiographic approach: a search for general processes and statements on the human relationships to the environment was illusory, that is geography gets scientific significance only from local, detailed monographies. In addition, Febvre's violent rebuttal of the Durkheimians made worse the relative scientific distance between geography and sociology. Needless to say, the Vidalian interest for environmental influences disappeared from Febvre's presentation of possibilism. Furthermore, in spite of the philosophical extension it received from Febvre, possibilism saw its scope reduced to certain moments in history. The historians' tendency was again to consider that the environment was significant for the establishment of human arrangements or settlements; when these are established, other processes – be they economic or social – become dominant. In other words, this view of possibilism tended to restrict environmental considerations – and thus the geographer's contribution – to initial conditions. The restricted scope left to geography was thus reinforced, and the geographers' early concern for material, daily life, or for cognitive representations and 'mentality' was easily taken over by historians of the Annales.

An analogous critique can be made about Braudel's glorification of Vidal's geographical contribution to knowledge. Fernand Braudel was a leading figure during
post World War II in history and human and social sciences. His masterpieces on the sixteenth century Mediterranean world, on the development of a world economy, or on the identity of France, all concur to demonstrate his appreciation of the significance of geography for history. However, by only glorifying the regional possibilist geography of Vidal and his early disciples, he made it clear that his contemporaries did not write significant contributions. At any rate, in Braudel’s work, geography is confined to an ancillary role in relation to a more encompassing discipline, which is history. And again, this authoritative and prestigious positive discourse in favor of geography actually played against the development of a renewed geographic contribution. Possibilism was trapped in the double bind set by historians to geographers: their contribution is highly valuable as far as they restrict it to partial, initial con- ditions of phenomena, that is, as far as they focus on … environmental deterministic relations.

A Diverse Heritage Among Geographers

While historian, Febvre was heralding possibilism at the cost of making it evolve far from its Vidalian original concerns, geographer, Jean Brunhes (1869–1930) was the disciple of Vidal who most developed the possibilist approach. Although his position at the Collège de France where a new chair of human geography had been created for him gave a wide audience to his views, it did not favor the continuation of his research themes because the Collège was not a doctorate granting institution (as was the university). Pierre Deffontaines was among the few geographers who best carried on some of the many themes opened by Brunhes.

In contradistinction with other Vidalian geographers indulging in Febvre’s interpretations, Brunhes deliber- etely chose not to privilege regional studies. For him, the possibilist approach could best be cultivated through theme oriented research, these themes being provided by the various terrestrial forms of interaction between culture and nature. Starting from the study of these ‘geographical facts’, one could arrive at more general statements about the humanistic significance of the human transformation of the Earth. This humanistic concern ranged from applied, practical recommendations to quasi metaphysical meditation on the becoming of the human being on Earth. Among the best known concerns that he developed from a geographical point of view was the issue of the increasing realm of thought on the surface of the Earth, which Deffontaines referred to by using the terminology created by Vernadsky and promoted by Teilhard de Chardin for dealing with the origin of geographic fact, the inevitable intermediary between nature and man, might be called, according to his 1913 paper Du caractère propre et du caractère complexe des faits de géographie humaine, Brunhes claimed that “Man carries in his mind’s eye a certain representation of the universe which depends partly on himself.” On this representation depends the human selective use of the Earth’s possibilities. This ‘psychological factor’ (to use Brunhes’ term from La Géographie Humaine, first published in 1910) ties and mediates human beings and environ- ment. This is why Brunhes, clearly expressing a Vidalian position, rejected the division of human geography into ‘passive or static’ and ‘active or dynamic’ branches, whereby the former would study the ‘action of nature on man’ and the latter the ‘reaction or action of man on nature’. He argued that human geographical phenomena result from a constant interplay between nature and culture, and, consequently, that possibilism should nurture a holistic approach. The important role given to representations was to be seen in this perspective. Although the concern for them already existed among Vidalians and others, Brunhes’ clear cut contribution on this set possibilism in the incipient cognitive tradition of geography.

His fundamental concept of the ‘psychological factor’ had a very Bergsonian flavor. His colleague at the Collège de France, philosopher, Henri Bergson, held the view of a creative evolution responsible for a state of perpetual change, adjustment, and redefinition, which was similar to Brunhes’ ‘principle of activity’. As he put it, “the human psychological factor, which is thus at the origin of geographic fact, the inevitable intermediary between nature and man, might be called, according to an expression dear to Henri Bergson, ‘the direction of the attention’.” The echoes of this Bergsonian concern for creativity and flux can also be found in the writings of a later member of the French school, Jean Gottmann (1915–94), who was attentive to the emergence of new forms of settlements and of social, economic, and politi- cal spatial organization. However, there was a diffuse and diluted form of Bergsonism which seemed to have spread among most French geographers who did not get their training at the time of Vidal. They overemphasized contingency, shying away from strong causal schemes. Worse, many of them misinterpreted Bergson’s emphasis on the importance of intuition for knowledge; they took it as the legitimation of their relative disdain for formal, analytical, or mathematical analyses. Added to environmental destructions and his support for the conservation pleas in his time brought a worried, if not dark, note to this view and made him much less optimistic than the other Vidalians about human eco- logical future.

A key aspect of possibilism as promoted by Brunhes was the importance of the ‘idea’ that each people held about the world or elements of it – ideas which enhance the human autonomy vis à vis the environment. In his 1913 paper Du caractère propre et du caractère complexe des faits de géographie humaine, Brunhes claimed that “Man carries in his mind’s eye a certain representation of the universe which depends partly on himself.” On this representation depends the human selective use of the Earth’s possibilities. This ‘psychological factor’ (to use Brunhes’ term from La Géographie Humaine, first published in 1910) ties and mediates human beings and environ- ment. This is why Brunhes, clearly expressing a Vidalian position, rejected the division of human geography into ‘passive or static’ and ‘active or dynamic’ branches, whereby the former would study the ‘action of nature on man’ and the latter the ‘reaction or action of man on nature’. He argued that human geographical phenomena result from a constant interplay between nature and culture, and, consequently, that possibilism should nurture a holistic approach. The important role given to representations was to be seen in this perspective. Although the concern for them already existed among Vidalians and others, Brunhes’ clear cut contribution on this set possibilism in the incipient cognitive tradition of geography.

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the biases introduced by Febvre, this tendency encouraged possibilism to slide away from the strong framework provided by Vidal and Brunhes toward idigraphic case studies.

Basically, they juxtaposed a vague rhetorical rejection of environmental determinism and a nonsystematic search for diverse causal connections between the local environment and social characteristics. Obviously, exceptions existed in relation to this broad trend which started occurring in the inter World Wars period and became dominant after. For instance, Max. Sorre (1880–1962) implemented part of the research program set by Vidalian possibilism when he focused on the biological aspects of the human relation to the environment, giving geography its full ecological significance, and establishing new thematic orientations such as medical geography. Other examples include Raoul Blanchard (1877–1965) who tried to adopt the possibilist approach to the study of cities, albeit with mixed results in this respect, or Maurice Le Lannou (1906–92) who criticized most studies of genres de vie for neglecting their social dimension. Mention should also be made of Pierre Gourou (1900–99) who progressively changed his explanatory emphasis from environmental constraints to sociocultural organization. Nevertheless, the dominant Febvrian interpretation of possibilism stopped geographers short from structuring their argument within a theoretical argument; they were left studying local correlations between environmental and social characteristics, with the risk of inducing some deterministic outlook on society.

This was the case with tropical countries where too many geographers who correlated climatic conditions with underdevelopment unwittingly slid into environmental determinism. It clearly begged for reactions, the most strident coming from Marxists geographers, but leading to other (economic and political) determinisms. By the 1970s, Vidalian possibilism had thus progressively disappeared from most French research, as a result of its interpretation as a weak theory.

In other countries, the possibilist orientation inspired many works and nurtured numerous debates. Sometimes, there were strong convergences and collaborations between Vidal himself and a few of his contemporaries. For instance, the Russian geographer, Alexander Voikev showed close to Vidal's conceptions, contributing in 1901 a well documented article for the French school's periodical, the Annales de Géographie, in which he focused on the force of the human impact on the Earth through his power over movable bodies. Cast in more general terms, the idea of the human population as an important transformer of nature laid a receptive ground for Vidalian possibilism. Another source of this receptivity was the felt necessity to combat the strength of environmental deterministic biases in geographical practice. This was often the case in Anglo American geography, and for a long time (actually up to the 1960s) there were sustained debates on the determinism/possibilism theme. However, the tendency to frame the issue as an 'either/or' option made those debates miss the Vidalian approach which was neither deterministic nor radically possibilist.

If at times the Vidalian inspiration was direct, especially in countries which modeled their institutionalization of geography on the French innovations, in many cases it was intermingled with the widespread neo Kantianism which pervaded philosophical and social scientific currents of the beginning of the twentieth century. A case in point comes from English Canada, with the influential work of Harold Innis on the economic formation of his country. But it certainly is the Berkeley (or Carl Sauer's) school which best extended abroad some implications of the possibilist theoretical approach. This was achieved through the full recognition that the study of culture is the key to understand the complex and multifaceted results of the human interaction with the environment. The cultural geography which it inspired gave possibilism its full cognitive dimension, opening it to other research along this line and to new themes relating to environmental perception and behavior.

Thus, possibilism has enticed a whole range of research themes, but, somehow, most of the philosophical and theoretical Vidalian kernel has long ceased to exist. However, its central issue – determinism vis à vis relative human freedom – has come back to the fore and called for a return to the original possibilist discussion.

Now that neo Kantian and classical contributions to the history of geographical thought are less depreciated than before, and that the concern for place is no more rejected as antiscientific even by its formerly most outspoken enemies, the epistemological and theoretical positions entailed by Vidalian possibilism can be revisited in light of the recent attempts at encompassing the relative roles of voluntarism, contingency, and determinism in human affairs. It is noteworthy that key issues on the current geographical agenda include the relationship between different forms of explanation (e.g., neo positivist and narrative), the reemerging interests in vitalism and what the life sciences might contribute back to human geography, the relationships between 'agency and structure' or 'individual and society', and the pressing challenge of sustainability. These issues are all in effect returning to concerns first articulated by Vidal and coded into his vision for a possibilist human geography.

See also: Determinism/Environmental Determinism; Exploration; Lamarchianism; Philosophy and Human Geography; Probabilism; Structurationist Geography; Vidal de la Blache, P.
Further Reading


Definitions

In everyday usage, postcolonial cities refer to those cities (frequently capitals) in what were previously colonial societies. In addition to this temporal or historical use of the term, however, postcolonial may also imply a particular critique, one which not only emphasizes the distinctive impact which colonialism has had on the economy, society, culture, spatial form, and architecture of the city but also on the way the city itself is understood and represented. Thus, some postcolonial critics would reject or deny representations of cities as postcolonial, arguing that this privileges a particular (usually ‘Western’) interpretation of the city at the expense of a more indigenous one. As the terms imperialism and colonialism are often used interchangeably, in what follows, imperialism refers to the imposition of the power of one state over the territories of another, frequently by military force. Where imperialism originates in the metropole, what happens in the colonies resulting from economic, political, and cultural control and domination is colonialism, even though this can take various forms. While the term postcolonial can be used to apply to all historical and geographical instances of colonialism, whether of the Romans in Britain, the Japanese in Korea, or the English in Ireland, this article focuses on European industrial colonialism and its aftermath in the non-European world.

In a less frequent usage, the term postcolonial cities refers to those capitals or major cities of the one-time imperial metropoles, such as Paris, London, Birmingham, or Amsterdam, not only because of the large postcolonial populations they have attracted following the formal end of colonialism, even though this can take various forms. While the term postcolonial can be used to apply to all historical and geographical instances of colonialism, whether of the Romans in Britain, the Japanese in Korea, or the English in Ireland, this article focuses on European industrial colonialism and its aftermath in the non-European world.

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Origins of Interest in Postcolonial Cities in Human Geography and the Social Sciences

In the 30 years following World War II, over 70 states, previously European colonies, gained their political independence from the mid 1950s, a number of mainly North American and European social scientists (geographers, sociologists, and anthropologists), studying aspects of urbanization in Asia, Africa, and the Middle East, began to identify distinctive social, spatial, and cultural characteristics of towns and cities in recently decolonized countries where European traders, settlers, and colonial officials had lived (or were still living) and whose urban development they had largely controlled. With the departure of the former colonial power, these colonial towns and cities had now been inherited by the newly liberated subjects of the independent nation. What these studies described were dual cities, ethnically, socially, and spatially segregated between the ‘European’ town and ‘native’ settlement; the first, modern, spacious, low density, well maintained through the use of town planning, and culturally different from the surrounding environment; the second, usually separated from the first by parks, railway lines, or open space, invariably more densely settled, with traditional housing, social and cultural buildings overcrowded, and lacking in services and infrastructural provision. A powerful condemnation of this phenomenon from French Algeria that simultaneously conveys the sense of oppression and injustice experienced by members of the colonized society is that of the Martiniquan nationalist writer, Frantz Fanon, in his oft-cited critique of colonialism, Les Damnés de la Terre:

The colonial world is a world divided into compartments … of native quarters and European quarters, of schools for natives and schools for Europeans, in the same way we need not recall apartheid in South Africa … The colonial world is a world cut in two. The dividing line, the frontiers, are shown by barracks and police stations. In the colonies it is the policeman and the soldier who are the official, instituted go betweens, the spokesman of the settler and his rule of oppression … The settler's town is a strongly built town, all made of stone and steel … The town belonging to the colonized people, or at least the native town, the Negro village, the medina, the reservation, is a place of ill fame … It is a world without spaciousness, men live on top of each other … The native town is a crouching village, a town on its knees, a town wallowing in the mire. (Frantz Fanon, 1961: 37 39)

While this dual cities phenomenon, though varying greatly between different places, was widely recognized, it is evident from the mid 1960s’ comments of American
sociologist, Janet Abu Lughod, that, despite the occa-
sional observations mentioned above, the subject had not
yet attracted serious theoretical or policy related atten-
tion, either from local or foreign observers.

The major metropolis in almost every newly
industrialising country is not a single unified city, but,
in fact, two quite different cities, physically juxtaposed
but architecturally and socially distinct ... These dual
cities have usually been a legacy from the colonial past.
It is remarkable that such a phenomenon has remained
almost unstudied. (Janet Abu Lughod, 1965: 420)

The years which followed witnessed a number of
serious attempts to remedy this situation. The interest
in human geography and other disciplines came from two
sources. One was the growing dissatisfaction among
geographers, sociologists, and others, increasingly famil-
lar with cities outside the West, of the inadequate state
of comparative urban theory at this time. This was seen as
largely based on Western industrial experience with
theories of urban and city growth dominated by the work
of the Chicago School. For these scholars, serious
thinking about the concept of the colonial city and the
ories of colonial urban development were to take place
between the late 1960s and mid 1970s.

The second impetus came from urban professionals
concerned with policy related issues of urban develop-
ment planning following the end of colonial rule. It was
in these two, often interrelated, contexts that a more
theoretically informed understanding of the notion
of both the colonial and postcolonial city developed.
It was an understanding which recognized that, despite
political independence, the persistence of colonial
structures – represented among others by the grossly
unequal social and spatial divisions of major cities – was
an affront to the democratic aspirations of newly
independent nations. This 'colonial space' of the Euro-
pean part of the city and its distance from the native
settlement was not just based on the standards and
specifications of the so called modern city in the West;
in many cases, in order to satisfy the political and cultural
demands of the colonial elite, it also represented a gross
inflation of these standards. In many postcolonial cities,
decades after independence, while the native area of
the city crumbled under pressure from rapid migration,
indigenous elites occupied the spaces vacated by their
foreign predecessors.

In addition to these real spatial inequalities, however,
the newly independent nation was faced with additional
symbolic contradictions in the city. In different colonial
towns and capital cities, the architecture and urban
design of the imperial power, whether modest or gran
diose, had been consciously conceived to convey cultural
as well as political authority. For the political elite of
the new postcolonial nation, removing monuments and
replacing street names with those of their own
folk heroes was relatively simple; however, endowing
the city with a totally new national identity, one that
draws on its own vernacular cultures, representational
spaces, and modes of signification, was not only a much
longer term project but also, because of competing
regional, ethnic, linguistic, and other tensions in
newly established nation states, a deeply contentious
one. Moreover, more immediate priorities had to be
addressed, such as political stability, land redistribution,
economic development, or providing shelter for the
burgeoning population in squatter settlements. In this
context, transforming the image of the city, projecting
a new identity, had usually taken second place on a new
nation's agenda. In India, for example, it took almost
40 years after independence for the names of India's
one time colonial port cities, such as Bombay, Madras,
Calcutta, to be vernacularized as Mumbai, Chennai, and
Kolkata, respectively.

Representing the City

As with the term postcolonial itself, it can be argued that
the category of the postcolonial city is more of an out
sider's than insider's label. It privileges a representation
of the city which foregrounds its colonial past, rather
than the city's present or future. In this sense, post
colonial can carry the meaning of the failure of
decolonization. Is the once colonial city destined to
be forever postcolonial or can it, like Hong Kong or
Singapore, gradually metamorphose into a world or
global city? The mutability of categories applies equally
to other terms used over the last 50 years with reference
to other cities in Asia, Africa, or Latin America. Where
world space is couched within a developmentalist
framework, rather than one of colonialism and post
colonialism, the same cities are referred to as 'Third
World Cities', a phrase coming into use following the
invention of the 'Third World' paradigm in the early
1990s. In this conceptual framework, they are represented
not with regard to issues of cultural identity, heritage, and
questions of representation, but rather in relation to in
adequate water and shelter provision, unemployment,
and overburdened infrastructure. As all such represen-
tational categories emanate from a globally dominant
anglophone positivism and a discourse originating in
the West, it follows that they are either contested or
rarely used by the inhabitants of the city itself, whether
urban professionals or local residents. However, since
the late twentieth century, new research and scholarship
on the colonial and postcolonial city by scholars native
to the city has resulted in original and interesting per
spectives on both.
Revisiting the Colonial and Postcolonial City

While the earlier studies of colonial and postcolonial cities (principally in English, though also in French and Spanish) produced during the first three or four decades following the end of colonial rule might be described as the first critical accounts of such cities, they have generally located the topic within a European or Euro-American frame of reference. Moreover, as they were generally based on European archives and language sources, the agency for the cities’ development has frequently been primarily accorded to their European inhabitants, with less attention paid to that of the indigenous population. Since the late twentieth century, however, studies by scholars native to the city or country, drawing on previously unused sources, often in local languages, have begun to transform this perspective. Accounts of the development of Singapore, for instance, based on a detailed study of local archives, have challenged the notion of the colonial city as simply the outcome of dominant (Western) forces. They represent the city as a product of indigenous, local agency where the colonized have maintained substantial control over their lives.

Other recent studies of the colonial city have challenged one of the dominant themes of these earlier Euro-American studies, namely, the ethnic, racial, social, and spatial divide between the indigenous city and the European colonial settlement. Detailed historical studies of Delhi, for example, drawing on a variety of different local archives, have questioned the use of dualistic categories of colonizer/colonized, traditional/modern, European/native, old/new, and shown that social and spatial divisions in the city were not nearly so clear cut as has been represented. Instead, there were charged interconnections between the two spaces. The new colonial settlement offered opportunities for some Indian residents to move between cultures and spaces, constructing new identities, identifying with the new by rejecting the old, and creating indigenous modernities. A similar study of Calcutta, making use of local languages, challenges an oft repeated colonial representation of the city as a space marked by a Manichean division between the ‘European city’ and the ‘black town’. While such labels certainly exist on European maps and in the anglophone colonial records, helping to confirm European perceptions of the city, they (and similar terms) are absent in local Bengali accounts of the city, and hence, do not inhibit the movement or activities of local inhabitants. For them, the meaning of the city is not constructed through a perception of colonial spatial divisions but rather as a cradle of Bengal nationalism.

These recent accounts, postcolonial in both senses of the term, show that the space of ‘the colonial city’ is both ambiguous and contested. Most importantly, attitudes have changed over time. The same is true of the postcolonial city, a concept not easy to define. What has happened in the decades since it first came into use is that its meaning has fluctuated, not least because the conditions in which the postcolonial city exists have also changed. This is most clearly seen in relation to the postcolonial Indonesian capital of Jakarta. Here, following the end of Dutch colonial rule in the mid twentieth century, social and political opposition not only returned during the three decades (1966–98) of President Suharto’s dictatorial ‘New Order’ regime, but also their severity and scope increased. In this context, the urban, housing, and architectural developments undertaken by the Dutch have, by comparison, been seen by an Indonesian scholar as relatively enlightened, a ‘colonial gift’ inherited by the postcolonial society and state. Clearly, however, not all postcolonial accounts of colonial cities are so benign.

In this context, how is the postcolonial city recognized? This is not easily answered as cities are not necessarily postcolonial in the same way. The most drastic solution to transforming the colonial city and, in the process, changing the public’s sense of commitment to the nation and promoting a sense of national pride, is to shift the geographical location of the capital, not only building a new city on a new site, but also using spectacular vernacular architecture and an indigenous name to do so, a strategy adopted by Sri Lanka in shifting its capital from Colombo to Sri Jayawardhanapura Kotte. Less dramatic is the construction of a new capitol or parliament building, a strategy adopted by Bangladesh, Papua New Guinea, and Kuwait, among others. Elsewhere, as in India’s capital city, the lavish spatial layout of the central areas of New Delhi has, over the half century since independence, been redefined by the addition of numerous government buildings. Toponymic reinscription is a common way of reclaiming the cultural space of city streets. The urban and architectural attributes of the one time colonial city can also be treated as part of the city’s inheritance and used for the promotion of tourism. Yet such policies are invariably contested. For some, but not for others, half a century after independence, the symbolic significance of colonial buildings has lost its oppressive meaning and become an apolitical part of the nation’s heritage. While such a policy may be enthusiastically endorsed by UNESCO’s International Committee on Monuments and Sites, it can be bitterly resisted by local groups.

In other cities, such as Brazilia, Chandigarh, or Islamabad, modernist architecture has been combined with nationalist rhetoric to create new images for the nation. From the late twentieth century, constructing the world’s highest building, as in Malaysia’s Kuala Lumpur or Taiwan’s capital, Taipei, has become an essentially
competitive strategy for postcolonial nations to 'put themselves on the map' and make claims on others' definitions of modernity. In all these strategies, the aim is to convey to the city's inhabitants a new sense of national citizenship, a new collective consciousness.

Yet, irrespective of these changes to the physical environment, inherent structures of power, inherited from the colonial regime and institutionalized in the centralizing and authoritarian practices of city and state bureaucracies leave an indelible scar on the urban landscape, not least in the post apartheid cities of South Africa.

Cities: Postcolonial or Postimperial?

So far, it has been assumed that postcolonial cities refer primarily to those cities existing in formerly colonized societies. Yet the distinction between postcolonial and postimperial cities can be ambivalent, depending on the position and location of the speaker. Labeling Paris or London as (technically) postimperial cities foregrounds their earlier imperial role without necessarily invoking imperial contexts. Yet postcolonial is increasingly used to describe them, not only because of the ethnic and racial composition of their populations but also because of their public culture and civil society, including matters of education, politics, religion, and culture, among others.

As world space is simultaneously global, postcolonial, and colonial (among other categories), postcolonial histories of migration not only distinguish the population, politics, and culture of one postcolonial (or postimperial) city from another but also from other ‘world’ or ‘global cities’, such as Frankfurt, Chicago, or Zurich. For example, of the roughly one third of population of New York that is foreign born, over half are from the Caribbean and Central America, with significant proportions from Europe, South America, and South and Southeast Asia. Any explanation for the presence of a substantial portion of that population, particularly the English speaking migrants from the Caribbean, South and Southeast Asia, has to take account of colonial and postcolonial histories. This is equally the case with the Spanish speaking migrants from the Caribbean and Central and South America. In London, of the roughly one fifth of the population that is foreign born, the large majority is principally from postcolonial countries, particularly South and Southeast Asia, Ireland, East, West and South Africa, the Caribbean, North America, and Australia, as well as from continental Europe. The same is true of Paris, where about one fifth of the population is foreign born; of these, a substantial proportion are primarily from postcolonial North Africa (Algeria, Morocco, and Tunisia), or Mauritius. Of the legal immigrants in Lisbon, many are from Portuguese ex colonies such as Brazil, Angola, Cape Verde islands, and Macau.

These distinctively postcolonial migrations have major influences on the economy, society, culture, religion, politics, spatial and built environments, and also security, of the city. They bring to the global city a variety of vibrant postcolonial cosmopolitanisms specific to the city (and the state) where they exist. Numerically or economically powerful postcolonial minorities can bring their influence to bear on government policies, both domestic (in regard to immigration, education, or welfare) or foreign (in relation to foreign policy, international disputes, and disaster relief) or in regard to public culture, the arts, dress codes, and media. They shape the definition and nature of multiculturality and create new forms of hybridity in different cultural realms, whether in regard to language, religion, literature, or the arts. Understood in this sense, the postcolonial city can be said to generate not only multiple temporalities but also multiple spatialities. These extend the real and the virtual space of the city and its inhabitants to other urban and rural locations worldwide.

The significance of these real and virtual spaces can be seen in the growing outsourcing of employment (especially in call centers) from cities in North America, Europe, and the UK to the large anglophone labor markets in South and Southeast Asian cities, an aspect of globalization that cannot be understood without reference to a postcolonial urban frame. Employment out sourcing has generated both extensive employment opportunities and office building in major metro politan Indian cities such as Bangalore, Hyderabad, and Delhi. In Paris, most postcolonial minorities (mainly North African) are in the banlieues which, from the late twentieth century, have concentrated the socially and economically marginalized in the peripheral areas of French cities. Structurally equivalent to British and American inner city areas, and often referred to as ghettos, the banlieues provide a space to develop a separate cultural agenda where the inhabitants reterritorialize housing projects that were previously socially anonymous. In Britain, the urban landscapes of (especially) eastern, western, and southern inner suburbs of the postcolonial global city of London have been regenerated and transformed by South Asians, a large proportion of whom, while being united by and sharing the same religion, are nonetheless divided along national and ethnic lines. In the urban enclaves and terraced housing of Britain’s second major postcolonial city of Birmingham, the largest group of South Asian Muslims are from Pakistan, comprising 7% of the city's population. The east Midlands, manufacturing city of Leicester, with almost 10% of its 280,000 population from South Asia, occasionally described as 'Europe's largest Indian city' must also be the most postcolonial of this continent. In the words of Singapore geographer, Brenda Yeoh, not only are the colonial city and imperial
city “umbilically connected in terms of economic link ages as well as cultural hybridization but their ‘post equivalents’ ... need to be analyzed within a single ‘postcolonial’ framework of intertwining histories and relations” (Yeh, 2001: 456–68). In this context, policies of colonial urbanism in the one time colonies can also be seen as being related to the development of racial and class divisions in major Western cities. However, it has to be underlined that individual urban authorities in different countries have their own distinctive policies, whether in regard to questions of housing, planning, education, or other spheres. In multicultural societies, it can be expected that members of particular communities, particularly if they are of recent settlement origin, stay together, with access to their own shops, social centers, and places of worship (as, for example, was also the case with British and other European and American communities abroad).

Long after the formal end of empire, postcolonial memories and associations continue to affect the use of spaces in the one time imperial city. Debates over his toric sites in the City of London, for example, remain bered as the economic and financial center of the Empire, have been used to influence subsequent decisions about urban design. Memories of empire have been kept alive through maintaining the historical importance of par ticular places. Yet, postcolonial as well as postimperial memories can also be celebratory for the multicultural population of the city. This consciousness points to a changing, vibrant future, a new kind of intellectual milieu created by new ethnicities, hybridized identities, and diasporas that create new and distinctive cultures in each unique, geographically and culturally specific postcolonial city. Whether in the cities of the one time metropole or the one time colony, postcolonialism creates both the split, as well as the suture, between traditional and modern identities. It is inextricably linked to the creation of plural societies and transnational cultures.

The more metaphorical (rather than literal) use of the terms, colonial/postcolonial, have also been deployed to refer to urban processes in contemporary Europe. With migrant labor, legal as well as illegal, arriving from all over the world, including postcommunist Eastern Eur ope, filling the lowest paid slots in an ever increasingly globalized economy, there are new colonized populations in Western cities. In this context, features that to a greater or lesser extent distinguish postcolonial populations, such as a language shared with the host society, some fam iliarity with the laws, culture, and social practices of the metropolitan society, a shared, if contested, history, the presence of long established communities, are features which, among others, differentiate postcolonial com munities and migrants from those of nonpostcolonial origin. In the context of these criteria, multicultural Berlin or Zurich differs from multicultural London or Paris.

Various scholars have shown how the postcolonial paradigm has been expanded to cover many historical and geographical instances. Though not sufficient in themselves, postcolonial histories, sociologies, and geographies are nonetheless key to the understanding of a plethora of issues, not just in the multicultural, post colonial, and postimperial global cities, such as Hong Kong, Toronto, or Amsterdam, but in many other cities worldwide. The growth of a postcolonial urban per spective in the last two decades is a result of globaliza tion and migration as well as the extension of virtual worlds through the spread of information and communications technology. It is an essentially comparative, cross cultural, and cross temporal perspective. It results not only from observations of postcolonially mobile authors and their postcolonial mobile readers, but also from more sophisticated interpretations of globalization, from the viewpoint of countries and religious cultures outside the West.

The nature of what is postcolonial about the post colonial city can be radically different in different places and at different times. What is meant by the phrase must always be elicited on the basis of the specific historical, cultural, and political circumstances in which each postcolonial city exists.

See also: Colonialism I; Imperial Cities; Multicultural City; National Spatialities; Race; Urban Architecture; Urban Design; World/Global Cities.

Further Reading


Relevant Websites
http://www.iniva.org
Paul Gilroy: London: Postcolonial City, CellloidCities at Iniva.
Geography and Postcolonial Studies

Engagement by geographers with postcolonial studies can be traced back to the early 1990s. This engagement took different forms in different areas of the discipline: feminist geographers responded to criticisms of Western feminism by black feminists and women in the global South with a renewed focus on the politics of difference; feminist and development geographers began to explore issues of positionality, representation, and power relations that arise through cross-cultural research; historical geographers renewed their interest in the spatialities and critical geographies of empire and colonialism (Blaut’s *The Colonizer’s Model of the World* was an early example); and there was an outpouring of critical historiographies that highlighted the closely bound nature of the history of modern human geography with the history of colonialism (Edward Said’s *Orientalism* was a particular influence within geography). Running through these disparate engagements was a concern with Western centrum – that the previously unrecognised complicities between geography and colonialism had introduced a series of unacknowledged and unexamined assumptions into the very heart of the Anglo American discipline that are profoundly insensitive to the meanings, values, and practices of other cultures. Geographers have thus drawn on various aspects of postcolonial studies in an effort to ‘de-colonise’ the discipline.

Definitions

Postcolonialism is a difficult and contested term. This is because it is sometimes assumed to refer to ‘after colonialism’ or ‘after independence’, describing the wide range of social, cultural, and political events arising specifically from the decline and fall of European colonialism that took place after World War II. However, while European colonialism may no longer exist as before, it is far from clear that colonialism has been relegated to the past. Not only do colonies and colonial powers still exist (Britain and France, for example, still possess scattered territories around the world and Indonesia – in relation to disputed territories in East Timor, Irian Jaya, Sipadan, Ligitan, and Batam – and China – in relation to Tibet – for example, are putative colonial powers) but critics argue that developed nations continue to enjoy economic and political advantages that accrue to them because of the alleged abuses of globalized capitalism. Thus, neo colonialism is seen as a continuation of the domination and exploitation of formerly colonized countries but through different means, primarily inequitable inter national trade and geopolitical relations.
The meaning of postcolonialism is not simply an epochal term and is not limited to 'after colonialism'. Rather, it refers to ways of criticizing the material and discursive legacies of colonialism that are still apparent in the world today and still shape geopolitical and economic relations between the global North and South. As a metaphysical, ethical, and political theory, it addresses issues such as identity, race, ethnicity and gender, the challenges of developing postcolonial national identities, and relationships between power and knowledge, both in terms of how colonial powers produced and used knowledge of colonized peoples in their own interests and in how these knowledges continue to structure inequitable relations between formerly colonized and colonizers. As a literary theory it deals with literature produced both by authors in colonial countries and by colonized peoples responding to colonial legacies by 'writing back', or challenging colonial cultural attitudes through literature. Thus postcolonial theory addresses both the ways in which the literature of the colonial powers has been used to justify colonialism through the perpetuation of representations of colonized people as inferior, and the ways in which writers from (de)colonized countries have attempted to articulate, reclaim, and celebrate their cultural identities.

There is no single definition of postcolonialism and some critics reject the use of the term on grounds that it presupposes a continued socio-cultural dominance by former colonial powers. However, broadly speaking, postcolonial approaches and perspectives can be said to be anticolonial. They have become increasingly important across a range of disciplines over the last 20 years, including both geography and development studies.

Origins and Debates

A number of different strands of thought have contributed to what we now understand as postcolonialism. Just as definitions are complex and contested, there is no single origin of postcolonialism, rather a number of different responses to colonialism and decolonization that have inspired both liberation struggles and academic inquiry. Many of these responses predate the period when the term postcolonial began to gain currency and are now claimed retrospectively as continuous or connected to postcolonial politics and modes of cultural practice. They include the writings of African American W. E. B. Du Bois and South African Sol Plaatje in the late nineteenth/early twentieth centuries, the Harlem Renaissance, the Nègritude Movement of the 1940s and 1950s, the writings of authors and critics as different as Trinidadian C. L. R. James, Nigerian Chinua Achebe, Colombian Gabriel García Márquez, Argentinian Jorge Luis Borges, and many ‘Commonwealth’ writers of the 1960s and 1970s, who are now seen as the precursors of postcolonial criticism. However, major influences on postcolonial theory since the 1980s can be traced to a number of key writers.

Fanon’s Psychology of Colonialism and Racism

Frantz Fanon was perhaps the preeminent thinker of the twentieth century on the issue of decolonization and the psychopathology of colonization. Born in Martinique and active in anticolonial activism in French North Africa, his works inspired both anticolonial liberation movements throughout the world and postcolonial theorists (notably Edward Said and Homi Bhabha). His first book, Black Skin, White Masks (1952) analyzed the impact of colonial subjugation on the black psyche. Based on Fanon’s personal experience as a black intellectual in a white dominated world, the book elaborates the ways in which the colonizer/colonized relationship is normalized. As a colonized subject and recipient of French education, Fanon conceived of himself as French, but felt profound disorientation after encountering French racism, which decisively shaped his psychological theories about culture. Fanon develops an understanding of racism as generating harmful psychological constructs that both blind the black man to his subjection to a universalized white norm and alienate his consciousness (it should be noted that Fanon’s account has been criticized by feminists for failing to take into account the experience of subjugation of black women).

Fanon’s explanation of the effects of being colonized by language was also influential: speaking the language of the colonizer meant that the colonized accepted, or were coerced into accepting, the collective consciousness of the colonial power, which identified blackness with inferiority, evil, and sin. In an attempt to escape the association of blackness with evil, the black man wears a white mask and internalizes white cultural values, creating a fundamental disjuncture between consciousness and body. This focus on alienation reveals the Marxist roots of Fanon’s writings. Fanon’s insistence that the category ‘white’ depends for its stability on its negation, ‘black’, that notions of white superiority cannot exist without an opposite (black inferiority), and that the origins of these notions were formed at the moment of imperial conquest, have been central in postcolonial critiques of colonialism and racism. His subsequent book, The Wretched of the Earth proposed the overcoming of the binary system in which black is bad and white is good through peasant revolution. This faith in the African peasantry and emphasis on language anticipates the work of Ngũgĩ Wa Thiong’o.
Ngũgı̃ Wa Thiong’o and ‘Writing Back’

Ngũgı̃, a Kenyan author and the first East African to publish a novel in English, embraced Fanonist Marxism in his third novel, *A Grain of Wheat*. He subsequently renounced English, Christianity, and the name James Ngugi as colonialist. He changed his name to Ngũgı̃ wa Thiong’o and began to write solely in Gĩkũyũ and Swahili. While in exile following a period of imprisonment, he wrote his most influential book, *Decolonizing the Mind*, in which he argues for Africans to write in their native languages, rather than European languages, in order to overcome the suppressions of colonialism and to build an authentic African literature. Contemporary writers have drawn on Ngũgı̃’s notions of the power of language; some appropriate the language of the colonizers to ‘write back’ from the margins and reclaim postcolonial cultural identities (Salman Rushdie’s novel *Midnight’s Children* is proclaimed as one example, its liberal mix of English and Indian languages being a departure from conventional Indian English writing).

Subaltern Studies: Postcolonial History, Nationalism, and Identity

The Subaltern Studies Group emerged in the 1980s as a collective of scholars (including Ranajit Guha, Gyan Prakash, Dipesh Chakrabarty, Gayatri Spivak, and Partha Chatterjee) interested in the postcolonial societies of South Asia in particular and the developing world in general. Originally the collective adopted an approach, inspired primarily by Gramscian Marxism, of history from below, focusing on the lives of peasants—subalterns—rather than on elites. This was intended to counter colonialist versions of (primarily Indian) history and the elitism of bourgeois nationalists in the historiography of Indian nationalism, both of which had been apparent in debates in the 1970s between Cambridge University scholars and orthodox Marxist historians in India.

The focus on subaltern histories of insurgency and the role of nonelites as agents of political and social change, together with an engagement with complex processes of domination and subordination meant that the Subaltern Studies Group played a vanguard role in postcolonial theory. The collective made particularly influential contributions in studies of the active participation and intellectual creativity of subaltern classes in processes of nation state formation, in elaborating the discourses and rhetoric of emerging political and social movements (in contrast to highly visible actions like demonstrations and uprisings), and in attempting to recover the silenced voices of the formerly colonized without losing sight of the structural inequalities between the dominant and the subjugated. Tensions eventually grew within the collective between those who subscribed more closely to Marxist approaches and those who were engaging with post structuralist critiques. However, it was arguably these tensions that inspired debates around issues such as knowledge production, historicism, and the (ir)retrievability of subaltern voices that have inspired much of postcolonial theory since the 1980s.

Postcolonial Theory: Said, Bhabha, and Spivak

While origins of postcolonialism can be traced to a number of different and disparate sources and while, in theoretical terms, it has been greatly influenced by Marxist political economy and post structuralist cultural and linguistic analysis, it was arguably Edward Said and subsequently Homi Bhabha and Gayatri Spivak who came to have the greatest influence within postcolonial theory. Said is best known for his book *Orientalism*, which is often considered the founding text of contemporary postcolonial theory. In this, Said critiqued the construction of false assumptions underlying Western attitudes towards Asia and the Middle East and decried the subtle and persistent Eurocentric prejudices against Arabs and Islamic peoples and their cultures. He drew implicitly on Fanon’s ideas about binaries (what he called ‘othering’) to suggest that a long tradition of false and romanticized images had served as an implicit justification for European and the USA’s colonial and imperial ambitions. He also denounced Arab elites for internalizing Orientalist ideas of Arabic culture. Although criticized for homogenizing ‘the West’, Said’s use of Foucauldian theory to argue that colonial discourse has material effects on those being represented has been particularly influential.

Like Said, Bhabha challenges the tendency to treat postcolonial countries as a homogeneous category about which stereotypes can be perpetuated but, in addition to drawing on Fanon, his ideas are more heavily influenced by post structuralism, most notably the writings of Derrida, Lacan, and Foucault. His work is noteworthy for identifying ambivalence in colonial dominance and thus producing a more nuanced understanding of colonial power. In *Location of Culture*, Bhabha deploys concepts such as mimicry and hybridity to challenge the colonial production of binary oppositions (center/margin, civilized/savage, enlightened/ignorant), suggesting that cultures interact, transgress, and transform each other in a much more complex manner than binary oppositions allow. Thus hybridity has the potential to intervene and dislocate processes of domination through reinterpreting and redeploying dominant discourses; the spaces where differences meet become important. Although in cele brating cultural heterogeneity Bhabha has been criticized for relying on notions of original and distinct cultures, his emphasis on the subversive effects of hybridization has been influential.

Spivak has perhaps made the most innovative and substantial contributions to postcolonial forms of
cultural analysis. She has been referred to as a ‘Marxist feminist deconstructionist’, since she sees each of these approaches as necessary but insufficient by themselves, always in tension yet productive together. Her overriding ethncopolitical concern has been the tendency of institutional and cultural discourses and practices to exclude and marginalize the subaltern, especially subaltern women. Her most influential (and controversial) essay, ‘Can the subaltern speak?’ explores whether subalterns can speak for themselves or are condemned only to be represented and spoken for in a necessarily distorted fashion. Spivak locates the problem not with the inability of the subaltern to speak but with the unwillingness of the culturally dominant to listen. In A Critique of Postcolonial Reason, Spivak explores how European philosophers not only tend to exclude the subaltern, but actively prevent non-Europeans from occupying positions as fully human subjects. She also explores the links between discourse and the inequities of global capitalism, in which women in developing countries are positioned as ‘superexploited’ labor, and coins the term ‘strategic essentialism’ to refer to a means of overcoming difference in temporary solidarity for the purpose of social action, a notion of particular significance for feminists and women activists.

Spivak’s writings on positionality have also been particularly influential, specifically on the need to ‘unlearn one’s privilege as one’s loss’. This unlearning requires recognition that one’s race, ethnicity, class, gender, and nationality create relative privilege, which conditions certain prejudices and learned responses, limiting knowledge by preventing access to other knowledges. Unlike Western rationalism which, since the Enlightenment, has deemed that the world is knowable through observation, Spivak argues that there are certain knowledges, experiences, and existences that are closed off from the privileged view. This is only resolvable by ‘learning to learn’, which opens up the possibility of gaining knowledge of others. It involves an ethical relationship with the other that opens up spaces where those others can have a voice and where they can be taken seriously. The implication of Spivak’s arguments is a need for continual questioning and reflexivity about one’s relative position and vigilance of the potential negative effects of our attempts to create knowledge about and to represent others.

**Critiques of Postcolonial Theory**

Despite its significance, postcolonialism has been subject to a great deal of criticism. It has been accused of being institutionalized, representing the interests of a Western-based intellectual elite (Bhabha, Said, and Spivak were employed at universities in Europe and/or the US when they made their most influential interventions, for example) who speak the language of the contemporary Western academy, perpetuating the exclusion of the colonized and oppressed. Some critics suggest that greater theoretical sophistication has created greater obfuscation; postcolonialism is too theoretical and not rooted enough in material concerns. Emphasis on discourses is accused of detracting from an assessment of material ways in which colonial power relations persist; not enough consideration is given to the relationship between postcolonialism and global capitalism; economic relations and their effects elude representation in much of postcolonial studies. Some critics berate postcolonial theory for ignoring urgent life or death questions, including questions of inequality of power and control of resources, human rights, global exploitation of labor, child prostitution, and genocide. Postcolonial theory is noteing easily translated into action on the ground and its oppositional stance has not had much impact on the power imbalances between North and South. Critics accuse it of being preoccupied with the past, while new forms of Orientalism continue to disadvantage large parts of the world. While some of these criticisms are arguably somewhat overstated, especially when considering the role that Marxism has played in much of postcolonial thinking and the fact that its origins were primarily in modes of cultural analysis, the intersections between postcolonialism and development studies are one area where these tensions have proved productive.

**Postcolonialism and Development**

Until recently, there was little dialog between postcolonialism and development, reflecting differences in disciplinary traditions, politics, wariness over motives, and divergences in the languages and concepts used to articulate core issues. Critics allege that development studies tend not to listen to subalterns and postcolonial studies neglect material issues such as poverty. The politics of postcolonialism diverges sharply from other discourses and, although it shares similarities with dependency theories, its radicalism rejects established agendas and accustomed ways of seeing. This means that postcolonialism is a powerful critique of development (as an idea and as a practice), fuelling mutual distrust between the two approaches. However, the possibility of producing a truly decolonized, postcolonial knowledge in development studies (including development geographies) became a subject of considerable debate during the 1990s. Postcolonialism is an increasingly important challenge to dominant ways of apprehending North–South relations and has begun to pose significant questions for development studies, particularly issues concerning the material effects of discourse and notions of agency and power. This has perhaps been most marked
within gender and development and also in the rise of participatory approaches to development research.

**Critiquing Discourses of Development**

Postcolonialism critiques development discourses as unconsciously ethnocentric, rooted in European cultures and reflective of a dominant Western worldview and challenges the very meaning of development as rooted in colonial discourse, depicting the North as advanced and progressive and the South as backward, degenerate, and primitive. Early postcolonial writers, such as South African Laurens van der Post, challenged this assumption by referring to hunter-gatherers as the first affluent peoples. Postcolonialism has prompted questions about whether such indigenous systems of equity, reciprocity, and communalism are more advantageous to peoples of the South than the pursuit of capitalism, with its emphasis on individual wealth and incorporation into the global economy. Postcolonialism problematizes the ways in which the world is known, challenging the unacknowledged and unexamined assumptions at the heart of Western disciplines that are profoundly insensitive to the meanings, values, and practices of other cultures. The superiority of modern industrialization and technological progress is increasingly questioned, creating alternative knowledges to reshape views of non-Western societies and their environments.

Some critics have suggested that to subject development to postcolonial critique might be considered a form of intellectual faddism and that while ever there are pressing material issues such as poverty in the world, concerns with the language of development are esoteric. However, language is fundamental to the way in which those interventions are ordered, understood, and justified and postcolonialism thus offers ways of understanding what development is and does, and why it is so difficult to think beyond it. The texts of development are written in a representational language, using metaphors, images, allusion, fantasy, and rhetoric to create imagined worlds that postcolonial critics argue bear little resemblance to the real world. Consequently, development writing often produces and reproduces misrepresentation. Postcolonialism seeks to remove negative stereotypes about people and places from such discourses, requiring that categories such as 'Third World' or 'developing world' are problematized and rethought and an understanding of how location, economic role, social dimensions of identity, and the global political economy differentiate between groups and their opportunities for development.

**Knowledge and Power**

Postcolonial critiques challenge the experiences of speaking and writing by which dominant discourses come into being. For example, terms such as 'developing' or 'Third World' homogenize peoples and countries and have other associations – economic backwardness, the failure to develop economic and political order, and connotations of a binary contest between 'us' and 'them', 'self' and 'other' – which are often inscribed in development writings. These practices of naming are not innocent. Rather they are part of the process of what Spivak calls 'worlding', or setting apart certain parts of the world from others. Said demonstrates how knowledge is a form of power, and by implication violence; it gives authority to possessors of knowledge. Knowledge has been, and to large extent still is, controlled and produced in the West. The power to name, represent, and theorize is still located there, a fact which postcolonialism seeks to disrupt.

Postcolonial theorists suggest that the texts of development are both strategic and tactical, promoting and justifying certain interventions and delegitimizing and excluding others. Power relations are clearly implied in this process, with certain forms of knowledge dominant and others excluded. The texts of development contain silences; postcolonial approaches interrogate who is silenced in and by these discourses, and why? Ideas about development are not produced in a social, institutional, or literary vacuum, but are part of a development industry that is implicated in relationships of power and domination. A postcolonial approach to development literature, therefore, can say a great deal about the apparatuses of power and domination within which those texts are produced, circulated, and consumed.

Development discourse promotes and justifies very real interventions with very real consequences. Contrary to critics of postcolonialism, such approaches do not simply represent a 'descent into discourse', where the effects of development languages are confined to the text and the possibilities of effecting change are denied. Rather, postcolonialism enables an exploration of the links between the words, practices, and institutional expressions of development, and between the relations of power that order the world and the words and images that represent the world.

**Agency in Development**

Postcolonialism invokes an explicit critique of the spatial metaphors and temporality employed in development discourses. Whereas previous designations of developing countries signaled both spatial and temporal distance – 'out there' and 'back there' – postcolonial perspectives insist that the 'other' world is 'in here'. The 'developing' world is integral to Western notions of 'modernity' and 'progress', contributing directly to the economic wealth of Western countries through labor and resources. In addition, the modalities and aesthetics of the former colonies have partially constituted Western languages.
and cultures. Postcolonialism, therefore, attempts to rewrite the hegemonic accounting of time (history) and the spatial distribution of knowledge (power) that constructs the developing world. It also attempts to recover the lost historical and contemporary voices of the marginalized, the oppressed, and the dominated, through a radical reconstruction of history and knowledge production that seeks to recover the agency and resistance of peoples subjugated by both colonialism and neocolonialism.

Postcolonialism challenges the notion of a single path to development and demands acknowledgement of a diversity of perspectives and priorities. The politics of defining and satisfying needs is a crucial dimension of current development thought, to which the concept of agency is central. Postcolonialism prioritizes questions such as: who voices the development concern, what power relations are played out, how do participants’ identities and structural roles in local and global societies shape their priorities and which voices are excluded as a result? Postcolonial approaches attempt to overcome inequality by opening up spaces for the agency of non-Western peoples. Of course, poverty and unequal access to technology make this increasingly difficult; non-Western academics, for example, rarely have the same access to books and technologies of communication as their Western counterparts. However, despite this, the work of academics in formerly colonized countries has led to a questioning of authorization and authority.

Significant questions have been raised for scholars and practitioners in development. By what right and on whose authority does one claim to speak on behalf of others? On whose terms is space created in which they can be heard? Postcolonialism asks: Can non-Western voices be heard? Is this merely an attempt to incorporate non-Western voices into Western canons? It is no longer feasible to represent formerly colonized peoples as passive, helpless victims. Their voices are now being heard, and their ideas are increasingly being incorporated into grassroots development policies, if not at the level of national governments and international development agencies and financial institutions. This is particularly the case in gender and development and in participatory approaches. In the former, postcolonial approaches have forced a move away from totalizing discourses and a singular feminism (based upon the vantage point of white, middle class Western feminists, which failed to acknowledge the differences between women) toward the creation of spaces where the voices of black women and women from the South can be heard.

Postcolonial approaches allow for competing and disparate voices among women, rather than reproducing colonialist power relations where knowledge is produced and received in the West, and white, middle class women have the power to speak for their ‘silenced sisters’ in the South. There are also some overlaps between feminist approaches and the rise of participatory methods, which, although still often problematic and not always particularly successful, are at the very least notable in their attempt to engage with postcolonial critiques concerning agency.

### Postcolonial Geographies

In addition to its potential in development studies (including development geographies), postcolonialism is beginning to have significant impacts in human geography more broadly. Postcolonial theory demonstrates how the production of Western knowledge forms is inseparable from the exercise of Western power, attempts to loosen the power of Western knowledge, and reasserts the value of alternative experiences and ways of knowing. It articulates clearly some difficult questions about writing the history of geography, about imperialist representations and discourses surrounding ‘the Third World’ and about the institutional practices of disciplines.

Postcolonialism has an expansive understanding of the potentialities of agency and shares a social optimism with other discourses, such as gender and sexuality in Western countries, where rethinking has helped generate substantial changes in political practice. Therefore, despite the seeming impossibility of transforming North-South relations by politics of difference and agency alone, postcolonialism is a much-needed corrective to the Eurocentrism of much writing about non-Western worlds and is becoming increasingly important in understanding and critiquing contemporary geopolitics.

While postcolonial approaches are viewed as constructive in many parts of the discipline, no coherent project of postcolonializing geography has emerged. The use of postcolonialism in geography must always be provisional and combined with political geography, feminism, and understandings of globalization and transnationalism. However, human geography risks irrelevance if it ignores the lessons of postcolonialism. The concerns of the ascendant (if not the most powerful) majority of the world’s population are very different to those of the powerful Western minority; unless the intellectual preoccupations of the West acknowledge this shift they are likely to become ever more out of step with political and economic dynamics of the majority of the world’s population. Anglo-American geography has long had a tendency to universalize the parochial: economic geography is almost exclusively concerned with advanced economies; urban geography focuses on global and other Western cities and ignores the nature and effects of rapid urbanization taking place in developing countries; cultural geography’s focus on identity and cultural politics is overwhelmingly Western-centric; political geography, with its theorizations of geopolitics, territoriality, and the state, remains largely a view from the West.
Development geography is arguably one part of the discipline that has not abandoned area studies in favor of a view from nowhere and is thus perhaps more attuned to a postcolonial sensibility. However, recent years have seen a productive engagement across the discipline with postcolonialism. Some economic geographers are beginning to explore diverse forms of economy and to ‘theorize’ back from the South. Attempts are being made to ‘de colonize’ and provincialize urban geographies by challenging Eurocentric classification systems that rank ‘world cities’ and ignore diverse urbanisms around the world (Robinson’s Ordinary Cities is one such example). Urban and cultural geographers are exploring how the imperial experience helped shape and continues to shape the economic, social, political, and cultural landscapes of the imperial powers themselves, not just those places they colonized (for example, Jacobs’ Edge of Empire).

Today’s global cities are celebrated not only as sites of carnival, hybridity, and liberation, but also explored critically as containing very real vestiges of the past in terms of polarization, segregation, cultural hegemony, racialization, and nationalism, and thus as sites of ever-evolving, competing, and complex identity and cultural politics. Political geographers are drawing on post-colonial theory to examine new forms of Orientalism and their contemporary geopolitical consequences (e.g., Gregory’s critique of Western responses to Iraq and Afghanistan in The Colonial Present).

Geographers are also becoming more attuned to the ethical dimensions of postcolonialism. Feminist and development geographers have been particularly inspired by Spivak’s writings on ethical relationships between researcher and researched, developing participatory methodologies that negate some of the inequalities in power relationships and creating spaces in which the researched are able to speak for themselves. This relates not only to the subjects of contemporary research, but also to the recovery of historical agency and resistance (e.g., in Clayton’s study of indigenous peoples of Vancouver Island). Historical and cultural geographers have challenged notions of unidirectional diffusion of discourses, knowledge, and cultures from metropoles to peripheries by exploring historical and contemporary interconnectedness (examples include analyses of colonial governmentality and ethical/fair trade). Postcolonialism is also inspiring thinking around the politics and ethics of teaching, with geographers drawing on the likes of Said and Spivak to challenge the negative portrayals of non-Western places. Central to this has been a concern with the affective elements of pedagogy – recognition that negative stereotypes can produce disaffection and disconnection (e.g., representing Africa as a ‘basket case’ induces a lack of concern on the grounds that nothing can be done to improve conditions), and a need to retain hope, optimism, and an ethic of generosity in our critical geographies (e.g., by focusing on the remarkable advances that some African countries have made in less than 50 years of independence).

Geographers are responding to the postcolonial challenge of finding ways of comprehending other worlds, including our relations with them and our responsibilities toward them, without at the same time being invasive, colonizing, and violent. Postcolonialism thus holds out the possibility for both a new agenda in geography teaching and research and continued vitality and relevance of geography in a rapidly changing world.

See also: Eurocentrism; Imperialism; Cultural; Neocolonialism; Orientalism; Race; Subalternity; Third World.

Further Reading


Relevant Websites

http://www.lib.virginia.edu/area/studies/subaltern/ssmap.htm
http://www.heinemann.co.uk
Link to Heinemann publishers and their African Writers Series and Caribbean Writers Series.
http://www.ipics.org.au
The Australian based Institute of Postcolonial Studies; contains links to various sites connected with the study of postcolonialism, journals, and reading lists.
Introduction

Trends in conflict, both civil and international, are turning down over the past 20 years. While there is still a disproportionate ratio of civil to international wars (about eight to one over the past two decades), the absolute numbers of both types currently underway are probably at an all time low. (Lack of reliable information before 1600 requires the insertion of uncertainty into this claim.) According to the Stockholm International Peace Research Institute (SIPRI), in 2005–06, there were 17 major armed conflicts in 16 locations. These were all civil wars since no interstate conflicts were active.

However, the relative scarcity of contemporary conflicts (from 1997 to 2006, there were 34 different major conflicts) belies their long term effects. Wars have long term effects not only on the populations in the conflict zones, but also on populations beyond these territories through the flight of refugees and by the economic impacts of the significant disruption in war zones and the externality effects on regional economies. The landscapes of war zones are well marked, sometimes indelibly, by the legacy of war in the form of minefields, destroyed land scape icons such as churches and mosques, ravaged cities, abandoned lands and during post war rebuilding, by war memorials, and altered place and street names. Much of the postconflict research focus is on the economic consequences of civil wars, especially capital flight, negative economic feedbacks, destruction of capital stock, and diversion of governmental resources to military use. Growing attention is now being given to the number and distribution of refugees and forced migrants near conflict zones and their potential effect in destabilizing neighboring regions. Human geographic factors such as population distributions, especially migration and refugee flows, have also been correlated to increased conflict risk.

Although the relationships between altered demographic circumstances and further conflict are under theorized, large and diverse populations in poor countries can be involved in a struggle over power, representation, and resources (education, healthcare, food, and employment). Ethnically concentrated populations may be mobilized to perpetuate conflict beyond a ceasefire if an ethnic/grievance agenda dominates their political discourse. Diasporas, especially those from a minority region in rebellion against the state, may also assist in support for disparate groups and hence, prolong conflict. The overseas support in the twentieth century for Irish, Armenian, Zionist (Israeli), Cuban, Ukrainian, Croatian, Polish, and Palestinian separatist or independent movements kept them going at times when they were under severe threat in their home bases. Thus, wars in one country tend to have significant spillover effects on adjoining states, especially if border controls are weak, and more extensively on regional peace. If the conflict draws in major outside powers or involves use of a global resource, such as oil or diamonds, the global implications can be dramatic, long after the shooting stops.

Of course, not all conflicts follow routinized procedures and involve groups with uniforms, political agendas, and territorial aims. Recently, rebel groups are becoming relatively more involved in conflicts with objectives that are often economic, religious, or ideological. Further, attacks on unarmed civilians (terrorism) have risen dramatically in the past 20 years, especially in the Middle East, and the targets have both the objectives of destabilizing governments by undermining their popular support and also to wreck the social fabric of communities and societies through generating repressive government responses and ethnic strife. The long term impacts of these kinds of conflicts are as yet unclear and while terrorism is not a new phenomenon, its presence and impact have only reached global consciousness in the past decade.
How the Causes and Nature of Wars Affect the War Outcomes

Few civil wars remain confined within the borders of the country at war, especially due to refugees displacing to neighboring states. Furthermore, rebel groups try to gain power by utilizing resources that they can access (e.g., diamonds, criminal networks, drug dealing, and informal taxes), and thus, conflicts tend to diffuse, making border zones prime territorial targets for governments and rebels. There is a considerable literature that separately examines the onset, escalation, and termination of civil wars, each taken as separate phases, disconnected from one another. At the same time, most of the literature has also looked at civil wars as self-contained and homogenous phenomena, ignoring the connections of civil wars to both regional and local conditions. Grievance is thought to be the root cause of civil conflict; civil wars are more common in societies with low incomes. Yet, poverty itself cannot provide an adequate explanation of why groups resort to violent conflict. Economic misery and poverty are ubiquitous, but only a few countries experience violent conflict.

Geographic work stressing the diffusion of conflict and the locational attributes of civil war has implied that certain contextual circumstances influence the onset and proliferation of war. Particular geographical locations in the periphery of the world economy suffered disproportionately as decolonization, superpower proxy wars, and Third World conditions created an environment of endemic poverty, and poor governance, in the 1980s especially fostered discontent and violent conflict. Strategic geopolitics—the relationships fostered by resource and strategic location dependence—have continued to create 'shatterbelt' regions well past the Cold War; these locations are likely to remain as hot zones. Shatterbelt regions, such as the Caspian Sea—Central Asia, are defined as areas with a precious natural resource, ethnic diversity, external interventions, and a history of conflict.

Another approach to the study of civil war ignores the question of why they start and focuses instead on how they continue. In general, factors affecting the onset of violent conflict are also thought to influence the duration of conflict and patterns of escalation. This line of research has given us additional insights about civil war dynamics, in particular the conditions under which peaceful settlement may be feasible. However, these approaches have also been almost exclusively focused on country-level aggregates. The geographic location of a civil war within any particular country is fundamental for understanding conflict dynamics. Civil wars that take place in the periphery of countries tend to last much longer than those occurring close to national capitals, for example. Although disaggregated data presently do not yet exist in a manner that easily allows cross national comparisons, it is already clear that a disaggregated, spatial perspective on civil wars will augment our understanding.

War Settlements: Partitions and Secessions

To the victors go the spoils, and the winners typically set the post war political arrangements which include territorial changes, population movements (both forced and voluntary), constitutional arrangements for post war governments, and the installation into power of favored leaderships or parties. Massive territorial changes and post war migrations occurred in Europe after World Wars I and II, and resentment at the Versailles Peace Agreement in 1919 helped to spur the Nazi rise to power in 1930s Germany. A powerful picture of the effects of war related border shifts can be seen in Michel Foucher's *Fragments d'Europe* atlas. The European map is littered heavily with lines representing previous borders and though most of these relict borders are no longer visible in the landscape or the nonmaterial representations, their identification clearly indicates the impermanency of territorial divisions and the frequency of post war adaptations by the peoples of war zones.

Two geographic options invariably come into play to try to resolve territorial disputes, especially around questions of ethnic homelands and control. Secession is a declaration of independence for part of a state's territory by a group present there; most secessionist movements are based on ethnic differences with the population of the rump or metropolitan state. Many states have been created through this method, including the United States, India, Ireland, many Latin American countries, and Norway, and more recently, Slovakia, and the countries emerging from the former Soviet Union and former Yugoslavia. Declarations of secession are often followed by a civil war or guerrilla conflict as the metropole tries to prevent a successful breakaway.

The second geographic division strategy is partition, defined by O'Leary "as a fresh border cut through at least one community's national homeland, creating at least two separate political units under different sovereigns or authorities" (O'Leary, 2001: 54). But he goes further to remind us that reactions to a political partition are always subjective, though in a systematic manner—"there will be proponents, opponents and the indifferent, who are always with us" (O'Leary, 2007: 887). Tir's review shows little evidence for the argument that partitioning leads to failure since partitioned countries tend to be ethnically diverse. Using a comparative description, O'Leary writes that "secessions are proposed, and opposed, with the same analogical battery — of cuts, tears, slashes and
rips. In fact secession is promoted and opposed as "unfastening", dividing along a previously established line of division. Secessionists usually have an established claim to a unit, either in recent or older history” (O’Leary, 2007: 889). Secessions often evolve into par
titions when an intractable conflict shows no sign of victory for the rump state. In the twentieth century, O’Leary identifies six partitions that ended conflict but produced a legacy of hate and recrimination that resulted in further hostility, suspicion, and conflict. The partition of Ireland (1920) stimulated the Irish civil war and the future ‘troubles’ in Northern Ireland; the partition of Hungary by the treaty of Trianon (1920) left a large proportion of the Hungarian people outside the new state; the partition of Kurdistan (1920–23) into three countries (Iran, Iraq, and Turkey with smaller numbers in Syria and the Soviet Union) violated a promise of the Treaty of Sévres (1920) to create a Kurdish state; Radcliffe’s commission created by the British government worked on the partition of India (1947) between pre
dominantly Muslim and Hindu states but events over took its deliberations and ended in the flight of millions to adjust to the new borders of Pakistan and India and long term hostilities between these states; partition plans for Palestine between Jewish and Muslim territories were developed in 1937 but again events overtook deliber
tations and the eventual partition of 1948 created massive refugee outflows and further hostilities between Israel and its neighbors; and the Turkish army partition of Cyprus in 1974 after their invasion of the island created a ‘pseudo state’ (Turkish Republic of Northern Cyprus) for the predominantly Turkish minority region of the north. Post war partitions among the victorious Allies divided Germany and Austria into zones of occupation but eventually these were erased (after 45 years and 10 years, respectively). Korea is still divided along the 38th parallel as a result of the 1953 ceasefire in its
civil conflict.

**Pseudo-States**

A peculiar institution has emerged in a number of post war situations in the 1990s where a permanent settlement has not been agreed and neither party is strong enough to impose its own territorial settlement – a reintegration or independence. Though the nomen
clature is not yet agreed for the political units that sit in this gray zone, the term ‘pseudo state’ is gaining adherents to describe self proclaimed independent ter
ritories that have emerged from the former Soviet Union. All have experienced conflicts triggered by the attempt by a minority in the newly independent state to carve out a territorial unit not subject to the control of the majority. The four most well known of these pseudo
countries (Iran, Iraq, and Turkey with smaller numbers in Syria and the Soviet Union) violated a promise of the Treaty of Sévres (1920) to create a Kurdish state; Radcliffe’s commission created by the British government worked on the partition of India (1947) between pre
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**Economic Impacts of Conflicts**

Though political geographers have focused on territorial alignments emerging from wars, most of the research on war outcomes has been completed by economists and political scientists. Macroeconomic evidence from Paul Collier and his colleagues in a large World Bank project has demonstrated that economic growth rate is reduced by 2% yearly during civil wars, the dominant type of modern conflict. Furthermore, the impact is not just in the country that experienced war but it is even more profound in neighboring states that get dragged into civil
wars by the basing strategies of rebels, by the placement of refugee camps on their territory, and by the spillover of conflict across the borders. Modern conflicts generate clandestine political economies so that, for example, the study of post war reconstruction in Bosnia in the after
math of the 1992–1995 war cannot be explained adequately without taking into account the critical role of smuggling practices and quasi public criminal com
natants. A recent Oxfam report (2007) summarized the effects of civil wars in sub Saharan Africa in a few powerful statistics. The total cost of post Cold
War (since about 1990) Africa’s wars has been over $300 billion equivalent to all the foreign aid that the
The continent has received in that time and over 10 million deaths. Compared to African countries without conflicts, those with civil wars have had 50% more deaths, 15% more undernourished people, while life expectancy is reduced on average by 5 years. Further, indirect deaths for civilians, mostly through healthcare cuts to fund the militaries, are 14 times higher than deaths in combat. Overall, conflict shrinks economies by 15% on average and it takes up to a decade to recover; though obviously the length of time is a function of the severity and extent of the conflict. Capital flight, exploitation, and export without controls of ‘lootable resources’ such as diamonds, the exodus of educated individuals for better economic opportunities, and damaged infrastructure from fighting all contribute to extending the effects of conflict well beyond the end of fighting and reduce the capacity of the state apparatus to engage in post war rebuilding.

Refugees and Health

Refugee flows are believed to exacerbate the risk and proliferation of conflict through a process of diffusion, wherein refugees alter the balance of power (through ethnic populations or resource exploitation), or escalation, an occurrence when refugee flows bring new combatants into a contentious situation. The impact of a refugee flow is contingent upon the political and military cohesion among the refugees, the stability of the host state, and the extent of external intervention.

Typical of wars, large movements of people change the ethnic ratios in specific regions and higher rates of disease and infections result. Despite the efforts of aid agencies, generally poorer nutrition, difficulties in finding reliable supplies of clean water, and inaccessibility to healthcare result in higher mortalities. Political scientists have clearly demonstrated these powerful indirect effects by showing that ‘civil wars kill and maim people – long after the shooting stops’. By taking one sample year 1999, the additional burden of death and disability from the indirect and lingering effects of civil wars in the years 1991–97, was approximately equal to that incurred directly and immediate from all wars in 1999. Using World Health Organization data, they could show the disability adjusted life years (DALYS) missing due to specific diseases and conditions and how conflicts’ long term effects disproportionately fall on women and children. In disaggregating these global results by country, it is evident that the burden falls disproportionately on the sub-Saharan African states though regional concentrations are also evident in South and Southeast Asia as well.

The subject of refugees combines traditional geographic interest in migration and in the geography of conflicts. Much of the work has focused on Africa, one of the world’s concentrations of refugees from the numerous civil wars fought over the past half century. Mapping of refugee locations has been well served by the growth of satellite monitoring for international agencies so that high resolution (less than 1 m) imagery is now used to count tents and to estimate populations in camps in inaccessible areas, such as the current conflict zone of Darfur (Sudan). Temporal remote sensing monitoring allows a documentation of population movements, animal husbandry, land use intensities, and infrastructural development. While the UN tries to protect and manage refugee zones, the nature of conflict does not always allow such protection and careful monitoring is needed to estimate the level of protection needed. The African refugee crisis, in particular, shows no signs of abating as conflict zones remain too dangerous for resettlement. The geography of the refugee crisis exacerbates the crisis in the delivery of health services as refugees frequently move to better environments to try to eke out a living, and camps tend to be breeding grounds for disease. Refugees have been shown to be an important vector of transnational violence of civil war so that refugees are not only a consequence, but also a cause of violence. Their presence often provokes a violent response from locals affected by their arrival – and, refugees expand rebel social networks. Although the vast majority of refugees never directly engages in violence, refugee flows may facilitate the transnational spread of arms, combatants, and ideologies conducive to conflict; they alter the ethnic composition of the state; and they can exacerbate economic competition in localities.

The politics of managing refugees, both in war zones and in destination countries where refugees seek to move, has its own geography. Most refugees from conflicts remain in the countries adjacent to the war zones – for example, in Iran and Pakistan from the 1990s Taliban war in Afghanistan. Other countries generally expect any refugees that manage to traverse the distances separating them from the war zones to remain only temporarily – as was the case for Bosnian refugees in Germany during the 1992–95 war. While the notion of a refugee is typically one that implies a temporary stay, the situation in most parts of the world is now a protracted one with refugees in temporary camps for decades, as is the case of three generations of Palestinians in the countries surrounding Israel. The refusal of Israel to accept any of them as returnees in a peace settlement prolongs both their precarious existence and the difficulty of a permanent peace settlement.

The Continuing Problem of Landmines

United Nations International Children’s Fund (UNICEF) estimates that in total, there are an estimated 110 million
mines and other unexploded ordnance (UXO) scattered in 64 of the countries worldwide, remnants of wars from the early twentieth century to the present. Africa alone has 37 million landmines in at least 19 countries, with Angola by far the most densely affected zone with 15 million land mines and an amputee population of 70,000, the highest rate in the world. Chechnya (the southern republic in Russia that has been the scene of a civil war for over a decade) proportionately has more injuries per population than any other war zone. The mine problem has received a lot of attention due to the award of the Nobel Peace Prize to the ICBL (International Campaign to Ban Landmines) in 1997 and the involvement of movie stars and other prominent persons, such as Princess Diana, in the campaign. Despite this belated awareness, the removal of mines proceeds at a glacial pace due to the danger, cost, and lack of international agreement on priorities, between $300 and $1000 per mine. Efforts to prohibit the future use of mines by militaries have foundered on their cheap ($1–$10) and easy accessibility, and their effectiveness in military campaigns. Geographers have argued that in mine ridden countries, such as Mozambique and Angola (legacies of protracted civil wars after independence in 1975), any notion of sustainable development is illusory as agriculture, transportation, resource access, and general international investment are hindered. In Bosnia, only about 4% of the mines laid over a decade ago have been removed and at present rates of removal, it will take over a century to complete the process. Modern geographic tools such as geographic information systems and remote sensing have proved to be valuable in monitoring, mapping, and explaining to stakeholders (usually local farmers) the various options for removal and reclaiming lands currently too dangerous to use.

Conclusions

Most of the academic work on post war developments have centered on the institutional arrangements that have been agreed to, or imposed on, the warring parties. In particular, the promise of consociational procedures has centered on the institutional arrangements that have been agreed to, or imposed on, the warring parties. In particular, the promise of consociational procedures has drawn on valuable experiences in Northern Ireland (after 1998) and South Africa (after 1990). However, each war context is different and though useful lessons can be learned from earlier implementations of constitutional provisions, there is little agreement on what constitutes a ‘best practice’. The current conflict in Iraq and the apparent intractability of interneceine hostilities between Kurds, Shiias, and Sunnis illustrate the difficulties of simple application of paper provisions. While much of the political geographic work on postconflict environments has concentrated on the changes in the visual landscape, much of it has a descriptive character that documents place name changes (e.g., from Danzig to Gdansk after World War II), preferences for street names (e.g., from Communist to nationalistic heroes in the states of the former Soviet Union), the destruction of iconographic landscape elements of a previous regimes (historical memorials, churches or mosques, cemeteries, etc.), and shifts in border markers and controls. However, as indicated in this brief review, the economic, health, and environ mental difficulties of people in war zones are both long term and very difficult to resolve because most wars do not end definitively and tend to have consequences that last for generations. Recriminations, rather than restitution, respect, and conciliation, are the most likely consequences of most conflicts.

See also: Borderlands; Development I; Development II; Nation; Political Boundaries; Political Ecology; Refugees and Displacement; State; Sustainable Development.

Further Reading


Relevant Websites

www.icbl.org
International Campaign to Ban Landmines.

www.stabilisationunit.gov.uk
The Stabilisation Unit (targeted assistance projects to countries after violent conflict).

web.worldbank.org
The World Bank.
‘Postdevelopment’ combines these views with a Foucauldian methodology of discourse analysis and a theory and politics inspired by post structuralism. These positions are not all consistent, yet they sufficiently overlap to group them together under the heading of postdevelopment.

Development is the management of a promise – and what if the promise does not deliver? Living in Chiapas or other oppressed and poor areas, chances are that development is a bad joke. Postdevelopment is not alone in looking at the shadow of development policies; all critical approaches to development deal with its dark sides. Dependency theory raises the question of global inequality. Alternative development focuses on the lack of popular participation. Human development insists on the need to invest in people. Postdevelopment focuses on the underlying premises of development and what sets it apart from other critical approaches is its rejection of development.

Since the 1980s activists and intellectuals in Latin America, Asia, Africa, and Europe have taken up these views, which have become prominent since they coalesce with ecological critiques and through bestsellers such as Wolfgang Sachs’s *The development dictionary* Postdevelopment critiques typically problematise poverty, view development as Westernization, and question modernism and science.

Economists speak too readily of poverty. One can distinguish between ‘frugality’, as in subsistence economies, ‘destitution’, which arises when subsistence economies are weakened through growth strategies, and ‘scarcity’, when the need for commodities takes over. A policy that follows is to implement growth strategies with caution, building on frugal lifestyles with appropriate technology and maximum use of local resources. However, rejecting economic growth or social development does not necessarily follow.

Viewing poverty simply as a deficit is to adopt the perspective of economism. Approaches such as con scientization and human scale development acknowledge the agency of the poor. Majid Rahnema criticizes the way development critics typically problematize poverty, view development as ‘deep ecology’ does to environmental science.

Along with ‘antidevelopment’ and ‘beyond development’, postdevelopment is a radical reaction to the dilemmas of economic and social development in the developing countries. Perplexity and extreme dissatisfaction with business as usual and conventional development rhetoric and practice are keynotes of this perspective. Mainstream development policies are rejected because they don’t work; they impose science as power, and inflict cultural Westernization and bring environmental destruction. They are rejected not merely because of their results but because of their intentions, worldview, and mindset. Economism implies a reductionist take on existence. Thus from the viewpoint of postdevelopment it is not the failure of development that is feared but its success.

Postdevelopment starts out from the realization that attaining a middle class lifestyle for the majority of the world population is impossible. In this view, the ‘development decades’ have been an irresponsible experiment that, in the experience of the world majority, has failed. In time this has led to a position of total rejection of development. Antidevelopment thinkers such as Gustavo Esteva in Mexico find that development stinks. Postdevelopment overlaps with Western critiques of modernity and technoscientific progress. It stands to development as ‘deep ecology’ does to environmental management. There are different strands to this way of looking at development. ‘Antidevelopment’ is inspired by anger with development business as usual. ‘Beyond development’ (au delà de développement) combines this aversion with scanning the horizon for local alternatives.
truly pauperizing. Valid as these considerations are, a consequence is that poverty alleviation – for what such efforts are worth – slips off the map. Another problem is that less market participation does not necessarily imply more social participation – unless we romanticize poverty and equate poverty with purity (and the indigenous and local with the original and authentic). The step from a statistical universe to a moral universe is worth taking, but a moral universe also involves action, and which action follows?

According to Serge Latouche, Arturo Escobar, and other postdevelopment thinkers, development is Westernization, an external approach based on the model of the industrialized world. What are needed instead, they argue, are endogenous approaches and discourses. Development, in this view, is a successor to colonialism. With decolonization came critiques of cultural imperialism, Coca Colonization and later, McDonaldization. According to the cultural homogenization thesis, Western multi-nationals, media, and consumerism induce cultural uniformity. Yet, in effect, this denies the agency of the global South. It denies the extent to which the South also owns and promotes development. Several development per spectives, such as dependency theory, alternative development, and human development, originate mainly in the South. Furthermore, what about ‘Easternization’, as in the East Asian model, touted by the World Bank as a ‘develop ment miracle’? What about the influence of Japanese management techniques and ‘Toyotism’? What about the fast rising influence of China? Besides, in view of steep historical differences between Europe and North America ‘Westernization’ is a lumping concept. This argument also overlooks more complex assessments of globalization. If we adopt a polycentric approach, the reorder to Eurocentrism is the recognition that multiple centers, also in the global South, shape development discourses.

**Antimodernism**

Part of anti-Western sentiments is antimodernism. No doubt development policy suffers from a condition of ‘psychological modernism’, has erected monuments to modernism and vast infrastructures, and big dams that place technological progress over human development. The worship of progress is not reserved to the West. Developing countries have used science as an instrument of power, creating ‘laboratory states’, with high tech modernization drives from China to India. The nuclear tests in South Asia are another rendezvous of science and raison d’etat.

Aversion to modernism also exists in the West. There are many overlaps between critical theory and counter culture in the West and antimodernism in the South. The alternative economist Schumacher (“small is beautiful”) found inspiration in Buddhist economics and Fritjof Capra in Eastern mysticism, while the critical Indian thinker Ashis Nandy’s outlook has been shaped by Freud, the Frankfurt School, and Californian psychology along with Gandhi and Tagore. Part of the critique of modernism is the critique of science. A leitmotif, also in ecological thinking, is to view science as power. ‘Science’ here means Enlightenment thinking and positivism, an instrument in achieving mastery over nature. Critique of Enlightenment science runs through the work of Vandana Shiva. However, this is not a simple argument. Vandana Shiva was originally trained as a physicist. Science has been renewing itself, for example, in quantum physics and chaos theory, and undergoing paradigm shifts leading to ‘new science’. Besides, there are countertrends within social science. In social science, positivism is no longer the dominant temperament; increasingly the common sense in social science is constructivism. Positivism prevails in economics, but is also under attack. A distinction should be made between critique of science and anti science. Acknowledging the limitations of science, the role of power/knowledge, and the uses made of scientific knowledge does not necessarily mean being anticience. Critique of science is a defining feature of new social movements, North and South. Yet ecological movements use scientific methods to monitor energy use, pollution, and climate changes, as in ‘green accounting’. Anti development at times sounds like Luddism, longer on rhetoric than on analysis. Also in the global South being ‘antiscience’ is not a viable option. It is more appropriate to view modernism as a complex historical trend, which is partly at odds with simple modernization.

Development discourse, according to Arturo Escobar, has been a mechanism for producing and managing the Third World, just as the Western scholarship of the Orient – the Orientalism analyzed by Edward Said – produced and managed ‘Oriental societies’ during colonial times. Discourse analysis, the careful scrutiny of language and text as a framework of structures of thought, contributes to understanding colonialism as an epistemological regime and serves to analyze development discourse. Discourse analysis is not specific to postdevelopment; what is distinctive for postdevelopment is that from a methodology discourse analysis has been turned into an ideological platform. According to Escobar, World Bank studies and documents “all repeat the same story.” However, this ignores the tremendous discontinuities in the Bank’s discourse over time (redistribution with growth in the 1970s, structural adjustment in the 1980s, poverty alleviation and social liberalism in the 1990s, and good governance, anticorruption, and social risk mitigation in the 2000s).

Many concerns of postdevelopment are not new and are shared by other critical approaches to development.
Postdevelopment parallels dependency theory in seeking autonomy from external dependency, but takes this further to development as a power/knowledge regime. Postdevelopment faith in the endogenous parallels the emphasis on self reliance in dependency theory and alternative development. While dependency thinking focuses on the nation state, postdevelopment is concerned with local and grassroots autonomy. Alternative development shares with postdevelopment the radical critiques of mainstream development but retains belief in and redefines development. The record of development is mixed and does include achievements, as noted below, so what is the point of rejecting it in toto?

Antimanagerialism

Adherents of postdevelopment are not interested in alternative development approaches, but rather in alternatives to development. Alternative development is rejected because it reflects the same worldview that has produced the mainstream concept of science and development. Alternative development is even more odious than mainstream development because of its friendly exterior. According to Gustavo Esteva, alternative development is a deodorant to cover the stench of development. In response to the commonsense question of what do we do now, the十or in most sources is to stop at critique, which means an endorsement of the status quo and, in effect, more of the same.

An Assessment

Postdevelopment thinking is uneven. For all the concern with discourse analysis, the use of language is often sloppy. In proposing to do away with development, postdevelopment essentializes ‘development’ and implies that it is possible to arrive at an unequivocal definition. Essentializing ‘development’ is necessary to arrive at the radical repudiation of development, and without the antidevelopment pathos the postdevelopment perspective loses its foundation.

At times one has the impression that postdevelopment turns on a language game rather than an analytic. Some of the claims of postdevelopment are misleading and misrepresent the history of development. The development dictionary refers to the 1940s as the beginning of the development era. However, the application of development to the South started with colonial economics; references to the South started with colonial economics; the instances cited in postdevelopment literature mainly concern Africa, Latin America, and South Asia. The experience of East Asia, Southeast Asia, China, and newly industrializing countries is typically not discussed, even though they are the current trendsetters of development.

Fine points of theory aside, what is to be done? Postdevelopment thinking does make positive claims and affirms Gandhian frugality, conviviality, grassroots movements and local struggles, indigenous knowledge, and cultural diversity. However, none of these are specific to post development nor do they necessarily add up to rejecting development. In response to the commonsense question what do we do now, the tenor in most sources is to stop at critique, which means an endorsement of the status quo and, in effect, more of the same.
If we consider neoliberal critiques of the developmental state side by side with postdevelopment critiques of development power, the parallels are striking. Both agree on state failure, though for different reasons. According to neoliberal critics, states fail because of rent seeking and inefficiency; postdevelopment critics object to authoritarian social engineering and the faith in progress. Yet the net political effect turns out to be much the same. In other words, there is an elective affinity between the development agnosticism of neoliberalism and postdevelopment.

The development dictionary features critiques of the market, state, production, basic needs, etc., which are historically informed but overstate their case, offer no alternatives, and ultimately fail flat. According to Escobar, many of today’s social movements in the global South are involved in or mediated by antidevelopment discourses. However, social movements in the South are much too diverse to be captured under a single heading. Many popular organizations are concerned with ‘access’ to development programs, with inclusion and participation, while others are concerned with renegotiating development, decentralization, or alternative political action. ‘Antidevelopment’ is too simple and rhetorical a description for the views of the ‘victims of development’ and ‘victims of development’ is too simple a label. Early alternative development views also underestimated the desire for and appeal of development and engaged in ‘island politics’.

The political horizon of postdevelopment is one of resistance and local struggles à la Michel Foucault rather than emancipation. Postdevelopment’s use of discourse analysis as an ideological tool becomes apparent when it comes to politics. Foucault’s imagination of power is an imagination without exit. Accordingly, postdevelopment takes critique of development to the point of retreat. Retreat from business as usual can be a creative position from which an alternative practice can grow. Thus critical theory, though pessimistic in outlook, served as a point of reference and inspiration. However, the imaginary power of that inspires postdevelopment leaves little room for forward politics. Postdevelopment’s quasi-revolutionary posturing reflects a hunger for a new era and a romantic nostalgia politics of glorifying the local, the grassroots, and community. Postdevelopment politics range from the ‘romance of resistance’ to a conventionally compartmentalized world.

Marx, and Joseph Schumpeter after him, referred to modern capitalism as a process of ‘creative destruction’. What happens in postdevelopment is that of ‘creative destruction’ only destruction remains. What remains of the power of development is only the destructive power of social engineering. Gone is the recognition of the achievements of development policies, the improvements in healthcare, the reduction of infant mortality, the enormous reduction in poverty levels particularly in East Asia and China, and the creativity of developmental changes. Instead postdevelopment offers a cultural critique of development and a cultural politics in which development is a stand in for modernity, and the real issue is modernity.

Postdevelopment is caught in rhetorical gridlock. Using discourse analysis as an ideological platform in vites political quietism. In the end postdevelopment offers no politics besides the self-organizing capacity of the poor, which lets the development responsibility of states and international institutions off the hook. Post development arrives at development agnosticism by a different route but shares the abdication of development with neoliberalism. Since most insights in postdevelopment sources are not specific to postdevelopment (and are often confused with alternative development), what is distinctive is the rejection of development. Yet the rejection of development does not arise from post development insights as a necessary conclusion, that is, one can share its observations without arriving at this conclusion, so there is no compelling logic to post development arguments.

Postdevelopment belongs to the era of the ‘post’ as in post structuralism, postmodernism, postcolonialism, and post Marxism. It is premised on an awareness of endings, the ‘end of modernity’ and the ‘crisis of the future’. Postdevelopment parallels postmodernism both in its acute intuitions and in being directionless in the end, because of the refusal to translate, or lack of interest in translating, critique into construction. It also matches the neotraditionalist reaction to modernity. There are romantic and nostalgic strands to postdevelopment and its reverence for community and the traditional and its attitude toward science and technology shows elements of neo Luddism.

Postdevelopment is based on a paradox. While it is part of the broad critical stream in development, it shows no regard for the progressive potential and dialectics of modernity, for democratization, soft power technologies, and reflexivity. Social movements and civic activism, ‘North and South, cannot be simply captured under the label ‘anti’. Postdevelopment’s strength is a hermeneutics of suspicion, an anti-authoritarian sensibility, and hence a suspicion of ‘alternative managerialism’. However, since it fails to translate this sensibility into a constructive position what remains is whistling in the dark. What is the point of declaring development a ‘hoax’ without proposing an alternative?

Alternative development thinking looks at development from the point of view of the disempowered, from the bottom up, and combines this with a perspective on the role of the state; in brief, a strong civil society needs a strong state. Postdevelopment adopts a wider angle in looking at development through the lens of the
problematic of modernity. Yet, though its angle is wide,
its optics is not sophisticated and its focus is blurred. Its
take on modernity is one dimensional and ignores dif-
ferent options for problematizing modernity, such as
modernities in the plural, new or reflexive modernity,
and its corollary in relation to development, reflexive
development. Postdevelopment and ‘alternatives to de-
velopment’ are flawed premises, flawed not as sensibilities
but as positions. The problem is not the critiques, which
one can easily enough sympathize with, but the accom-
panying rhetoric. ‘Alternatives to development’ is a mis-
omer because no alternatives to development are
offered. There is critique but no construction, resistance
but no transformation. ‘Postdevelopment’ is misconceived
because it attributes to ‘development’ a single and con-
sistent meaning which does not match either theory or
policy and thus replicates the rhetoric of development
rather than penetrating its polysemic realities. It echoes
the ‘myth of development’ rather than leaving it behind.
Postdevelopment makes engaging contributions to col-
lective conversation and reflexivity about development
and as such contributes to philosophies of change, but
its contribution to politics of change is meager. While the
shift toward cultural sensibilities is a welcome move, the
plea for ‘people’s culture’ or indigenous culture can lead,
if not to ethnocentrism and ‘reverse orientalism’, to
reification of both culture and locality or people.

See also: Desertification; Development I; Development II;
Imperialism, Cultural; Indigenous Knowledges; Modernity;
Orientalism; Participation; Poststructuralism/
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Introduction

Posthumanism is an ambiguous term that suffers from similar semantic uncertainties as postmodernism. Its ‘post’ prefix hints at the arrival of a new epoch – as ‘posthumanism’ it claims to identify a new mode of being in the world that departs significantly from the conditions of humanism. As post ‘humanism’, the ‘post’ radicalizes its suffix to suggest a new model of politics and philosophy, however, it does so in a fashion that echoes its antecedent’s critical ethos. Posthumanism thus refers to the populist diagnosis of a new era, a new mode of critical enquiry that defines itself in relation to humanism, and a working through of the latter’s critical tradition.

Humanistic geography puts the (singular) figure of the human front and center and examines the role of human agency, creativity, and consciousness in making sense of the world. It understands the human in binary opposition to the nonhuman. In contrast and in different ways, posthumanist geographers cast their analytical net a little wider to challenge a singular model of the human subject and to blur and enliven the boundaries between the human and the nonhuman. Empirically, they push in two interwoven directions – within the category of the human and along its margins – to formulate new spatial philosophical and political orientations.

Posthumanism has been greeted with ambivalence by human geographers and other social scientists. Some have welcomed the fresh perspective it provides on our contemporary molten and cosmopolitan condition, where it is very difficult to separate humans and nonhumans, and the singular model of the human subject has been thoroughly critiqued. Others are concerned about a turn away from humanism and the critical resources this provides, while a third strand questions whether we have ever been human (in a formal sense) and doubts the need for such an epochal theoretical turn. Posthumanist geography is still an emerging, open, and contested field.

The broader movement toward posthumanism in social theory and the social sciences has been driven by at least two forces. First, there is a growing public awareness in the West of the empirical impossibility of separating nature from society and a questioning of the political advantages that supposedly accompany such a division. This emerging posthuman sensibility has been triggered by concerns and debates over innovations, events, and crises in a number of diverse arenas. These include recent development in technoscience (e.g., genetic modification, artificial intelligence, nanotechnology, and reproductive technologies), the food system (like the risk of ‘mad cow disease’ and the rise of the organic movement), public health (in the form of zoonoses such as avian influenza), and climate science (where the diagnosis of climate change has demonstrated the global reach of anthropogenic activity).

Popular reactions to these developments have varied widely but many share a sense that we have crossed a threshold and are entering a new era. For some technocratic optimists this brave new world is full of the emancipatory promise of modern science. It presents...
new opportunities for human enhancement, individual self-realization, and significant new arenas for (capitalist) economic growth and profit. For more conservative and environmentalist critics, this novel posthuman condition is apocalyptic and threatens our human identity and the future habitability of the planet. The stakes are high in these debates and the battle lines are drawn and fiercely contested.

Second, posthumanism arrived within the academy on the back of a growing intellectual dissatisfaction with humanism. This critical mode of posthumanism was driven in part by the popular reappraisal of the human, and has challenged both the constitution of the human category itself and the possibility of drawing neat boundaries. Feminist, post-structuralist, postcolonial, and queer theorists have all questioned the possibility of identifying universal and authentic models of human consciousness and agency. They have drawn attention to the exclusionary work done by adhering to a singular model of human identity. This historicizing of humanism found a home in a reinvigorated cultural geography, which maintains humanism’s critical imperatives and has sought to map the vast diversity of existing human subjectivities and to deconstruct the processes through which they are constructed and contested.

Furthermore, on the margins of the category human, vitalist philosophers, ethologists, neuroscientists, and sociologists of science have highlighted the material and immaterial interlinkages that blur the human–nonhuman boundary. This vitalist, material turn has raised the possibility of a more than human geography that would run alongside a posthumanist model of identity and difference. This current maintains the humanist attention to the body and embodied practice but is more open to the materialities and affective forces that flow between humans, organisms, and objects, cutting across modern ontological divides. This critical posthumanism seeks to tread a path between the apocalyptic and hyperbolic extremes of popular posthumanisms.

Modalities of Posthumanism

Working through the advent of posthumanism it is possible to identify four different modalities in which it has been received and discussed. These could be termed hyperbolic, apocalyptic, deconstructive, and vitalist posthumanisms. The first two represent different modes of popular posthumanism – contrasting discourses circulating in public debate. The latter two account for two different ways in which posthumanism has been debated and developed in social theory and social science. This article discusses each in turn, making reference where appropriate to their reception in human geography, before identifying some key themes.

Hyperbolic Posthumanism

This is the posthumanism of technocratic optimists and some science fiction writers. It underpins the research agendas of many biotechnology and technoscience corporations working around issues such as human enhancement and genetic engineering and informs the philosophy of the Extropians, who advocate a proactionary principle toward scientific innovation. This modality of posthumanism celebrates the arrival of a new epoch in which humans, technologies, and animals can be morphed together into novel collections of hybrid forms. It is full of hyperbole about the potential of scientific developments and technology to enhance the human condition and to forge new social and spatial formations.

Hyperbolic posthumanists argue that we are moving into a new stage in the evolution of life. Here, through human agency we can take control of our own destinies and of those around us, rearranging molecular structures to produce new and enhanced posthumans or down-loading consciousness into artificial life forms. This hyperbolic position also informs the discourses of techno-optimists in relation to the problems posed by climate change, resource scarcities, and biodiversity loss. Putting their faith in modern science they argue that we will be able to engineer our way out of peril, (re)creating new life forms, synthesizing foodstuffs, sequestering emissions, or – if the worst comes to the worst – emigrating to other planets.

In this popular posthumanism the future is a space for the realization of a narrowly defined individuality and posthuman futures shape up in an apolitical world of free play and unbridled opportunity. The political naivety that underpins this approach is founded on a (neo)liberal conception of the sovereign individual and advances a fundamentally capitalist modality that has visions of the posthuman condition opening up vast new arenas for investment and economic growth. Culturally, this liberal position bleeds into popular postmodernist science fiction, which highlights the possibilities for the formation of new individual identities through deliberate surgical, pharmacological, and technological interventions. Ultimately however, these liberal (supposedly) postmodern accounts only deviate slightly from a thoroughly modern imperative that seeks to harness the potential of posthuman developments for emancipatory and/or profitable ends.

Apocalyptic Posthumanism

This is the response to the posthuman condition of many deep green environmentalists, religious and social conservatives, and defenders of traditional liberal humanism. It includes the work of popular writers such as Bill McKibben, Francis Fukuyama, and Jurgen Habermas. With differing degrees of alarm and vitriol they shout...
enough at the apocalyptic changes they see being wrought by capitalist modernity. Environmentalists bemoan the end of nature and challenge the ethics and necessity of genetic engineering and nanotechnology—innovations they argue are out of sync with natural space times. Similarly, social conservatives opposed to stem cell research and human genetic modification, for example, feel that such developments threaten the very essences of humanity and nature. They seek to reign in technoscience, harking back to a more stable and binary models of human–nonhuman interaction—where humans were human and nature was natural.

Like hyperbolic posthumanism, apocalyptic posthumanism is a popular position whose advocates claim to have diagnosed the arrival of a new epoch. However, here humans have crossed some dangerous critical threshold. In contrast to the former’s optimism, for the harbingers of the posthuman apocalypse the arrival of this new condition is fraught with danger. The solution is not to plough on but to retreat. This results in a reactionary and either religious or neohumanist politics of fixed identities framed around an eschatological trajectory of decline and doom. This politics reaches back for an idealized time and a naturalized set of sociospatial and socioenvironmental relations, often through a process that precludes democratic deliberation.

In this way apocalyptic posthumanism reinvigorates narrow models of the human and nature—purified through a dualistic ontology—and advocates policies toward their protection or reintroduction. It is thus grounded in a static geography and temporality of transcendent forms, outside of social and ecological history, or at least evolving at geological timescales. Identifying these singular ideal types is always problematic and is generally reliant on the selective use of statistics, normal curves, and standard deviations, which efface the differences on the margins.

Deconstructive Posthumanism

This is the posthumanism of a set of poststructuralist, feminist, postcolonial, and queer theory scholars who draw on a diverse collection of philosophical resources to deconstruct the single figures of the human and the nonhuman at the heart of humanism and humanist epistemology. They seek to draw attention to the violence that results from an adherence to such identity thinking. This body of work is informed by the philosophies of Michel Foucault, Jacques Derrida, Judith Butler, and Giorgio Agamben, among many others.

While humanism argued for the existence of a core and authentic sense of human subjectivity and consciousness that could and should be shared by all people, deconstructive posthumanists argue that all subject positions stem from and are related to the social matrix in which we find ourselves. In its most radical manifestations this critique is antihumanist and argues that there is nothing universal or natural about any singular model of human identity. Poststructuralists like Foucault have deconstructed the different ways in which subject positions are created and enforced through the social distribution of discourses. They sketched out theoretical resources to allow people to decode, transgress, and resist subjectification and to forge new identities.

Instead of fixed identities deconstructive posthumanists emphasize cultural difference—cut along infinitesimal axes including gender, ethnicity, age, sexuality, disability, and a host of more finely grained categories. Others draw on psychoanalysis to explore how identities are often formed through a binary process of othering. Here the positive characteristics of the same are defined in relation to a negative projection of the other. This recognition of the widespread abjection toward difference opens analysis to human desires and anxieties outwith the understandings of human agency and consciousness at the heart of humanism. Here the subject is at times unknowing and unknowable and is always defined in relation to another in situations that vary by geographical context.

Social theorists have traced the incidence of a range of self–other dualisms including man/woman, western/oriental, and gay/straight. Perhaps the most important manifestation of this tendency in relation to posthumanism is the humanist dualism that establishes the fundamental division between the human and the nonhuman (or inhuman). Giorgio Agamben terms this an anthropological machine which works to separate the two both within the human—to establish the unique human conscious subject, divorced from its animal body—and on the margins of the human—to create a lumpy class of animals. Writing in the shadow of the Holocaust, Agamben documents how these divisions bleed together through the tendency to elide the human other with the inhuman or to relegate it to a subhuman status alongside or even subservient to the nonhuman

This model of deconstructive posthumanism was readily appropriated by a new and reinvigorated cultural geography in the 1990s. Alongside their feminist colleagues, cultural geographers used textual and qualitative methodologies to map the moral geographies of cultural difference and normalization. In this linguistic turn they explored how identities are territorialized and deterritorialized through discursive and signifying practices, which spatialized a self/other binary. They sought to give literal and theoretical space to a radical postmodern politics of difference based around the creation and expression of hybrid and fluid identities. Empirically, this body of work has been exceedingly heterogeneous and has encompassed arenas varying from food to music and from natural history to housing. This challenge by
cultural geographers to degrading self/other dualisms continues the humanist critique of the singular figure of rational man, which lies at the heart of most modern economic and political theory.

Deconstructive posthumanism also challenged the narrow epistemology of humanist social science and opened a complex and contested politics of knowledge. Multiple and splintered subject positions allowed for the expression of heterogeneous vernacular epistemologies. The epistemological challenge posed by deconstructive posthumanists was also developed in the Sociology of Scientific Knowledge (SSK) by authors such as David Bloor and Bruno Latour, whose work was to have a significant influence on human geography. Cultural geographers’ dabblings with vernacular epistemologies raised the specter of epistemological relativism and provoked alarm among the physical and environmental scientists with whom they share their discipline.

This deconstructive ethos has also been extended out from a concern with the contents of the human category to examine what happens to those on the margins – the nonhumans denigrated by the anthropological machine – and critical animal geographers have examined animals as another other. Drawing on Derrida, who highlighted the tendency to lump together the great diversity of the nonhuman realm under the undifferentiated label animal, they have begun to map and document the animal spaces of modern life. This move has brought animal geography into contact with ongoing work on animal rights and animal welfare along with wider currents in environmental ethics.

Deconstructive posthumanism has had an important influence on human geography and has broadened and deepened the critical focus of humanist approaches by opening analytical space for multiple subject positions and forms of spatial connection and performance, out with the narrow confines of a narrowly defined human subject. However, and in reaction to the narrow grounds of humanism, deconstructive posthumanism has remained anti ontological in its theorizing. With its preoccupations with textual representation and the formation of identities it has been unwilling to discuss the material basis to human and nonhuman life. The lively agencies of bodies, technologies, and places are glaringly absent from these accounts.

**Vitalist Posthumanism**

This is the posthumanism of a growing collection of philosophers, feminist theorists, and nonrepresentational and more than human geographers, who together pick up on the critical impulse of deconstructive posthumanism but seek to ground their analyses of the human condition in a nonessentialist, vitalist ontology. While deconstructive posthumanism aims its critical energies at the figures of the human and the nonhuman, vitalist posthumanism addresses the ontological politics of their making and remaking. This final strand to posthumanism is informed by an engagement with the vitalist philosophies of figures such as Gilles Deleuze, Bruno Latour, and Isabelle Stengers and their reworkings of antecedents such as Spinoza, Bergson, and Whitehead. This engagement underpins a material turn in geography and the social sciences, which moves off from the linguistic turn associated with deconstruction.

Some of the earliest work in this area emerged from science studies and the innovative work of Bruno Latour and his fellow actor network theorists. Latour and his colleagues argued that we have never been modern and challenged the ontological hygiene that accompanies the modernist dualisms of nature–society (human–nonhuman), subject–object, and the mind–the body. In place of these purifying dualisms they drew attention to the vital agencies of nonhuman technologies and the role of embodied skills in the performance of everyday life. Latour was particularly interested in the processes of representation. He took forward the epistemological agnosticism of deconstructive posthumanists, but through a series of ethnographic studies, attended to the embodied practices and skilled negotiations through which scientists translate the world into representations. His work conveys the reality of scientific practice and documents the important agencies of scientific instruments and the skilled bodies of scientists themselves in producing and maintaining representations. These are often effaced from their final published accounts.

Latour’s concern with the material grounds to everyday life echoes an interwoven strand of vitalist posthumanism which draws attention to the creative role of the human body in making sense of space and pushing back against different modes of subjectification. This concern with the body has been developed in different ways by feminist and postcolonial scholars and those in nonrepresentational geography. Together, these thinkers have returned to and reworked earlier concerns with the body as a sense making vessel, as expressed in the phe nomenclology of Merleau Ponty and Heidegger. To this strand they have added insights from the lively ontology of Gilles Deleuze. In contrast to the static, certain, and transcendent archetypes of humanism, Deleuze argued for an ontology of intensities, producing forms that are in a constant and unstable state of becoming. Deleuze eschewed identities and dualisms for a world of difference and immanent differentiation. His difference is not defined by the relationship between self/other or human/nonhuman; it is infinitesimal and emergent.

A growing collection of nonrepresentational geographers have engaged in such theoretical alchemy and have developed concepts from theorists of practice and ethology to explore the embodied, affective, and
nondiscursive basis to much social life. Inspired largely by the work of Nigel Thrift, nonrepresentational geographers are critical of the linguistic excesses and anti-ontological stance of much new cultural geography, where identities, difference, and meaning are reduced to social constructions. Instead, they seek to document the skills, senses, and emotions that underpin human social interactions and examine the ways in which these act according to and depart from wider attempts to prescribe identity. Taking a performative understanding of social life they draw attention to the vast array of precognitive forms of knowledge that frame our engagement with the world and the open ended and contingent nature of any interaction. Epistemologically, they trace how the processes of representation involve learning to be affected by the material world.

This work has informed and interwoven with a burgeoning strand of emotional geography, which develops the concerns of humanistic geography with subjective experience and broadens earlier engagements between geography and psychoanalysis. The rise of emotional geography can also be understood as part of a wider interest in emotion in political science, neurobiology, philosophy, and cultural studies. Emotional geographers have sought to look beyond individual, internalized experiences of emotion to map broader social and relational landscapes of affect. Nonrepresentational geographers differentiate between emotion and affect, where emotion is understood as the cognitive experience of the individual subject of a particular state – anger, joy, envy, etc. – while affect describes prescursive, embodied sensations, yet to be encoded into emotions. Affect provides an alternative mode of shared intelligences to the material world that operates outwith the individual subject. Posthumanist geographies of affect therefore take forward psychoanalytical critiques to get at the more than/other than rational energies that underpin social life, operating beyond the around the individual, conscious subject of humanistic approaches.

Feminist scholars, like Elizabeth Grosz, have taken on this concern with the visceral and contingent nature of social life and have explored what the material specificities of the female body bring to our understandings of social order and control. In contrast to earlier under standings of race and gender as social constructions, these corporeal feminists have sought to reontologize such categories and to engage with the ontological politics of their performance and contestation. This approach moves off from an understanding of the body as a passive container of social identity to the body as a living assemblage of biological materials and processes. They have traced the material consequences of efforts to cut this nonessentialist world of differentiating entities into neat identities and categories that prescribe geographies, power relations, and modes of behavior. Similar lines of enquiry have recently been pursued by postcolonial geographers who acknowledge the materiality of race and aim to reontologize racial difference along nonessentialist lines.

Moving out from the vitalism of the human body, more than human geographers have acknowledged the lively agencies and hybrid ontologies of the nonhuman realm and have begun to construct accounts of human–nonhuman interaction which do not privilege human agency and consciousness. This endeavor has been strongly influenced by the work of Deleuze and Latour and seeks to develop a critical posthumanist politics for our contemporary condition that avoids the twin poles of complacent hyperbole and reactionary nostalgia. At present, it has two divergent strands. The first has grown out of Marxist political ecology and employs a weak model of dialectics to explore the metabolic interactions of nature and society under capitalism and the production of hybrid natures under different social conditions. The second model is more firmly tied to the immanent ontology and ethology of Deleuze and巡航s the scalar politics and binaries of the nature–society dialectic. Instead, it emphasizes the contingencies and interminglings that occur between human and nonhuman life and highlights the difficulties and dangers that accompany the construction of meta narratives to explain human–nonhuman interaction. Debate is ongoing between these two approaches as to which best explains our contemporary condition and provides the optimum mode of intervention.

Geographers have also traced the important biopolitical role of material technologies in governing everyday life. They have documented how technologies sort, classify, and order behavior and provide the often unconsidered background to normal daily practices. On the material boundaries of the human–nonhuman, more than human geographers have explored the intercorporeal interminglings of different bodies in the visceral arenas of food networks, transgenic organisms, and viral epidemiology. This work has highlighted the permeability of the human body and its material dependence on and susceptibility to the nonhuman environment. These embodied geographies sketch out a lively and promiscuous ontology that undermines the solid units of the human–nonhuman binary.

Animal geographers have also begun to engage with this vitalist ontology to explore the beastly places of nonhuman lives, in and among the geographies of human habitation. They have mapped a series of networked geographies and lively topologies that unsettle simple modern mappings of nature – like urban, rural, the nature reserve, the nation state, and the sanctity of human body. This engagement has been explicitly ethical and has explored the potential mismatch between the humanist discourse of species identity and the immanent potential
within any organism and ecological complex for differentiation. Attending to this nonhuman difference, vitalist posthumanists have outlined the parameters of a relational or ethological ethics that avoids anthropocentrism of much animal rights discourse and the utilitarianism of most modern regimes of environmental governance.

Various authors have also sought to push forward the positive political potential of this vitalist ontology to rethink difference and to forge a critical posthumanist politics. Perhaps the most famous examples of this type of endeavor can be found in the work of Donna Haraway, who has given us the fertile concepts of the cyborg and the companion species as metaphors for forging a more than human politics. A similar task can be found in the ongoing work of Isabelle Stengers, whose hybrid and immanent ‘cosmopolitics’ is starting to attract the attention of several cultural geographers as a way of forging a more than human politics and epistemology. The political challenge this poses is discussed in greater detail below.

Posthuman Themes

This brief overview of the four different modalities of posthumanism gives a sketch of the popular and theoretical landscapes encompassed by the term. The next section to this article highlights five important themes that run through the recent interest in posthumanism and frame the key debates amongst its advocates. These relate to the ‘ontologies’, ‘epistemologies’, ‘methodologies’, ‘ethics’, and ‘politics’ of posthumanism and posthumanist geographies.

Posthumanist Ontologies

There are a range of different ontological positions in play in the four different modalities of contemporary posthumanism outlined above. Deconstructive posthumanists are avowedly anti ontological in their work. They contest all claims to truth that relate to an essential human or nonhuman nature and are reluctant to ground their interventions; their identities are constructed in the heady realms of discourse and representation amid swirling networks of language and signification. In contrast, both hyperbolic and apocalyptic posthumanism are grounded in a naïve epochal ontology that diagnoses the demise of a pure state in which nature and society were separate, and the arrival of a new posthuman condition, which is characterized by proliferating hybrids. They differ in their judgment of this millennial event but their ontology is consistent. It is the final vitalist modality that advances the most coherent ontology of the four and it is this that has stimulated the greatest interest among posthumanist philosophers and geographers.

The ontology of vitalist posthumanism challenges both deconstructive and apocalyptic positions and seeks to harness and guide the hyperbolic excesses of unbridled modern technoscience.

Latour’s amodern ontology, in which the world is comprised of hybrids, quasi objects, and quasi subjects, historicizes the epochal imaginings of both apocalyptic and hyperbolic posthumanists and contests their claims that our contemporary condition comprises a new ontology of blurred boundaries. Latour argues that these boundaries have always been blurred. While the con temporary blurrings might be novel there is no such thing as a pure human or a pure nonhuman, there never has been and there never will be. Deleuze’s ontology of immanence takes these critiques a step further to challenge the transcendental forms of nature and natural bodies beloved of conservative apocalypse harbingers. Like Marx, Deleuze argues that nothing is static, everything is a product of historical conditions, and all that is solid can melt into air. Such an understanding undermines any politics of nostalgic retreat that uses objective science to naturalize any past form or set of social relations.

The ontology of vitalist posthumanism thus takes us beyond the anti ontological stance of deconstructive posthumanism without lapsing into the essentialist for mations of which the latter is so critical. However, the flat ontology of Latour and other actor network theorists has been criticized by geographers and other social scientists for its generalized symmetry. This reduces humans and nonhumans to the same ontological condition, and leaves theorists unable to differentiate specific human competencies, like the ability to reflect and react to classification. Critical theorists argue that this forgoes too many of the explanatory and political resources of humanism.

In place of Latour’s flat ontology, Deleuze presents a nonessentialist ontology of difference. He draws on Spinoza and ethology to outline a relational ontology of affects. Affects are the material properties and forces of a body that condition the nature of any interaction in a particular spatial context. These affects are not immutable essences but are immanent from the assemblage in which a body is encountered and are open to the play of future differentiation. With this emphasis on the immanent potential of any body to become otherwise, Deleuze maintains the postmodern focus on difference, without reducing difference to the play of textual signifiers. Nonrepresentational geographers argue that he thus outlines a relational ontology that helps move beyond the realism–relativism impasse that plagued cultural geography and the sociology of science in the 1990s. They have developed Deleuze’s ontology in the context of their work on embodiment, affect, skill, and intelligence.

In many ways it is possible to map overlaps between the exuberance for immanence of some vitalist posthumanists and the celebration of innovation among
hyperbolic posthumanists. Although the former see the contemporary condition as a radical departure, both relish the experimental and creative ethos of modern technoscience and welcome the possibilities for social reinvention and individual self-expression. Indeed, as feminist and Marxist critics of Deleuze have pointed out, his groundless ontology struggles to provide criteria for differentiating between different becomings – between, for example, the genetic screening of human embryos and the emergence of virulent zoonoses. On occasions the radical defense of immanence and flow among some vitalist, posthumanist geographers comes close to the complacent hyperbole of some of the more extreme advocates for unbridled technoscience. The political conundrums this poses is discussed below.

Finally, each of these four modalities of posthumanism performs their own spatial ontology, with differing consequences for posthumanist geographies. Apocalyptic posthumanism implies a geography of retreat – a return to spatial units and imagined pasts with clearly drawn divisions – the wilderness or nature reserve, the purified body or preindustrial society. This modality imagines an impossible regional topology of neat territories. Deconstructive posthumanism implies a networked spatial ontology in which human subjects are caught up in ontological and epistemological relativism offered up by Derrida and Latour and Deleuze and moves on from the ocular centric epistemology and have drawn attention to the primacy of the gaze in Western epistemologies. The view from nowhere can be understood as a reflection of the broader dualism established between the mind and the body – where the mind, as the locus of thought, receives a direct and mediated representation of the world through the panoptic gaze. The body is absent from such an epistemology. Developing the methodologies and concerns of humanistic geography, cultural geographers have mapped the consequences of this ocular centric epistemology and have drawn attention to the exclusive ways of seeing it sustains. By and large this work has focused on deconstructing textual representations.

In line with their materialist ontologies, vitalist posthumanists have taken forward the deconstructive critiques of modern (social) scientific epistemologies but have sought to ground them in explorations of the embodied practices of knowing and representation. More than human and nonrepresentational geographers have drawn in particular on ideas from phenomenology, performance studies, and the sociology of science to trace extensive variety of vernacular or folk knowledges and knowledge spaces hitherto marginalized from the Whiggish histories of modern science and geography. Deconstructive posthumanists have also drawn attention to the primacy of the gaze in Western epistemologies. The view from nowhere can be understood as a reflection of the broader dualism established between the mind and the body – where the mind, as the locus of thought, receives a direct and mediated representation of the world through the panoptic gaze. The body is absent from such an epistemology. Developing the methodologies and concerns of humanistic geography, cultural geographers have mapped the consequences of this ocular centric epistemology and have drawn attention to the exclusive ways of seeing it sustains. By and large this work has focused on deconstructing textual representations.

Posthumanist Epistemologies

Deconstructive posthumanists like Foucault and Derrida and their acolytes in cultural geography have challenged the epistemology of humanist social science on the grounds that it is founded on an ideological construct – the single human subject, which they argue is an exclusive model that is generally white, male, hetero sexual, and Western. Claims to truth that stem from and relate to this subject efface the vast diversity of other voices and modes of subjectivity that exist in a world of difference. In place of this universalized view from nowhere – or god trick – feminist writers like Donna Haraway and Sandra Harding, argue for an epistemology grounded in situated knowledges. Here the author reflects on the context of their subject position both geographically and in relation to the power relations that surround their claims to representation. This reflexive process foregrounds an author’s own standpoint, which they claim develops a stronger form of objectivity than that emerging from an idealized humanist subject.

Cultural geographers have welcomed this postmodern epistemological challenge and have documented an extensive variety of vernacular or folk knowledges and knowledge spaces hitherto marginalized from the Whiggish histories of modern science and geography. Deconstructive posthumanists have also drawn attention to the primacy of the gaze in Western epistemologies. The view from nowhere can be understood as a reflection of the broader dualism established between the mind and the body – where the mind, as the locus of thought, receives a direct and mediated representation of the world through the panoptic gaze. The body is absent from such an epistemology. Developing the methodologies and concerns of humanistic geography, cultural geographers have mapped the consequences of this ocular centric epistemology and have drawn attention to the exclusive ways of seeing it sustains. By and large this work has focused on deconstructing textual representations.

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This vitalist approach has opened analytical space for the consideration of a host of other senses beyond the visual. Nonrepresentational cultural geographers have documented the sensory geographies of taste, touch, smell, and sound, engaging with and witnessing the spaces experienced by differently abled communities.
Out in the field, sociologists of science have explored the embodied interactions that occur between humans and nonhumans on an affective level and have drawn attention to the vernacular expertise performed by lay communities. This democratization of expertise broadens the standard epistemologies of natural science and gives political space to hitherto marginalized groups.

**Posthumanist Methodologies**

The linguistic turn in cultural geography and the subsequent material or performative turn by more than human and nonrepresentational geographers have led to a significant diversification in the methodologies and methods employed by human geographers. This trend has significantly increased the modes of intervention available and has resulted in a more catholic understanding of what counts as data within the discipline.

Deconstructive posthumanism in cultural geography drew on a range of methods for textual analysis. Its most significant development was the employment of textual data, which is then subjected to similar formative methods to try and get closer to objects and the practices of people in real time. These ethnographic methods involve the transcription and coding of textual data, which is then subjected to similar forms of discourse analysis to those used on published material.

Nonrepresentational geographers are critical of this textual focus, which they argue misses the life of the events being recorded and fails to witness affects, skills, and everyday practices. Instead, they have drawn on and refined a collection of ethnographic, visual, and performative methods to try and get closer to objects and the practices of people in real time. These ethnographic methods involve the geographer acting as an observant participant, experiencing places along with their research subjects through similar modes of embodied engagement. Geographers have employed video and creative writing techniques to witness and record their experiences for later analysis. This type of engaged and affective fieldwork moves toward a participatory model of research, in which the social scientist actively intervenes in the research situation – rather than seeking to remain a detached observer. This model challenges the figure of the academic as impartial and above the fray. Instead, it advocates getting involved in any emerging politics in the research context.

To explore the agency of nonhumans – both organic and inorganic – more than human geographers have borrowed ethnographic methods from science studies and anthropology – in particular from actor network theory.

Following the object or tracing the commodity through multisited ethnographies has become a popular method for examining how different nonhumans link together peoples and places and for revealing the hidden connections they perform. Attending to the specific skills and practices required to translate an object into a mobile representation has proved a powerful mechanism for exploring the pragmatics of representation and for unraveling the geographies of power operating through distributed networks.

**Posthumanist Ethics**

The different modalities of posthumanism outlined in the first section to this article challenge, in their different ways, several of the core principles of humanist ethics. In particular, deconstructive and vitalist posthumanisms question the primacy afforded reason and human consciousness in ethical decision making and the binary (human–nonhuman) formation of who or what has ethical status.

More than human geographers have sought to outline a relational ethics that goes beyond the humanist privileging of the human subject as the single container of value. They aim to broaden the ethical franchise in line with the insights of a hybrid and vitalist ontology. The relational ethics they advocate also avoids the moral extensionism of neohumanist animal rights theorizing, which elevates a small subset of species to ethical parity with humans and ignores the nonhuman majority. A relational ethics attends to the specific ecologies and immanent potentialities of an ecological complex and is founded on a nonessentialist, ethological ethics that aims to respect the difference of the nonhuman. To date, the normative articulations of these ethics have (necessarily) remained vague and largely comprise appeals for less violence toward animals and to tread lightly on the earth.

This relational model of ethics therefore claims to avoid the transcendent and static ethical codes advocated by apocalyptic posthumanists. Here the nonhuman realm – as nature – is reduced to an ontologically pure domain to be held in reserve. This type of ontological conservatism can be found in deep ecology, wilderness movements, and many organizations campaigning to save a specific model of the human. In place of this ethical ontology more than human, relational geographers have argued for a postenvironmentalist ethics that would embrace the contingent and hybrid ontology that characterizes our amodern condition and would avoid the tendency among environment ethicists to fix the nonhuman in time and place.

Moving off from the humanist understanding of rationalism as the imperative for ethical action, nonrepresentational and emotional geographers have also explored the affective underpinnings to ethical action.
This more than rational approach to ethics develops the ideas of postmodern ethicists, such as Zygmunt Bauman, who argue after Foucault that ethics requires a sensibility as well as a code. It is this sensibility that impels people to act in relation to a code and an ethical sensibility rarely stems from the act of rational contemplation. Instead, an ethical sensibility emerges from the practices and affections that constitute everyday life, performed in the material world in a noncontemplative fashion. This precomputive basis produces an ethological ethics that is grounded in the messy and lively ontology of our posthuman condition. Geographers and social theorists have drawn attention to the importance of enchantment, wonder, and curiosity as the foundation for a generous disposition toward the nonhuman realm. They are also starting to develop the ethical implications of abjection, phobias, fears, and more ‘negative’ affective responses.

**Posthumanist Politics**

The popular posthumanism of hyperbole and apocalypse represent two different extremes along a spectrum of political responses to the contemporary posthuman condition. In apocalyptic posthumanism we are offered a politics of retreat, a nostalgic return to a mythical and pure natural past or an essentialized human archetype. These fixed forms are often determined by experts through an autocratic model of science that shortcuts democratic politics. In contrast hyperbolic posthumanism envisages a realm beyond politics in which individual, self interested actors can seek transcendence through promiscuous interminglings. This complacent posthumanism offers few critical resources to address inequities in the development of technoscience or to manage the ecological and physiological risks that accompany sociomaterial innovations.

In their different way, deconstructive and vitalist posthumanism offer two very different models of politics, which try and thread a path between these two extremes. Neither of them is explicitly antimodern but they do seek to reign and guide the excesses of complacent posthumanism. Deconstructive posthumanism has largely concerned itself with challenging the political formations and modes of governance that are associated with modern thought. Its advocates have been less interested in ad vocating a positive politics and those who have taken on their ideas drift toward a model of antistatist anarchism or a form of postmodern identity politics that widens the types of difference recognized by progressive politicians, out from traditional concerns with socioeconomic class and gender.

Vitalist posthumanism seeks to ground its politics in the stuff of life in a nonessentialist and immanent fashion. It argues that we cannot start at a fixed beginning – the human/nature – but instead must begin in the middle, in among the processes of becoming. What is human and what is natural is always the effect, rather than the ground for politics; forms and identities emerge from the interaction of lots of different actants, rather than providing the starting point for these interactions. Accordingly, vitalist posthumanists argue that we need a politics that does not seek to conserve existing beings but to produce new forms. This is an immanent model of politics that contests appeals to natural forces and the unchanging existence of political economic structures. Instead it gives space to flows, becomings, and deter ritorializations of regimes of power and subjectification.

The politics of vitalist posthumanism therefore differs markedly from the politics of scale that has dominated much critical geography over the last 20 years. Scalar politics argues that the world is ordered hierarchically, with more extensive global forces and networks interpenetrating with local spaces to determine outcomes. It defends the existence of universal global forces and entities – like capital and capitalism. Instead a Deleuzian or Latourian approach would see these networks as contingent and fragile and, most importantly, continu ously performed in a multitude of local settings under determined by a scalar hierarchy. Several different models of positive posthumanist political theory exist that are informed by this ontology. These include Donna Haraway’s metaphorical use of the cyborg and the com panion species, Isabelle Stengers’ and Bruno Latour’s cosmopolitics, or Hardt and Negri’s concept of the multitude. In different ways, geographers are now beginning to develop and spatialize these models.

Marxist and feminist critics have argued that the radical emphasis on immanence and flexibility in the work of Deleuze and Guattari and those who have developed their ideas veers too far toward a hyperbolic and complacent posthumanism. They posit that the monstrous couplings envisaged by Deleuze and Guattari and the forms of subjectivity they enable too closely approximate those posthumans being created by capita list technoscience. In celebrating immanence and fluidity orientated around a flat ontology, Marxist critics argue that vitalist posthumanism struggles to maintain a critical space from the imperatives of global capitalism for flexibility and creative destruction. Similarly, feminist critiques of hyperbolic posthumanism argue that this is masculine fantasy of wild spaces, new frontiers, and sublime encounters.

This tension between fixity and fluidity and the relative merits of scalar analysis has provoked much debate within the discipline. This centers on the chal lenge for a vitalist approach to move off from the certainties of both political economy and neoliberalism and to forge a critical, material posthumanism that can thread a path through the reactionary desire for fixity and the complacent celebration of fluidity.
Posthumanism and ‘Human’ Geography

The rise of a posthumanist geography within the sub discipline of human geography raises obvious questions about the suitability and the future of the human–physical divide within the discipline. In recent years, the ontological hygiene implied by this division has come under critical scrutiny from a host of geographers seeking some form of interdisciplinary (or intradisciplinary) rapprochement. Posthumanism – especially in its vitalist modality that appreciates the liveliness of the nonhuman world – can be understood as one strand of this broader questioning. Indeed more than human geographers have begun to collaborate with natural scientists – both geographers and others – to develop new methodologies to allow interdisciplinary collaboration.

In some ways this could be seen as a return to an older model of cultural geography, as practiced by the Berkeley School, where the materialities of cultures and natures were considered in a more symmetrical fashion. How ever, this move toward a reunion also aims to forge a more critical, deliberative, and democratic model of science than that envisaged by Carl Sauer. Here, geographers like Sarah Whatmore have drawn on the work of Isabelle Stengers, who outlines a methodology for interdisciplinary collaboration and the redistribution of expertise in environmental decision making. Stengers advocates the formation of competency groups for deliberation in matters that concern social and natural scientists, organic nonhumans, and different public constituencies.

Conclusions: The Latent Humanism in Posthumanism

On many levels posthumanism is therefore something of a misnomer. In ontological terms we have never been human, in the strict sense of the term, and cannot now be beyond something which cannot and did not exist. Popular claims for the passing of the human era and arrival of a new posthuman condition are misplaced and hyperbolic. Boundaries between the human and the nonhuman have been crossed throughout the entire history of the human species. However, perhaps popular posthumanism is actually more concerned that the pace of these ontological interminglings has been stepped up, that we have entered into a new temporality of imma nence and hybridization that is inherently both more risky and more promising. It would be fair to say that the current temporality of innovation, interspecies exchange, and environmental degradation are unprecedented and therefore demand critical attention.

It is here that the mis appellation of those activities grouped under the labels deconstructive and vitalist posthumanism is perhaps most clear. In many ways their concern with the failings of humanism and with the character of emerging posthuman futures situates their activities firmly within the tradition of progressive critical theory. Even as they seek to move away from their humanist predecessors, deconstructive and vitalist posthumanists remain firmly tied to the Enlightenment ethos of critical enquiry. To be sure, the human is now much less assured, much more caught within the play of forces and the discursive networks of other actants. It is also much less self evident to itself (the psychoanalytic critique), but the point about the collision of the terms ‘post’ and ‘human(istic)’ is not that the latter – the human, and indeed the humanistic philosophies which feasted upon it – are so much entirely erased as thor oughly problematized (while still leaving flickering traces in what remains). Posthumanism and humanism remain thoroughly interwoven; even as the Human (sing) leaves, critically reflexive humans (pl.) are not going to disappear anytime soon.

So what are we post? What does it mean to be post human? Is posthumanism just another faddish post ‘ism’ or does it make a valuable contribution to the geo graphical enquiry? In many ways these are early days and the answers to these questions are still being worked through; the jury is still out. However, it is clear from this brief overview that posthumanist theories have posed a strong challenge to the unitary figure of the human in humanism and to the boundary work this figure does in defining the nonhuman. Posthumanist geographers are in the vanguard in forging a critical mode of post humanist enquiry that provides fresh perspectives on established themes of geographical research. A critical posthumanist geography is well placed to make timely interventions into contemporary hot topics as the char acter and consequences of the current molten moment work themselves through.

See also: Actor-Network Theory/Network Geographies; Affect; Becoming; Dwelling; Fluidity-Fixity; Humanism/ Humanistic Geography; Human-Nonhuman; Interdisciplinarity, Material, The; Nature; Nature-Culture; Non-Representational Theory/Non-Representational Geographies; Other/Otherness; Postcolonialism/ Postcolonial Geographies; Postmodernism/Postmodern Geography; Poststructuralism/Poststructuralist Geographies; Psychoanalytic Theory/Psychoanalytic Geographies; Resource and Environmental Economics.

Further Reading


Relevant Websites

http://www.posthumanism.org.uk/
Ethics, technology, culture.

http://www.nature.com/
Nature.

http://www.opendemocracy.net/
Open democracy, free thinking for the world.

http://www.prospectmagazine.co.uk/
Prospect Magazine.
Postmodern City
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Glossary
Deconstructionism A philosophical approach to knowledge connected with postmodernism that attempts to interpret meaning by stripping away layers of embedded assumptions, biases, and ideas in order to understand the ways in which meaning is socially, historically, and contextually constructed whether the object is a text or a building.
Disneyfication The appearance of themed architecture, sanitized leisure spaces, the privatization of public space, and other theme park-like elements in urban space; usually used in a derogatory sense.
Epistemology A branch of philosophy concerned with systems of knowledge, and how knowledge is formed and validated.
Neologism The coining of a new word or phrase to express a concept that cannot be adequately represented with existing language.
New Urbanism Postmodern urban planning and design movement whose goal is the creation of neighborhood-oriented urban communities based on appealing and livable architecture.
Post-Fordism An economic formation associated with the postmodern era, in which capital moves beyond the mass production, assembly-line model of Henry Ford and instead shifts to a model of consumer-driven flexible accumulation where labor and production are globalized.
Postmodernism A catch-all term that has been applied to literary criticism, art and architecture, and the social sciences to describe theory and practice that actively rejects the scientific certainty and rationality of modernism, and instead engages linguistic and cultural relativism, subjectivity, and heterogeneity, and in some cases links them to underlying social and economic transformation.
Post-Structuralism A variety of postmodern methods and theories such as deconstructionism that approach knowledge from the philosophical standpoint that meaning is socially constructed and always shifting; a denial of the binary opposition of structuralism.

Definitions
The postmodern city as a concept virtually defies a single definition. Since the time of its entry into common urban lexicon, there have arisen so many competing definitions of the term ‘postmodern’ it has been likened to an intellectual Rorschach test. The term appears to invite debate regarding its actual historical moment, its cultural milieu, and its politics. It is impossible to pin down historically, with various authorities claiming its beginnings anywhere from the late nineteenth century to the 1970s (the phrase postmodern itself dates back to 1870, and was used in an architectural context as early as 1945). It is variously treated as an architectural esthetic, an urban social condition, an epistemological stance, and an intellectual subculture. It has been associated, albeit in different ways, with political stances on both the left and the right. Some of the most prominent figures held up as superlative examples of postmodernist work steadfastly refuse to be publicly associated with that term. Given this intellectual cacophony, the term ‘postmodern city’ can best be approached as a collective (but not necessarily cohesive) attempt to define and shape the city that emerges out of twentieth century modernism.

Introduction
Beginning in the 1970s and early 1980s, a new type of architectural style began to appear sporadically in the skylines of North American and European cities. Sometimes the distinguishing features were subtle, such as the Chippendale flourish atop the otherwise modernist AT&T building in New York City, and sometimes the features were boldly unique, such as Frank Gehry’s irregularly angular house in Santa Monica, clothed in rough asphalt and chain link fencing. Such buildings attracted the attention of architectural critics who declared them postmodern, that is, conscious efforts to reject the sleek and coldly efficient tenets of architectural modernism. At the same time, urban critics noted a sea change in the broader cultural, social, and economic conditions of the city as industrialism waned, inner city poverty intensified, service sector oriented leisure and consumption prevailed, and new global economic relations underpinned the urban fabric. These critics also identified these changes with the term ‘postmodern’ and incorporated related philosophical developments such as post structuralism and deconstructionism into their theoretical understanding of these changes. Thus, by the mid 1980s, the post modern city had been rhetorically constructed as an
architectural style, an urban condition, and a theoretical perspective.

Emergence of Postmodern Perspectives on the City: Questioning the Modern

One consistent thread across all postmodern urban thought is a conscious distancing from modernism. While some postulate a dramatic reworking of modernist tendencies and others see a complete break from them, all agree that the signature characteristics of the modern city – an efficient machine for living crisscrossed by superhighways and planned from a rational scientific standpoint – no longer apply to contemporary urban (and suburban) space. Modernism, like postmodernism, also is a multifaceted construct, and from the postmodern perspective its underlying tenets come under attack from all sides. Postmodern architects question modernism’s definition of beauty as stark functionalism, as epitomized by Mies van der Rohe’s famous statement “less is more.” Postmodern planners question the top down elitist process associated with the development of the twentieth century city illustrated by figures such as Robert Moses. Postmodern geographers set their gaze upon the underlying theories used to interpret the modern city, questioning a legacy of modernist geographic theory from positivist scientific approaches popularized in the 1960s back to the urban ecology introduced by the Chicago School in the 1920s. Some, following the lead of European critical social theorists, reach back to modernist theories as they were developed in the hands of Marx, Weber, and others in the nineteenth century to remap a theoretical path that explicitly theorizes the spatial. The work of French theorists such as Jean Baudrillard, Michel Foucault, and especially Henri Lefebvre has been particularly influential in the development of postmodern geographic thought.

While all postmodern perspectives may share the same motivation to uproot assumptions about modern urban space, the different theoretical and disciplinary starting points shape divergent interpretations of the nature of postmodern urban space. Two distinct conceptual poles have emerged: one that celebrates a playful, pedestrian friendly, and historically sensitive landscape where healthy communities are nurtured; and the other, its diametric opposite, a sinister hyperspace that is the active embodiment of the military industrial complex of late capitalism/globalization. The former is more often associated with postmodern architecture and planning, while the latter is more common in postmodern urban geography. Some of the more provocative interpretations are situated somewhere between the two poles, investigating the hegemonic possibilities of postmodern urbanity’s complex and contradictory impulses.

Building, Planning, and Understanding the Postmodern City

However one chooses to label contemporary urban forms, they are actively being designed and built by architects who align themselves with postmodern styles, planned by urban planners who embrace a postmodern communicative model of development (and sometimes even before the dust has settled), interpreted by geographers and urban theorists who invoke the phrase postmodern to explain what they see. The postmodern city has extraordinary material presence that borders on visual branding – specific buildings and entire cities are indelibly associated with the term. Architects, planners, geographers, and other urban theorists each play a different role in constructing the powerful imagery, as well as the concrete landscapes, of the postmodern city.

Designing the Postmodern City: Postmodernism as Architectural Style

Some of the earliest references to the postmodern city are made in connection with specific architects and their designs. By the time Philip Johnson had completed the aforementioned AT&T Building in 1984 (Figure 1), perhaps the most famous postmodern commission of its time, several prototypical works insistently announced
the arrival of postmodern styles in the city and set the parameters of debate. Designs such as Charles Moore’s Piazza d’Italia in 1978 (Figure 2) with its shimmering juxtaposition of free standing classical columns and colorful neon lights in a decaying inner city neighborhood, and Michael Graves’ playful Portland Building in 1982 that housed government workers within a 15 story structure adorned with what appeared to be giant holiday ribbons, introduced architectural elements that brazenly rejected the modern. They introduced symbolism and decoration, historical referents, pedestrian scale, and humor. Postmodern architecture was also linked with tourism and consumption early on; James Rouse’s festival marketplaces arose out of malingering industrial sites to combine decorative historical charm with cleverly marketed shopping opportunities, and epitomized (some might say obscured) underlying postmodern land use transitions. Seminal texts such as Robert Venturi, Denise Scott Brown, and Steven Izenour’s 1972 *Learning from Las Vegas* and Charles Jenck’s 1971 *Language of Postmodern Architecture* helped formalize and popularize the movement. In 1985, the Disney Company chose to engage well known postmodern architects to carry out ambitious expansion efforts on their Florida and California properties, and, a few years later, in France. As a result, high profile commissions were awarded to numerous postmodern architects, ensuring that literally millions of tourists each year would now visit some of the most representative postmodern architecture as part of their vacation. Architectural esthetic merged seamlessly with tourist destination; Michael Graves’ Swan and Dolphin hotels (with a total of over 2000 rooms), for example, became the nightly endpoint after a long day of play (Figure 3); Robert Stern’s cartoonish Disney Casting Center, a sight out the left side of the tour bus, and Frank Gehry’s Festival Disney in Paris, an ironically symbolic shopping mall for European visitors. Michael Eisner, then the CEO of the Disney Company, referred to his postmodern vision as ‘entertainment architecture’ a provocative combination of urban functions not lost on urban theorists.

**Planning the Postmodern City: Postmodernism as Planning Discourse**

The original goals of postmodern architecture — playfully decorative styles, sensitivity to the local, and the fostering of open and engaged community settings — continue to be of great importance to those planning the city. Postmodern planning discourses focus on ways to achieve these goals by looking beyond just one building at a time and instead grappling with urban development at neighborhood and regional scales. Just as architects bemoaned the perceived stranglehold that modernist principles held over their discipline, a growing number of planners felt equally straight jacketed by the preferred scientific rational methods of large scale, bulldozer driven approaches of the day. Jane Jacobs was one of the first to criticize the *status quo* in her scathing 1961 assessment *The Death and Life of American Cities*; other planners noted with some bemusement that while traditional cities like Detroit and Cleveland imploded upon themselves, the artificial townscape of Disneyland (1955) was in fact a far more successful model of a city.
that actually worked. Early Disney proponents such as James Rouse and Peter Blake noted that Disney contributed not just a visually, historically charming architectural lexicon, but a blueprint for an urban infrastructure that efficiently provided power, transportation, sanitation, and somewhat intangibly, happiness to tens of thousands of people at a time. Translating these achievements to the real world has been an important goal for many postmodern planners. Probably the most recognizable effort has been labeled ‘new urbanism’, a movement that some have noted owes its success as much to sympathetic journalists as to architects and planners. Most strongly associated with the design team of Andres Duany and Elizabeth Plater Zyberk and their works such as Seaside, Florida (1981), new urbanism refers to collective efforts to reintroduce the wisdom of the nineteenth century walking city into twenty first century urban and suburban spaces thought to have been dehumanized by decades of modernist plans. New urbanism brings with it a very tactile agenda – an architecture based on traditional wood and stone building materials, brick lined streets (to slow traffic), front porches (to encourage neighborliness), shade trees for comfort, water features to soothe, and diversity – visual, social, and economic. The neighborhood, not the individual building, remains the key object of design; new urbanists plan to ensure a usable, walking city lined with attractive homes, shops, parks, offices, and schools. As a visual iconography for urban design, new urbanism has attracted considerable attention both within and outside the architectural profession. The professional organization Congress for New Urbanism, founded in 1993, 12 years later claimed over 2000 members in 20 countries and over 200 new urbanist developments in the United States alone. New urbanism has been influential in shaping United States public housing policy: The US Housing and Urban Development (HUD) HOPE VI grant program, also initiated in 1993, incorporated new urbanist design principles into their program guidelines. And by 1994, perhaps somewhat inevitably, new urbanism came full circle to again be linked with the Disney Company. When Disney announced plans for a new urbanist styled new town development Celebration (Figure 4) adjacent to their Walt Disney World property in Florida, more than 5000 people lined up to compete in a lottery for just 341 properties.

New urbanist developments, though they may number in the hundreds, represent only isolated pieces of the urban fabric. Other postmodern planners are concerned with developing comprehensive discursive practices that can rewrite the entire planning process itself, and thus affect space at regional and national levels. Alternatively known as the communicative planning model, the collaborative model, or the consensus model, the top priority is the reevaluation of the planner’s role in the development process. No longer is the planner seen as the trained scientific expert who informs the public what is best for them. Such a model, it was argued, led to fundamentally undemocratic results, ensuring that those in power maintained their power by replicating a formative mechanism of oppression. Instead, the postmodern planner should be envisioned as a facilitator, a patient listener who hears the stories told by the various stakeholders, distills the points of connection, and helps
build consensus among the various parties. These theories are predicated upon a body of postmodern work that sees all knowledge as socially constructed, accepts different forms of knowledge as equally valid, and, drawing from Jurgen Habermas’ theory of communicative action, posits that consensus achieved through communication can be the foundation for rational action. Following Habermas, the role of language itself is key – it is through talking and listening, contesting or accepting others’ claims, that pragmatic mutual understanding is reached. Proponents of the communicative models further note that recent research indicates that even in the heyday of modernist planning, the decision making stakeholders never paid as much attention to so called expert knowledge as was assumed. Postmodern planning approaches, thus, are meant to more realistically model the nonlinear and unpredictable paths by which decisions are reached.

Theorizing the Postmodern City: Postmodernism as Interpretive Framework

By the 1980s, geographers and other urban observers began to inquire whether the new esthetic emerging in the city was not just a new architectural style or the result of different planning procedures but a break from modern urban conditions, and not necessarily a positive one at that. The notion that the postmodern city represents fundamentally different cultural, social, and economic relations has become one of the most active themes in urban research. This version of the postmodern city looks beyond both the material landscape and its related planning processes to ask what economic, social, and cultural relations underlie contemporary urban form. Often the initial motivation to pursue these questions is triggered by specific buildings or places – the new venues are symbolic reminders of the increasing difficulty in navigating the terrain with existing theory (or, for that matter, existing cartography). Buildings like Portman’s Bonaventure in Los Angeles (Figure 5), cities like Sea side, Florida, or the artificial fabric of Disneyland have inspired urban theorists to interrogate specific places using methods derived from postmodern (post structural) philosophical thought, and to reevaluate the epistemological bases of their own urban theories as well. Perhaps no city has been as enigmatic a puzzle, and hence as influential a site, as Los Angeles, and no group of scholars as closely associated with postmodern urban theory than the so called LA school.

The LA school emerged somewhat fitfully in the late 1980s, bringing together an otherwise divergent set of scholars who all shared the conviction that the processes that converged to produce the seemingly unique contours of Los Angeles were in fact the same processes occurring at national and global scales. Los Angeles has been identified as prototypical of significant trends in including economic restructuring, demographic upheaval,
the death of public space, the disneyfication of urban space, and environmental degradation at unprecedented levels. A growing collection of postmodern tours guide the reader through Los Angeles’ extremes: Fredric Jameson, for example, takes readers through the dizzying privatized hyperspaces of the Bonaventure Hotel in order to illustrate the cultural expression of postmodern capital; Edward Soja places readers in the pilot’s seat of an imaginary airplane to fly over the discommodated metropolis of ethnically, economically, and environment mentally balkanized spaces rigidly enclosed by an outer ring of strategically placed military complexes; and Mike Davis gives a postmodern weather report where the reader can experience Los Angeles’ imminent destruction from fire, flood, wind, and geological fault lines, often due to the unintended consequences of recent urban development.

The LA school is also unified in the conviction that conventional urban theory cannot explain these new formations, and that profound reconceptualization is needed. Some embrace a critical post Marxist perspective, some a perspective that borrows from other postmodern social theories such as feminism and post colonialism, and some a perspective more clearly drawn from post structural/deconstructionist philosophies. All new words (neologisms) to disrupting the expected structure of discourse.

A significant result has been what is referred to as the spatialization of theory; that is, a conscious effort to theorize the powerful role space plays in shaping urban conditions. Working from the assertion that most theory (either modern or postmodern) privileges the way social conditions shape urban space and not vice versa, this revitalized urban theory attempts to carve out a dynamic and formative role for the spatial. Three of most in fluential approaches have been introduced by Michael Dear, Edward Soja (both working out of Los Angeles), and David Harvey. Michael Dear offers what is on the surface the most playful of the approaches, building an alternative model of urban space consisting of, in his words, dreamscape, carcereal cities, privatopias, ethno burbs, and the like, representing (again in his words) the keno capitalism of the new world bipolar disorder. Beneath the somewhat mischiefous vocabulary, the point is that new economic relations of power are manifest in radically new spatial form. Edward Soja works exten sively with Henri Lefebvre’s Marxian theories on the production of space to develop a concept he calls ‘thirdspace’, a deconstructive possibility where perceived space, conceived space, and lived space are all simul taneously constructed and mediated. David Harvey – though working thousands of miles away from Los Angeles – has developed a more explicitly neo Marxist theoretical perspective that has been similarly influential for postmodern urban theorists. Harvey revisits Marx to excavate the spatial undercurrents from his writing in light of twentieth and twenty first century waves of economic restructuring and globalization. His theories provide a direct link between the broad processes of de industrialization, post Fordist flexible accumulation, global immigration, and other material patterns and the shiny commodified streetscapes of postmodernity. Harvey also explicitly states what is implicit in much postmodern urban writing: that the production and reproduction of urban space is an inherently utopian process, in that it is a continually unfolding discourse about how the world should look and how it should operate. Indeed, postmodern space is often interpreted in utopian terms, whether it is a Disney like utopian charmscape or a Jameson esque dystopian hyperspace. Harvey helps locate the utopian impulse by theorizing it within contemporary spatial form.

Postmodern Critiques of the City

There are almost as many criticisms of postmodernism as there are definitions; even when just considering the postmodern city, numerous formidable critiques have been voiced. They fall broadly into two camps – first, critiques regarding the desirability of a world filled with postmodern urban spaces, and second, critiques attacking the theoretical and epistemological underpinnings of postmodern urban models. Adherents of the first camp agree that postmodern urban changes have occurred, but lament what they see as the degradation of urban space. Adherents of the second camp question the underlying assertion that the models being offered are indeed adequate to interpret contemporary urban space, or whether in fact a postmodern break has occurred at all.

Gated communities, skyscrapers built as fortresses, surveillance cameras, fabricated shopping streets, skin deep historical facades, and other hallmarks of post modern form have drawn harsh criticism from many observers. The architectural forms of the postmodern city have been dismissed as culturally vacuous, or worse, treated with great suspicion as the material embodiment of a neoliberal agenda that foreshadows an increasingly balkanized city where, despite postmodern rhetoric promoting diversity and heterogeneity, actual urban spaces become unprecedentedly polarized along socio-economic fault lines. Critics fear that the postmodern city with its commodified theme park environments will
seductively distract the citizenry from seeing what is really going on – those citizens, that is, who were not barred entrance by gates, surveillance cameras, and other militaristic means. Further, a planning process that encourages planners to assume the role of facilitators is identified as a key element of the problem. In their attempts to build consensus, critics argue, planners simply legitimate the interests of corporate capital as they inadvertently become mouthpieces for the most powerful stakeholders at the table. Thus the postmodern planning model is seen to potentially replicate the hierarchies of power that created geographically uneven development in the first place.

Other critics of the postmodern city go further and question the underlying tenets upon which postmodern urban theory is based. A common argument centers on whether a radical postmodern break has indeed occurred, and if so when. With no postmodern break, critics assert, traditional urban theories still serve well. Even if a break has occurred, others question, does proposed theory explain it? Postmodern urban theory is often accused (as is most postmodern theory in general) of going too far in rejecting master narrative and letting in competing voices, to the point of allowing interpretation to dissolve into an incommensurate pastiche of observation or unverifiable personal anecdote. A related concern focuses on the ways in which culture is implicitly theorized within postmodern theory – does cultural expression inevitably and deterministically follow other social changes? Recent scholarship in cultural studies suggests cultural form, while entwined with social and economic production, is not so easy to predict. The image painted by Jameson of cultural zombies wandering helplessly through the Bonaventure hotel unable to construct the cognitive maps that would lead them to the exits is theoretically unsettling to some. Ironically, for a body of work that rejects totalizing theory, much of postmodern thought ends up treating culture as monolithic and static. Culture, critics argue, is hegemonically more creative than that.

These general concerns have led some to examine actual postmodern spaces more closely, and to track how they change once they are lived in and part of the material landscape. Quite interesting observations have been made that encourage more investigation into the significance of postmodern urban form. Frank Gehry’s famous Santa Monica house (where he lived), for example, after several years underwent a more conventional remodel much to the horror of Gehry’s postmodern fans. The motivation, however, was not for any inherent esthetic reason but reportedly to better accommodate the needs of his two growing boys when they became teenagers. Charles Moore’s Plaza d’Italia, upheld as an icon of postmodern space both publicly accessible and architecturally stunning, was subsequently taken over by a nearby luxury hotel which now claims an exclusive catering contract for the space. And the pinnacle of postmodernity itself, Disneyland – both embraced as charming, livable urban space and reviled as darkly sinister embodiment of post Fordist commodification – is itself no longer the white, middle class, themed environment Walt Disney originally envisioned. Now over 50 years old and situated in a predominantly Latino region, Disneyland has undergone remarkable and unexpected transformations at the hands of new generations of visitors (though postmodern advocates can rest assured the same transformations have not occurred to the same degree at the Walt Disney World property in Florida). In the end, postmodern urban space – whether it formally exists or not – is a fluid and exceptionally revealing representation of the ways urban forms are constituted, reconstituted, and discussed in specific geographic contexts.

See also: Cultural Geography; Feminism/Feminist Geography; Fordism, Post-Fordism and Flexible Specialization; Los Angeles School of Post-Modern Urbanism; Modern City; New Urbanism; Planning, Urban; Postmodernism/Postmodern Geography; Privatization; Public Space; Quantitative Revolution; Urban Architecture.

Further Reading


Relevant Websites

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Congress for new urbanism.

http://www.ihab hassan.com
Ihab Hassan, a biography.

http://www.egs.edu
Jean Baudrillard, a professor of philosophy of culture and media criticism.

http://www.sprawl busters.com
Sprawl Busters international clearinghouse for anti sprawl.

http://www.dpz.com
Website for duany plater zyberk & company.
Introduction

In last few decades, the postmodern debate has literally transformed the cultural and intellectual scene across a whole range of disciplines, from literary criticism, the visual arts, and architecture, to large portions of philosophy and the social sciences, all of which witnessed an unprecedented series of theoretical innovations and critical ‘streams’, commonly brought together under the ‘postmodern’ umbrella.

Radical relativism, the fragmentation and instability of subjects and objects, a loss of confidence in comprehensi ve theoretical frameworks, and a rejection of the grand narratives that laid the foundations of mainstream, ‘rational’ understandings of the modern tradition: these were just some of the characteristics of this proliferation of critical approaches. But it is these same characteristics that also render particularly difficult (and unstable) any attempt to trace the perimeters of what, at least in some Western academic circles, is considered as one of the most relevant intellectual developments of the late twentieth century.

Human geography, especially in the English speaking world, was deeply marked by this revolutionary set of events. On the one hand, the generalized ‘rediscovery’ of the spatial dimension in social theory and philosophy brought by the postmodern turn drew new attention to geographical thought and the geographical tradition; on the other hand (and according to many commentators), the postmodern contributed in an important way to the ‘return’ of geography to the mainstream of the social sciences, paving the way to a new and highly prolific interdisciplinary dialog.

If there was one common denominator that characterized the diverse ‘postmodern’ streams of thought, it was the focus on the so-called ‘crisis of the representation’. Geography, as a discipline that had always been concerned with the ways in which the world and its spatial relations were represented, could not exempt itself from this radical questioning of the very principles that guided the production of modern Western knowledge. According to George Benko and Ulf Strohmayer, human geography came away from the encounter with the postmodern “with a renewed sense of mission, vindication, even of pride.” This new centrality assigned to the discipline of human geography was visible in a number of ways: the sheer amount of space assigned to geographers in volumes dedicated to postmodernism; the frequent reference to geographical theories on the part of other social scientists as well as those working in cultural studies; and even more pervasively, the new fashion for spatial (and geographical) metaphors in contemporary social theory.

In the last decades, the postmodern and postmodern geography (however we may define it) have become an established presence in the discipline. It is a presence evidenced not only by the vast production of articles that, from 1986 onward, have appeared on the pages of some of the most prestigious geographical journals, and the publication of numerous books explicitly informed by a ‘postmodern perspective’, the key place of the ‘post modern’ in geography today is also supported by the attention afforded to it by some of the most influential editorial initiatives that have attempted to map post war Anglo American human geography. By and large, the postmodern wave in geography is recognized as a phase – particularly intense between the mid 1980s and the mid 1990s, but which also retained part of its vibrancy in the years that followed – that contributed in a fundamental way to the intellectual atmosphere of the disciplinary debates of those years; a phase during which human geography gained, in many ways, newfound prominence within the social sciences.

Writing about the postmodern or, better yet, writing after the postmodern turn, is fraught with difficulties; any attempt at tracing a cognitive mapping of the postmodern itself (or of ‘postmodern geography’), is necessarily a partial and subjective endeavor. In other words, any attempt at defining the state of the art of postmodern geography is doomed to fail, if only for the very fact that the introduction of the postmodern to geography – as to other fields of enquiry – has implied the breaking down of any paradigmatic logic and skepticism toward any linear reconstruction of the history of the discipline. The aim of this article, therefore, is not to describe and define the contents and the borders of a putative ‘postmodern geography’. On the contrary, its objective can only be that of identifying, in a partial and entirely subjective fashion, some of the intellectual trajectories that marked one of the most important moments in recent English language geographical debates, together with the cultural and intellectual atmosphere that made them possible.

A singular and coherent body of ‘postmodern theory’ has never existed, possibly due to the very nature of postmodern thought. Equally, there has always been a lack of consensus regarding what the postmodern really
consists of, and, as a consequence, its historical roots and relative evolution. Some commentators have envisaged the postmodern as enabling new forms of cultural and political resistance; conversely, others have seen within it the very end to any form of progressive politics and a tacit legitimation of the status quo. The postmodern attitude has been often depicted as anti Marxist, and yet it has been adopted by many 'post Marxists', and even considered by some as an unintended offspring of Marxist theory; it has represented a radical revolt against modern rationality and its consequences, but its reflections are rooted, in many ways, in critical modern theory; it has been the subject of attacks from both the Right and the Left, but in its own 'relativism', it is still struggling to define what a genuinely postmodern political stance might be; it has fundamentally challenged all forms of intellectual authority, and yet its impact is precisely the product of the academic prestige of its early advocates. In order to compose at least a partial history of the postmodern turn, the next section will attempt to ‘excavate’ some of its most influential trajectories.

Postmodern ‘Archeologies’

The exact origins of the term ‘the postmodern’ (or ‘postmodernity’) are uncertain. In Best and Kellner’s reconstruction of the postmodern’s genealogies, besides a few isolated (and relatively obscure) episodes in the late 1800s and early 1900s, when the term was used to define a certain artistic or intellectual avant garde, the idea of the ‘postmodern’ emerged only in the years immediately following World War II. Best and Kellner trace the first popular usage of the term to 1947, in D. C. Sommervell’s summary of Arnold Toynbee’s epic A Study of History. Sommervell identifies a presumed ‘rupture’ with the modern era and the birth of a new, ‘postmodern’ epoch: Toynbee himself will later adopt the term as well, identifying the ‘breaking point’ between the modern and postmodern epochs in the year 1875, a historical moment characterized by widespread anarchy and disorder and an accompanying cultural relativism.

From the 1950s onward, the term begins to gain currency, especially in the United States, where it appears in several volumes. Albeit lacking a precise definition, it is almost always used with a historical connotation: an epoch that follows the modern one; an epiphenomenon marking the end of modernity or at least of some of its elements/aspects. Probably the best known example of this early usage can be found in C. Wright Mills’ The Sociological Imagination (1959); in Mills’ periodization of Western civilization, the current epoch signals the beginning of a new, ‘postmodern’ era. Nonetheless, the early usage of the term represents, at most, a series of relatively isolated episodes, for they do not ignite a genuinely open debate on the putative emergence of a ‘postmodern epoch’, it is thus difficult to link these early works with the theoretical developments of the decades that follow.

American cultural theory begins to adopt the term with more frequency in the 1960s and 1970s, but with an entirely different meaning: the ‘postmodern’ becomes one of the code words for a broader antimodernist stance that finds its clearest expression in the visual arts and, more generally, the emerging pop culture. The very beginnings of a ‘postmodern debate’ can thus probably be traced back to these early stirrings (although, again, the term was not that widely diffused). Since a reliable and comprehensive reconstruction of the multidisciplinary debates of these early years is virtually impossible, Hans Bertens suggests looking at the history of American literary criticism in order to begin to grasp the emergence and the evolution of the idea of the postmodern, for it is in this disciplinary realm that the postmodern debate takes its clearest shape, at least initially. Literary criticism, according to Bertens, probably the only institutionalized field of enquiry where a certain antimodernist stance can be identified with a certain degree of continuity from the 1950s onward. Despite the fact that the revolutionary impact of the postmodern would, at the end, be much more pronounced in the ‘arts’, it is the location of postmodernism’s beginnings within American literary criticism that will be more influential on later interpretations: as various scholars have suggested, much of the confusion surrounding the origins and nature of postmodern thought can be attributed precisely to the fact that it emerged within this domain, a domain characterized by a very specific conception of the ‘modern’.

What is most important to note, however, is that for many of its advocates, this first postmodern wave represented above all an escape from – and a rejection of – the grand narratives and epistemologies of modernity, together with their associated metaphysics of representation. It is within just such an intellectual atmosphere that the postmodern idea began to affirm itself as a specific understanding and codification of the emerging new forms of expression in the arts and the humanities more broadly. Set against the rationality, the ‘seriousness’ and the paradigmatic structuration of modern art, the new, ‘postmodern’ experiments professed an ironic, playful lightness of being, an eclecticism marked by pastiche and, in their more extreme expressions, even a certain degree of nihilism.

Following these American beginnings, the 1970s witnessed a shift in the postmodern debate, as it becomes gradually absorbed into the orbit of French poststructuralism. The political and cultural events of the late 1960s, in France in particular, are a defining moment. These, together with the rapid transformations occurring in the global political economy, exact a wholesale
revision and reconsideration of the structuralist episteme that had dominated the cultural scene in France up to then. Until then, social analysis had focused largely on the identification of underlying, 'universal' rules; it was aimed at the production of a knowledge that sought to be objective, coherent, rigorous, and, above all, 'true'. The social sciences were particularly concerned with maintaining at least a veneer of 'scientificity' and 'objectivity' in order to grant legitimacy to their theories.

The post structuralist 'revolution' consisted, above all, in an attack upon the 'scientific' claims of dominant paradigms, claims that laid the basis for the construction and the adoption of rational models of society (and social analysis); claims whose ontological foundations were based in Enlightenment ideal(is) of truth and objectivity. Setting itself in opposition to such universal and abstract models, post structuralism placed emphasis, rather, on a recovery of everyday experience and 'contextual' interpretations of the social; on the need for an awareness of the political dimension of every form of knowledge, and the instability of any language; it called for a new understanding of the 'cultural', and of the inescapably Eurocentric nature (and origin) of all modern theory.

Many post structuralists were influenced by the writings of Jacques Derrida and, in particular, Derrida's call for a radically new philosophical praxis. Indeed, the initial encounter between post structuralism and the postmodern was centered largely on an adoption of the deconstructionist approaches pioneered by Derrida and Roland Barthes; it is only later that other post structurist influences would gain importance, such as the orizations of Michel Foucault on power and discourse, and the Lacanian reinterpretation of Freudian thought. The 'deconstructionist' postmodernism of the early years was strongly marked by a 'linguistic textual' approach and focused on contesting the essentializing nature of all representations. Many of these early works were devoted, indeed, to an analysis of the functions of language and, especially, the impossibility of language to represent that which transcended its own boundaries, with a great deal of attention to the deconstruction of texts and to intertextuality. Since deconstructing representations was to be conceived as an inherently 'political' act, the postmodern celebrated first the supposed 'death of the Subject' and, subsequently, that of the Author as well. Paradoxically enough, the putative demise of the metaphysics of representation rendered the questions of subjectivity and authorship even more important – precisely because when faced with the absence of abolute truths, what now mattered most in the process of the transmission of knowledge was who was speaking (or writing), why, and for whom.

Another key post structuralist influence on the post modern turn was the preoccupation with the functioning of power and the constitution of subjectivity, in great part inspired by the work of Michel Foucault. The production of knowledge that, in positivist terms, was often described as potentially objective and neutral, was now seen as inherently imbued with power – and thus became an object of analysis, as did its practices and protagonists. While postmodern analysis did not entirely embrace Foucault's theoretical edifice, it adopted in large part his guiding claim that knowledge and language were inseparable from the exercise of power. It is for this reason that many postmodern scholars focused their writings on 'unveiling' the implicit political dimension of all representations and on combating the hegemony of dominant discourses that inevitably silenced other, sub merged voices; this, in part, explains the postmodern's insistence on the recognition and valorization of difference, polyvocality, and pluralism. Much attention was devoted, indeed, to the analysis of the condition of the 'Other' – that is, the condition of those normally excluded by hegemonic, 'normal', and normalizing discourses and practices: ethnic, racial and sexual minorities, the differently abled, etc. In particular, great importance was granted to understanding the processes of the constitution of these various Others, and the role of representations, discourse and everyday language in this very constitution.

The translation into English of Jean Francois Lyotard's La Condition Postmoderne in 1984 is an important turning point: here, a prominent post structuralist the orist adopts the 'postmodern' term, marking the definitive confluence of the two schools of thought – American postmodernism and French post structuralism. Just like post structuralism, this 'new' postmodernism radically rejects the idea that language can faithfully represent reality; that representations can provide the key to 'true' knowledge; and that the things of this world are somehow 'reflected' by our discourses. Rather, it argues, it is language that constitutes our world, knowledge, therefore, can only be partial, inevitably influenced by social, political, and cultural circumstances and the specific historical context within which it is articulated. What is important to note here is that post structuralism was not only a key source of inspiration for the postmodern turn; at certain moments, one and the other became essentially indistinguishable (at least in their North American variants). In other words, the postmodern debate not only absorbed the post structuralist critique of structuralist approaches, but also this latter's search for new modes of enquiry, new languages, and new forms of subjectivity. The sense of radical rupture with the past that this break represented came to be seen either as a long awaited liberation from the shackles of the modern episteme or, more negatively, as the definitive loss of traditional Enlightenment ideals and values.

But not everyone conceived the postmodern turn in this philosophical-cultural-linguistic optic. For some
analysts, it was the world itself that was changing in such
rapid fashion that new understandings, new cognitive
tools were necessary to be able to decipher its transfor-
mations. The globalization of many economic processes,
the IT revolution, the supposed planetary diffusion of
certain consumption models, the increasing fragment-
tion of lifestyles and cultures, the emergence of a
myriad of new political and cultural subjects, the growing
concern for the environment, the reemergence of
regionalisms, localisms, and a variety of fundamentalisms,
the triumph of a capitalist regime of flexible accumu-
lation, the retreat (if not the 'end') of the nation state, and
the progressive privatization of many realms of social life
– these were only some of the expressions of the epochal
shifts occurring across the globe; shifts interpreted
by some as the closing of an era, as the confirmation of
the end of modernity and the emergence of a new,
'postmodern' society and culture.

Frederic Jameson, in his agenda setting article 'Post-
modernism, or the cultural logic of late capitalism' that
came out on New Left Review in 1984, on the one hand
depicts the postmodern as a product of the transforma-
tions of global capitalism; on the other, as a radical shift
in our spatio temporal coordinates, calling for a radically
new set of analytical tools. Jameson's piece was to prove
crucial in bringing the postmodern debate to geography
and geographers. His focus on the built environment and
on architecture, as well as the particular emphasis gran-
ted to space and spatial processes as key to understand-
ing and codifying the shifts in the organization of advanced
global capitalism, could not but capture geographers' attention.

Envisioning the emergence of a 'postmodern society' and
of concrete, architectural expressions that pre
sumably marked its birth, meant in a sense legitimizing a
linear vision of historical and social evolution. And yet
it is this understanding of the postmodern that was to
initially inspire geographers and other social scientists.
Certainly, the fact that the principal early protagonists of
the postmodern turn in geography (and other disciplines)
shared a Marxist background was important. Jameson's
materialist interpretation of the transformations of global
capitalism was, in many ways, articulated in very familiar
terms. What is more, Jameson’s was the first widely
accepted analysis of the postmodern in the social sciences
and in their attempt to bring the discipline back to the
heart of the intellectual debates of the day, geographers
could not but be influenced by it.

Up to that moment, the social sciences had, for the
most part, generally ignored the debates on the post
modern that were developing in the meantime in
philosophy, the arts, architecture, and the humanities,
more broadly. It was only in the mid 1980s, right around
the time of the publication of Jameson’s piece, that
sociologists, in Britain especially, began to turn their
attentions to the postmodern. The initial foci of their
debates were the more clearly sociological aspects of
Jameson's theorizations, as well as those of French soci-
ologist Jean Baudrillard: in particular, the relations
between the postmodern and new forms of production
and consumption. This theoretical perspective charac-
terizes a significant proportion of English language social
scientific production of the subsequent years, focused
especially on the emergence of new, post Fordist
production regimes and the broader transformations
of global capitalism as a response to the systemic crises
of the 1970s. Jameson's piece was to prove particularly
useful here, offering social scientists a novel reading of
these transformations; a reading able to link the new,
as yet unexplored phase of advanced capitalism to
the astounding series of shifts visible in the social and
cultural spheres. What is more, it proposed an entirely
new theoretical vocabulary and analytical apparatus, able
to describe the spatialities of late capitalism.

The publication of Jameson’s article marks, in fact, the
upsurge of a much wider interest in the postmodern
throughout the 1980s. Numerous books and articles
appear in these years, as does a journal that will soon
become an important forum for the postmodern debate:
Theory Culture and Society edited by Mike Featherstone.
In 1988, the journal dedicated an entire issue to the
postmodern turn, in many ways setting the agenda for
the years to come. It is also these years that witness the
publication of some of the key texts of the postmodern
debate: Foster's 1985 Postmodern Culture; Hassan's 1987
The Postmodern Turn: Essays in Postmodern Theory
and Culture; Featherstone's 1991 Consumer Culture and
Postmodernism, Lash’s 1990 Sociology of Postmodernism;
Bauman’s 1992 Intimations of Postmodernity; Hutcherson’s
1989 The Politics of Postmodernism, and Jenkins’ 1992 The
Post Modern Reader. Geographers add their own voices
to this debate: in particular, David Harvey's The Condition
of Postmodernity and Edward Soja's Postmodern Geographies.

We can thus trace three possible routes through the
'archaeology of the postmodern', routes that will
produce three distinct interpretations of the postmodern
in geography. The first interpretation draws upon that
which was identified here as the initial, post structuralist
phase of the postmodern debate. Strongly influenced by
the work of Jacques Derrida and, in part, that of Roland
Barthes, it focuses on the deconstruction of geographical
discourses and texts, in order to unveil the 'taken for
granted' that disciplines such discourses and texts and
grants them their 'normalizing' power.

The second interpretation, on the other hand, is
largely inspired by the theorizations of Michel Foucault
and the other authors whose work fueled the second
phase of the postmodern debate. It is an interpretation
that places particular emphasis on the exercise and
functioning of power and, in particular, the relationship
between power, discourse, and space. Key here are the influences of feminist scholars, as well as the emerging literature in postcolonial studies. This is a particularly rich and innovative strand of the postmodern debate, containing a great variety of diverse perspectives and approaches, and thus difficult to capture within a single mapping.

The third and final interpretation is that most closely inspired by Jameson’s work and the early debates in the social sciences, and directly emergent from Marxist and post Marxist traditions. This strand of postmodern geography is often focused on studies of the postmodern city and, more generally, postmodern spaces, as well as analyses of social, cultural, and economic processes in a postmodern ‘era’.

This brief archeology of the postmodern is certainly partial and incomplete. Many other authors and influences could have potentially been taken into consideration in order to offer a more nuanced and complex understanding of a phenomenon that has always evaded a strict mapping. For instance, the influence of not only Pierre Bourdieu, Guy Debord, and Richard Rorty, but also that of Gilles Deleuze and Felix Guattari, is cited in many reconstructions of the postmodern’s early archeologies. To this list of names, we could also add those of James Clifford, Clifford Geertz, Ernesto Laclau and Chantal Mouffe, Henri Lefebvre, as well as Edward Said – all individuals whose work has been enormously influential, also in geography.

**Postmodern Geographies …**

What has the postmodern turn meant for human geography, then? How did geographers respond to it? How did it change our way of conceiving – and of doing – geography? The end of the 1980s witnessed a whole series of important shifts in human geography that can be understood both as a reaction to developments within the discipline itself and also as a response to a variety of external stimuli. Many ‘critical’ Anglo American geographers began, in fact, to turn against positivist interpretations and, in particular, those associated with spatial analysis. At the same time, however, those years also witnessed a relative disenchantment with radical and Marxist approaches on the part of some progressive geographers: at the heart of this disenchantment lay the fact that some Marxist theorists still considered spatial theory to be the ‘grand explanations’ and in the ‘progress’ of (social) scientific analysis, while at the same time devaluing the importance of the subjective dimension. Some Marxist geography was accused, in particular, of advancing ‘essentialist’ theses in having tried to universalize the concept of social class, it had essentially forgotten the importance of context (and thus the role of diverse places) as well as the importance of individual identities. Such critiques, however accurate they may have been, were key in opening geographical reflection to the postmodern debate that appeared to offer, at least in part, an alternative to the structuralism and ‘essentialism’ of Marxist perspectives, through its attention to – and valorization of – difference in its myriad expressions.

The growing interest in this new set of approaches was also spurred on by the rapid transformations occurring in all realms of social life – from politics, to popular culture, to the economy – transformations that necessitated a new conceptual apparatus and new analytical tools from geography and geographers. Nonetheless, it is important to note that geographers were relative latecomers to the postmodern debate, and it is indeed debatable whether the discipline really ever entered a ‘postmodern phase’. So while it is true that most post structuralist theories today make use of spatial metaphors to one extent or another (if not of geographical concepts tout court), it is equally true that while the postmodern debate was raging in other disciplines at the end of the 1970s and beginning of the 1980s, ‘critical human geography’ was still struggling with its Marxist legacy and a variety of post Marxist critiques of structuralism, such as structuration theory.

The fact that post structuralist approaches would come to Anglo American geography mainly through Marxism and the writings of Marxist/post Marxist geographers would have important repercussions on the development of the postmodern debate within the discipline. Indeed, many of the ideas that we consider today as integral part of the postmodern tradition in geography can only be understood as the fruit of the encounter of postmodern theories with notions coming from historical materialism. Again, Jameson’s 1984 piece was key in this encounter, but so was a much broader body of critical social theory of the early 1980s. What is more, successive Marxist critiques of postmodern ideas – or even the wholesale rejection of postmodern perspectives on the part of some Marxist geographers – came to be considered, paradoxically enough, as some of the most influential works on ‘postmodern geography’. Perhaps the best known case is that of David Harvey’s ‘The Condition of Postmodern’. A work that was explicitly anti postmodern but that came to be considered by many as a foundational text of this new wave of ‘postmodern geography’. The Marxist influence on ‘postmodern geography’ will begin to lose its strength only in the following decades, with the growing importance of post structuralist, postcolonial, and feminist theory.

The early years of the postmodern in geography were also marked by a distinctive set of research foci. Key to these were the question of the emergence of the ‘postmodern city’. Rejecting wholesale the principles of the Chicago School, these early works called for the
elaboration of new understandings in the spirit of a 'postmodern urbanism', conceiving the city as a complex socio spatial phenomenon that could not possibly be captured within a single exhaustive definition, within a singular logic. Alongside this new interest in the city and its transformations, 'postmodern' geographers turned their attentions to the broader changes occurring in society, hypothesizing the emergence of a 'postmodern epoch', an epoch characterized by a new cultural logic, by post Fordist political economies, by a radical reconfiguration of the spaces of the political, and by the presumed triumph of representation over reality.

Postmodernity was, therefore, not seen as a singular manifestation, awaiting discovery and description by geographers: it was envisioned, rather, as a complex of diverse perspectives, processes, and objects, a confused and convoluted collage of people and places, un decipherable with the analytical tools of the past.

Following the writings of Scott Lash and John Urry on the end of 'organized capitalism', the work of Mike Featherstone on the globalization of culture, and the theorizations of Pierre Bourdieu describing the new division of society into distinct classes of consumers, some geographers began to turn their attention to the role of the mass media and of representations, as well as the changing role of consumption. Some of this research focused its attention on the places of consumption, as well as on the consumption of places themselves. Many writings investigated the relationships between postmodern lifestyles and tastes and the transformation of specific urban and regional contexts, as well as the role of 'cultural capital' in radically transforming entire city neighborhoods.

The postmodern turn thus brought with it a number of important consequences for human geography. As in other disciplines, it was welcomed with enthusiasm by a significant number of geographers who found its innovations (and provocations) inspirational. But the post modern also encountered considerable resistance, if not outright hostility, on the part of others who perceived its arrival as a menace to the discipline's identity. Yet, neither the initial misunderstandings between the two 'factions' nor the relative indifference with which some treated it at the outset, prevented the postmodern from blossoming in geography and becoming, in the decades that followed, a key part of the disciplinary 'tradition'.

**Postmodern Geographers…**

Most accounts identify two crucial passages, two crucial moments in the emergence of a 'postmodern geography'. The first is the period between 1986 and 1988, when a series of articles appeared, all making explicit reference to postmodern analysis. The journal *Environment and Planning D: Society and Space*, first published in 1983, rapidly became the forum of choice for cutting edge reflection on social theory in geography and, from 1986 on, the place where a great part of the debates on the postmodern were played out. It is *Society and Space*, in fact, that in 1986 published the first articles explicitly dedicated to the postmodern: Michael Dear's reflection on 'postmodern' urban planning and Edward Soja's exploration of Los Angeles' 'postmodern' spatialities.

Other articles followed in rapid succession: in 1987, David Harvey's piece on postmodernism and the American city in *Antipode*, and David Ley's analysis of postmodern urbanism in Vancouver in the Journal of Historical Geography. A year later, Michael Dear published 'The postmodern challenge: reconstructing human geography' on the pages of Transactions of the Institute of British Geographers. Dear's article was particularly important as both a first attempt at mapping the postmodern turn in geography, as well as a call to arms to the discipline as a whole: the postmodern offers a unique opportunity, Dear argued, to bring the discipline back to the mainstream of the social sciences. Equally influential was Derek Gregory's 1989 essay on 'Areal differentiation and postmodern geography' (part of the edited volume *Horizons in Human Geography*), suggesting a curious parallelism between postmodernism and geography. Geography's long standing interest in 'difference', Gregory argued, rendered it a potentially more welcoming field to the relativist claims of the postmodern agenda. The postmodern thus emerged from its relatively marginal position in the early 1980s, to affirm itself as 'the' expression of cutting edge reflection in geography. Between 1986 and the end of 1993, numerous papers, articles, and essays dedicated to the postmodern and postmodernity appeared, giving life to a series of different 'strands' of reflection, associated with the different positions in the disciplinary debate.

In some ways, this wealth of reflection can be seen as simply the definitive codification of a much longer dis ciplinary 'ferment'. Already during the preceding decade, geographers had begun to explore the epistemological and ontological foundations of the discipline in ways that would strongly influence the 'postmodern' debates in the late 1980s and all through the 1990s. We can note, among others, Soja's writings on the socio spatial dialectic from the early 1980s (a reflection that would culminate with the publication of his seminal book *Postmodern Geographies* 9 years later), as well as Gunnar Olsson's considerations on the nature of language, dating to more or less the same period. However we may choose to locate these influ ences, what is most important to note in this brief his torical reconstruction is the flux of new, provocative ideas into the discipline that, by the end of the 1980s, have fundamentally transformed its theoretical debates and its role in the social sciences.
1989 represented, in fact, a turning point, with the appearance of two books entirely dedicated to the postmodern in geography. The first was Edward Soja’s Postmodern Geographies, a collection of essays on the postmodern read through a Marxist ‘lens’ and inspired, in particular, by the work of Henri Lefebvre (and, to an extent, also by Michel Foucault). In this by now pathbreaking book, Soja sets out for a new ‘geographical materialism’, able to marry the latest developments in social theory together with a new, privileged attention for space, something that had been traditionally sacrificed by historical materialism. Apart from its contribution to ‘bringing the spatial back in’, the collection contained also two ‘empirical’ chapters in which Soja attempted a ‘postmodern’ reading of the Los Angeles spaces, launching an entirely new way of doing urban geography. Soja’s engaging prose and even his choice of topics revolutionized traditional ways of writing about the city and Postmodern Geographies would prove a fundamental influence for not only the next generation of geographers, but also urban scholars in other disciplines.

The second volume to appear that year and to leave an equally important mark on the development of postmodern reflection in the discipline was David Harvey’s The Condition of Postmodernity, both for the notoriety of its author, and its decidedly antipostmodern stance. In his critical appraisal of contemporary post Fordism, Harvey provided a scathing analysis of the new global regime of flexible accumulation, as well as of the ‘post modern culture’ dictated by the market, a culture based on a problematic ellision between the profit imperative and artistic production, between fiction and reality. Harvey’s critique is quite distinct from other postmodern interpretations: the contemporary historical phase was, in his view, to be located (and understood) within a broader periodization of capitalism, characterized by ever increasing time–space compression. ‘The condition of postmodernity’ thus follows the spirit of Marxist critiques of the postmodern, of which the author would become one of the most authoritative interpreters.

The publication of these two volumes marked the definitive legitimation of postmodern reflection in Anglo American geography but not only, given its growing influence on other national geographical communities. From that moment on, research adopting the postmodern as theoretical and/or methodological perspective began to proliferate, from studies of cities, to those on land scape, on the spectacularization and consumption of culture, on the spatial effects of flexible accumulation regimes – as well as on geography and the production of geographical knowledge. In the meantime, a new generation of geographers started to reconsider the contributions of geography’s postmodern ‘pioneers’. For some, the post Marxist legacy was seen as actually part of the problem raised by postmodern reflection in the social sciences, rather than a solution or set of viable answers. The postmodern debate in geography thus began to engage with a new series of approaches, this time around influenced much more directly by post structuralist thought. Some of the most fruitful terrains of analysis where this occurred are the various deconstructionist approaches to the study of geographical maps and texts; the reflection on hermeneutics and geography (strongly influenced by the writings of Derrida and Barthes); the deep engagement with the work of Foucault and Lefebvre; and the new attention for the body, inspired by Lacanian psychoanalysis. The post structuralist turn also took on other forms, however: we can mention here the important role of feminist critiques of the postmodern, the ongoing dialog with cultural studies and postcolonial theory; or even the birth of critical geopolitics (though the latter inspired more by the post structuralist turn in international relations than in geography itself).

Giving some order to all of these diverse currents of thought is a next to impossible task, not only because of the diversity of the various perspectives and topics of research and the inevitable contaminations between them, but also because many of the protagonists of the post structuralist debates in geography would most likely not consider their work as part of the ‘postmodern’ canon, albeit (in many cases) recognizing its decisive influence. This is perhaps unsurprising: the ‘postmodern’ perspective rejects, a priori, any paradigmatic closure and is therefore more usefully conceived as a particular way of understanding geographical thought, rather than a specific, alternative methodological apparatus. For this reason, the very proliferation of approaches in contemporary human geography can be considered in itself a direct consequence of the postmodern turn.

Postmodern Cities and Spaces?

The analysis of the transformations of the contemporary city represented, in many ways, the very heart of the geographical reflection on the advent of a new postmodern era and the codification of new postmodern spaces. Los Angeles was, for long, at the center of this reflection, identified as the postmodern city par excellence – a codification that has not been without its detractors. Some have even gone as far as identifying a distinct Los Angeles School of urban scholarship as the successor to the Chicago School and, like it, destined to influence all future geographical analyses of the city. However accurate this assessment may be, it does mark the enor mous influence of the Big Orange on the collective imaginary of its (postmodern) scribes. What is more, the idea that the birth of a postmodern epoch or, certainly, the end of modernity, corresponds to a distinct set of cultural transformations that can best be read off the
changing spaces of the ‘postmodern’ city found its ideal laboratory in LA, whose ‘lessons’ were later applied to other urban contexts. Nonetheless, it is difficult to reduce even the Los Angeles school to one common denominator, and to trace a clear, singular trajectory from Soja’s first explorations in the 1980s, to his and others’ more recent travels through the Los Angelene ‘postmetropolis’ and its edge cities, theme parks, exopolis, and the affirmation of that which Dear would term the postmodern urban condition.

The great wealth of writings of geographers, urbanists, sociologists, and anthropologists on the postmodern city can be roughly divided into two distinct camps, reflecting in many ways the two dominant (and seemingly antithetical) interpretations of the postmodern. The first, as was already noted, considers the postmodern as a distinct era or epoch, as a distinct phase or stage of advanced capitalism; the second, on the other hand, attempts to codify a specific postmodern way of thinking and knowing. In the first interpretation, the object of analysis is the changing ‘urban reality’, its built environment, and the political and cultural economies of the postFordist city; in the second, it is more a question of adopting/elaborating a new, ‘postmodern’ approach to the study of cities. In other words, the postmodern city can be approached either by trying to codify the momentous changes occurring in many European and North American urban regions (and not only) and the emergence of what this literature will term a ‘postmodern urban condition’ – or, rather, by trying to understand how the transformations in the contemporary city can be best conceived and theorized. Postmodern urbanism can thus be interpreted both as the emergence of new forms of urban development, new urban spaces, as well as a new lens, a new logic within which to interpret the urban.

It is perhaps useful at this point to take a step backward. The new architectural styles that we usually refer to as ‘postmodern’ appeared, in fact, already in the early 1970s, with the intention (as Edward Relph suggests in his The Modern Urban Landscape in 1987) of revitalizing the old city centers by means of heritage preservation and by means of a whole series of new approaches to urban design and planning, including a new attention to what becomes termed ‘community planning’. According to Relph, ‘postmodern architecture’ was not merely every thing that came after modernism; it was better understood as an aware revival of elements of previous styles and forms. It is such a ‘revival’ that guides the various attempts at urban regeneration, heritage preservation, and the redefinition of urban design. It would therefore be correct to say that the postmodern refers not only to a new architectural style, but more importantly a new attitude toward architecture and planning and its role in the rapidly transforming contemporary city.

In his influential edited collection Variations on a Theme Park that came out in 1992, Michael Sorkin explored some of these new urban ‘fragments’, proclaiming the end of the traditional, modern city, made up of orderly squares, streets, and boulevards, and the emergence of the postmodern city, linked by fiber optic cables and made up of self-referential, securitied enclaves, where public space is privatized and the traditional center dis appears. For Sorkin, postmodern cities were marked by three characteristics: the first is the disappearance of all stable material and cultural relations that, in the past, linked communities to specific places; the second is the obsession with security and the growing connections between the virtual world of the Internet, television and closed circuit cameras, and everyday life; the third is the increasing transformation of urban spaces into ‘themed’ enclaves. The postmodern city described by Sorkin thus not only transcends traditional urban categories and divisions, but also regiments urban spaces within a new geography of segregated segments, ‘public’ in appearance only.

A few years later, Michael Dear and Steven Flusty attempted to map these new geographies by tracing some of the most recent developments in Southern California (that the authors consider, nonetheless, indicative of broader urban trends), to then move on to a description of a possible ‘postmodern urbanism’ able to interpret the cities of today, transformed by what they term ‘keno capitalism’. The reconfiguration of the city they described evokes, in many ways, the urban fragments of the Los Angeles region identified by Soja exopolis, flexcities, cosmopolis, splintered labyrinth, carceral city, and simulacrum. The variable geometries of the LA urban region were, moreover, associated with a variety of shifts in the global political economy that express themselves ‘on the ground’ in the form of the technopoles described by Allen Scott in 1993, Fishman’s techoburbs in 1987, but also the ‘landscapes of despair’ of the homeless and the new poor, identified by Wolch and Dear in 1993. The great variety and originality in the new urbanism is just one way in which the Los Angeles School tried to put some order in the urban magma that fills the spaces of Southern California. The theoretical framework proposed by Dear and Flusty in order to interpret this urban space ‘gone mad’ was a series of fragments and fragment(ing) processes within which to contain some of the abovementioned manifestations: described with a series of (very postmodern) neologisms such as the ‘global latifundia’, ‘cybergeoisie’, ‘protosurps’, ‘memetic contagion’, ‘citistat’, ‘com mudities’, ‘cyberurbia’, ‘citidel’, ‘cyberia’, ‘pollyanarchy’, ‘disinformation superhighway’, ‘holsteinization’, ‘praedarianism’, and ‘protosurps’.

The Los Angeles School did not only try to make sense of what was happening in Southern California, but
also continued to experiment with new readings of urban space that could be more widely applicable – with the assumption that LA, ideally at least, was destined to become the capital of the twenty first century. It is not by chance that another volume edited by Allan Scott and Edward Soja in 1996 was entitled *The City: Los Angeles and Urban Theory at the End of the Twentieth Century*. It was a voluminous work that brought together the contributions of the principal protagonists of the LA School (together with the editors, Mike Davis, Michael Dear, Charles Jencks, and Jennifer Wolch, among others) and that aimed to provide a definitive assessment of the Los Angeles ‘urban condition’ through a series of diverse readings, ranging from more structured and structuralist approaches, to narratives that are more ‘postmodern’ in both language and style.

Certainly, Los Angeles was not the only site of reflection on the postmodern in those years. Katherine Gibson and Sophie Watson’s 1995 edited collection *Postmodern Cities and Spaces* was another important contribution to the debate, bringing together a series of diverse contributions that spanned, as the editors note, two quite antithetical understandings of the postmodern: the first, considering it an era or distinctly new socio cultural condition; the second, a specific way of knowing and understanding the changing urban context. The structure of the book in many ways reflected this divide, although the editors are careful to note in their ‘Introduction’ that while the tension between these two perspectives may lend itself to a strict mapping, the volume aimed, rather, to offer readers a ‘route map’ along two complementary itineraries through the postmodern that at times run parallel, at times converge or diverge. Indeed, the most interesting aspect of this collection is the attempt that it makes at bringing together quite diverse writings on the postmodern, from accounts of the postmodern city, its fragmentation and new political subjectivities, to a series of trajectories through the city, inspired by Foucault’s work on heterotopia, by the concept of chora, by Walter Benjamin’s reflections on the figure of the flâneur, or by feminist reflection on private and public spaces (and bodies). It should be noted that the tension between the two diverse understandings of the postmodern high lighted by Gibson and Watson’s volume – that between the postmodern as ‘object’, a novel, multiple, and fragmented reality, and postmodern(ism) as an ‘attitude’, or approach – had been already identified by another key text a few years earlier – Cloke, Philo, and Sadler’s 1991 *Approaching Human Geography*.

**Conclusions**

The uncertain trajectories of the postmodern that we have tried to identify in the preceding paragraphs do not exhaust themselves at the end of the 1990s of course. The theoretical reflection on the postmodern in geography has, indeed, continued with great vigor, as evidenced by the publication of a number of ‘overview’ volumes in the decade that followed: to Benko and Strohmayer’s *Space and Social Theory: Interpreting Modernity and Postmodernity* in 1997, Doel’s *Poststructuralist Geographies: The Diabolical Art of Spatial Science* in 1999, and Dear and Flusty’s *The Spaces of Postmodernity* in 2001, to cite but a few.

A book that deserves special mention is Edward Soja’s *Thirdspace*, published in 1996. Soja’s approach in this volume is quite distinct from that adopted in *Postmodern Geographies*. This new work explores the interstices between postcolonial theory and postmodern geography, using the idea of ‘third space’ to ‘open up’ geographers’ explorations of the spatialities of life, adopting what Soja terms a ‘critical postmodernism’, distinct from both the celebrations of the end to all certainties pronounced by certain relativists, as well as from a ‘critical modernism’ that presents a caricature of the postmodern as nihilistic and self celebratory. Besides the work of Homi Bhabha and other writers who inspired contemporary post colonial reflection such as Gayatri Spivak and Edward Said, Soja’s analysis also draws upon the work of Foucault and Lefebvre, as well as the spatial feminism of Gillian Rose and the postcolonial feminist writings of Gloria Anzaldua.

Alongside the above cited volumes, the late 1990s as well as the decade that follows also witness the publication of new works dedicated to the postmodern city; innovative analyses of urban spatialities that, in many cases, also pioneer new theoretical and methodological tools, adding to the broader reflection on the postmodern in geography. Key in this respect are Soja’s *Postmetropolis*, published in 2000, and Michael Dear’s *The Postmodern Urban Condition* in 2000: volumes authored by the two geographers who opened up the reflection on the post modern city 14 years earlier. One of the last books explicitly referring to the ‘postmodern’ was Claudio Minca’s 2001 edited collection *Postmodern Geography: Theory and Practice*. The volume highlights some of the tensions and controversies that have accompanied the advent of the postmodern in geography, tensions that have since consolidated into a distinct set of positions, at least within English speaking geography. In this optic, the comparison with perspectives from other academic contexts is particularly revealing: the contributions of Italian and Scandinavian geographers included in the volume offer, in fact, a very different view on the legacy of the postmodern debate but also its possible futures. Overall, reexamining these somewhat convoluted disciplinary trajectories in retrospect, at least one thing is clear: the postmodern has become integral part of the geographical tradition. Not only: it is, by now, widely accepted that the advent of postmodern reflection in
geography significantly contributed to revitalizing disciplinary debates of the past 20 years and opening geographers’ eyes to a whole series of new research avenues and approaches.

See also: Deconstruction; Feminism/Feminist Geography; Marxism/ Marxist Geography I; Marxism/Marxist Geography II; Poststructuralism/Poststructuralist Geographies; Structuralism/Structuralist Geography.

Further Reading


Post-Phenomenology/Post-Phenomenological Geographies

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Glossary
Experience The unit of measure of the post-phenomenological. Experience is not necessarily grounded in the human.
More-Than-Human The realms beyond the human (inhuman, nonhuman) that co-constitute practiced engagement.
Post-Phenomenological A rereading of phenomenology as phrased in the most part through post-structuralist theories.
Practice The bodily relation to the world (encompassing movement, sensation, perception, and action).

Introduction
Post-Phenomenological Geographies

This article gathers together 'post phenomenological' geographies: an emergent and, thus far, fragmented body of work. The wider context of post phenomenological writing is limited, and although only a handful of geographers such as Edward Relph emphasized the importance of the human imagination of place (albeit relying on a particular figuration of place) to human being, folding ideas of authentic existence and alienation into a mode of being in place. In brief, phenomenology offered a vehicle to take note of (human) experience, the impact of sensation through the flesh of the body, and the ways in which this experience is constituted by, and of, place. Phenomenologically influenced human geographies subsequently became less popular as geographers such as Derek Gregory and David Harvey critiqued the ideas as not offering the political purchase required for the development of a critical human geography. For Harvey, dwelling did not offer the resources to deal with the occurrence of societal change, and the 'universal' body offered by phenomenology made Gregory look to the theoretical resources of post structuralism, feminist theorists, and postcolonial theorists instead.

However, in the context of a more general 'practice turn', phenomenology made a return, alongside other theorists such as Bourdieu, Wittgenstein, Garfinkel, and Deleuze. Particularly relevant for the subsequent directions taken by post phenomenological geographies was the use of phenomenological ideas by Nigel Thrift in the development of nonrepresentational theory. This signaled a shift from the predominantly humanistic interest in transcendental phenomenologists such as Husserl and the constitutive phenomenologies of Schutz, to the existential forms of phenomenology embodied by writers such as Merleau Ponty.

Transcendental phenomenologists work toward a universal conception of being: their study is not of a particular person in a particular environment; rather it is concerned with a more impersonal, less located form of experience. The interest is in the transcendental ego: a universal source of all experience (from which individual experiences are personalized according to context). Constitutive phenomenologists lend more of a socio- logical and geographical conscience, focusing as they do upon the role of society in molding our intersubjectively located understandings of the world, and creating shared communities of meaning that exist within the life worlds of particular societies or cultures.

Existential phenomenologies, having contributed most to post phenomenological geographies, reject the universal form of experience and take less of a meaning-based approach, arguing instead for the importance of the study of the particularity of experience. Instead of being created through meaning, the life world is constituted through experience and interpretation of this experience. Rather than locating experience in the body, or in intersubjective space, post phenomenological geographies...
extend experience trans humanly. This allows the analytic focus to be decentered from and extended beyond the human body, taking in the inhuman (including, e.g., the agency of animals or objects) and the nonhuman (the ‘pull’ of the world). Experience does not just occur within the body, confirming our boundaries and corporeality, but is a creative force distributed across bodies and worlds (all manner of ‘things’ – objects, events, places, spaces – matter here, having performative and constitutive force).

Crucially, none of these post phenomenological accounts ‘leave behind’ the phenomenological (as a realm of experience), but rather refigure what experience might be, where it might be located, how it comes about, and how we, as social scientists, might account for it. These post phenomenological modes of working revisit the resources offered by phenomenology, critically returning to concepts such as ‘dwelling’, and working them through current ‘phenomenological’ theorists such as Alphonso Lingis and Michel Taussig, and theorists such as Deleuze and Levinas, whose intellectual trajectories developed in post World War II France in critical relation to phenomenological traditions. In this way, these post phenomenological geographies have resonances with other ‘post phenomenological’ moves across the human and social sciences over the last 15 years. Although a diverse and contested field encompassing, for example, Don Idhe’s sociologies of science and technology, and more recently a journal special issue edited by Suzi Adams concerned with the ways in which the world is produced and placed, all these post phenomenological writings investigate exactly what it means to transform, rather than abandon, phenomenologies, and in doing, continue to push the boundaries of what it means to be in the world.

Experience

Post phenomenological geographies have made several distinct contributions to the area of geographies of experience. Phenomenological frameworks have been used in conjunction with participant observation and in depth interviews in order to offer a nuanced understanding of the lived world of humans. These accounts of phenomenological experience have overlapped and been mutually constitutive with such areas of research as emotional geographies and embodied health geographies. Phenomenological writings have been used to understand the interrelations between self and other as lived, and the spaces between body, self, and other. Beginning with perceptions, which fill the gaps between perceiver and perceived, phenomenology gives insights into the ways in which space is lived, and how lived space is integrally related to our sense of self. This spatially specific understanding of who we are lends analytical purchase to Joyce Davidson, who uses Merleau Ponty’s understanding of being at home in the world (or constructing a ‘homely’ space) as integral for mental health, to construct a phenomenological understanding of the lived experiences of being agoraphobic. This emphasizes the need of individuals to reinforce their human selves as centers, in order to counter the depersonalizing tendencies that are incipient in every sensation. In allowing an understanding of what happens when the raw ‘power’ of sensation overwhelms and threatens an individual’s embodied sense of self, phenomenology offers opportunities to both describe and explain embodied geographies of health and illness.

The second area of post phenomenological research into experience turns against the remit of phenomenology more explicitly, in that it troubles the category of experience itself, questioning the phenomenological location of experience in the figure of the human. This constitutes a desire to move beyond the reductive act of constituting experience through the contours of the human, and the act of sensemaking (feeling and naming a sensation). A number of different conceptual devices and empirical strategies have been employed to extend accounts beyond the cartographies of human embodiment.

Materializing Corporeality

The first mode of extending experience is through engagement with the materialities of bodies (and not just those parts of it’s materiality that we can grasp through the sensing capacities of our bodies). Emma Roe has done precisely this in her research on food and eating. What post phenomenological geographies do here is expand the realms of what the (experiential) human is, what counts as the empirical field (and how we go about evidencing this), and also what geography is (beginning to employ the knowledges amassed in, e.g., cognitive science or biomedical disciplines). Thinking in these terms has the potential to refigure our understanding of the relation of the body to the world. For example, thinking in terms of stimuli and neuronal firing patterns, or biochemical reactions that occur across the epidermal boundaries of the body offers a different perspective on experience. Rather than understandings based upon objects or individuals, these are system based under standings that delocate and distribute actions transhumanly. Experience in these terms can be understood in terms of flows and feedback and expanded through a consideration of what these non cognitive processes contribute to (human) experience and sensation. Methodologically, this kind of research draws upon cognitive scientists such as Francisco Varela, supplementing per sonalized first person narrative frames with third person accounts that document muscular reactions, micro scale
fleshy movements, and those parts of the body that ordinarily lie outside our sensible frame. This demands accounts that are never solely located in the personal, requiring innovation in research documentation with the use of technologies (such as video) that constitute new forms of visibility.

Affect

Affect offers an increasingly important language for geographers to speak to corporeal changes precipitated by transsubjective experiences (linking material processes to immaterial registers). Affect is a pre-personal force; an intensity or experience that is not necessarily tied to the human, but which can become a charged 'background' catalyzing bodily performances and actions. The main theoretical lineage of affect for post-phenomenological geographies has been Deleuze, who explicitly rejected phenomenological claims for some form of foundation of sense, on the grounds that the unfolding nature of the world continually unpicks any foundation. Attending to this register (which has become a shorthand for the precognitive and nonrational) shifts (place based) experience into a register less centered on the human, thus enabling geographers to take account of the role of affect in precipitating corporeal formations and subjective emergences. Alongside percepts (another Deleuzian concept), affects are used to account for the constitutive relation between body and world, inside and outside, and self and landscape by John Wyllie. What interests him is the ways in which affect and percept fold into the performative creation of self and landscape. This happens through double movements of solicitation and response which give emergent form to subjects, bodies, and specific temporalities or spatialities. Affects and percepts speak to the emergent becoming of the world (in contrast to personally owned perceptions and affections, which serve to situate us in the world, solidifying our being). Mark Paterson similarly uses affect in constructing a 'felt' phenomenology, concerned with touch. He maps the relation between the sensory experiencing body and how this manifests in emotional encounters, tracing both intra- and intercorporeal intensities.

Witnessing

Somewhat different suggestions for expanding the phenomenological realm of experience arise when we reflect on the representational habits and strategies amassed by the discipline, and the categories geographers use to divide and understand the world. Taking apart the phenomenologically understood space of immediate bodily experience, J. D. Dewsbury argues that the link between the sensible and the intelligible has been intellectually habitualized, but this offers only one way of thinking experience. Dewsbury finds the immaterial realm interesting, in particular those things such as emotions, passions and desires, and spirit, belief, and faith that are both located in the phenomenological and also strain at the edges of human experience. This requires a particular kind of accountability that moves beyond the human and the phenomenologically experiencing subject, and opens up questions such as what is the relation between sense and sensation, how does the sensible come into being, and at what point is sense made? The stance that Dewsbury suggests might answer these questions is that of witnessing; a stance that at once is located in the subject, and unpins from it, continually querying the human located phenomenological horizon. Witnessing is a form of being called into being by the event of the world, and evidencing this through all of the senses. Witnessing never amasses a final picture of the world, but constitutes experience through the almost intangible, the uncertain, and the haunting.

The Spectral

As much as Dewsbury points toward the edges and uncerainties of experience, perhaps the farthest 'outside' of experience that post-phenomenological geographers, such as John Wyllie, have pushed is that of the spectral or ghostly. The spectral, as the Derridean return of a presence, unsettles certainties (place, temporality, and the certainty of the way we evidence the world through sensation). This offers another, as yet less developed, route for post-phenomenological geographies to trouble the being in the world of the phenomenological self.

The Unexperiencible

Another, quite distinct, route offered by post phenomenological geographies is a shift away from the emphasis phenomenology places (mirrored in other geographies of 'practice') upon intentionality and purposive action. Intentionality is central to phenomenology, but constrains the possibilities of a relation between body and world to those parts of the body that are involved in the making of sense (thus requiring the subject as a starting point). As argued by Paul Harrison, this enacts a lack of concern for passivity, and the ways in which the subject might be held in relations of passive exposure – those that bind us in unchosen relations. Harrison queries what happens when you take a different starting point and grant a phenomenological role to the unwilling or the sensuous (as a realm that is not attached to any activity). Suffering is the state of extreme passivity that allows Harrison purchase upon the limits of experience, hinting towards the realm of the unexperiencible (which might itself
take on many different dimensions). In this the limits of the phenomenological (as realm of experience), and the limits of phenomenology (in accounting for these realms of experience), are tested, opening up questions such as what might a (post)phenomenology of the unwilled look like, or how might we do a geography of bodily states that do not have any phenomenal content? These questions raise methodological challenges, given the focus of many of the post phenomenological accounts on movement and the moving body, and raises the question of how to research passivity, and how geographers might challenge the (sociocultural) value attached to movement.

**Landscape, Corporeality, and Subjectivity**

Another area, overlapping with that of experience, in which post phenomenological geographies have been most clearly articulated is in geographies of landscape. Forms of phenomenological understanding situate landscape through the experiencing body, and have thus offered alternatives to the work that has situated landscape as a cultural image to be read in terms of multiple and contested meanings. Post phenomenological approaches have re problematized landscape, returning in some way to ideas of practice and experience but dislocating these from the human body. John Wylie and Mitch Rose suggest that landscape is tension (of presence and absence, performance and perception, proximity and distance, immersion and detachment). They problematize the classical phenomenological move of locating the self in the body and the body in the landscape, asking instead whether the subject is in, of, or on the world, and how we might be all three of these things at once. In this, they trouble notions of locating and embedding, and instead think about landscape in terms of a folding, or an implication of body and landscape. This fleshy form of mutual constitution allows post phenomenological geographers to think about the challenge of landscape to corporeal borders and coherences. A number of geographers have made related post phenomenological interventions around landscape.

**Dwelling**

Dwelling, often drawn from a Heideggerian lineage via social anthropologist Tim Ingold, offers one way for geographers to negotiate landscape and place. Beginning neither in the subject nor the world, dwelling references togethernesses, foldings, and involvements of human and nonhuman. As such, this return to dwelling has been staged in reference to the desire to negotiate nonhuman agency in the practiced, lived construction of place. It also partly negotiates the perceived inadequacies of actor network theory in dealing with spatially specific locatedness. Dwelling offers one way to negotiate how place is a time deepened ensemble of things and beings (human and nonhuman) together, while at the same time recognizing the more fluid, ephemeral, or dynamic ‘becomings’ that come to make up place. A notable use of dwelling is that of Paul Cloke and Owain Jones in their study of the nonhuman agency of trees in the perform ance of an orchard as place. They focus upon the ways in which repeated performances in, and of, landscape concretize place, and work through the ways in which modernity might be destructive to (or merely change) practices of dwelling.

Hayden Lorimer develops ideas of dwelling in slightly different ways from Cloke and Jones, using it to frame his questions about living landscapes. He experiments with the possibilities of narrating the moving geographies of nonhuman animals, and how these might add to our understandings of landscape. In this, he invokes the roles of knowledges on the ground and grounded knowledges, in performative, more than human, creations of place. Weaving historical sources with topographical empirical encounters, Lorimer maps place through energies, forces, and flows; way marking routes through the material and immaterial, permanent, and impermanent. This nods toward an eclectic range of influences, including the psychogeographies of Iain Sinclair and the performance archaeologies of Mike Pearson. As such he suggests ways for post phenomenological geographies to negotiate the tactile and practical and to recognize the importance of vernacular and folk knowledges, and the learned, intimate skill of folding with landscape. Caitlin DeSilvey echoes this approach to the temporalities of dwelling, as she assembles and disassembles the material artifacts and fragmentary objects implicated in the ambiguous processes and practices of dwelling on a Montana homestead. DeSilvey acts as curator, detailing the interdependent lives of individuals, animals, objects, and buildings, and from this, salvaging the near histories of dwelling on the margin. In both these cases, dwelling opens up the doing of landscape beyond the human, and questions processes of inhabiting the world.

Paul Harrison has staged a more theoretical (and less empirical) engagement with dwelling. Here he strips dwelling down to a mode of naming the relation between one and the other, and the event of that relation taking place (through a movement of spacing). Drawing on Heideggerian resources from Levinas, Harrison addresses an erasure within Heidegger’s conceptualization of dwelling; that of alterity, or relation to the other. As well documented, otherness made Heidegger uneasy and as such he suppressed all forms of otherness by subsuming difference within sameness. In making this highly political move, Heidegger excludes the ways in which difference interrupts, reveals, and places into question an individual’s form of being in the world. Harrison argues that
it is necessary to take account of this action of difference in a way that does not simply cast it as an alien threat to the possibility of dwelling, to make dwelling a viable ethico-political concept. Thinking the event of the relation, or the space between individuals in this way has valuable consequences (and indeed is imperative) for thinking otherness and processes of othering (on cultural, ethnic, religious, etc., grounds), and thus for encountering identity, community, and subjectivity. Exploration of this space between us (and how then it might be accounted for) constitutes another route that post phenomenological geographies might take.

**Postcolonial Landscapes**

The use of postcolonial theories in conjunction with phenomenological theories of vision, embodiment, and locatedness is another line of post phenomenological enquiry. This weaves a passage between lived experience, cultural representation, and the performance of ideologies. Marking a move away from the text–context–text analytical loop of representational politics that has situated much postcolonial analysis in geography, this instead connects sensory surfaces with processes of meaning making, while looking at practices of colonial spatial inhabitation. In particular, Jessica Dubow has pursued the historical situation of empire as bound up with bodies, experiences, and expressions. Thus colonial figures are corporeal bodies who experience place bound sensations, and become colonizers through their embodied relation to the land. Whereas many postcolonial geographies focus upon the colonial scopic regime as a point of the view on the world, what phenomenological writings do is locate the colonial gaze and body in the landscape. The use of the metaphor of phenomenological groundedness to locate the space based experience of colonial bodies draws critical attention to the ways in which colonial spaces were produced.

**Landscapes of Meaning**

One line of critique leveled at post phenomenological geographies is developed by Tim Cresswell, who suggests that the separation of bodily experience from conscious does little to do from the Cartesian separation of mind from body. Characterizing the body solely as a realm of “nonrepresentation”, or even focusing too heavily upon this nonrepresentational realm, creates separations (both conceptual and empirical) between representation and practice, both of which he argues are implicated in human movement and experience. In claiming that human mobility is both reperceptional and practical, Cresswell expands the realm of the post phenomenological to consider just how experiences and practice are wrapped up in psychosocial processes of meaning making, and are never separate from cognitive processing. This explicit requirement to consider the ways in which bodily practice is tied up with ideological practice (and thus power) is something met in part by Mitch Rose, whose approach asks how subjectivity and meaning become layered with landscape. In asking how subject formations are directed in particular ways through particular relations with landscape, Rose considers the ways in which landscape is not encoded with meaning as such, but is rather a surplus of meaningfulness. Rather than tying landscape down to a framework of meaning, Rose understands meanings as affectively and emotionally initiating and provocative. Advocating a suspension of the action of cultural theory in relation to conventions of meaning encoding and decoding, Rose asks what the world can possibly tell us. How do particular subject formations occur, and what is the act through which we become separate enough from landscape in order to understand ourselves as an “I”?

**Future Directions: Doing Post-Phenomenological Geographies**

While post phenomenological geographies are presently not particularly cohesive, this leaves open a wider variety of paths for future research. This might be in terms of empirical focus, theoretical exposition, and methodological focus. The methodological challenge is using methods that clearly and habitually situate the human at the center, and adapt them so they allow access to the inhuman forces that are the subject of post phenomenological geographies. There have been a number of strategies in this.

**Experiential Research**

The first of these is the empirical focus upon spaces and practices in which the action of these forces is heightened, and thus more accessible. Thus, these forms of research have dwelt upon body—body contact (through practices such as massage or Reiki for instance), bodily movement (e.g., focusing upon walking, dancing, or cycling), and body—object relations (through practices such as eating, or becoming intoxicated). Written documentation (in accordance to the demands of the academy) is important, and the question of how to narrate these geographies underlines the questions of subjectivity and corporeality that the post phenomenological geographers documented here have raised. An interesting tension exists in much of this research because it works from individual ethnographic experience in order to speak to these transhuman forces and impulses. Experiential research and personal testimony are used to
appeal directly to the forces of the inhuman, and the ways in which the unfolding of the world draws the subject in ways not immediately of their own choosing.

Current worries about this mode of accounting for the world have arisen due to the lack of attention paid to the more traditional modes of accounting for the subject (class, gender, identity, etc.). What this research does however, is to try to understand how the more than human parts of the world contribute to the performance, maintenance, and solidification of sociocultural lines of gender, class, and identity, rather than taking these as ‘natural’ starting points of analysis. They also attempt to underline that the narrative does not come from an unaffected, unafflicting coherent subject. Rather, a point of view as narrator is an outcome (rather than a preexistent position from which to speak) of the practice being researched. Other possibilities have been explored, such as Lorimer’s imaginative mobilizations of historical sources, or Paterson’s use of the body as a recording surface upon and through which the traces of the research practice are written.

Documentation

The second is experimenting with the documentation of these post phenomenological geographies. Roe, in her research concerned with the moving material nonhuman, questions this becoming post phenomenal through the realm of movement. Practical activities documented through videoing are envisioned as a methodological resource by Roe, as it is in movement and practice (rather than meaning) that sensation meets flesh, and the realm of experience is located. Roe is particularly interested in the event as an ontological device (the event as bodies coming together, where ‘bodies’ are not just restricted to the human), and what kinds of experience we might excavate in the post phenomenological spaces of the body (i.e., those spaces and processes that are beyond our senescent cognition – biochemical reactions, etc.). Video has been a strategy also adopted by Eric Laurier, who, although positioning his approach as ethnomethodological rather than post phenomenological, has experimented with the use of video to document the production of everyday social conventions, without necessarily grounding these in consciousness, or locating them in the human body. His distributed attention has so far been focused upon such mundane (but vital) practices as dog walking, drinking coffee, and driving cars.

These methodological directions, combined with the already flourishing empirical and theoretical post phenomenological geographies outlined above, suggest a number of fruitful spaces for future engagement. The diverse directions which have been outlined, are united by the phenomenological concern with the embodied self in the world negotiated in relation to the fragmented and fragmenting subject at issue in post structuralist theories, giving geographers insights into themes such as subjectivity, corporeality, landscape, and place.

See also: Affect; Body, The; Dwelling; Ethnomethodology/ Ethnomethodological Geography; Non-Representational Theory/Non-Representational Geographies; Performance, Research as; Phenomenology/ Phenomenological Geography; Place; Posthumanism/ Posthumanistic Geographies.

Further Reading


Glossary

Diversification Process associated with agricultural actors moving away from a sole focus on agricultural production toward recognition of multiple uses of agricultural and rural resources.

Multifunctionality Territory bounded by agricultural/rural productivist and nonproductivist action and thought characterized by multiple pathway opportunities.

Multifunctionality Spectrum A spectrum of decision making that explains action and thought of rural actors in the context of productivist and nonproductivist pathways.

Nonproductivism The opposite of productivism in the multifunctionality spectrum of decision making; action and thought associated with agricultural practices where maximization of food and fiber production is ‘not’ important.

Pluractivity Farm households engaging in several activities to differentiate income streams.

Productivism Agricultural action and thought associated with maximum food and fiber production based on Fordist modes of production and industrial–agricultural systems.

Post-Productivism The era ‘after productivism’ associated with agricultural and rural spaces characterized by reduced emphasis on maximizing food and fiber production where nonagricultural uses of rural space assume greater importance.

Introduction

Two key arenas of concern have influenced recent research and thinking on conceptualizations of agricultural and rural change. The first relates to the proposed transition from a ‘productivist’ to a ‘post productivist’ agricultural regime (the p/pp transition), and the second revolves around the notion of ‘multifunctional agriculture’. Although there is growing criticism of linear concepts surrounding the postulated p/pp transition, it is still assumed by many that agricultural regimes have moved toward a post productivist era. Debates on this transition have brought together a wide array of researchers from different disciplinary backgrounds, including rural studies, history, sociology, economics, or social psychology, with human geographers being at the forefront of debates.

This article reviews current conceptualizations of post productivist and multifunctional agriculture and provides a critical evaluation of both terms. Debates on the p/pp transition are closely intertwined with recent conceptualizations of the notion of multifunctional agriculture and none of these conceptual constructs can be understood without reference to the other. Although some continue to advocate the utility of post productivism, many are now criticizing this transitional concept and argue that the notion of nonproductivism may provide a better heuristic opposite to productivism. Understanding productivist/nonproductivist action and thought as a ‘spectrum’ of multiple decision making pathways enables the conceptualization of multifunctionality as the conceptual territory bounded by the two extreme agricultural transitional pathways of productivism and non productivism – a space that, compared to the p/pp transition model, better encapsulates the temporal nonlinearity, spatial heterogeneity, global complexity, and structure–agency inconsistency that characterizes agricultural and rural decision making across the globe.

The Transition from Productivist to Post-Productivist Agriculture

Agriculture in Crisis

Over the last 50 years, global agriculture has witnessed profound changes with regard to technological innovations and food and fiber production techniques, actor spaces, policy frameworks, food regime structures, ideologies, and impacts on the environment. Food production has increased dramatically so that today more than 6 billion people can, in theory, be adequately fed. However, many agricultural systems have also seen dramatic structural upheavals, including the rapid decline in agricultural workforce in most advanced economies with concurrent destabilization and restructuring of rural communities. This has been accompanied by the substitution of subsistence farming patterns with cash crop production for external markets in many regions of the developing world, and the dismantling of the often sustainable traditional farming systems. In many areas, this has occurred simultaneously with an increase in the severity and extent of environmental degradation linked to over intensive agricultural practices and production techniques.

In recent years, much theoretical and conceptual work has attempted to understand these changes in modern agricultural regimes and rural areas, both in developed...
and in developing countries. One of the most powerful theoretical concepts to emerge from these debates has been the notion that modern agricultural regimes have moved from a ‘productivist’ to a ‘post productivist’ era.

**The Transition to Post-Productivism**

In recent years debates on the p/pp transition have added an interesting new conceptual dimension to agricultural/rural research – a field that was, for a long time, seen as having relatively static theorizations of agricultural and rural change. Agricultural productivism and post productivism are relatively recent terms, with debates emerging in academic circles in the UK in the early 1990s. Discussions were spearheaded by some of the key thinkers on agricultural change at the time including Terry Marsden, Philip Lowe, Paul Cloke, Richard Munton, Keith Halsecree, Jonathan Murdoch, and Neil Ward. These authors set the scene for a burgeoning debate on the p/pp transition that has continued unabated to the present day.

In advanced economies, it has been argued that the transition to a post productivist era began in the 1980s and has lasted to the present day. Post productivism has been generally seen as the mirror image of productivism – in other words, post productivism has been defined in the negative as what it is not, rather than as what it may be. Post productivist agriculture is characterized by a reduction in the intensity of farming through extensification, diversification, and dispersion of agricultural production with an associated move away from agricultural production toward consumption of the countryside. This has been associated with the loss of the central position of agriculture in a society characterized by contested countrysides, a widening of the agricultural community to include formerly marginal actors at the core of the policy making process, and a weakening of the state role in policy making with a more inclusive model of governance that also includes grassroots actors. Farming techniques in the post productivist era are seen to be more in tune with environmental protection through reduced application (or total abandonment) of external inputs (e.g., organic farming), while during the post productivist era the main threats to the countryside are generally perceived to be agriculture itself rather than urban or industrial development. Although conceptualizations of the p/pp transition have been largely restricted to the situation of the UK, some studies have attempted to assess how applicable this transition is elsewhere, in particular, in Australia, New Zealand, and the European Union. As a result, reference to the p/pp transition is now well established in the agenda of rural geography, prompting some to suggest that it has become one among the accepted orthodoxies for conceptualizing recent agricultural change.

For developing countries, meanwhile, work on famine has led to increased nuancing and locally grounded definitions of food security. By the end of the 1990s a post productivist view may have emerged for some developing countries that has emphasized the multiple and shifting ways with which individuals and households achieve food security. Partly reflecting notions of the p/pp transition in the developed world, parallel shifts can be recognized in debates surrounding agricultural change in developing countries, in that food security in the poorer South is seen to have moved from the global and the national to the household and the individual, from a food to a livelihood's perspective, from objective indicators to subjective perception, and from production to consumption of the countryside.

**Deconstructing Post-Productivism**

Several years after the first widely publicized discussions of a shift toward post productivism, and at a time when further profound changes in agricultural/rural arenas at the local, national, and global scale are taking place, many argue that it is time to reevaluate existing conceptions. In particular, there is an inherent danger in uncritically accepting seemingly straightforward and linear concepts of societal change as embodied by the p/pp transition (Figure 1). There is increasing concern that the p/pp model is not robust enough to explain agricultural change – be it from the perspective of developed or developing countries. Indeed, echoing many scientific critiques of other ism/post ism debates

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(e.g., transition to post Fordism, post modernism or post socialism), evidence increasingly suggests that the so called transition toward post productivism is characterized by temporal nonlinearity, spatial heterogeneity, global complexity, and structure agency inconsistency. These recent debates, therefore, make the notion of a shift toward post productivism increasingly difficult to substantiate. Some argue, therefore, that – marred by issues of UK centrisim, presentism, an overemphasis of political economy conceptualizations, and confusion about linearity and homogeneity – the p/pp transition no longer stands up to critical scrutiny as a model adequately explaining contemporary transitional processes in agriculture.

The problem of the implied linearity of the p/pp concept has partly been linked to the fact that those who conceptualized the term post productivism largely failed (until recently at least) to take into account the wealth of actor oriented and behaviorally grounded research. An inclusion of such research points toward considerable differences in productivist and post productivist action and thought at different levels of actor spaces. Grassroots actors, for example, have remained largely productivist in their agricultural occupational identities (i.e., not all stakeholder groups are moving along the p/pp transition at the same pace and in the same manner as Figure 1 would imply). Some argue, therefore, that we witness a spectrum of different views rather than two easily definable and separate conceptual entities. Acknowledging findings from actor oriented and behaviorally grounded studies suggest that the breakdown of productivist attitudes and ideologies have ‘not’ yet occurred, and that agriculture should be seen as an increasingly ‘bifurcated’ process, comprising ‘both’ productivist and post productivist action and thought.

The problem also partly stems from the fact that the p/pp transition has been conceptualized from a UK centric perspective that has largely failed to discuss whether, and to what extent, the concept has a wider applicability elsewhere. In particular, there is growing evidence of a time lag and ‘spatial’ inconsistencies in the adoption of post productivist action and thought across the world, as different localities are positioned at different points in the p/pp transition. This ‘territorialization’ of productivist and post productivist actor spaces highlights the wide ranging diversity that exists within agricultural transitional processes. That such productivist and post productivist action and thought occur in ‘multidimensional coexistence’, therefore, has led researchers to increasingly question the implied directionality of the p/pp model. This means that post productivism has ‘not’ replaced productivism. Indeed, it appears that both processes ‘coexist’ temporally, spatially, and structurally. The postulated transition to post productivism, therefore, should not imply that productivist institutional forms, networks, ideologies, and norms have been superseded, suggesting that post productivism has not been radical, but rather incremental and accommodationist to pro productivist action and thought.

Some have, therefore, rightly asked whether the notion of post productivism may only be a conceptual construct that describes patterns at the macro structural level, or that it may even be an academic myth. Like any terminology beginning with post, the notion of post productivism indicates a hesitance by those who propelled the term into the academic terminology to create a new term linked to problems of dualistic theorizations of societal transition. From a theoretical perspective, critics, therefore, increasingly encourage the search for new tools to explore the nature and dynamics of the conceptual ground in between the extreme paths of productivism and post productivism. Yet, the main conceptual problem rests less with the notion of productivism, but with the concept of ‘post’ productivism (especially with the prefix post) and the suggestion of an irreversible transition from one organizational state to another. A reconceptualization of the p/pp transition model has long been overdue if this model (or parts thereof) is to have wider scientific credibility in the future.

**Multifunctional Agriculture and the Productivism/Nonproductivism Spectrum**

**Conceptualizing ‘Nonproductivism’**

The relative failure of the reductionist p/pp transition model to explain contemporary agricultural change means that the continued use of the term post productivism is untenable. Post should imply something following after something else, and the mounting evidence does not support the assumption that a coherent and conceptually well defined era has followed on from the productivist era. There are, therefore, increasing calls that agricultural action and thought should be viewed as occurring along a temporally nonlinear and spatially heterogeneous spectrum of decision making possibilities, which negates the need to define distinctive boundaries and acknowledges the fluidity and flexibility of agro cultural action and thought. Recent work suggests that the notion of ‘nonproductivism’ provides a better conceptual term to describe the opposite end of productivism (referred to as the ‘productivist/nonproductivist transition model’, hereafter the p/np transition model).

Nonproductivist action and thought contains many of the indicators that have been used to conceptualize post productivism in the past (see above), but without the underlying assumption that there is necessarily a temporally and linear movement toward such action and thought over time.
One of the key advantages of the notion of nonproductivism is that, as opposed to post productivism, it is a neutral term, simply denoting action and thought that is not productivist. This helps us get away from the danger of subjectivity that has hitherto branded productivism as the ‘bad’ and nonproductivism as the ‘good’ era. Embedding both productivism and nonproductivism as part of a spectrum allows recognition that there is no action and thought affecting agricultural and rural areas that is entirely productivist or nonproductivist, but that each process may contain elements of both. Transition should be seen as occurring along and within different pathways of constraints and opportunities within the p/np spectrum over time, rather than being conceptually restricted to a transition from one set of seemingly structured coherences (i.e., productivism) to another (i.e., post productivism).

**Multifunctional Agriculture**

In its simplest definition, the notion of ‘multifunctional agriculture’ implies an agriculture that has multiple functions, many of which go well beyond the production of food and fiber as its central objective. Multifunctionality is the antithesis of monofunctionality, where agriculture serves relatively narrow functions largely focused on food and fiber production. Yet, many debates on multifunctionality have narrowly focused on economic, policy based, and structuralist interpretations that place great emphasis on economics and the state (i.e., the political economy) as key drivers of multifunctional transitions. In part, this is a legacy of structuralist interpretations that dominated conceptualizations of agricultural and rural change during the 1990s. It is only in the last few years that wider issues linked to culture, the consumption of countryside, and society’s changing views of agriculture have been incorporated into conceptualizations of multifunctionality, and discussions on the importance of multifunctional identities of grassroots actors and their aspirations have only recently become the focus of attention. The predominance of structuralist interpretations has led to a relatively narrow view of multifunctionality that focuses more on processes, rather than acknowledging that multifunctionality should be understood as occurring along and within different pathways of constraints and opportunities within the p/np spectrum outlined above, is it possible to provide a holistic and normative understanding of what multifunctionality implies, who the beneficiaries should be, and how it ought to be implemented in practice – in other words, the notion of multifunctionality has remained undertheorized, process oriented, and poorly linked to wider debates in the social sciences. This has led some to call for improved theorization of the notion of multifunctionality, in particular, in the context of extensive debates on agricultural transition. Recent work suggests that the conceptual territory of multifunctionality can be theoretically anchored in the p/np model (see above), and that multifunctionality occupies the (conceptual and real) space between the extreme pathways of productivism and nonproductivism – referred to as the ‘multi-functionality spectrum’ (Figure 2).
current conceptualizations of multifunctionality as a static state, this new view of multifunctionality sees it as a dynamic transitional process occurring within the boundaries of the productivist and nonproductivist decision making spectrum. Contrary to the binary notions of productivism and post productivism, the multifunctionality spectrum, therefore, enables the under standing of multiple actions and processes simultaneously in a nonlinear and spatially heterogeneous way.

The underlying assumption of this new understanding of multifunctionality is that almost any agricultural/rural action and thought will contain elements of both pro ductivism and nonproductivism – in other words, that few actions, thoughts, and development pathways can be described as solely productivist or nonproductivist. The advantages of this view are that it allows the exact positioning of any actor, actor space, or process along a spectrum of decision making based on the various dimensions making up productivist and nonproductivist spaces. Conceptualizing multifunctionality as part of a spectrum acknowledges the complexity and multi causality underpinning agricultural change. This new concept can be applied in any location around the world, as it sees policy change as only one of many components of multifunctionality, and is, therefore, largely independent of the history of policy making trajectories specific to a given territory (e.g., the EU) that has hitherto marred the exporting of the European multifunctionality concept to non European geo graphical contexts. The new concept can also be invoked to explain processes in any farming system (both with productivist and with nonproductivist tendencies) and is not limited to traditional forms of agriculture. Most importantly, the multifunctionality spectrum no longer needs to be associated with a Euro or Northern centric policy discourse but can be applied equally to both the developed and the developing world.

A Normative View of Multifunctionality

The new multifunctionality concept implies normative judgments about the value and direction of multi functionality. In other words, multifunctionality can and should not be a neutral term, but has to be accorded a value and positionality along the p/np decision making spectrum. Defining multifunctionality is, therefore, about accepting that ‘priorities’ need to be set with regard to specific actions and processes influencing agricultural (and rural) development pathways. Recent commentators have suggested that the multifunctionality spectrum is characterized by varying quality based on ‘weak’, ‘mod erate’, and ‘strong’ multifunctionality. Weak multifunctionality is the worst type of multifunctionality close to the productivist decision making pathway, while strong multifunctionality is the ideal model that all societies should be striving for. In this view, strong multifunctionality engenders synergistic mutual benefits between individual actions and processes (e.g., landscape protection and food quality, direct marketing and rural community embeddedness, etc.) and, therefore, is good for the environment, farmers, rural social relationships and governance structures, food quality, and agriculture–society interactions in general. Strong multifunctionality is, therefore, predicated on strong natural, social, moral, and cultural capital.

Figure 3 shows how this concept of weak, moderate, and strong multifunctionality can be applied to describe individual development pathways of individual farms or entire agricultural regimes where multifunctional quality may fluctuate over time (pathways a–h in the figure). Strongly multifunctional transitional pathways are characterized by action and thought located close to the nonproductivist pathway boundary of the multi functionality spectrum, with a strong emphasis on public good characteristics and strong social, economic, cultural, moral, and environmental capital. High environmental sustainability plays a key role in the strong multi functional model, based on highly diverse assemblages of crops and livestock, often akin to palaeotechnic types of agricultural production. Actors in the strongly multi functional agricultural regime will show strong tenden cies for local and regional embeddedness, in particular, through horizontally integrated rural/farming com munities with very close interaction between local communities through reciprocal rural–agricultural rela tionships characterized by strong lateral actor linkages and newly empowered stakeholder groups. This reson ates closely with human geography conceptualizations of spaces of hope as alternative economic spaces, whereby newly assembled (or rediscovered) horizontal platforms of action are (re)created out of local agricultural/rural systems. Such embedded social networks particularly include activities that will help provide new income and employment opportunities for the agricultural sector.
(i.e., new or strengthened relationships between the agricultural sector and rural society), as well as so-called 'associational interfaces' that are both informal but highly significant in establishing trust, common understandings, working patterns, and different forms of cooperation and cooptation between different stakeholder groups in the food supply chain. In countries with ethnic minorities living in rural areas (e.g., Australia, New Zealand, Canada) local embeddedness in strongly multifunctional agricultural regimes will also mean empowerment and inclusion of 'ethnic groups' (e.g., Australian Aborigines) in agricultural/rural decision making processes.

Strongly multifunctional systems will also be characterized by short food chains and high(er) food quality associated with more differentiated food demand by consumers (the quality turn), the capacity to resocialize or repattalize food, a demand for food products with high (often regionally based) symbolic characteristics, the creation of additional value for rural regions, and enlightened visions about the links between food and health focusing on the interlinkages between both human and environmental health. Strongly multifunctional food consumption shows a shift toward healthy diets (e.g., Mediterranean foods) predicated on food quality and good nutritional balance. Strongly multifunctional systems will also have low farming intensity and productivity, in most cases characterized by a reluctance to use Green Revolution or genetically modified crops. There will also be high degrees of diversification and pluriactivity, in particular, away from traditional productivist food and fiber production, leading to a revaluation of existing farm household knowledge (e.g., of women and young people) and the need to develop new skills and professional abilities. Strongly multifunctional farming systems are also likely to embark on diversification pathways that move the farm enterprise away from a singular focus on food and fiber production. Some also suggest that strongly multifunctional rural spaces are more likely to be only weakly integrated into the global capitalist market, as only partial or complete disengagement from global capitalist (productivist) networks and agriculture liberalization processes will enable on farm implementation of strong multifunctionality pathways. Further, strong multifunctionality will also imply that substantial mental changes are taking place among various stakeholder groups, in particular, through open minded farming and rural populations who see farming and agriculture as processes that go well beyond productivist food and fiber production, mass production, and profit maximization. A strongly multifunctional agriculture can also be seen to act as a bridge between agricultural practices and the wider community (in particular, disadvantaged groups in rural society). Finally, strongly multifunctional systems will also be closely associated with open minded societies who accept that the nature of farming and agriculture is in the process of change. Overall, the strongest level of multifunctionality can be achieved if all of the above processes and activities occur simultaneously (which will rarely be the case), based on self reinforcing multiplier effects of multifunctional activities.

Commentators nonetheless suggest caution about not falling into the trap of romanticizing one multi-functionality model over another. Historically, for
example, it would be wrong to argue that for most of the time since the inception of farming, agricultural regimes operated on the basis of the strong multifunctionality model. Indeed, the question has been asked whether the strong multifunctionality model in one area may be predicated on the coexistence (temporally and spatially) of moderate and weak multifunctional agricultural regimes in other areas. In other words, it is the aim to achieve strong multifunctionality possible and based on a win–win situation, or is it possible to conceive of a ‘zero sum game’ situation in which the existence of one multifunctionality regime is predicated on the existence of another? It may well be that in the long term economic efficiency, the survival of farming systems, and the ability to feed the world may be predicated on pulling all agricultural systems increasingly toward strongly multifunctionality pathways.

**Conclusions**

This discussion has shed light on the notions of agricultural productivism and post-productivism and has highlighted how commentators have increasingly called for a deconstruction of the notion of a linear p/pp transition. Instead, studies increasingly suggest that a revised model based on a spectrum of decision making bounded by productivist and nonproductivist pathways better encapsulates the nonlinearity, heterogeneity, and complexity that characterize agricultural transitions. Although the p/pp transition model has made a vital contribution to current debates on agricultural transition, it is suggested that post productivism cannot, and should not, be seen as the end point of contemporary agricultural change. Instead, a modified transitional model based on the notion of a productivist/non productivist spectrum of decision making forms a more appropriate nonlinear conceptual model of agricultural change that also acknowledges spatially heterogeneous processes and structure–agency inconsistencies in agricultural cultural change.

Debates on this p/pp transition are closely intertwined with the notion of multifunctional agriculture. While many existing understandings of multifunctional agriculture see it largely as an economic or policy based process that only provides a limited basis with which to understand agricultural change, recent commentators are arguing that multifunctionality should be understood as an overarching normative concept anchored in a revised productivist/nonproductivist spectrum of decision making. Thus, discussions about multifunctionality have increasingly moved away from positive to normative theory, implying the need for subjective value judgments about the quality of multifunctional decision making pathways. Conceptualizations of weak, moderate, and strong multifunctionality pathways suggest that a value judgment can be taken with regard to ‘better’ and ‘worse’ agricultural development pathways, and that the strong multifunctionality model, closely associated with non productivist action and thought, is qualitatively and morally the best pathway to follow and implement.

See also: Agriculture, Sustainable; Agri-Environmentalism and Rural Change; Conservation and Ecology; Environmental Policy; Food Networks; Food Regimes; Fordism; Global Commodity Chains; Rurality and Post-Rurality.

**Further Reading**


Introduction

The relatively gradual processes of urban change are sometimes interrupted by periods of more radical urban restructuring influenced by turbulent developments in society. The principles on which societies are founded can be substantially changed and a massive remodeling of social and spatial organization follows. A recent example of such changes are the urban transformations in post-socialist countries conditioned by the transition from communist totalitarian to democratic political regimes and from centrally planned (command) to market economies.

Even though the principles behind the production of urban environments change quickly, the pace of changes in the built environment, land use patterns, and residential differentiation are much slower. The key aspect for the understanding of post-socialist urban change is the distinction between the short term period when the basic principles of political and economic organization are changed, the medium term period when peoples’ behavior, habits, and cultural norms are adopted to new environment and transformations in a number of spheres begin to effect broader societal change, and the long term period in which more stable patterns of urban morphology, land use, and residential segregation are reshaped.

The post-socialist transition is a broad, complex, and lengthy process of societal change. It starts with the refusal of a communist regime and central planning. A society with democratic political regime and market economy is generally accepted as a desired destination. This general societal transition is realized through multiple transformation processes that are highly contingent upon specific historic, cultural, as well as place specific contexts. Despite certain common principles, the starting conditions, paths, and processes of change as well as its outcomes vary and any account of transition from socialism to capitalism must be aware of both commonalties and dissimilarities. The post-socialist urban transformations substantially differ between groups of post-socialist countries as well as between cities within individual countries due to their position within an urban hierarchy and regional economic geographies.

This article mainly builds on the experience and situation in major capital cities of post-socialist Eastern Central Europe, since these are the cities that have been studied the most. The generalization based on these cities may also be relevant for other post-socialist cities.
economic systems was radically distinct from capitalism. As a consequence, the impact on the built environment, land use, and residential differentiation yielded distinct patterns which contrast with capitalist urban development. Socialism was implanted by a radical reform to the preexisting social and cultural milieu as well as to the built environment. Most cities developed prior to socialism under feudal and capitalist conditions. The exceptions were new towns erected under the communist regime and that were numerous especially in the former Soviet Union. The urban environment itself differed because individual socialist countries were in strikingly different phases of industrialization and urbanization process. Furthermore, socialism itself was not uniform. It varied across regions and so did its influence on urban development.

The main political aim of the socialist system was to create a socially just society. This was supposed to be achieved by eliminating capitalist mechanisms, thought to be responsible for producing social inequalities and replacing them with a new, socially just system of production and distribution of societal resources. The key aspects of the socialist system were the common ownership of the means of production and the administrative allocation of resources governed by the state and the ruling communist party (consequently, some authors prefer to use the term ‘state socialism’ or ‘communism’). Socialist society was considered as a temporary phase in the transition to a classless communist society where everyone would contribute with her/his abilities and receive according to her/his needs.

The common ownership of almost all means of production was achieved through nationalization. Nationalization brought enterprises from private ownership to the hands of the state, and thus the exploitation of workers by capitalists was removed. To alleviate inherited injustices in housing, dwellings were redistributed from bourgeois to working class families. However, the system highly favored communist party members and officials.

Socialist ownership (state and cooperative) received explicit preference over private ownership. Furthermore, a distinction was made between personal ownership (given by the amount appropriate for the use by household) and private ownership (property in excess of what would be considered as appropriate to possess at household level thus providing means for extra income). For instance, while single family houses were considered personal ownership, apartment buildings with dwellings for lease demonstrated private ownership, as they presented a capitalist mean that provided rent to the owner.

The distribution of revenue among employees, companies, and governments was regulated by the system of central planning. Central planning integrated political control and economic coordination of the state and the communist party. The main objective was to achieve economic growth that would guarantee an increasing quality of life and socially equitable distribution of scarce resources. Priority was given to production and strategic (mostly heavy) industries in certain regions. A significant portion of resources were allocated to the military complex.

On the individual and family level, the allocation of resources was governed by needs declared by the state. The administrative allocation set standards and regulated price levels. Support was provided for basic needs, not luxury goods. For instance, there was a normatively given relation between family size and the size of dwelling corresponding to it. An excess space was charged with higher rent. Public housing was heavily subsidized and real property transactions were governed by the state. Land rent in terms of the mechanism of spatial allocation of functions did not exist. The spatial allocation of investments was determined by a complex hierarchically organized structure of decision making within the system of central planning. Priorities in the redistribution of scarce resources yielded new economic, social, and territorial disparities. The administrative allocation resulted in new inequalities specific to socialism.

Socialism created specific features in cities. Since many legacies of previous capitalist and feudal systems could not be easily removed or eliminated, the socialist cities incorporated a significant share of pre socialist areas and the inherited built environment importantly determined the development of land use patterns under socialism. The new construction concentrated (beside infill developments) right at the city edge in high density residential areas of multistory apartment buildings (see Figure 1), thus maintaining a compact urban form that contrasted with the sprawling North American and spreading West European cities. Although capitalist urban landscapes were affected by similar modernist planning ideas, the scale of housing estates constructed for several thousands of inhabitants, and the consequent high proportion of multiple family housing noticeably distinguished the socialist city from the capitalist city. The inner city decay that could be similarly observed on both sides of Iron Curtain was caused by the disinvestment of the state as the main landlord, whose prime concern was to build new socialist areas. Renewal was applied in some places beginning in the 1970s, leading to brutal reformulations of pre socialist inner city landscapes. Reconstruction and regeneration of old structures were used in an experimental form only during the 1980s.

The lower share of services and higher share of industry in terms of both employment and land use stemmed from the nature of the socialist political economy including its strategy to keep manual workers as the revolutionary force in major cities. Thus, massive industrial areas spread from old inner city locations to...
newly established outer city zones. Services were distributed in a hierarchical structure of city, sector, and residential district centers, in order to guarantee economies of scale as well as even accessibility of population from residential areas to individual types of services. The commuting between places of residence, work, services, and leisure activities was assured by a dense network of public transportation. Central areas retained a significantly high share of residential function. The political role of city centers was accentuated through the location of government and communist party buildings there. Centers were prime locations of culture with the presence of numerous cultural amenities, such as museums or theaters. Although central areas concentrated on retail and other consumer services, they did not resemble the picture of capitalist urban downtowns dominated by commerce and corresponding business driven architecture.

In socialist cities, population in urban space was primarily differentiated by demographic characteristics. This was caused by spatially concentrated housing construction, housing allocation to young generations, and a low level of migration. Consequently, particular generations of housing estates corresponded with certain age cohorts and their positions in family life cycle. There was a lower level of residential socioeconomic differentiation compared to the capitalist cities. However, residential socioeconomic inequalities still existed. This was not only because of the uneven nature of the residential environment and housing stock but also due to the
mechanisms of housing allocation under socialism. Certain groups of people received better housing based on higher societal or communist party merits. This resulted in a pattern of large areas characterized by a social mix of households, less segregated and more evenly distributed lower social status population and a concentration of elite in exclusive neighborhoods. On the macro level, social status declined with the growing distance from city center, with sharper decline in some inner city sectors and stronger social status of some well located new housing estates (see Figure 2). On the micro level, a mosaic of various socially mixed residential areas reflected the combined effects of past and present as well as the less socially deterministic nature of the administrative allocation of housing. In the cities within the Soviet Union, the sociospatial pattern was even further complicated by ethnic differences caused by migration movements between Soviet Republics within the whole country territory.

As socialism emerged as a fundamental alternative to capitalism, the socialist city was an alternative to the capitalist city. This was not only for the normative goals based on socialist principles but also due to the outcomes of the really existing socialism. Similar to capitalist cities, the socialist city was shaped by cultural modernity, industrialization, technological progress, and advancing divisions of labor. However, the particular character of the socialist, political, and economic organization steered these general processes of societal development through its backwaters. Within the common background of a modern city of the twentieth century that was shaped by industrialization and physical planning, socialist cities represented the major alternative to capitalist urbanization.

Societal Transformations and Their Impact on Urban Change

Post socialist transition does not proceed in vacuum as the replacement of one reality with another. It is a highly complex process that reformulates existing and creates new structures. Transition consists of multiple transformation processes that are related in certain time sequence, address universal or more specific areas, and include both the political application of normative concepts as well as spontaneously proceeding societal changes within (re)established market environment.

In the first years of the transition, systemic changes in political and economic systems played the leading role. Their realization was a necessary precondition for spontaneous transformations to take place. The systemic government controlled reforms aimed to establish a capitalist system based on a pluralist democracy and a market economy, and to integrate countries into inter national political and economic systems. In most post socialist countries, the basic reforms of the political system were achieved in the first months and years after the collapse of communism. They included democratic elections at all government levels and the decentralization of power to local governments. Then the new democratic governments focused on transformations of economic system, the main pillars of which included the privatization of state assets, the liberalization of prices, and free foreign trade relations. The main outcomes of these systemic government controlled transformations were new societal rules based on democratic policy making and market economy principles, a vast number of new private actors and owners, and an openness of local economic systems to international economic forces.

The market principles of resource allocation and the growing exposure to an international economy formed conditions for the development of spontaneous societal transformations of economic, social, and cultural environments. Urban change has been especially influenced by internationalization and globalization, economic restructuring in terms of deindustrialization and the growth of producer services, increasing social differentiation, new modes of postmodern culture, and neoliberal political practices.
International companies and foreign direct investments started to play the decisive role in reshaping local economies and economic geographies and in determining the position of post socialist countries, regions, and cities in a global economic order. In major cities, international companies and foreign direct investments started to play the decisive role in reshaping local economies and economic geographies and in determining the position of post socialist countries, regions, and cities in a global economic order. In major cities, inter nationalization was strongly present in producer services that formed the soft infrastructure for capitalist system expansion to new markets and later in consumer services and industrial production. Foreign managers and high salary employees of foreign companies formed a specific segment of the demand on the high income housing market. In some countries, immigrants formed the bottom tier of the socioeconomic hierarchy. Foreign investment in real estate (office, retail, industrial, as well as residential) began to massively reshape urban landscapes and skylines. A highly uneven balance between Western and domestic actors represented by capital and access to Western resources was further exacerbated with policies and measures favoring capital strong for eign enterprises.

Economic restructuring involves de industrialization and tertiarization. Economic decline that was caused by de industrialization and the development of consumer services, particularly retail which offers low paid jobs affected most cities. The growth in advanced producer services provided fortunes only to major command and control centers, usually capital cities. This left the remaining urban places to struggle for foreign direct investments in manufacturing that would bring industrialization and jobs for local population. Local economic systems were integrated into the global economy in a highly uneven manner with capital cities ranking well among major global centers, successful regions providing cheaper and well skilled labor to routine production within the global assembly line, and peripheries waiting with the mixture of hope and depression. De industrialization left behind extensive brownfields posing both potential for redevelopment as well as threat of further spreading decay. Producer services concentrated in expanding city cores of major centers and contributed to their rapid commercialization. Many of these services later decentralized to out of center locations and business parks at the city outskirts. Retail and tourist facilities in attractive places brought new bright consumption landscapes to city centers followed by later massive expansion of malls and big boxes in outer city areas.

Economic change mediated through labor markets was expressed in growing wage and income disparities. Various national forms of social security systems mitigated some of the social hardships of economic restructuring. However, they could not change the gene rally accepted move toward higher income differen tiation that contributed to social polarization among households and the formation of new territorial disparities in well being. The income inequality was reflected in the reemergence of pre socialist patterns of residential differentiation, the establishment of new enclaves of affluent population, as well as segregated districts of socially excluded. Social and physical upgrading has developed via incumbent upgrading and gentrification of existing neighborhoods and construction of new districts of condominiums for sale in inner city areas, and growth of new suburban communities of family housing for new wealthy population. In some post socialist cities, the escape to rural suburban areas presented the survival strategy of low income population, which otherwise remains trapped in some decaying inner city neighborhoods and less desirable postwar housing estates.

New conditions allowed for the development of a greater plurality of values, a tendency toward individualism and promotion of self interests. Values and preferences of a younger generation shaped by new opportunities as well as some social hardships brought about by economic reforms have resulted in a rapid decline of family formation. An exaggerated second demographic transition has impacted residential choices with consequences for urban housing. More importantly, consumption has become the key life target for population masses. Globalization has brought a homogenization of consumption via the same goods offered by transnational corporations. But not everyone enjoys these opportunities. Consumption by most people is limited by their income level and preferences shaped by advertise ments tailored to the standard mass consumer behavior. Shopping centers use visual features and various forms of entertainment to attract consumers, and transnational corporations highlight their presence in the urban structure. Private firms use cultural strategies to sell themselves, strengthen their influence and competitive ness, and demonstrate their pride and power. The post modern esthetic in post socialist city utilized and intensified the collage of the past and present, local and global, standard and specific, and real and virtual. The socialist propaganda of collective will was replaced by individualistic choice in consumption oriented cap italist city.

National as well as urban governments often pursued political strategies influenced by neoliberal political discourse. However, the real pragmatic mixture of neoliberal ideology with attempts to keep social peace through retaining some socialist regulations in operation. The decisions of both the central government as well as local politicians were grounded in a neoliberal ideology, which saw free, unregulated market as the mechanism of allocation of resources that would generate a wealthy, economically efficient, and socially just society. Politicians perceived the state as the root of principal harms to society and the economy in particular. Urban planning was perceived as contradictory to the market.
Clientelism prevailed and ad hoc decisions were preferred to the creation of basic rules of the game embedded in a long term plan, strategy, or vision of urban development. The internal urban transformations have often been left to the operation of free market still partially bound within the framework of traditional, rigid, physical planning instruments. However, after the first decade of transition, many urban governments learned new techniques of urban management and governance. They started to apply more sophisticated tools, such as strategic planning. The application of European Union programming documents in accession and new member states of European Union further helped to consolidate urban government measures toward more coordinated and complex policies to tackle urban problems. The power of the planner who governed allocation of investments in the socialist city was replaced by investors who steer politicians and planners to facilitate urban development in a manner favorable to capital.

The new mechanisms that shape urban spatial or organization of post socialist city developed through a double transition that includes the local post socialist transition to market economy and the global transitions conditioned by economic globalization and its influence on local political, economic, social, and cultural restructuring. These two transitions are mutually interrelated. The local transition was necessary to link local societies to the capitalist world. 'Western winds of change' could then start to play their decisive role in local market led transformations. Despite the strong role of local socialist legacies, power to shape future lies in the hands of actors operating in the global market place. Precisely, this double transition is the key feature of post socialist change, which distinguishes it from other types of transitions.

**Restructuring Urban Spatial Organization**

The post socialist transition is shaping former socialist societies in similar directions. However, the starting conditions varied, transformation paths and the speed of change differ, and the outcomes exhibit both similarities and differences. Despite similar destinations, market reforms were not uniform. For instance, the use or refusal of restitution (property return to previous owners) created strikingly different conditions within urban property markets. In Prague and Tallinn, restitution provided a significant supply of real estate in inner city property markets leading to turbulent land use changes in attractive locations; this was in contrast with Budapest, where restitution was not applied. The character of the built environment has shaped possibilities for current investment. For example, the conservation of historic city core in Prague entailed strikingly different conditions compared to central Warsaw that has been remodeled with the dramatic construction of skyscrapers. The memory of the pre socialist era and the burden of the socialist legacy, the progress of country reforms and their institutional affiliation with West, the size of market, and the geographic and cultural proximity – all these have affected the inflow of foreign direct investments that play such a key role in local post socialist economic development. While the global economic system embraces the whole planet, individual countries, regions, cities, and even neighborhoods are integrated into it in a highly uneven manner. The changing geography of post socialist city reflects place specific local features (of urban environment, institutional regulations, and cultural values) as well as generally similar, but still internally differentiating impacts of the transition to global capitalism.

Most urban growth in post socialist cities is concentrated in the attractive localities of the city center, some adjacent nodes and zones in inner city, and in numerous suburban locations (see Figure 1). The main transformations in the spatial pattern of former socialist cities and their metropolitan areas included the commercialization and expansion of city centers, the dynamic revitalization of some areas within the overall stagnation in inner cities, and the radical transformation of outer cities and urban hinterland through commercial and residential suburbanization (see Figure 3). City centers and suburban areas are the territories with the most radical urban change. First decade of transition was characterized by investment inflow to city centers causing their commercialization and decline in residential function, albeit substantial physical upgrading. Decentralization occurred later with investments flowing to both out of center and suburban locations. Central and inner city urban restructuring involved the replacement of existing activities with new and economically more efficient uses, taking the form of commercialization, gentrification, construction of new condominiums, brownfield regeneration, and the establishment of new secondary commercial centers and out of center office clusters. In the course of time, suburbanization has become the most dynamic process changing the landscapes of metropolitan regions of post socialist cities. It is bringing a complete reformulation of metropolitan morphology, land use patterns, and socio spatial structures.

Besides its positive economic and physical effects, city center commercialization also brings decline in residential function, conflicts with historical heritage, and overutilization accompanied with congestion. The value of city center scenery has been appropriated by busineses, showing the uneven juxtaposition of international private capital over the local public. The socially and spatially selective gentrification that is strongly associated with foreign business elite proceeds unchallenged since it
Figure 3  Post-socialist landscapes: (1) contrast of new international and old wooden vernacular housing (Vilnius), (2) manhattanization of central Warsaw, (3) inner-city stagnation in Praga (Warsaw) contrasting with (4) gentrification at Vinohrady (Prague), (5) new condos overlooking urban village (Prague) and (6) housing estate (Kiev), (7) gated communities, and (8) ribbon retail development in suburbs (Prague) (photo: Michael Gentile (6), Luděk Šykora (1–5, 7–8)).
is thought to be a natural process that brings bourgeois neighborhoods back to their former glory. Revitalization, whether based on residential or nonresidential functions, is now directed by capital, not governments. It has brought investment to some decaying areas, leaving many other places unattended in the sea of stagnation. The formation of brownfields and the physical and social decline of some housing estates constructed during socialism present major problems in the post socialist city. Most controversy is linked to suburbanization. It is praised for the freedom of housing choice under free market conditions, and blamed for social, economic, and environmental insustainability.

The compact physical morphology of former socialist city is changing under the impact of activities sprawling into the hinterland. Property development brings densification in central city landscapes. Brownfields formed by deindustrialization present new inner spaces of opportunities whose former structure can be completely remodeled provided there is the interest of investors. City centers are gaining the spirit of business and in some instances tourist districts, keeping the presence of government and some cultural functions. Tertiarization also brought fortunes of growth to outer areas, forming secondary nodes of employment in advanced services concentrated in office districts and new landscapes of consumption in shopping and entertainment complexes offering services to mass population as well as low paid jobs to less skilled, mostly female, workforce. High concentrations of retail facilities are being strategically located in new nodes between existing residential areas with their original small neighborhood centers, and between the compact city of mass consumption power and new booming wealthy suburbs. The original hierarchically organized system of services with the dominance of the central city is transformed with layers of new centers to a more polycentric structure. The new functional–spatial division of roles between new nodes and centers to a more polycentric structure. The new functional–spatial division of roles between new nodes and specialized areas affects the life and death of smaller centers that with their limited scale and scope of services on offer cannot compete with retail giants. Sociospatial patterns are also changing (see Figure 2). The strengthening of the existing disparities between areas within cities is counterbalanced with a social recomposition of gentrified districts, declining housing estates, and suburbanization of the wealthy. Surprisingly, the level of sociospatial disparities has not increased during the first decades of capitalism. Segregation processes operate in their initial phases against the socialist heritage, bringing some higher social status neighborhoods (housing estates) as well as lower social status zones (suburbanization of rural hinterland) closer to the city average. However, the new capitalist principles set the city in motion toward new outcomes that will in the course of time illuminate themselves more boldly on the watermark image of socialist city. This is in the meantime signaled by contrasting pictures of ghettoizing areas and gated communities as examples of extreme developments in segregation patterns.

Post-Socialist City: Socialist Legacy, Drive to Capitalism, and (In)definite Future

Despite approaching two decades since the political turnover and the beginning of political and economic transformations, cities in former socialist countries can not be described by a set of key stable attributes. Their key definitional characteristics are transformations – processes of change. The principles and mechanisms that shape urban spatial organization have already been largely changed. Urban growth, decline, and restructuring are conditioned by market principles and regulations based on democratic policymaking. The spatial structure of post socialist cities contains new urban landscapes, which emerged under capitalist conditions. However, large urban sections still resemble socialist cities. There have been important urban changes; nevertheless, they have not completely altered the former spatial patterns yet. While the core transformations of political and economic systems were accomplished within few years, changes in settlement structures will take several decades.

Post socialist cities are cities in transition. They are characterized by the dynamic processes of change rather than static patterns. The urban environment formed under previous system is being adapted and remodeled to new conditions given by the political, economic, and cultural transition to capitalist society. Many features of socialist city suddenly appeared in contradiction with the principles that govern capitalism. These contradictions between capitalist rules of the game and socialist urban environment led to the restructuring of existing urban areas. In the course of time, new capitalist urban developments are gaining more important impacts on the overall urban organization. The post socialist developments bring the reemergence of some pre socialist patterns, transformations in some areas from socialist times, and creation of new post socialist urban landscapes.

Post socialist city is a temporarily existing phenomenon. Its transition from socialist to another type of city is definite in time. Post socialism is the time period between the change in the rules of the game and the completion of corresponding transformations in built and social environments. When will such transformations be accomplished and cities will become one of the many variants of urban places under capitalism? This question cannot be answered yet. Post socialist cities are still on the road of their transformations.
See also: Capitalism; Communist and Post-Communist Geographies; De-Industrialization; Gentrification; Globalization and Transnational Corporations; Segregation; Socialism; Transitional Economies; World/Global Cities.

Further Reading


Geografiska Annaler B: Human Geography (2007), Special Issue 89(2).


International Review of Sociology (2006), Special Issue 16(2).


Introduction

Over the course of the twentieth century geography underwent a series of conceptual revolutions, inspired as much by tumultuous on the ground events, as well as the crossover of ideas and concepts developed within other disciplines. Though the arrival of post structuralism can be considered simply another ‘turn’ within the discipline, what renders this approach distinctive is its rigorous interrogation of those core concepts – such as objectivity/subjectivity, interpretation/explanation, discrete/relational, etc. as objectivity/subjectivity, interpretation/explanation, discrete/relational, etc. Post-structuralists asked that we reflect not only on how we know and understand the world; typically described by key binary forms such as objectivity/subjectivity, interpretation/explanation, discrete/relational, etc. rather than others.

Introduction

As these debates waged they also waned to the point of tiresomeness. It has been in the latter half of the move ment that post structuralist geographers have come to reassert their claims over ontology, largely by rethinking post structuralism of a simplistic idealism and a relativist, even nihilist, politics. Post structuralists responded by claiming that no objects were outside the systems of representation, and that any claim to know them in an unmediated way was no more than an exercise of power whereby one theoretical stance was privileged above all others as both accurate and truthful. As these debates waged they also waned to the point of tiresomeness. It has been in the latter half of the move ment that post structuralist geographers have come to reassert their claims over ontology, largely by rethinking difference and representation in more explicitly materialist terms. In doing so, these geographers have interro gated more closely the ontological ramifications of the work of Derrida and Foucault, but have also explored the space, place, nature, culture, individual, and society – become framed in thought in the first instance. In posing such questions, post structuralism found, and continues to find, a productive moment in examining how social relations of power fix the meaning and significance of social practices, objects, and events, determining some to be self evident, given, natural, and enduring. In regard to geography, this requires an analysis of why some objects – landscapes, regions, space, place, etc. – rather than others are taken to be central to geographic inquiry, as well as an analysis of how those objects are understood to exist and relate to one another.

This sort of post structuralism, then, is epistemo logically centered. Certainly, it came to prominence under the banner of a more widespread ‘linguistic turn’ in the humanities and social sciences, which emphasized the production of meaning and the ‘social construction’ of reality, and made much of the emphasis placed upon the construction of meanings in the work of Derrida and Foucault. For this reason, critics of post structuralism offered a rejoinder that touted the sometimes brute force of materiality: of class exploitation and the uneven distribution of wealth and poverty, of the forces of nature and the concrete effects of environmental conditions, and of gender relations and the facts of biological repro duction, to name a few. Criticisms that post structuralists have been con cerned only with discourse and representation, as opposed to the ‘real’ material conditions within which these meanings were considered to be embedded, had a profound impact on geographic debate during the 1990s. Marxists and some feminists were often found accusing post structuralists of a simplistic idealism and a relativist, even nihilist, politics. Post structuralists responded by claiming that no objects were outside the systems of representation, and that any claim to know them in an unmediated way was no more than an exercise of power whereby one theoretical stance was privileged above all others as both accurate and truthful.

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work of Deleuze and Latour, whose contributions are discussed here. At the same time, what was a somewhat knee jerk critique of other epistemological stances, for example, ‘Marxism’, as a ‘meta narrative’ that promised to singularly explain real world conditions, has been tempered by a more sensitive appraisal of the diversity of ideas beneath such a label. Indeed, it is this more nuanced approach to academic discourse that resonates with a post structural emphasis on difference understood not only as a rejection of sameness and the status quo, but also as a receptivity toward the experimental and the new.

Taken together, both dimensions of post structuralist thought – the epistemological and the ontological – pivot around a set of fundamental questions. These include: If meaning and representation are indeterminate and contextual, and if, as a consequence, the ‘real’ world is ‘constructed’ as an ontological fact, then how does power work to produce its truths? And, if difference in the world is not a residual from or a bad copy of a singular Identity, but is rather the immanent force characteristic of all materialities, including imaginings, emotions, words, and meanings (as well as those elements more usually thought of as material, such as organisms and the land scapes they inhabit), then how, in the shift in thought that moves from ‘being’ to ‘becoming’, do we go forth in the world to think and speak in terms of things and their qualities?

Before we begin to address these questions, it seems worthwhile to emphasize that though its intellectual roots are in Continental philosophy and literary theory, post structuralism knows no boundaries when it comes to objects of analysis. So, though its impact has been most strongly felt in cultural geography, where it has not only invigorated research questions but has also led to the identification of new objects of analysis (e.g., films and other texts), its critical stance toward simplistic forms of truth, representation, materiality, and politics have become points of engagement between it and other geographic subfields, including economic geography; geopolitics and the state; urban and rural geography; cartography and geographic information system (GIS); social geographies of gender, ‘race’, and the body; postcolonial geographies; and nature–society relations. And, it is through this process of de stabilization that post structuralism has wide ranging implications for geography at large.

**Poststructuralism**

**Structuralism**

Part of understanding the relationship between post structuralism and structuralism is highlighted in the prefix ‘post’, as opposed to ‘anti’. The former negates its suffix, but it does so relationally and in ways that carry structuralism with it – as in beyond rather than against. For this reason, it is impossible to write about post structuralism without first coming to some understanding of structuralism.

The literature associated with structuralism is complex and wide ranging, but in all its forms it holds that all manner of processes, objects, events, and meanings (let us call these POEMs for short), are taken to exist not as discrete entities, but as parts relationally embedded within, and constituted by, underlying wholes, or structures. It is not unusual to see structuralism rendered as an inflexible and static framework, but that would be a misunderstanding. A structure is not an external archetecture upon which POEMs are hung, for such a view implies that a structure exists independently of the parts it embeds; instead, structures are constituted solely from the relations among their constitutive elements, or parts. And, since they do not exist independently of POEMs, structures are dynamic and spatially differentiated fields of relations. Finally, structures do not have material form nor do they have the ability to act; they are not visible in the empirical realm but, inasmuch as they systematize the relations, and therefore the causal efficacy, of POEMs, they are presumed to operate.

The most important structuralist thinker for the development of post structuralism was the Swiss linguist, Ferdinand de Saussure (1857–1913). His goal was to understand the abstract structures behind all forms of social communication, from painting and religious rituals to chess games and the rules of courtship. As a linguist, Saussure applied his theory of semiotics – that is, the study of language, to the study of language. In doing so, he rejected the traditional, historical approach to the study of language, a philological endeavor focusing on detailed descriptions of the historical evolution of particular languages and language families. He also rejected the positivist line of research dominant in his day, which sought to understand language through the analysis of sounds and their impact on the nervous system. For Saussure, elements of language gain their currency according to the structure that they create and within which they are embedded. A particular language, there fore, must be studied as a systematized collection of sounds and inscriptions, each of which, as in structuralism more generally, can only be assigned a value or meaning when thought of in relation to the remainder of the elements.

But how does language work to transmit meanings from one person to another? In analyzing the relations among these elements, Saussure struck an analytic distinction between the ‘signified’, which is the mental construct, or idea, of a particular phenomenon, and the ‘signifier’, which takes the form of a distinguishable ‘mark’, such as a sound, inscription, or special body
movement. Within a language, signifieds are associated with particular signifiers to form a ‘sign’, in consequence, when people communicate they use particular signs to convey and understand meaning. In addition, because signifiers are considered to exist within the realm of the symbolic, that is, as abstract representations that refer to real world phenomena, the systems of communication within which they are embedded can be thought of as relatively autonomous from any real world referent. Given that there is no necessary relationship between the signifier and the signified, the actual choice of signifier is arbitrary. This is why various languages can have different words (signifiers) for the same object (the signified). Indeed, the signifier only has value when it can be differentiated from other signifiers and used to convey a particular signified again and again. All languages, then, depend upon the fact that we learn to recognize this difference between signifiers.

Now the very fact that communication can occur through signifiers that are fundamentally arbitrary implied for Saussure that a system, or set of rules, must exist by which people can indeed be taught to differentiate between signifiers, and to which all must subscribe if communication is to proceed unhindered. Just as chess and courtship (both systems of signs) are built around certain rules of the game (the moves of the knight, the lingering glance), so all languages are founded upon abstract regulations that shape the ways in which they are played, or manifested in practice. Within this conception, the underlying structure that allows communication to take place is called langue, while the actual practices by which communication takes place is called parole. To sum up, for Saussure the elements of language consisted of interrelated signs, whose mark or signifier is embedded in a structure of langue, which itself may be transformed through the practice of parole.

That Saussure’s model could be applied to any number of sign systems in any language and across myriad communication systems accounts in part for its popularity well into the 1960s in a variety of disciplines, including literary theory and philosophy. Freudian psychoanalysis, in particular the analyses of dreams, was rooted in structuralism. So too was anthropologist, Lévi Strauss’s search for the organizing principles of culture. And, in some versions of Marxism, structuralism underwrote attempts to explain many aspects of social life as determined by the underlying mode of production. It was with these and other forms of structuralism that post structuralism took issue.

Language and Discourse

Though elements of post structuralism can be found in the work of philosophers such as Friedrich Nietzsche and Martin Heidegger, its formal recognition as a body of theory can be traced to a host of more contemporary social, cultural, and literary theorists. Here, under the heading of language and discourse, both of which speak to underlying issues concerning epistemology, we discuss the work of two of the most important theorists, Jacques Derrida (1930–2004) and Michel Foucault (1926–84). Later, in the section titled ‘Materiality and difference’, which addresses more avowedly ontological concerns, we take the opportunity to discuss the work of two other prominent post structuralists, Gilles Deleuze (1925–95) (and colleague Félix Guattari, 1930–92) and Bruno Latour (1947–).

It was Derrida who, at a 1966 conference on structuralism in the city of Baltimore, introduced post structuralist thought to an international audience through the presentation of a paper titled, ‘Structure, sign, and play in the discourse of the human sciences’. The major goal of the conference was to stimulate innovation in structuralist thought across a wide variety of disciplines. Yet, Derrida’s paper (published in 1970 and reissued in 1972) critiqued the very notion of structure by analyzing the process of ‘centering’ upon which diverse forms of structuralist thought were constructed. Tracing back particularly significant manifestations of this centering process in Western thought, Derrida suggested that what seemed to be ontological securities, such as presence, essence, existence, cause, origin, substance, subject, truth, God, and ‘man’, were merely epistemo logical constructs handed down through generations of philosophers and scientists.

Specifically, Derrida noted that in the process of producing a structure’s parts, all those elements that seemingly do not have some form of relation with its center must be excluded. Thus while the center is related to all of those elements within the structure, it is also held to be beyond the excluded elements, and therefore fixed and inviolable, at least with respect to those ‘other’ elements. However, Derrida argued that the structure could not exist without the accompanying exclusion, and this meant that the center was both within (i.e., a presence) and outside (i.e., an absent presence) at the same time, implying that a center is not really a center after all, but a contradiction, a force of desire or power rather than an ontological foundation. Another way of viewing his contribution is from the perspective of within: if centers rely on the exclusion of outside elements to produce structures, then they and their associated structures are dependent upon the ‘outside other’, or ‘constitutive outside’. Derrida would go on to show how we can uncover the productive ‘trace’ of this ‘other’ within centers and structures so as to ‘deconstruct’ the effront ery of their claims to independence. In addition, Derrida explained how a structure paradoxically provides both the grounds and constraints for what he called the freeplay of the structure. This freeplay – that is, the...
movement and change that determine how a structure unfolds – is both made possible and limited by the 'structurality' or centering of a structure, which contra dictorily hinges on its fundamental immobility and reassuring certitude. As Derrida went on to note, such centering is the product of a binary – an either/or – epistemology. Such a way of thinking about the world stabilizes not only the meaning of one term, such as truth (a center relying on such 'parts' such as objectivity, facts shorn of ideology, etc.), but also, through the assignation of a periphery, defines an 'other' that falls outside of its purview, fiction. In a similar vein, binary thought pro duces sharp contrasts between essence and ephemerality, cause/effect and contingence/serendipity, substance and chimera, God and idol, and 'man' and nature.

Post structuralists drew three important conclusions from this mode of thought. First, they maintain that in all of these binary systems, what appears to be the foun dation for a system of thought is but a hypothetical construct, one that reveals more about the society that produced it than the supposed character of the real world. In this case, post structuralists turn their attention to the production of centers, margins, and the boundaries that demarcate them. In recognizing centers and margins as products of an either/or mode of thinking rather than the natural state of affairs, post structuralists are drawn to several key questions. On the one hand, they ask who has the social power to draw the boundary between a center and margin; on the other hand, they question to what end is any such system of differentiation directed. In recognizing categorizations as the product of social relations of power, attention turns to which social groups have the discursive resources to construct categories; that is, who has the ability to name the world? Thus, a major component of post structuralist research involves in quires into the categories that frame reality according to either/or binaries.

Second, binaries presume a totalizing epistemology, so termed because either/or thought can only posit a world in which everything either 'is' or 'is not'. Epistemo logically speaking, the effect of binary thought is to constrain what can be conceived about the world. Now, in some instances binary thought can be productive, as in, for example, the 'freeplay' set loose in the formulation of computer languages that operate on an underlying sys tem of ones and zeroes. However, in other instances binaries so structure what knowledge is possible that they unduly limit what can be conceived in the world. In this way, the binary epistemology ultimately infuses ontological concepts (or what we presume the world to consist of, e.g., the individual vs. society, local vs. global, conscious vs. insensate, subject vs. object, chaos vs. order). Consider, for example, our understanding of phenomena as either natural or cultural. Such binary thinking will ultimately organize virtually all questions researchers might want to ask about social or physical systems. These questions, however, can ultimately be exposed as circular in character, for, though researchers may think they are posing questions about 'real' categories, they are by default investigating the products of their own binary epistemology.

A third complaint about structuralist thinking is that it is not, in fact, as fully relational as structuralism claims it to be. For example, while Saussure's model assumes that language comprises an arbitrary system of signifiers whose elements become meaningful through their relation to each other (the word 'cat' does not sound like 'dog' and thus permits us to understand the differ ence), for him the concept of a feline, four legged mammal (the signified) becomes the agreed upon, or correct, re presentation (see below) of the real world animal, or referent, independent of the existence of its canine variant. Using Derrida's critique of Saussure, however, we could argue that the mental construct of a feline is not grounded in the one to one relationship between it and the referent, but is definable only in relation to all other concepts that give feline its dis tinction by referring to what feline is not. Thus, feline is negatively defined in relation to a host of other concepts such as canine, leonine, equine, lupine, and bovine. Moreover, and this is the important point, all of these concepts, from feline to bovine, are themselves produced within a myriad of other relational fields of meaning, popular, as well as scientific. Rather than to assume a uniformity of meaning in the face of such complexity, post structuralists point instead to contradiction, juxta position, bricolage, and imbrication. In this manner, post structuralism throws doubt onto all certainties regarding researchers' ability to accurately represent reality, for our concepts do not simply re present that reality, in the sense of mirroring their referent, but represent reality within a fully relational system of understanding that does not require the referent to be cognized in the same manner by all.

A second influential theorist of post structuralism was the French philosopher historian, Michel Foucault. Whereas Derrida focused on the dualistic presumptions of Western philosophy, Foucault undertook to problem atize the production of modernist forms of knowledge, noting how 'Western' scientific ideas and practices since the eighteenth century produced a series of non normal others, such as the insane, the abnormal, and the sexually perverted. In doing so, he drew attention to how this modernist undertaking has been undertaken by a par ticular conception of 'Man' (as Foucault inevitably put it) as a unique being, capable of describing, explaining, and mastering the operation of body and mind, as well as society and nature. Hence, within these scientific analyses, the human subject is not only the object of her/his own understanding, s/he is also understood to
orchestrate the social and physical realms within which s/he lives.

In placing humans within these contexts, Foucault argues, modernist forms of knowledge necessarily establish a series of insurmountable paradoxes. First, s/he appears as an object to be studied empirically alongside other objects, but is also positioned as the transcendental source from which the possibility of all knowledge can flow. Second, in determining the domain of conscious thought, s/he has also framed the unconscious. And yet, in presenting her/himself as the source of intelligibility, s/he must attempt to explain this latter realm; that is, to think the unthinkable. And third, humans conceive of themselves as the product of history; and yet posit themselves as the source of that very history. For Foucault, modernist sciences of ‘Man’ simply cannot produce a comprehensive account of their subject/object, and so must disintegrate under the weight of their own contradictions.

Foucault’s own historical analyses can be considered a commentary on this same condition. Among the most important of his concepts is that of discursive practice. Put briefly, a discursive practice is a regularity that emerges in the very act of articulation. As such, it should not be thought of as a set of meanings that are somehow imprinted onto real world phenomena. (To think this way is to rely on an idealist understanding of the mind as the source of knowledge, and presume an unwarranted distinction between mind and body, self and social.) For Foucault, by contrast, each articulation establishes the conditions of possibility for thought and action; that is, it posits what is appropriate and reasonable to be thought and practiced. As such, an articulation is more than mere communication — it is an active intervention in the social and physical realms. From this position, Foucault derived two analytic projects.

First, he noted that each articulation is produced and understood within a given context, such that it is afforded meaning. The kinds of articulations Foucault was interested in were those that had gained sufficient authority such that they were deemed to be valid even when they were taken out of context. That is, they had gained the status of Truth. Hidden in previous analyses of communication, argued Foucault, were the means by which these particular articulations gained distinction. Within a discourse, he maintained, a disciplining process takes place within and between strategies of power, which are all those techniques by which a statement is accepted as valid and appropriate, and by which that statement could not but be articulated in the way it was. In regard to social research, for example, these techniques would include empirical confirmation, dialectical argument, and phenomenological bracketing. Each of these allows for the privileging of some articulations over and above others as valid claims concerning the nature of ‘reality’. For Foucault, power is considered within this context to operate through discourse, and to be complicit with the production of specific forms of knowledge that not only claim to provide insight into how the world works, but which are also deployed in the active management of that world. Key to this process is the emergence of a specialized cadre of experts, such as scientists and educators, who draw on these bodies of knowledge to further enhance their own status by ensuring the diffusion of particular ideas and concepts through society. Importantly, this legitimacy ensues not from their ‘personal’ character, but from the positions they hold within an institutional framework, as well as within a given set of social relations.

A discourse, then, is not something that is simply produced and received by people; rather, it is tied into a discursive site, such as a school, church, office, scientific laboratory, and so on, where knowledge is actively produced and disseminated.

Second, and following Saussure’s focus on semiotics as a science of signs, Foucault interpreted the term ‘discourse’ far beyond speech to include the inscription of social relations (and thereby the exercise of power) on and through the body itself. The complex interplay of social relations of power both enables and constrains the body in certain ways: that is, the capacity of the body to be shaped and to act. Foucault refers to the emergence of what he termed ‘technologies of the self’ — disciplinary actions that have become taken for granted. These range from new standards of punctuality to the self regulation of dress and hygiene. In making this argument Foucault’s aim was not to reiterate the imposition of coercive power over individuals, but to show the tendency for modern day power to be depersonalized, diffused, relational, and anonymous. Power is not held by one particular group, but rather is exercised through a series of everyday activities. For some critics, this position denotes a hopeless pessimism, in that power is understood to discipline and normalize more and more dimensions of everyday life. For Foucault, however, the means of resisting relations of power lie in the disruption of this daily performance. It is at this level, the site of the body itself, that resistance takes place.

The case studies Foucault chose to pursue, consisting of penal, education, and medical systems, focus accord ingly on the ways in which the self is constructed through discursive practices. The ensuing histories are also, however, illustrative of Foucault’s attempt to produce a body of work that does not operate according to modernist modes of interpretation. For Foucault, there is no necessary trajectory to history, nor is there a definitive causal mechanism, such as human agency, that lies at the heart of social change. Rather, in representing history, each mode of analysis — or genealogy — must be con sidered as conceived and articulated around present day issues and concerns, such that succeeding analyses of the same topic must necessarily rewrite the past from the
perspective of the present. Nevertheless, his own project was to bring to light how particular clusters of discourse/power worked to produce, fill, and maintain the categories by which we claim to know the world, such as culture, nature, history, geography, individual, society, modern, primitive, objective, subjective, and so on. All of these terms have an archaeology to them, by which Foucault meant a series of discursive formations, or epistemic spaces, within which these knowledges have been produced.

In sum, for Foucault, social researchers cannot secure, and therefore should not pursue, truth, at least when interpreted as a category with the status of a universal, timeless quality (that is, Truth with a big ‘T’). This is because each society has its own regime of truth, the specifics of which are fashioned by: the types of discourse deployed (these can be legal, moral, rational, and teleological, among others); the techniques and procedures used to distinguish between true and false statements; and the status of those who are charged with saying what counts as true. It is at this point that we can see an affinity between Foucault’s account of discursive practices and Derrida’s concern to de-stabilize those centers – such as origin, subject, essence, and Truth – by which explanatory modes of analysis operate. And, as we shall note below, it is their shared concern to work against accepted ways of thinking, researching, and writing about the world that inspired an emergent cadre of post structuralist geographers.

Materiality and Difference

As we mentioned in our introduction, a post structuralist focus on language and discourse puts the point of emphasis on epistemology rather than ontology. How ever, it would be disingenuous, if not downright anti-post structuralist, to assert a clean and neat division between the two, and indeed, as Chris Philo has intim ated in a 1989 essay, it would be incorrect to locate a philosopher like Foucault in one camp or another. In his case, Philo argues, discourse is understood to possess a distinctive ontological status. Hence, Foucault’s work can be read as an analysis of how the ontological is consti tuted in part by the myriad effects produced by discourse. Nevertheless, it is safe to suggest that for many geographers inspired by their work, both Derrida and Foucault were crucial in shaping their own analyses of the way the world is (ontology), but with the power orientations and slippages at work in how we understand our worlds (epistemology). By contrast, Gilles Deleuze’s explorations of the ontological status of pure difference have been understood as offering an influential counterpoint to the discussion so far.

Prior to Deleuze, accepted approaches to ontology preceded almost exclusively from the Platonic tradition, a strategy describing what is in the world through formal, ideal categories. Such an ontology operates by describing the apparatus of similitude, where the world is understood by isolating and organizing objects supposed to be of the same type into exclusive families. For instance, while for Plato there supposedly exists a perfect (though imma terial) chair form of which all actual chairs are but imperfect copies, chairs are nevertheless identified as members of that family by virtue of the fundamental characteristics that constitute their similarities to that form, their ‘chairness’. The point behind the Platonic strategy is to find a way to account for everything that is in the world within our own finite and limited language and representation. Thus, he would suggest that there is a form to which every category of ‘thing’ corresponds: chairs, certainly, but also people, statues, dogs, and so on. This ontology can be termed idealist insofar as the forms are thought to be transcendental; that is, they precede their material incarnation, representing – within the world of forms or concepts – the totality of possible forms that substances might take. Thus, when a substance does take form, according to Plato, we identify what it essentially is by virtue of its similarity to a set of possible forms. This systematic or categorical approach has continuously dogged Western philosophy, insisting upon a structuring analytic that predetermines and limits what can be expected to be in the world.

Deleuze’s establishment of an ontology of pure difference works against the popular tradition initiated by Plato. Inspired by several strands of minoritarian philosophical thought (encompassing work by Spinoza, Nietzsche, and Bergson, to name a few), Deleuzean ontology describes not a world of similarities shared by static objects, but rather one in which all of materiality is continuously moving, mutating, and transforming, differentiating even from itself in a constant process of becoming. And yet, in working to avoid thinking about the world in terms of similitude, a problem arises in the apparent impossibility of ontological description, both in terms of (1) the reliance of language itself upon similarities and categories, and (2) the sheer impossibility of accounting for the ever growing infinity of differentiations that are continuously unfolding. By contrast, Deleuze presents a world encountered from the per spectives of movement and force relations: rather than structured, whole objects (the human, the subject, what have you), there are continuously interconnecting multitudes of partial objects affecting and being affected by other partial objects, constituting – if only for a moment— assemblages that appear to cohere by working together or initiating processes that are specific to that relation.

Although he dismissed any such endeavor to produce titles or ‘isms’, Deleuze is often included among the ranks of post structuralists because his anti essentialist, assemblage based approach to ontology is concerned
first and foremost with the introduction of newness and variation in thought and life. While many post structuralist thinkers satisfy themselves by leveling critiques against the systematic and oppressive structures that pervade social life, Deleuze sought strategies for thinking, living, and relating beyond these. Thought turned toward difference reads itself for encounters with random, alternative arrangements and events emerging through the dynamic, interactive encounters of materiality.

In this sense, Deleuze's philosophy should be considered an active one. Thinking about difference is a matter of asking what bodies can do, and from this springs a literalist conceptualization of ethics as a form of inquiry into 'what is to be done'. Certainly, we are in undated with any number of different norms prescribing to us what our bodies should be doing; through which, as Foucault suggested, we discipline ourselves and police our subjectivity. And, with Deleuze, we are explicitly challenged to interrogate such disciplinarity by experimenting with variations in thought and embodiment that might aid in uncovering what else can be done. Such experiments need not be immense or completely transformative, but should be predicated upon the understanding that a life presents a virtually infinite number of experimentations continuously conditioned by its orientations to and relations with other bodies.

Orienting inquiry toward what things do corresponds with another line of thought that challenges structuralist preconceptions of social life and science, especially spearheaded by Bruno Latour and broadly known as actor network theory (ANT). This work addresses epistemological and ontological problems in the production of scientific knowledge by interrogating how such knowledge is negotiated and by challenging the limited, anthropocentric domain of agency in accounts of materiality. If Foucault was the historian of circulating dis courses of power, Latour might be considered their ethnographer. By observing the generation and negotiation of scientific knowledge as produced through everyday lab life, Latour challenges modernist conceptions of truth and transparency in scientific fact by witnessing the ways that scientists, in the process of discovery, actually participate in the creative production of those truths. Rather than being something that preexists and is slowly uncovered through repeated experimentation (a modernist conception), a scientific truth is something that is invented and reworked through situated exchanges by members of the community. Thus, scientific knowledge is always an emergent discourse dependent upon not only other circulating (and equally constructed) knowledges, but also upon the varying positionalities and privileges of the scientists themselves, the vogue of scientific topoi, access to resources and funding, and so on.

At the same time, Latour draws upon something similar to Deleuze's notion of assemblage ontologies to extend the place of agency beyond the human to nonhuman objects that, through various connectivities, bring about certain events or results. Thus, just as we cannot deny the participation of the scientist in the production of scientific knowledge, we likewise cannot ignore the role of various objects (tools, for example) in the accomplishment of the same. To return to Deleuze, we might say that while our concern should still be with what a body can do, we must always keep in mind that no body acts in a vacuum. Rather, as Latour has explained, objects are always immersed in a complex network that is established through the interactions between and among its members. Because there are any number of activities and processes unfolding across this network, it becomes impossible to grant certain participants at specific sites within it (that is, humans) a causal agency over and against that of other participants (that is, objects) that play just as crucial a role in carrying out a desired end.

Such a recasting of ontology, whereby human beings are located alongside a host of nonhuman entities within a broad and complex network, or assemblage, does raise the question of whether or not ANT has taken a step back, philosophically speaking, by returning to the Platonian notion of similitude. Indeed, some have commented on the fact that ANT analyses do run the risk of treating all elements within a network in the same manner, wherein anything and everything has agency in the sense of having the capacity to act or intervene within a situation so as to produce a particular affect. And yet, it would be more in keeping with Latour's examination of agency to see this rather as a necessary entry point into a much more complex form of interrogation, wherein thought is given to how people and things exist in the world such that they are constituted with particular capacities for action, whether it be through focused and deliberate intent, the movement of certain parts, or even a passivity in regard to the actions of other entities. All of these are a form of agency in the sense that they can work to produce particular affects, but their specific manifestation and mode of operation is very much context dependent. And, we would suggest, it is this attentiveness to context that not only augurs a particular role for geographers, long concerned with this topic, in the continuing development of post structuralist thought and practice, but positively demands it.

Post-Structuralist Geographies
Representation and Space

In the following discussion of post structuralist geographies we echo the preceding sections, tackling first epistemic issues and subsequently taking on more
avowedly ontological ones. We begin, then, with a dis
cussion of representation as a key concept for geog
raphers interested in drawing upon, and contributing to,
post structuralist debates. Representation can be theo
retically distinguished from re presentation by reserving
the latter's meaning as implying the impossible, namely,
capturing and reflecting – as in confining and mirroring –
a real world referent in thought, language, and visual
media. Representation, by contrast, refers to the social
mediation of the real world through ever present pro-
cesses of signification.

By illustration, we can return to the relationships
among signifiers, signifieds, and real world referents. As
should be clear, within post structuralism such relations
are not taken for granted; rather, they become foci of
analysis in their own right. This is because signifieds are
not presumed to stand alone, but are considered to be
defined in relation to each other through the socially
constructed discourses that give them their definition and
character. As a result of the embeddedness of signifieds
in discourse, no signifier can be presumed to stand in a
one to one relationship with a real world referent. And
finally, since referents themselves are not understood as
having essential qualities but are instead defined
and refined within relational systems of difference (for
example, not 'I, the cat...' but 'I, not dog, not bird, not
child, etc.'), even the bedrock of real things are, under
post structuralism, no longer thought of as things in
themselves. In light of this reconceptualization, post
structuralists refer to representational processes instead
of representation, and they direct their investigations
permanently fixed according to: the intent behind their
construction; or the perspectives of the reader. Thus, the mean-
ing of meanings drawn together in the articulation of
a discourse that communicates those meanings in a
sensible form by establishing differences among them.
Context, then, fixes the relational field of meaning, but it
does so only by drawing upon previous contexts that are
themselves embedded in still other contexts. This inter
contextual character of the relations among constructs is
intertext, a term specifying how one context is related to
others, but also how they might be transformed. As used
in Kolson Schlosser's article on the interplay between
geopolitics and media discourse, intertext is the re-
lational field – of flows, imbrications, and concatenations –
for the production of new contexts. To give an example, in
reading a book, context might be temporarily established
by an author who draws upon meanings established
within a genre. The act of reading, however, involves the
production of a new field of meaning by the reader within
which those meanings are de stabilized and re stabilized
yet again. In this view, and in virtue of the intertextual
character of all communication, meanings cannot be
permanently fixed according to: the intent behind their
production; their content, genre, or mode of dissemin-
ation; or the perspectives of the reader. Thus, the mean-
ing that adheres to signifieds cannot be presumed as fixed
or fully present, but are always in process, awaiting their
deployment in new contexts.

While the above points to the open and unfinished
character of representation, it also suggests a problem for
reflexive social analysts – that is, those willing to judge
their own work within the purview of representation. Put
succinctly, if representation within post structuralism
denies the disclosure of Truth, and if the subject is
no longer speaking with the security and advantage of
Identity, then how are we to trust our and others' ana-
lyses? Feminists have grappled with these issues at some
length. One widely accepted response is to reflect on one's
social positionality (white, homosexual, male) vis à vis
researched participants and texts, recognizing that the
outcome of those inquiries are influenced by the different
standpoints that infuse the research process. However,
others have argued, following post structuralism, that
the register of social experience that gives these stand
points their presumed stability (however temporary)
is no guarantee of Identity. Moreover, in the wake
of the 'death' (or dissemination) of the author, the
What is more, any claim to know can emerge as complicit
with authoritarian forms of power in which a particular
group names and frames reality for all. And, it is this
noninnocent character of constructs that points to the
importance of all the other constructs and to the entire
social context within which their interdependencies
become fixed and stabilized.

Second, in taking into account these interdependen-
cies, post structuralists take note of both context and
intertext. The former refers to the temporary stabilization
of meanings drawn together in the articulation of
a discourse that communicates those meanings in a
sensible form by establishing differences among them.
Context, then, fixes the relational field of meaning, but it
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points their presumed stability (however temporary)
is no guarantee of Identity. Moreover, in the wake
of the 'death' (or dissemination) of the author, the
As the century progressed, new cadres of experts, with ocularcentrism, Cartesian perspectivalism, and lin eation, meanwhile, is the basis for gridding social space – the Cartesian counterpart to categorization more gen erally. Any number of histories can be written about the imposition of reason’s grid epistemology, from the con figuration of social space in the projects of colonialism and nation building, to the carving of towns out of nature and bringing them together through systems of transport, to the policing and self disciplining of bodies in the gendered microspaces of everyday life. Even our concept of scale – cascading as it does through the above ex amples – can be thought of as an outcome of the grid epistemology. 

A relevant example of the differing material trans formations wrought by successive articulations of a grid epistemology can be found in Foucault’s commentary on eighteenth century France, wherein a crucial shift occurred in regard to how, and by whom, space was conceived and discussed. Previously, space had been the domain of the architects, who envisioned the governed city as a metaphor for the governed territory. The pri mary spatial trope was one of penetration, whereby all of the city, and by projection, all of the state, was laid open to the regulatory surveillance and practices of the police.

As the century progressed, new cadres of experts,
including engineers and builders, emerged as the authoritative sources of knowledge on transport linkages and planning. The associated discourses addressed space in terms of speed, mobility, and networks, and entailed a revisioning of the links between the exercise of political power and the lived space of both the city and the territory.

From this theorization of the ways in which spaces are already invested with epistemology, we can proceed to rethink some of geography’s key objects of analysis, such as landscape. Whereas previous theorizations understood landscapes to be the imprint on nature of a culture, or the effect of social process such as capitalism, post structuralism has pointed to their status as a complex of significations and discourses that are intertextually bound with a host of other landscapes and discourses. The landscape as text metaphor thus sees place as intersecting with an infinite number of other texts and contexts, such that we cannot demarcate where one starts and another begins. These multiple sites of discursive propagation open a circuit beyond the earthiness of landscapes, seeping into other representational media such as film, television, cyberspace, the body, political discourse and other forms of speech, and written texts of all kinds, including maps.

Difference and Space

Much of geography’s engagement with post structuralism has revolved around issues of representation, as manifest in a burgeoning series of deconstructive analyses: in these, the seeming authority of particular discursive sites, such as institutions, built environments, and the media, to fix the meaning of objects, peoples, and places, and the relations between them, is undermined by reference to the roles of context and intertext, which allows for their (temporary) production, as well as their reinterpretation. Less attention has been paid to issues of ontology, which, it must be stated, has more often than not been analytically sidelined as a mere product of epistemology. This absence has led to the charge that deconstructive modes of analyses, which, as outlined above, tend to focus on the fixing and unfixing of meaning.

In formulating this notion of multitudinous spacings, as opposed to space, some geographers have turned to Deleuze’s work on immanence, which is usually described as the reverse of the more traditional notion of transcendence. Transcendence finds its origins in the logical, as well as philosophical discourses, in that it points on the one hand to a divine being that stands outside of and beyond the world, and on the other to the more abstract notion of a unifying principle – which may be divine but which may also relate to an idealist notion of the formative power of the human mind to imagine – that underpins all of the phenomena that make up that world. If we refer back to Deleuze’s emphasis on difference, then we are reminded that this work is very much an effort to confront a Platonic, Western philosophy of representation, wherein all phenomena are considered the contingent manifestation of a universal model or standard. For Deleuze, difference does not mean different in resemblance; rather, it refers to a radical alterity, wherein each encounter proceeds to alter the world around us and within us, producing something new rather than more of the same.

Because such changes are wrought without reference to an outside power, or universal reference, Deleuze’s ontology can be called one of immanence, where the
distinctions that haunt transcendental thought (mind and body, God and matter, interiority and exteriority, and so on) are erased or flattened. Here, there are no preeminent forms, subjects, or structures, nor is there the development or organization of these; instead, we find haecceities (blocks of uniqueness) which, if they can be said to hold a property at all (a term that usually implies having something in common), hold the property that makes each individualization unique. This form of difference is continually renewed as haecceities become tendencies, forming complex assemblages of forces, particles, connections, affects, and becomings, relations of movement and rest, speed and slowness. They unfold within and through what Deleuze terms the plane of immanence, each discovering its own kinetic relations, as well as the relative limits of those relations; in effect, haecceities work to map their environment at the same time that both the environment and themselves are transformed through each and every encounter.

It is in this self organizing immanence that we find Deleuzean and Latourian inspired rejections of fundamental spatial concepts that rely on transcendence. Most prominent among these is that of scale. In its usual, vertical/hierarchical form, scalar levels – whether fixed or in more contemporary theories as socially produced – are an invitation to think POEMs as nested from the local to the global, and everywhere in between (body, household, neighborhood, region, nation). In this layered imaginary we find ample opportunity to sort social processes, such as those driving economies and culture, into their respective levels, as if somehow culture might work at one rung (say, urban), while economy at another (say, nation). This segmentation, which belies the concrete and immanent material contexts within which things cultural and economic reside and do their work, is, in turn, overcome by a further idealist maneuver: conceiving the processes at one level with those at another, with clever opportunities for horizontal flows followed by displaced touchdowns, and for scalar jumping to different levels. However, from a post structural perspective, the problem with such theorizing is precisely its reliance on a transcendental spatial imaginary, one that is detached from the actual sites in which concrete material objects and practices and their discursive counterparts are lodged – literally so, in the sense of being inserted into, and immanent with, dense unfolding of sites of social activity and material objects.

For example, to write as one might do of Wal Mart's corporate strategies in terms of a global entity operating within an ever expanding international political economy, and to frame locational decisions as an example of the struggle between economic globalizations and the preservation of local cultures, is to miss the point that the former are just as local – just as embodied – as the latter. They unfold differentially in sites and depend on the dispersed but nonetheless situated and materially connected traders who track the firm's stock exchange price signals in virtual reality (New York Stock Exchange (NYSE): Wal Mart Stores (WMT)); on the janitors, furniture, toilets, geographic information system (GIS) experts, computer keyboards, secretaries, and calendars that are put to work in organizing the boardrooms that bring together the decision makers; on the last minute deals cut between the property owner, the real estate developer, the city councilwoman, the transportation planner, and the president of the watchful neighborhood group; and all of them, in their turn, on the existence of that simple, Latourian object, the shipping container, invented only in 1956, and without which none of these dense objects and networks could have mobilized to enable the corporation to bring cheap goods from the social sites (factories) of China to the US in the first place. Globalization is not scaled; nor does it flow, unthethered, like the airline route map. To the extent that we can call it anything meaningful after having rejected transcendence, globalization is a process in which materials, practices, and meanings travel long distances (or are taken by others) only to nestle up to one another in place. Even when these connectivities are at a distance – as when these discourses are linked by cell phones, the Internet, or the press – their site specific materialities can always be traced: to the phone's network of transmission towers, to the servers that enable Internet transmissions, and to the materials employed in the printing and distribution of newspapers.

This understanding of radical alterity, or pure difference, stands in stark contrast to transcendent versions of globalization that our own cultured, categorized thought tends to turn toward in its search for order and sameness. One of the symptoms of this acculturation is a tendency to assume that what Deleuze refers to as the 'actual', that is a material world characterized by a multitude of groupings such as species, kinds, properties, spatiotemporal locations and subjects, constitutes all that is real and, moreover, is naturally grouped and sorted in this manner. Rather, Deleuze offers, this actual, material realm is but the contingent realization of what he calls the virtual, which is formed not from what is, but rather what can be. Here, the virtual is perhaps best considered a potential that, often hidden from our gaze through a cultural emphasis on order, can occasionally be glimpsed during moments of systemic change or bifurcation. In an ontology of immanence, it is the form of the relation between the actual and the virtual that forms the heart of an analysis. Hence, Deleuze's emphasis on experimentation can be understood as an attempt to further actualize the virtual realm, as expected identities are troubled by the occurrence of new sensations that defy identification.
Conclusion

As we have shown in this essay, one side of poststructuralism is dedicated to unsettling routine modes of social inquiry relying on handed down concepts that purport to contain either essential truths (e.g., progress, reason) or that fixes the meaning of worldly objects and events (e.g., parts of nature, the definition of resistance). These structurings and the centering effects they produce are taken as significant objects of inquiry in and of themselves; accordingly, the aim of both Derridian deconstructive and Foucaultean genealogical analysis is to understand how, and with what effect, such concepts operate, and to whose benefit. This tradition of thought has been extremely helpful in rethinking many of the constituent elements of human geography: Our nodding acquiescence to repetitive involutions of scores of normalized categories has been profoundly shaken under post structuralism. Terms such as community, nature, public/private, identity, scale, experience, space/place, culture, animals, development, history, justice, agency, authenticity, borders, citizen, technology, gender/sexuality, transgression/resistance, memory, and nation— and more— all have new, if unfixed, meanings. Even what it means to ‘post’ does not escape the critical gaze of post structuralism. The movement has unhinged these concepts from their earlier on securities, tossing them into a differential space of relational meanings buttressed by wide sociospatial–historical contexts and everyday social articulations; peering into that space we can examine its stabilizations and de stabilizations, their inexact certitude, and their exacting uncertainties.

Meanwhile, a productive, political moment is seized upon in the ever unfolding and complex differentiation of social and natural assemblages. Post structuralism rejects the notion that there is an ordered trajectory to the emergence of and development of sociocultural worlds. Concomitantly, it rejects any notion of continuity or order in history. Far from terrifying, our capacity for becoming difference.

To its other, structuralism, which is both its trace and its very much embedded in a web of relations with respect to its other, structuralism, which is both its trace and its becoming difference.

See also: Actor-Network Theory/Network Geographies; Deconstruction; Foucauldianism; Local-Global; Marxism/ Marxist Geography I; Marxism/ Marxist Geography II; Posthumanism/Posthumanistic Geographies; Structural Marxism.

Further Reading


Defining and Measuring Poverty

In 2001, the United Nations Committee on Economic, Social, and Cultural Rights defined poverty as a "sustained or chronic deprivation of the resources, capabilities, choices, security and power necessary for the enjoyment of an adequate standard of living and other civil, cultural, economic, political and social rights." This definition crystallizes more than a century of research on poverty and shows how far understandings of poverty have come from the early pioneering works of Charles Booth at the close of the nineteenth century. Although poverty remains one of the most prominent concepts in contemporary economic and social development discourses, defining it is notoriously difficult. This is due in part to the politics that usually surround the mere existence of poverty and what to do about it. Similarly, the multiplicity of disciplines involved in its study and the plurality of perspectives this brings along does not simplify things. Cognate disciplines that include economics, sociology, geography, planning, and political science all have some focus on understanding poverty from different angles. More recently, the emergence of development studies as a discipline has provided poverty studies with a focused discipline bringing together the cognate disciplines identified earlier. One thing that is clear from any contemporary reading of the poverty literature is the changing policy discourses and practice as new development paradigms emerge to influence how we look at poverty. With such changes also come shifts in how poverty is defined and the nature of solutions proposed.

Money-Metric Definition of Poverty

In general, contemporary discourses on poverty recognize a range of definitions, although it is more common to distinguish between narrow and broader definitions. Narrow definitions simply consider poverty in income (or the related expenditure or consumption) terms. Early systematic studies on poverty like the 1889 publication of Charles Booth’s groundbreaking Poverty Maps of London, the 1899 work by Seebohm Rowntree on York, and Robert Hunter’s 1904 study of poverty in America established an early trend to focus on income what has variously been termed ‘primary’ or ‘subsistence’ poverty – what contemporary discourse generally calls ‘absolute’ poverty. In these early works, a household was deemed as living in poverty if its income did not allow it to access what Rowntree termed “minimum necessities for the maintenance of physical efficiency.” Clearly, under this narrow conceptualization poverty is understood as a simple lack of sufficient income to perform productive (read labor output) and reproductive roles. Households whose incomes fall below this poverty threshold are more likely to be on social welfare assistance programs in countries where such schemes exist.

Since the 1970s and following the work of Peter Townsend, a distinction is often drawn between absolute and relative poverty. Absolute poverty refers to those people living below an officially determined poverty threshold, which generally varies by size of family unit and composition. For example, a household living on less than a US dollar a day in developing countries might be considered to be living in absolute poverty. In the UK, this measure is not used much; although in political hyperbole, households with less than half the inflation adjusted average 1997 incomes are seen as living in absolute poverty.

The concept of relative poverty is commonly used to refer to the extent to which household income is below the average household income in a given country. It is, therefore, often seen as indicative of the level of inequality in society. While absolute poverty’s poverty threshold is usually independent of time (only adjusted occasionally through political decisions), the relative poverty threshold tends to be adaptable and changeable as local income levels and standards of living change. For example, in the European Union, households whose income resources are below 60% of contemporary median net disposable income of that country are considered as living in poverty. This median value changes as national economic fortunes adjust over time. Relative poverty is often used as an indicator of how unequal a society is. In general, except for the United States where both absolute and relative poverty concepts are used officially, most developed countries tend to use relative poverty, while less developed economies use the absolute poverty concept.

Broader Definition of Poverty

While money metric defined poverty makes it easier to ‘objectively’ determine who is poor and who is not, the premise upon which it is based has often been criticized as misleading. For a start, at household level, defining poverty this way ignores welfare variations among household members. Some have argued that the multidimensional nature of poverty means that defining it...
in income terms fails to take into account the welfare characteristics of households living in poverty. Specifically, in the late 1970s, it was argued that raising incomes does not necessarily increase household welfare if the incomes cannot provide basic needs. It has therefore been suggested to focus on basic households entitlements. This implies that a household without access to basic entitlements such as decent shelter, food, clean drinking water, sanitation, health, and education be deemed as living in poverty. Following on from the groundbreaking works of Amartya Sen in the 1990s the term deprivation, is used more commonly in poverty discourses to draw focus away from income only, but rather on what people are able to do or be. This implies a focus not on the utility but on the welfare benefits of an income. Poverty in this context is then defined broadly as lack of capabilities rather than income. For example, being educated, well fed, and being free to exercise choice gives an individual a better living standard than being wealthy but in ill health. In contemporary poverty discourses, this new generation of poverty definitions coexists alongside the money metrics, and is seen as complementary rather than replacing the former. Those working with this broader definition tend to use the term capability poverty to distinguish it from conventional money metric measures.

In developed economies, adoption of this capability poverty approach has been subsumed into new discourses on ‘social exclusion’. This acknowledges that those living in poverty are unable to participate in institutions used by mainstream society. Contemporary poverty research in developed economies therefore tends to take place under this social exclusion label, although the term is also used in developing contexts.

**Chronic/Transitory Poverty**

In addition to understanding the scale and depth of poverty, contemporary concern is also with the duration of poverty. A distinction is now often made between those living in long term or chronic absolute poverty, and transitory poverty (those who are occasionally or sometimes poor). There are variations about the length of time that qualifies an individual as living in chronic poverty and in the main this is arbitrary and often depends on data availability and the cycles of surveys. Emerging consensus, however, suggests that ultimately it is the data availability that can tell us which households have remained in poverty between censuses and therefore in chronic poverty. The upper limit for chronic poverty is often a lifetime. At the turn of the millennium estimates suggested that out of the estimated 1 billion people living in extreme poverty (defined using the ‘international’ US$1/day line), up to 420 million experience chronic poverty.

The concept of chronic poverty allows us to distinguish households that have always been poor (have never been above the poverty threshold) and those that are usually poor (may occasionally be above the line but on balance are below the poverty threshold most of the time). The reason for this distinction is largely to do with the nature of policy responses to the different poverties. Transitorily poor households include those whose fortunes fluctuate around the poverty threshold. In agrarian societies, this might include households that emerge out of poverty during a good agricultural season, but fall below the line with any adverse event to their livelihoods. Also included in the category of the transitory poor are households that have experienced poverty before but on balance have living standards above the poverty threshold. For example, a household whose breadwinner loses a job may decline into deprivation till the means of livelihood are restored, at which point the household may live above the poverty threshold.

Classifying poverty in this way enables policymakers to develop better targeting mechanisms. Chronic poverty or hard core poverty is more entrenched and therefore more difficult to deal with when compared with transitory poverty.

**Measuring Poverty**

A key question for those trying to formulate policies to fight poverty relates to how poverty is measured. Several measures or indicators of poverty are currently in use. Depending on the definition adopted, a distinction is made between ‘objective’ measures and those of a subjective nature. When poverty is defined in income terms, the poverty threshold is often used to measure the magnitude and depth of poverty. Since the 1960s, following the work of Mollie Orshansky of the US Social Security Administration, a poverty threshold based on the minimum cost of a nutritional diet for differently sized households is used as the basis for poverty lines. Different countries tend to compute the poverty thresholds differently and have also come up with different types of poverty lines. For example, like many countries, Zimbabwe draws a distinction between the food poverty line (FPL) as the minimum cost of a nutritional diet for an average size household and the total consumption poverty line (TCPL), which refers to the minimum cost of the acceptable minimum living standard (including food, clothing, education, and health). A family experiencing food poverty is seen as being more vulnerable than one living below the TCPL. Setting the poverty line is often political as decisions have to be taken about what constitutes acceptable living standards, and this often raises controversies. While in the past, professionals have often taken a lead in
compiling the poverty lines, we now know from recent work on ‘voices’ of the poor that poverty lines can only be indicative rather than definitive when it comes to setting the boundaries of what minimum consumption standards are.

Once the poverty threshold has been set, some suggested that the use of key indicators for poverty can be used to analyze patterns, depth, and trends of poverty. Following on the seminal works of Forster, Greer, and Thorbecke (FGT) in the 1980s, three measures (the headcount index, the poverty gap, and poverty severity), generally in common use, are generally called the FGT class of poverty indicators. The three poverty indicators are computed in relation to the ‘poverty line’ and are the most commonly used. The simple head count index (HCI) can tell us the proportion of population with incomes or consumption levels falling below the poverty line. Expressed as a percentage, this gives us an idea of what share of the population lives in poverty and can be monitored over time to give an idea of the progress made in reducing poverty. Based on the poverty line, it is also possible to calculate the poverty gap ratio, which gives an idea of the depth of poverty or how far the poor are below the poverty line. Households with incomes or consumption above the poverty line are considered as being nonpoor. The third FGT indicator is the poverty severity index, which gives us an idea of inequality among the poor. This is calculated as the average squared income or consumption shortfall of the poor households (as a percentage of the poverty line). This measure assigns more weight to households with incomes far below the poverty line and is often seen as being a response to Amatya Sen’s view that income transfers from a poor household (already below the poverty line) to an even poorer one should be reflected in an improvement of how we measure income poverty. In general, a higher index reflects a higher number of very poor households among those living in income or consumption poverty.

Although widely used, the FGT indicators carry the inherent weakness that they capture poverty at a moment in time and fail to take account of fluctuations in mean income or consumption. Further, collecting income data through surveys is notoriously difficult and can often be misleading. Apart from the problems of individual recall, there is evidence to suggest poverty can be overestimated or underestimated as we may not capture the full portfolio of resources available to a household. It is, therefore, generally the case that household consumption data are preferred to income data as a measure of poverty. While sounding objective, it should be borne in mind that it still involves value judgments on what goods and services to include, what to do about it, and who makes that decision.

Increasingly, it is also the case that people may ‘feel’ they are living in poverty even if official lines may suggest otherwise. A subjective assessment of poverty (e.g., the Gallup Polls in the USA) tracks the ‘gut’ feeling of individuals and what they consider to be the poverty threshold. Following on from the works of Robert Chambers in the 1990s and the subsequent publication of Voices of the Poor in 2001 by the World Bank, there is a general consensus that subjective measures provide credible ‘lived’ experiences of poverty that can inform policy responses when used in conjunction with or to triangulate other ‘objective’ measures. In most developed countries, experience with ‘subjective measurements’ shows households with incomes below the median consider themselves as living in poverty. This is usually a much higher threshold than official poverty lines.

In some more developed countries, a simple record of the number of people on state income support or welfare benefits is also used as a proxy measure of poverty. It is, however, also widely accepted that not all people living on income support live in deprivation and also that not all who live in deprivation are able to access income support.

Comparing Poverty Levels across Countries

Although there are some international benchmarks on minimum living standards (e.g., daily per capita calorie intake differentiated by age and sex), understanding poverty in relative terms means there are variations in what could be defined as poverty across countries. This makes comparisons across countries difficult. A way out of this has been the adoption of an absolute poverty line to define populations living in poverty and on this basis to set an internationally comparable measure of income or consumption that is deemed adequate for households to avoid deprivation. The World Bank suggested that individuals living on less than US$1 per day adjusted for purchasing power parity (PPP) based on 1985 prices be classified as living in extreme poverty. The PPP is a method used to take account of the relative purchasing power of different countries’ currencies over the same types of goods and services. Its main function is to allow comparisons in living standards to be made across countries. Till 1993, the PPP was based on the Penn World Tables. Since then, consumer PPP based on World Bank estimates is used. This change has meant that the poverty threshold set in 1985 is actually US$1.08 when we recalculate the 1993 PPP. For simplicity, the figure of global poverty threshold for developing countries is set at US$1 per day/person. Using this simple measure of absolute poverty, it is possible to estimate the number of people living in severe poverty. Table 1 shows the regional shares of the people living in severe poverty and the changes over time. This clearly shows that sub-Saharan Africa and South Asia have more people living in severe poverty than any other region.
Table 1  Percentage of population living on less than a 1 US $ a day by region\textsuperscript{a}

<table>
<thead>
<tr>
<th>Region</th>
<th>1981 (%)</th>
<th>1990 (%)</th>
<th>2002 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Asia and Pacific</td>
<td>57.7</td>
<td>29.6</td>
<td>11.6</td>
</tr>
<tr>
<td>China</td>
<td>63.8</td>
<td>33.0</td>
<td>16.6</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>0.7</td>
<td>0.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>9.7</td>
<td>11.3</td>
<td>8.9</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>5.1</td>
<td>2.3</td>
<td>1.6</td>
</tr>
<tr>
<td>South Asia</td>
<td>51.5</td>
<td>41.3</td>
<td>31.2</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>41.6</td>
<td>44.6</td>
<td>44.0</td>
</tr>
<tr>
<td>Global</td>
<td>40.4</td>
<td>27.9</td>
<td>21.1</td>
</tr>
</tbody>
</table>

\textsuperscript{a}NB Data for East Asia excludes China.

As of 1990, some 1.2 billion people (27.9\% of global population) lived in poverty (less than US$1/day), by 2004 estimates suggested that 19\% of the world’s 6.6 billion people lived on less than a dollar a day. This indicates some progress in reducing global poverty rates, although it should be mentioned that most of the gains have been in Asia. The decline in the number of people living in poverty has largely been attributed to the global initiatives to reduce poverty in the framework of the Millennium Development Goals (MDGs). Some 189 countries have signed up to eight goals meant to address key social development problems. The first of the goals is the reduction of extreme poverty and hunger with a target to “reduce by half the proportion of people living on less than a dollar a day” using 1990 as a base year.

### Comparing Capability Poverty across Countries

Apart from these income/consumption based measures, since 1997 those working with a capability poverty definition also make use of a human poverty index (HPI) to measure poverty. Disparities in global living standards meant it was necessary to construct an index for developing countries (HPI 1) and another for more developed economies (HPI 2). This is a composite value based on four main parameters known to influence human capabilities. For HPI 1, these are probability of not living to 40 years, adult literacy rate, average population without clean water, and the percentage of children born under weight. For HPI 2, these are the percentage of people likely to die before the age of 60, the percentage of people whose reading is far from adequate, proportion of the population whose disposable incomes is less than 50\% of median income, and proportion in long term unemployment (more than 12 months). Table 2 shows the top ten and bottom ten ranked countries on the HPI index and their performance on the HPI index. The contrast between the top ten and the bottom ten is clear to see when we take a look at some of the individual indicators used to compute the HPI. Differences in the quality of life clearly show the North–South divide.

### Spatial and Social Distribution of Poverty

Globally, most of the people living in poverty are found in what the United Nations in 1971 termed less developed countries. These are economically challenged and facing institutional and human resource inadequacies that are often compounded by geography (location in space) and nature and human induced constraints. There are several ways of classification, but the two main ones emanate from the Bretton Woods Institutions (The International Bank for Reconstruction and Development (IBRD) and the International Monetary Fund (IMF)) and the United Nations. The IBRD classification is based on per capita gross national product (GNP). Countries with GNP per capita less than US$750 are seen as low income countries or less developed countries (LDCs). Currently, most countries in the Northern hemisphere have high GNP per capita, while those in the Southern hemisphere have low GNP per capita. This North–South divide often leads to generalizations that there are more poor people in the Southern hemisphere than there are in the Northern hemisphere. This, however, does not imply the absence of poverty in the more developed countries, but merely indicates in relative terms where people are more likely to be living in poverty.

Since 1990, the UN has come up with an alternative classification system based on a composite index they call the human development index (HDI). This brings together an income measure based on gross national income (GNI). A country with a GNI per capita less than US$750 would be classified as an LDC. The HDI also recognizes human resources constraints using a human assets index (HAI). This considers human resource issues such as literacy rates, nutrition, health, and education, in general. In addition, an economic vulnerability index (EVI) that takes account of instability of agricultural production, instability of exports of goods and services, share of manufacturing and modern services in GDP, merchandise export concentration, and population displaced by natural disasters. For these, the HDI is constructed triennially by the UN Committee on Development Policy. In 2007, there were 50 countries (up from 43 in 1996) classified as LDC. Of these, 34 are in Africa. In these countries, a majority of the people are likely to be living in poverty.
<table>
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<td>1.5</td>
<td></td>
</tr>
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<td>na</td>
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<td>1.3</td>
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<td>na</td>
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<td>na 41.1</td>
<td>41.1</td>
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<td>32.8</td>
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<td>74.3</td>
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<td>Malawi</td>
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<td>76</td>
<td>na</td>
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<td>na</td>
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<tr>
<td>18</td>
<td>Guinea-Bissau</td>
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<td>na 40.5</td>
<td>40.5</td>
<td>na</td>
<td>–</td>
<td>na</td>
<td>–</td>
<td>na</td>
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<tr>
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<td>Burkina Faso</td>
<td>55.8</td>
<td>na 26.5</td>
<td>26.5</td>
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<td>27.2</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>20</td>
<td>Sierra Leone</td>
<td>51.7</td>
<td>na 45.6</td>
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<td>65.2</td>
<td>na</td>
<td>57</td>
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</table>

Rural and Urban Divide
Apart from the North–South divide, there is also a rural–urban divide in the spatial distribution of poverty. This is particularly evident in the largely agrarian societies of the South where poverty tends to be largely a rural phenomenon. Current World Bank estimates suggest that up to 70% of those living in poverty are found in rural areas of the South, and make a living mainly from agriculure related activities. It is also known that most of the rural dwellers in LDCs are poor because of lack of land and poor returns for their produce, including labor. It has also been suggested that part of the poverty in the rural areas of the South can be explained by ‘urban bias’ in policymaking. This bias has seen rural areas lacking in basic service provision and infrastructure, as urban based policymakers tend to provide better facilities in urban areas. Through increased urbanization, however, estimates by the United Nations at the turn of the century suggest that by 2025, there will be more poor people living in urban zones of developing countries than in the rural areas. This urbanization of poverty is often seen as being driven by rural to urban migration under conditions of poor economic growth that characterizes the developing countries.

Social Dimensions of Poverty
Poverty discourses also recognize that within populations in both North and South, poverty is borne by certain social groups more than others. The Fourth World Conference on Women held in Beijing in 1995 brought to global prominence knowledge that poverty is not gender blind and that households headed by women are more likely to live in poverty than those male headed ones. The term feminization of poverty has been used mostly since the 1970s to describe this socially constructed predisposition to poverty. A key causal factor is gender bias built on male dominance in politics, society, and economy. This is often seen as creating conditions to disadvantage the female gender economically. For example, in 2000, the United Nations estimated on average that women earn slightly more than 50% of what men earn. This often creates economic disadvantages that often drive female headed households into poverty. Apart from gender, ethnicity, social class, age, and caste are often seen as factors that predispose an individual to poverty.

Understanding and Explaining Poverty: Theories of Poverty
If defining and measuring poverty are difficult, the conventional approaches on what causes poverty show an even deeper level of plurality. This is in part a reflection of the diverse nature of disciplines engaged in the study of poverty. The literature distinguishes between what we can call geographical and socioeconomic theories of poverty. Here, a cursory look at these is in order to contextualize the responses to poverty.

Geographical Theories of Poverty
In general, the geographical theories of poverty proffer explanations for the spatial distribution of poverty. In trying to answer why some places become poverty traps and others do not, the theories bifurcate into deterministic and possibilistic perspectives. The former tend to focus on the influence of the physical landscape in causing poverty, while the latter’s focus is on ‘spatiality’ or the interaction between the physical conditions and human processes to give poverty outcomes. Determinists usually seek to identify the physical characteristics that result in ‘spatial poverty traps’. Early works of writers such as American geographer Ellsworth Huntington tended to credit the physical environment, especially climatic conditions, with determining development outcomes. Thus, polar and tropical regions were seen as being predisposed to poor economic development outcomes, while the mid latitudes were considered as more stimulating and hence offering better prospects for economic development. Possibilistic thinking suggests that the physical environment merely influences rather than determines development outcomes, and hence poverty. For example, marginality and remoteness of a place is only seen as influencing the co-production of underdevelopment and spatial poverty traps when we take account of the specific ‘spatiality’ of the area. This means, rurality need not mean poverty in developing countries, unless certain specific historical, economic, and social conditions create such conditions. Rural areas only become poverty traps because of the nature of development decisions that are taken and the role ascribed to the rural space economy in the development processes.

Socioeconomic Theories of Poverty
Two main sociological theories offer some ideas on why an individual or a household lives in poverty. The first, often called the individual pathologies theory, blames those living in poverty for their condition. Usually based on observations of those living in poverty, this view suggests that there are individual inadequacies that pre dispose those living in poverty to their situation. Being lazy, addiction to the welfare system, low intelligence, or some mental and physical disability, for example, are some attributes identified in this thinking to explain why an individual cannot take opportunities that have allowed the nonpoor to thrive. In the 1990s, Herrnstein and Murray’s infamous bell curve theory is a typical example
of such works. This thinking has been criticized for failing to appreciate that an individual is not necessarily a free agent with all livelihood options available. Rather there are structural barriers that inhibit them from taking advantage of opportunities out of poverty. Policy responses in this frame of thinking tend to focus on correcting the individual pathologies through, for example, weaning the individual from welfare benefits (‘can work, must work’ policies) by offering targeted assistance to the individual.

An alternative to this individualization of poverty thinking is focuses on the family and the community as the cause of poverty. This is also often called the culture of poverty thinking. Its main argument is that poverty is rooted in socially generated belief systems. Through socialization (transmission of values, beliefs, and skills) poverty reproduces itself through intergenerationally reinforced behaviors. For example, a child growing up on welfare benefits is often seen as being inducted into this subculture and will likely grow up to live in poverty as an adult. While offering an alternative narrative, this way of thinking has been criticized for racial stereotyping and for failing to understand the structural factors influencing the emergence of subcultures.

Based on a critique of the individual pathologies and the culture of poverty narratives, respectively, an alternative explanation centered on the structural causes of poverty emerged. This argues that poverty is caused by structural barriers within the capitalist economy, and in some cases political systems can produce poverty.

**Theories of Development and Poverty**

Two main theories of economic development that emerged after World War II proffer different interpretations of lack of development and ultimately poverty. On the one hand is ‘modernization’ thinking that uses cultural and technological differences among societies to explain underdevelopment and ultimately poverty. According to this theory, affluence rather than poverty is what needs explanation and the answer revolves around a modern industrial economy. Technology is seen as the lynchpin of economic development. Certain cultural environments are seen as being inimical to technology and progress, and traditionalism is the biggest barrier to development and ultimately opportunities for wealth creation. Over time, as countries’ economic productivity grows, wealth is generated and the process of modernization spreads (initially from some core economic hubs) across the space economy removing underdevelopment (read backwardness). According to modernization thinking, poverty therefore can be solved by modernizing traditional societies. Capitalism is seen often as the solution rather than the cause of poverty and developed countries are seen as playing a more positive role in reducing poverty in the LDCs. In contemporary poverty discourses, analysis of initiatives like the Poverty Reduction Strategy Papers linked to the highly indebted poor countries (HIPC) suggests that these are modern variants of modernization thinking meant to kick start local economic development. Critiques of this theory have mostly focused on the fact that it uses the history of European development to try and influence development in parts of the world with different historical trajectories and their own value systems. Further modernization is simply seen as a way of extending markets for goods produced in the more developed countries.

On the other hand is the ‘dependency’ theory which suggests that at a global level, poverty in LDCs can be explained in part by the exploitation of poor countries by the rich ones, owing to the structure of the world economy that privileges some countries at the expense of others. The key argument is that poor countries in the South are kept in poverty by producing raw materials that are exported cheaply and processed in the more developed countries and sold back to them as manufactured or value added goods. For most post colonies, the roots of contemporary poverty are often still traced to a colonial experience that shaped specific economic relations between the more developed and LDCs. This theory suggests that underdevelopment is an ongoing process rooted in the ‘dependent’ relations created by the structure of the global capitalist economy. Initially, solutions to this ‘structurally induced’ poverty lay in delinking from this exploitative global economic system, substituting imports with locally produced goods, value adding, and formation of mutually beneficial regional trading blocks. More recently, the ‘trade dependency development pathway’ as a solution to poverty has emerged. This suggests that countries can trade themselves out of poverty through fair and ethical trade. Fair trade has become one of the most prominent populist antipoverty campaigns with a two pronged strategy targeting removal of trade barriers (and giving preferential access to lucrative markets) for poor countries, on the one hand, and campaigning for more ethical value chain structure that pays fair prices to the commodity producers in developing countries, on the other.

**See also:** Dependency; Determinism/Environmental Determinism; Fair Trade; Livelihoods; Modernization Theory; Possibilism.

**Further Reading**


Relevant Websites
http://www.chronicpoverty.org
http://www.sed.manchester.ac.uk
Institute for Development Policy and Management (School of Environment and Development, The University of Manchester).
http://www.imf.org
International Monetary Fund: Poverty Reduction Strategy Papers (PRSP).
http://www.worldbank.org
The World Bank: PovertyNet.
http://www.undp.org
http://www.undp.org
Poverty, Rural
A. R. Tickamyer, Ohio University, Athens, OH, USA
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Glossary
Core Powerful and affluent nations characterized by industrial and postindustrial economies that dominate international affairs.
Culture of Poverty Theory that poverty is the result of dysfunctional cultural traits that condone behavior and attitudes antithetical to economic advancement.
Development Processes of economic growth, poverty alleviation, and related social and political changes that are the goals of poor developing nations of the periphery.
Globalization The process of increasing interdependence and exchange of capital, goods, and labor in the world system.
Global North The same as core nations.
Global South The same as peripheral nations.
Modernization Theory of development that sees economic growth as a series of preset, progressive stages that all nations must experience to achieve prosperity.
Parastatal Semi-independent agency used to carry out central government policies related to economic growth and globalization.
Periphery Poor developing nations and regions, often, but not always, former colonies of core nations, sometimes divided into periphery and ‘semiperiphery’ or nations that have advanced economically beyond the least developed countries.
Poverty Threshold A measure of poverty that indicates the income below which a person is classified as poor.
Social Exclusion Social isolation and marginalization as an outcome of poverty.
Underdevelopment Impoverishment and dependency as the outcome of exploitation of the periphery by core nations, elites, and organizations.
World System The global division of labor that is characterized by unequal terms of exchange between states and corporations of the core and those of the periphery.

Introduction
Across the globe, the world’s population is in the midst of a historic shift from residence in predominantly rural regions to majority urban. The growth of mega cities and the constant stream of migration from rural to urban locations focus attention on urban issues and problems, including the ravages of poverty in densely populated and often crime ridden urban slums. Nevertheless, poverty remains disproportionately located in rural places. Currently three quarters of the world’s poor are estimated to reside in rural regions, and this figure will decline only slowly, with rural poverty remaining the dominant form of deprivation for many years to come. Rural poverty is not relegated to the poorest regions and nations, but is also disproportionately found in many core industrial and postindustrial nations. In the United States, rural poverty rates rival or exceed those of urban inner cities, and while statistics for other nations of the Global North are not always organized by spatial categories, large, sometimes hidden, pockets of rural poverty remain in the most economically advanced and powerful countries of the globe.

The rural poor are not just a reservoir of misery and deprivation for millions (currently almost a billion persons according to the International Food and Agricultural Development Agency (IFAD), but they also form a link between the problems of rural and urban centers and developing and developed regions. Rural poverty fuels a constant stream of migration between rural and urban areas as economic and political refugees, guest workers, and migrant labors seek better opportunities in urban centers within their nations of origin and across national boundaries. As part of an accelerated flow of the transnational exchange of labors, goods, and capital known as globalization, the rural poor provide an enduring source of cheap labor for the world’s fields and factories, often exchanging the hardships of rural poverty for the problems of the urban proletariat and underclass. Conversely, when economic recession or political pressures make urban life unsupportable, rural areas may act as a refuge for return migrants, exacerbating the already severe problems of these areas.

Although the causes, consequences, and issues facing the rural poor share many similarities regardless of regional status and location, spatial context plays an important part in shaping forms of rural poverty, and significant differences between the Global North and South dictate separate consideration. In the poor and developing countries of the Global South, rural poverty is still by far the most dominant form, and it is closely affiliated with marginal agricultural and natural resource livelihoods and landscapes. In affluent nations of the core, such as the United States, Western Europe,
parts of Asia, rural poverty tends to be hidden and ignored, rendered invisible by the concentration of population and attention to urban centers. Nevertheless, the existence of reliable, regular data collection on economic conditions in core nations provides relatively good information on the degree of deprivation experienced by rural populations. The relative neglect and failure to acknowledge serious rural poverty in core nations make this phenomenon especially pernicious. This article will first consider important conceptual and analytic distinctions necessary to understand rural poverty and then will briefly review the topic in peripheral nations, in core nations, and the connections between the two.

**Conceptual and Analytic Issues**

The study of rural poverty is a multidisciplinary enterprise, spanning the social sciences and represented in disciplinary based literatures and interdisciplinary policy analyses. Disciplines most often represented in rural poverty studies include economics, especially agricultural economics, sociology and rural sociology, geography and regional science, anthropology, political science, international relations, development studies, and policy analysis. Numerous journals, both disciplinary based and interdisciplinary analyze rural poverty, most often with a specific country or regional focus. Inter national and parastatal organizations such as the United Nations and its many agencies, the World Bank, and regional development agencies and associations conduct poverty assessments as part of their mission. Finally, many nongovernmental agencies such as the Ford Foundation sponsor research, fund programs, and produce reports on the topic. The wide variety of disciplines, agencies, and political entities whose agenda at least touch on rural poverty create the need to establish common understanding of key concepts and issues. These include definitions of both rural and poverty, spatial versus demographic approaches to poverty, and relationships between poverty, development, and inequality. Variations in definitions and approaches mean that assessments of rural poverty inevitably run into problems of comparability across time and space.

**What Is Rural?**

Definitions of rural vary by jurisdiction. Although the idea of rural evokes images of sparsely populated agrarian landscapes, not all rural residences or live lihoods are agricultural or even natural resource based, and not all rural populations are sparsely distributed. Furthermore, political and administrative considerations are always present in official definitions of rural places, and these vary widely from nation to nation and within nations over time. Definitions of what is classified as rural by different nations vary from a population of less than 2000 persons per settlement to more than 10 times that amount. Administrative definitions and boundaries may give alternative statistical accounts even within a particular nation. For example, in the United States, the official definition of rural is a place with less than 2500 persons, but the measure most often used to collect, analyze, and disseminate information on rural affairs is the county classification of nonmetropolitan, a proxy for rural that measures lack of urban development rather than rurality directly. Nonmetropolitan counties often contain settlements that exceed the 2500 person limit and are officially defined as urban. Similarly, metropolitan counties that contain world cities may have sparsely settled agricultural or natural resource areas that fit the most stringent definition of rural. Currently, there is no standard definition of rural that spans all nations, and it is safe to conclude that the lowest common denominator for defining rural remains not urban.

**What Is Poverty?**

The definition of poverty also varies greatly across time and place, with implications for the accuracy and comparability of the assessment of the extent and forms across regions and nations and, even within nations, across time. Although, poverty is variously defined in economic, psychological, and even philosophical terms, most measures are based on some variant of capacity for material consumption. For international comparisons among developing countries, the World Bank poverty lines of purchasing power of less than the equivalent of $1 and $2 per day are standard. Increasingly, these measures are supplemented with multidimensional indices such as the United Nations Development Program (UNDP) Human Development Index (HDI) and Human Poverty Index (HPI) that provide more extensive information on different facets of poverty and deprivation such as life expectancy, literacy, and access to safe water and healthcare. Countrywide studies and reports by international organizations such as the United Nations and the World Bank provide a wealth of information on rural poverty for developing countries, always recognizing the limits posed by different definitions of both rural and poverty and limited capacities to collect statistical data of the countries involved.

More affluent nations that possess far more efficient data collection apparatus and procedures are divided between those that favor absolute versus relative measures of poverty. For example, the official US poverty line is calculated by the government on the basis of the income necessary to maintain a minimal subsistence level determined by the cost of a market basket of consumer goods that is adjusted for family size and inflation. This provides the means to determine how many and what
proportion of different populations fall below an absolute poverty threshold, either over time or across space. Alternatively, countries that are part of the European Union (EU) typically take what is called a relative approach to measuring poverty by drawing the poverty line at income less than half the national median, calculating the proportion of persons falling below that threshold. The difference is between a measure that purports to calculate absolute levels of deprivation regardless of how many or how few people fall into that category versus one that is sensitive to the distribution of income and thus is as much a measure of inequality as of poverty. Finally, many more affluent countries, especially in the EU, also focus on the effects of poverty with measures of social exclusion, that is, the degree to which impoverished individuals and groups experience social isolation and marginalization. Regardless of type of measure, to provide meaningful data and comparisons, it is necessary to collect information on numbers of poor persons of varying social and demographic characteristics by spatial location. It is not possible to accurately count rural poverty without good measures of both poverty and rural.

Poverty of Persons and Poverty of Place

Poverty can be conceptualized demographically or spatially. Studies of poverty of persons focus on the social, economic, and even psychological characteristics of the poor; studies of poverty of place focus on institutional and structural characteristics of places with large numbers of poor people or disproportional rates of poverty. Of course, these are analytic distinctions, the two are closely connected, yet they represent different conceptual approaches. Rural poverty is by definition spatially defined, and much research examines the unique characteristics, causes, and consequences of poor rural places. At the same time, within rural regions, socio demographic characteristics of poor people may be examined for their own informational value and to determine if they differ from other types of locales. Similarly, the demography of poverty may be compared across spatial boundaries to determine the relative situation of different population groups across spatial boundaries.

Poverty, Inequality, and Development

Poverty can be viewed as an isolated state, but it is more productively understood as a relational condition, usually accompanying serious inequalities in resource access and distribution within and across societies. Hypothetically, it is possible to conceive of a population characterized by a perfectly equal distribution of deprivation, but in practice, poverty is intimately linked to inequality, and the dynamics of unequal exchange are implicated in processes of poverty causation. Thus, the Nobel award winning economist and political philosopher, Amartya Sen, demonstrated that famine, long a symbol of the most extreme form of poverty, is less a matter of the absolute lack of food, but rather symptomatic of a crisis of entitlement created by social inequality. Poverty and inequality are both causes and correlates of development problems, with pockets of poverty in both the peripheral and core regions related to exploitative relations of inequality that characterize underdevelopment.

Rural Poverty in the Periphery

Poor rural places in the world’s developing nations are often marginal agricultural or natural resource based economies with populations whose livelihoods depend on undependable subsistence activities. Lacking either a favorable resource base or a political climate conducive to successful investment and development of resources for the benefit of local populations, the rural poor are subject to the vagaries of natural and man made hardship. Factors implicated in rural poverty range from bad climate to poor infrastructure: Vulnerable groups such as female headed households, children, and race, ethnic, religious, or national minorities are especially likely to be disadvantaged. Studies of rural poverty in the Global South, either in individual countries or across regions, find a laundry list of causes and correlates of rural poverty including marginal land, pollution, lack of access to technology, transportation, and credit, remote location, corruption, natural disaster, disease, conflict and war, resource overuse and degradation, colonization and exploitation, and generally the conditions identified as underdevelopment – exploitation of peoples and extraction of resources by economic and political powers under terms favorable to the exploiter and unfavorable to indigenous populations.

The depredations of underdevelopment underscore the links between peripheral and core regions and their implications for rural poverty. While there are very few remaining isolated human groups whose subsistence economies operate almost entirely outside the global economy, for the most part, the poor rural peoples of the world are linked to the larger world system. Thus, unlike earlier culture of poverty and modernization theories that attributed poverty to the deficiencies of individuals or the backwardness of societies, most prevailing explanations of rural poverty in the periphery under stand it as the legacy of historical and contemporary unequal relationships that create dependency and disadvantage in the global economy.

The development paradigm subsumes a number of theories that explain poverty in terms of global power differentials and relations of exploitation, whether
historically or in the present. Variants include world systems theory, various brands of dependency theory, and most recently globalization. They differ in their theoretical origins from those rooted in Marxist and neo-Marxist approaches to more state based orientations, focusing on political rather than economic actors. They vary in emphasis on formative experiences from the plunder of colonization to the exploitive investments of multinational corporations and the unequal terms of exchange forced on poor places by the powerful transnational nationalizations of the core, a process that has accelerated with increasing globalization. Regardless of specific formulation, however, they share the view captured in Andre Gunder Frank’s phrase, “the development of underdevelopment,” that poverty is constructed through the outcomes of exploitive power differentials between core and periphery.

Of particular importance in rural areas are the unequal terms of exchange that characterize agricultural production and natural resource extraction in the global economy. Farming for local consumption increasingly is displaced by income generating export based agriculture requiring more capital intensive forms of cultivation that favor large land holders and rich investors. Small land holders and landless labor are squeezed off their land and employment, creating conditions conducive to migration to urban areas in search of work. At the same time, even the largest agricultural producers in poor countries have difficulty competing in a global marketplace where rich nations protect and subsidize agricultural production to the competitive disadvantage of poor nations that lack resources and infrastructure. Similar lopsided conditions afflict natural resource extraction, where the necessary capital investments and infrastructure for value added production are unavailable, leading to distorted terms of trade. In this manner, countries rich in natural resources fail to benefit from their assets, and poor peoples within these nations remain impoverished or become even poorer.

Rural Poverty in the Core

The geography of poverty in the core affluent nations also over represents rural areas. For example, in the US in 2003, the poverty rate in nonmetropolitan counties was 14.2% compared to 12.1% in metro areas. Although the gap between urban and rural poverty rates has decreased over time, the pattern of higher rates in rural areas has persisted for almost 50 years since poverty rates were officially established and tracked. Many remote rural areas have been marked by high (more than 20% of the population) poverty rates for decades, leading to design nation as sites of persistent rural poverty that bear many similarities to the rural poverty found in poor developing countries. In particular, rural poverty in the core often is the result of underdevelopment processes of exploitation, corruption, and neglect that characterize peripheral regions of the Global South.

This becomes evident when examining the spatial distribution of persistent poverty in the US. Rural poverty is not evenly distributed, but is disproportionately clustered in counties in the South and West, especially in the former slave owning states of the plantation South, Appalachian coal fields, Indian reservations, and colonies of the Southwest, areas noted for their histories of subjugation of subordinate populations by powerful local and national elites. Historical accounts and case studies trace patterns of rural impoverishment, demonstrating practices of discrimination, exploitation, exclusion, and corruption that turn formerly wealthy places such as resource rich areas of Appalachia into the persistently impoverished places they subsequently have become. Theories of underdevelopment constructed to explain the situation of nations of the periphery have found equal use applied to peripheral regions of the core.

Of course, not all rural poverty in the US is predicated on longstanding historical patterns of exploitation and resource extraction. More recent trends of economic restructuring, deindustrialization, and accelerated applications of capital intensive technologies in all forms of production from agriculture and mining to manufacturing have had specifically deleterious effect on the less diversified economies of rural areas. The loss of jobs and livelihoods, whether in farming, mining, or manufacturing, in areas that depend on one or two industries creates new hardship and exacerbates existing economic vulnerabilities. The specific form and pattern of economic losses varies by region and type of economy. The virtually complete dominance of corporate agriculture has made the family farm obsolete. Deindustrialization in the upper Midwest rustbelt communities and Southern mill towns results in the loss of rural manufacturing plants to offshore locations with cheaper labor. Depletion of natural resources and increased environmental regulation in timber and fisheries devastate whole communities dependent on these industries. The growth of low level service sector jobs such as retail sales, care work, and tourism does not make up for the loss of higher wage industries in these areas.

These trends are widespread across the industrial world, and the US is not the only example of a core nation with severe problems of deep and persistent rural poverty. Studies of rural poverty in Britain find similar patterns, and it can be speculated that other EU nations follow suit. However, it is difficult to gauge the extent of rural poverty in many core nations, since they do not always publish poverty data by rural–urban location, but rather by region or by occupation, making it difficult to determine uniquely rural poverty rates or to distinguish
between agricultural and other rural economies. Furthermore, at least in many European countries, rural and agricultural subsidy and protection, as well as more extensive welfare states provide universal access to social welfare provision that buffers rural residents from some of the harshest aspects of poverty. This corresponds to a greater concern with poverty as a source and form of social exclusion than found in the US and thus, the prevalence of studies that assess forms and degrees of isolation and marginalization rather than absolute deprivation.

**Rural Poverty across National and International Divides**

Rural poverty in the core and periphery share many similarities. Poverty results ‘from’ lack of jobs and viable livelihoods, at least in part, the result of accelerated globalization processes that put more isolated rural areas and their residents at a disadvantage in the global division of labor. Rural poverty results ‘in’ deprivation and isolation, with rural residents more likely to lack access to resources, including adequate income, food, water, healthcare, and education. Women, children, and minorities are especially vulnerable to processes both internal to specific societies and to broad global patterns of patriarchy and discrimination that create disadvantage for women and their children, as well as other vulnerable populations.

That said, there also are important differences. Deprivation in core nations may not always equal the depths of poverty in the poorest countries. However inadequate, unlike many developing nations, most core nations have some sort of safety net that provides assistance to their poorest residents, even if access is more limited in rural places. Finally, rural regions in core countries, however poor, exploited, and underdeveloped, also are part of larger entities that may be implicated in the exploitation of the rural poor in the periphery. Although powerless themselves, the rural poor of the core collectively are associated with the policies of their governments.

More notably, there are important links between the core and periphery, urban and rural regions beyond the fact that they are part of a global division of labor that increasingly draws all persons and places into its orbit. As noted earlier, economic migration and return migration provide steady streams between regions and across boundaries. The earnings of migrants to urban centers and core countries provide remittances that support those left behind. The policies adopted by bilateral and multilateral organizations whether free trade agreements such as North American Free Trade Agreement (NAFTA) and General Agreement on Tariffs and Trade (GATT) or structural adjustment policies dictated by the International Monetary Fund (IMF) and World Bank rearrange economic relations in ways that affect the poor of both rich and impoverished regions. The rural poor, even in the most isolated and remote places, bear the brunt of these policies.

**See also:** Counterurbanization; Historical Geographies, Rural.

**Further Reading**


**Relevant Websites**

http://www.ifad.org

Enabling Poor Rural People to Overcome Poverty,
Pragmatism/Pragmatist Geographies
S. J. Smith, University of Durham, Durham, UK
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Glossary
Pragmatism A philosophical orientation which pays attention to the practical consequences rather than the metaphysical origins of ideas.
Pragmatist Geographies Geographies adopting a pragmatist orientation which emphasizes how the search for ‘truth’ or knowledge should be grounded in the everyday practices of people/places under study.

Pragmatism: Origins and Character

Pragmatism was developed in North America, in the aftermath of the Civil War, by scholars at the universities of Chicago and Harvard. A kernel of the idea formed around a small group of philosophers – perhaps a single ‘metaphysical club’ – in the 1870s. Described by Louis Menand as ‘a knot in the tapestry’ of turn of the century life, pragmatism set itself the task of reconciling metaphysical disputes by focusing on the practical effects of one view or another being true. Pragmatism eschewed the abstractions of ‘armchair’ philosophy, rejected Enlightenment dualisms (between mind and body, idealism and materialism, subject and object, and so on), had limited faith in positivist scientific method, eschewed the abstractions of ‘armchair’ philosophy, rejected Enlightenment dualisms (between mind and body, idealism and materialism, subject and object, and so on), had limited faith in positivist scientific method, eschewed the abstractions of ‘armchair’ philosophy, rejected Enlightenment dualisms (between mind and body, idealism and materialism, subject and object, and so on), had limited faith in positivist scientific method, eschewed the abstractions of ‘armchair’ philosophy, rejected Enlightenment dualisms (between mind and body, idealism and materialism, subject and object, and so on), had limited faith in positivist scientific method, eschewed the abstractions of ‘armchair’ philosophy, rejected Enlightenment dualisms (between mind and body, idealism and materialism, subject and object, and so on), had limited faith in positivist scientific method, eschewed the abstractions of ‘armchair’ philosophy, rejected Enlightenment dualisms (between mind and body, idealism and materialism, subject and object, and so on), had limited faith in positivist scientific method. Pragmatism was an activist, Jane Addams – previously overlooked – is increasingly recognized as a key participant in this movement.

The best known of the early, or classical, pragmatists include John Dewey, William James, George Herbert Mead, and Charles Sanders Peirce. Other key figures include Oliver Wendell Holmes (who was a lawyer) and Charles Beard (a historian), as well as logician and ethicist, Clarence Irving Lewis. Philanthropist and activist, Jane Addams – previously overlooked – is increasingly recognized as a key participant in this movement.

The earliest influential accounts of pragmatism were published in 1878 (in essays on ‘How to make our ideas clear’ by Charles Peirce, and on ‘Spencer’s definition of mind as correspondence’ by William James). However, the label ‘pragmatism’ did not receive public recognition until 1898 when James coined it during a lecture on ‘Philosophical conceptions and practical results’ at Berkeley. It became an immensely popular idea, and it is not surprising to find that pragmatisms and pragmatists come in diverse styles and traditions. Some authors draw a distinction, for example, between James and Dewey, who may be thought of as ‘social nominalists’ (regarding society as the sum of the individuals comprising it), and Mead and Peirce, with their leaning toward ‘social realism’ (believing that society amounts to more than the properties of its constituent parts). Others distinguish James’s focus on individuals and their emotions from Mead’s more fully social view of the self, and also from Dewey’s wider concerns with sociality and the public realm. Several commentators draw attention to Peirce’s distinctively logical, highly systematized style of pragmatism which – for better or worse (and scholars are divided on this) – stands well apart from the rest.

There are, nevertheless, some common themes, which – as befits a philosophy whose signature trait is the social character of knowledge – merit attention. There are many ways of labeling these core ideas, but most lists make reference to pluralism, instrumentalism, fallibilism, and experimentalism, all of which are rooted in a distinctive conception of society, and contain a firm ethical steer.

Pragmatism is, first and foremost characterized by a deep seated ‘pluralism’: it is in every way an anti foundationalist, anti essentialist, ‘more than representational’ enterprise whose core metaphysical claim is that the future is – to a significant degree – open: plastic, negotiable, alterable. In this radically open view of the world, ‘reality’ is neither mirrored in nor mined by ideas, but is manufactured through their application. In this action orientated, and therefore performative, space, theories are always provisional and ‘truth’ is an act, not a fact: it is something that happens to an idea. Ideas are nothing in themselves: they are (or are not) ‘made true’ by events. Pragmatism then is very much a philosophy of practice.

To that end, a further definitive characteristic of pragmatism is its ‘instrumentalism’. Ideas are not truths waiting to be discovered but social experiments whose veracity is judged by their effects. Ideas (which are social rather than individual creations) are instruments for achieving particular purposes: their function is to help societies adapt to a changing but unpredictable world. In a New York Times interview published in 1907, James argued that pragmatism’s primary interest is in its (instrumental) doctrine of truth: an idea is ‘true’ if it ‘works’ and does not clash with logic or experience. It follows (for James) that the role of the mind is to be creative not reflective; its work is not to apprehend but...
to transform: 'the use of most of our thinking is to help us to change the world'. And this is not so much 'a fact' as an ethical impulse, as might be anticipated from a philosophy invented precisely to resolve the dilemma of determinism.

This imperative to act rests on experimentation, not least because a corollary of pragmatism's pluralism is its 'fallibilism'. Pragmatism is deeply aware of the fragility of knowledge, recognizing that all matters of 'fact' are liable to modification in light of experience. Such modification is not done by individuals, but by a critical community of inquiry. To inform this community, pragmatism espouses the virtues of 'experimentalism'. There is (largely thanks to Dewey) a Darwinian impulse driving pragmatism: a conviction that change is inevitable but progress is not. So pragmatism, a philosophy of action, leans toward experimentation as a way of transforming unknown — but not unknowable — environments as better to meet human needs. Experience here is not about passively registering the pre given; it is an experimental resource — a way of learning through doing; a way of continually testing, evaluating, and modifying the meanings and materials that make up the world. Experimentalism is therefore both empirical and radical. William James in fact coined the term 'radical empiricism' (a 'philosophic attitude' which he distinguished from, and later preferred to, pragmatism) to describe this method of settling metaphysical disputes by appeal to experience. Such disputes are only worth having if there are practical consequences of one notion rather than another being true. In assigning action priority over contemplation, pragmatists engage with a world shot through with contingencies in order to reduce or manage its uncertainties.

Finally — a point implicit in all the above — Pragmatism occupies 'a social and an ethical world': a space created by a mix of meanings, materials, and moralities which is characterized more by process than by form, and which exists in and through communication. Pragmatism indeed signals the sheer diversity of sites and situations, of spaces and places, in and through which knowledge are enacting, tested, revised, and practiced. The pragmatic message in a world where change is inevitable but progress is not is that human agency has the potential — and the ethical obligation — to intervene. But how and to what ends? Dewey's work is especially apposite here. He was deeply concerned with the impossibility of achieving consensus as to either desirable outcomes or the means of achieving them. He recognized that there is a fragmented geography of pragmatic knowledge communities as befits a world whose hallmark is diversity: even at a specific site, or in the context of a particular setting, there could never be a single appropriate prescription for change, much less an agreed mandate to implement it. Dewey's pragmatic solution — a form of deliberative democracy — was the ongoing process of communication, negotiation, and experimentation required continually to test, revise, and come to a compromise over appropriate interventions (including their political forms) in the light of newly emerging situations.

Neopragmatism

Although highly popular in the 1920s and 1930s, pragmatism was eclipsed in the 1940s by a turn to analytical philosophy with its faith in logical positivism and its foundational theory of truth. However, for social and political theorists, pragmatism left traces in the work of Emile Durkheim, Friedrich Nietzsche, Max Weber, Ludwig Wittgenstein, it was in part embraced by Jürgen Habermas, and it proved, in many ways, central to the inspiration of Gilles Deleuze. Pragmatism was more self-consciously ‘reinvented’ in the 1980s following the publication, in 1979, of Richard Rorty's Philosophy and the Mirror of Nature. This was an attempt by Rorty to lead analytical philosophy out of the corner it had – by then – painted itself into. This work might not have had such impact had he not followed it up 3 years later with a collection of essays on The Consequences of Pragmatism. Its import was also assured by the fact that established figures such as Richard Bernstein had already primed the field, and because others — like Hilary Putnam and Richard Shusterman — were ready to enter the debate. Neopragmatism also appealed to feminist thinkers and civil rights activists such as Cornel West and Nancy Fraser. Today, this movement continues to gather momentum, while remaining as diverse and contentious as it was a century ago.

One key achievement of the neopragmatists is to turn attention to the role of language not as a way of representing the world, but as a mode of communication or interaction; a way of deliberating problems and agreeing solutions collectively. Language, or more particularly, ‘conversation’, has thus been placed at the heart of the transactitional, interactional, and wholly social view of knowledge and experience that the classical pragmatists espoused. Another avenue opened up by this new generation of thinkers concerns the physicality of esthetic and ethical experience: the art of living is about practice, as well as talk, and this turns attention to the physical, emotional, and instrumental workings of the personal and the social body. These ideas were all — sometimes in a different style using different linguistic conventions — entertained by the first wave of pragmatist thinking, and it is not surprising that the pragmatic revival has been very much a celebration of philosophical roots. Deweyan ideas have been particularly widely embraced. They were, for example, Rorty's main inspiration, albeit in controversial ways. Today, however, a clutch of social
science disciplines – including human geography – are engaging with, and building upon, a much broader pragmatist legacy.

**Pragmatism and Geography**

Pragmatism is a wide ranging philosophy which has left its mark on the law, in theology, across the arts, and in education, as well as in social and economic research. Any role it might have had in the shaping of geographical traditions has still to be established, though the early wave of pragmatism almost certainly had a bearing on the geomorphological legacy of G. K. Gilbert and W. M. Davis, as well as on the environmental geography of Gilbert F. White. Although Robert Park and perhaps Carl Sauer were also exposed to, and possibly influenced by, this body of thought, there is no clear evidence that it filtered directly through to academic human geography at the time: certainly there is little to suggest that the University of Chicago’s geography department, founded in 1903, took on the pragmatists’ mantle. In fact, notwithstanding such seeds as were sown in the early decades of the twentieth century, those more recent geographers most engaged with philosophical and methodological debate have hitherto prioritized Continental (European) philosophy and have hence had rather little to say about the role and relevance of (North American) pragmatist ideas.

That said, there are exceptions, and increasingly so. They can be hard to pin down, not least because those geographers whose work is inspired by, or infused with, a pragmatist ethos tend to be at pains to emphasize that theirs is an intellectually modest project. The corollary of regarding ‘realities’ as inexhaustible is that there is unlikely to be consensus on any aspect of how the world works. So geographers engage with pragmatism as an attitude to inquiry: an approach which does not *a priori* define the objects or subjects of study, nor dictate a particular set of methods, knowledge, or practices; an approach, grounded in experience, to the problem of living. So pragmatism’s legacy is, above all, as Dewey put it, a metaphorical ground map. Exploring this territory, human geography’s project has been enlarged in several key ways.

Perhaps the earliest account of pragmatism as an explicit possible philosophical inspiration for geography is contained in an essay published in 1981 by John W. Frazier. He prized in particular the pragmatic maxim that ‘‘reality’’ is a mix of knowledge and error – a mix which can be altered to produce a range of different outcomes. Pragmatic methods of experience and experimentation thus constitute practical problem solving devices which could – in this case by ‘‘invigorating applied geography’’ – help promote human welfare. Frazier’s essay is the forerunner to what has become the most sustained early impact of pragmatism on the work of human geographers, which is ‘methodological’ and at the same time ‘ethical’. This practice centered philosophy recognizes the ‘‘cansity’’ of both people and things, and emphasizes the importance of experience in mediating between intellect and common sense. It may seem ironic that as a way of doing research it not only inspired the qualitative methods that put the ‘‘human’’ at the center of (humanistic) geography in the early 1980s, but also that – being so profoundly nonrepresentational – it spoke to the more material (and quite deliberately ‘‘more than human’’) turn toward the current millennium.

The fact that pragmatism inspired both these shifts testifies not to its malleability as a doctrine, but rather to the relational middle ground it occupies between antihuman determinisms and antimaternal idealisms.

On the one hand, therefore, the interpretative humanistic tradition of urban sociology and anthropology known as symbolic interactionism was self consciously inspired by pragmatism. Nurtured for a time at the ‘‘Chicago school’’, this interactionist tradition – with its emphasis on encounter and engagement – became a methodological hallmark of urban social geography for at least a decade. On the other hand, and more recently, parallels have been drawn between some key pragmatic and neopragmatic ideas and the nonrepresentational styles of working (with complex networks of people and things, with the artifacts and organisms of the human and nonhuman world) that have become so central to human geography today. In particular, methods of knowing the world through practice, means of creating the future through performance, all illuminate the relational, transactional, emergent qualities of human beings. It is not surprising that some key figures in the formation of nonrepresentational geographies and material sociologies – Michel Callon, Bruno Latour, Nigel Thrift – have all found it helpful to refer to the pragmatic tradition in their work.

Next, there is the possibility of linking the legacy of classical pragmatism with the energies of its later exponents in order to ‘reinvigorate some key subdisciplinary areas of human geography’. Take, for example, economic geography. Here, it might be imagined that Peirce’s logical pragmatism would appeal. However, while Peircean pragmatism may have been highly influential in the development of American quaternary geology and geomorphology, it is the later pragmatists (generally those most indebted to Dewey) who have most inspired economic geography. Trevor Barnes, for example, has used Rorty’s ideas to unpack the gravity model, while Peter Sunley has looked to Bernstein and Putnam for progress in appreciating the importance of context for economic analysis. Likewise in the flourishing field of urban geography, Gary Bridge, for example, has
traced the ideas of Dewey into and beyond the work of Jürgen Habermas, in order to rethink the nature of the city and the public realm as a transactional, performative, esthetic, and experimental affair.

Additionally, there is a place for pragmatism in ‘the recovery of emotional geographies’, recognizing the sensory body, the social self, the affective content of everyday life, and, to an extent, the psychoanalytical qualities of human beings. Mead’s ideas, for example, have been used in geography to link understandings of the psyche with the practicalities of the body, and to grapple with the relationality and sociality of the self. Likewise, James, with his radical take on social psychology, wrote extensively on the emotions, which he regarded as both a condition of knowing (building on the pragmatist idea that only that which can be sensed can be known) and a practical resource: a means of action that would otherwise be inhibited. Pragmatism was, as much as anything else, a reaction to philosophy’s longstanding suspicion of the emotions; thus, it is unsurprising that these ideas have helped reposition emotional affairs in the heart of human geography.

Pragmatism further speaks to a new ‘preoccupation with uncertainty and risk’. The possibilities here were laid out by James Westcoat over 15 years ago in a thought-provoking discussion of common themes in the work of Dewey and Gilbert F. White (who was preoccupied with hazards and resources). This Deweyan take on uncertainty has been recovered and extended in more recent years in a series of papers by health geographer, Macolm Cutchin, which contain a prescription for handling context and contingency in a radically pragmatic world. Geographers have also looked to pragmatism to flesh out ‘key disciplinary concepts’ like space, place, and situation. In the early days of this, pragmatism – with its focus on engagements, attachment, relationalism, and materiality – tended to be used as a counter to prevailing impressionist, literary, reflective, and representational accounts of place. The most recent flurry of published papers, however, are more forward looking, noting the importance of anti-essentialist thinking, as well as the centrality of critique, but stressing too the value of using geographical sites instrumentally, experimentally, ethnically, and indeed normatively – as a tactic for creating futures that are better than the past.

Pragmatism’s Critics

Pragmatism is not without its critics, the earliest of which came from within its own ranks when Peirce distanced himself from his peers by coining the term ‘pragmaticism’ to distinguish ‘his’ system of logical rules from ‘their’ metaphysical theory, as a means of clarifying ideas. More generally, pragmatism has been criticized as at best overly incrementalist, and at worst an ‘anything goes’ philosophy which is anti-intellectual, lacks radical edge, and is too easily hijacked by a liberal – indeed commercial and imperial – worldview. Perhaps the most enduring critique, however, concerns pragmatism’s lack of attention to the systematically uneven distribution of power or to the structures of inequality that such unevenness sustains.

It is not entirely correct to say that power is absent from the world of pragmatism. On the contrary, pragmatism has a lot to say about the relationship between knowledge and power, and is committed to using ‘knowledge as power’ to recognize and resolve conflict. But it is true that, beyond this, power is undertheorized – a condition which is hardly surprising for a philosophy that has always resisted formalism, rarely dwelling long enough on structures to recognize the enduring inequalities they express. Recently, though, John Allen has sketched the bones of what might become a pragmatist account of power: this would be an expedient affair that is antifoundational in character and energized through situated practices. The intriguing suggestion here is that, by adding an account of the difference that space (and spatiality) make to how power is practised, there is also a chance for geography not just to be inspired by pragmatist ideas, but actively to give something back; to shape the future of the single major philosophy most open to such change.

See also: Chicago School; Non-Representational Theory/Non-Representational Geographies; Performativity; Positivism/Positivist Geography; Psychoanalytic Theory/Psychoanalytic Geographies; Symbolic Interactionism.

Further Reading

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A child of the Bronx, Allan Pred (1936–2007; Figure 1) was one of geography’s premier leading theoreticians and practitioners of urban geography and social theory. He entered Antioch College at the age of 16, graduated in 1957, and subsequently completed an MA at Pennsylvania State University and a PhD at the University of Chicago in 1962. For 44 years, he was a professor of geography at the University of California, Berkeley, where he arrived as an assistant professor at the age of 25. He was long married to his Swedish wife, Hjördis, with whom he had two children, and divided his time between Berkeley and Sweden for much of his life. In 2007 he died of lung cancer.

Pred’s academic output is legendary, including 22 books and more than 70 journal articles and book chapters. His awards, too numerous to detail, included the Anders Retzius medal from the Swedish Society for Geography and Anthropology, honors from the Association of American Geographers and the Polish Academy of Sciences, an honorary doctorate from Uppsala, and multiple visiting appointments. Pred’s career took him through diverse conceptual approaches in a series of shifts that both reflected and contributed to geography’s multiple intellectual transformations. He drew for inspiration upon authors and genres as diverse as urban growth theory, innovation diffusion, Walter Benjamin, feminism, structuration theory, linguistics, and post-structuralism to inform his work.

In the 1960s, his early work centered on the historical geography of American manufacturing and its linkages to the country’s urban growth patterns. From the start, his perspective was resolutely historical, emphasizing the contextualized nature of urban growth rather than abstract processes independent of historical time. Increasingly, the early focus on manufacturing was supplemented by a growing interest in the role of information and its relations to the differential growth of cities. Much of this phenomenon was theorized in terms of circular and cumulative feedback loops. In particular, he noted the powerful role of the telegraph in the long distance transmission of information in the nineteenth century, a technology that greatly reduced uncertainty and accelerated the penetration of Midwestern regions by East coast capital. The crowning achievement of this phase of Pred’s career was the highly influential volume *City Systems in Advanced Economies*.

In the 1970s, Pred turned toward the time geography initiated by Torsten Hagerstrand, and began to apply this framework to the US context. Places, he maintained, are always and everywhere times, that is, always coming into being, and geography can never be fruitfully portrayed as a static landscape frozen at one temporal moment. This move both led him on the one hand to delve more deeply into issues of individual consciousness, including the notion of sense of place advocated by humanistic geographers, and to integrate individual life trajectories with broader questions of social reproduction on the other hand.

Pred became a fierce advocate of Anthony Giddens’ notion of structuration, and worked assiduously to integrate it with geographers’ notions of place and locale. In this reading, the socialization of the individual and the reproduction of society and place are two sides of the same coin; that is, the macrostructures of social relations are interlaced with the microstructures of everyday life. People reproduce the world, largely unintentionally, in
their everyday lives, and in turn, the world reproduces them through socialization. In forming their biographies everyday, people reproduce and transform their social worlds primarily without meaning to do so; individuals are both produced by, and producers of, history and geography. Because people are endowed with the capacity to resist hegemonic power relations, the production of places, in short, is always contingent. One summary of this perspective was offered as a presidential address to the Regional Science Association. Emotionally, Pred offered applications to Boston, examining the lives of merchants in the nineteenth century as the city was catapulted through waves of mercantile capitalism, industrialization, and a rapidly changing world economy.

One facet of this line of thought led Pred to a sustained concern for the role of language in the making of place and people. As a set of representations of the world that simultaneously shape consciousness and define the meanings given to place, language came to assume a central role in his analysis of social reproduction and local politics. Pred exhibited a sensitivity to the gendered nature of language that few geographers appreciated at the time.

Historical context, the world economy, time geography, structuration, and language were all parts of his ambitious analysis of nineteenth century Stockholm. Having spent considerable time in Sweden, with access to its rich census data, Pred meticulously traced the contingent reconstruction of the city’s streets and neighborhoods as an emerging bourgeois identity was firmly imposed on its landscapes, both annihilating older, preindustrial meanings and simultaneously defeating alternative, working class ones. This project lay at the core of a broader agenda to uncover the historical roots and implications of modernity in general.

Pred’s fascination with Sweden included a growing critical strain. Even in the ostensibly most tolerant of societies, he argued, racism was widespread. Pred thus became a pioneer in geography’s belated examination of ethnicity and race, which, under the impact of poststructural critiques, revealed race to be a set of economic, political, cultural, and discursive relations that shape individual and collective life chances and identity. By contextualizing race as an ideology – that is, as a socially constructed relation, not a pre given biologically determined ‘given’ – Pred illustrated the complex ways in which race is constructed, experienced, and negotiated in everyday existence; how it intersects with class and gender, and the manner in which racial relations of domination and subordination play out over space and time. Like gender, racial and ethnic identity is fundamentally a power relation that typically reflects, reinforces, and naturalizes existing lines of inequality. This body of work was extended to include a critical examination of the ‘war on terror’ and its profoundly political repercussions.

Pred’s long and productive career have established him as a scholar who is both sensitive to the changing intellectual climates of the discipline and as one of its most insightful practitioners. His work exhibits a sustained concern for issues such as power and identity, everyday life and social relations, uneven development, and the interpenetration of the global and local.

See also: Language and Research; Race; Structuration Theory; Transnationalism and Technological Transfer.

Further Reading

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Pregnancy and Childbirth
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Glossary
Abortion The natural or induced expulsion of the fetus from the womb.
Contraception A device, substance, or method that prevents pregnancy.
Ectopic Pregnancy A pregnancy in which the embryo develops outside the uterus, usually in a fallopian tube or sometimes, in the ovary, cervix, or abdominal area.
In Vitro Fertilization A method of assisted reproduction in which a man's sperm and a woman's egg are fertilized in the laboratory and then transferred to the uterus of woman for implantation and development.
Life Cycle Approach An approach to human health that refers to the entire span of a person's life from birth to death, rather than a shorter time period of ill health.
Maternal Mortality Ratio The number of maternal deaths per 100,000 live births.
Obstetric Fistulae Tears between the vagina and either the bladder or the rectum, causing incontinence as urine and feces leak through the vaginal opening.
Obstetric Morbidity Illnesses and disabilities associated with pregnancy, delivery, and the postnatal period.
Safe Motherhood Initiative (SMI) A global initiative put in place in 1987 by the World Health Organization (WHO) with the aim of reducing the health risks of pregnancy and childbirth.
Stillbirth When a baby is born dead at or after 20 weeks of gestation.
Surrogate Pregnancy A pregnancy contracted between the woman carrying the baby and the persons who will raise it, with the intention that the pregnant woman will give up the baby after it is born.

Introduction
A woman's reproductive or fecund years, which begin with menarche and end with menopause (broadly considered the period between 15 and 45 years of age), are when she is capable of becoming pregnant and giving birth. In humans, the gestation period (the length of pregnancy) typically lasts 9 months. During this time, the baby grows in its mother's uterus or womb, receiving oxygen and nourishment and expelling wastes via the umbilical cord, which is attached to the placenta. The latter is an organ that develops during pregnancy to facilitate the exchanges of oxygen, food, and waste between mother and baby. An ectopic pregnancy occurs when the embryo develops outside the uterus, usually within a fallopian tube or more rarely, in the ovary, cervix, or abdominal area. The embryo cannot grow or survive outside the uterus. One in every 40–100 pregnancies is ectopic.

At the close of gestation, labor pains caused by uterine contractions usually signal the onset of the birth process. During labor, which is regarded as the first stage of natural childbirth, contractions strengthen and accelerate in frequency. The duration of labor varies considerably, but averages 10–12 h for women giving birth to their first child (primiparae) and 6 h for women who have already given birth. In the second stage of childbirth, known as delivery, the baby is pushed out through the birth canal (vagina). The third and final stage of childbirth occurs when the uterus expels the placenta as afterbirth. Childbirth, which is also called birth or parturition, is therefore the natural conclusion of a human pregnancy during which the fetus is at least 20 weeks old and occurs when the newborn leaves the mother's womb.

Traditionally, births took place at home with midwives and female relatives in attendance. This practice continued until the twentieth century. Thereafter, the hospital became the site for giving birth for the majority of women in industrialized countries and this is increasingly the case in developing countries. After a hospital birth, the mother and child are often separated and cared for independently. In developed countries, to counter this trend of the 'medicalization of childbirth' and treating pregnancy and childbirth as illnesses, a small number of women are opting for homebirths supervised by trained midwives. Such women wish to fully experience giving birth in the familiar and safe settings of their homes without the use of drugs such as epidurals. An additional incentive is that homebirths tend to be less expensive and that delivery by cesarian section is rare in births taking place in nonhospital settings.

While bringing a child into the world is normally a happy occasion, childbirth can be a stressful event for both mother and infant. Some women experience postpartum (postnatal) depression, a condition that is considered biomedical in its origins due to hormonal imbalances. However, depression is compounded by distress stemming from inadequate emotional, economic, and social support. Contrary to the assumption that sociocultural contexts associated with childbirth in non-Western societies protect
mothers from depression, factors unique to the culture including gender preference and low involvement of fathers in childcare can be a cause of stress to mothers and exacerbate postnatal depression.

Abortions

Not all pregnancies result in a live birth. Fetal death can occur either before 20 weeks of gestation (spontaneous abortion or miscarriage), or at or after 20 weeks of gestation (stillbirth). Spontaneous abortion occurs in about 10–15% of all pregnancies. Induced abortion, on the other hand, is caused deliberately so that the pregnancy is not completed. Because of risks to the woman’s health, most induced abortions are performed during the first 3 months of pregnancy, except in special cases. When performed by medical doctors in a sanitary environment, abortions are safe and relatively simple procedures. However, those performed by untrained persons in nonsterile environments can be extremely dangerous, resulting in serious problems including infertility and even the death of the woman from infection and bleeding.

Induced abortions that are unsafe create a major health hazard for women in developing countries; an estimated 19 million such abortions practiced worldwide in 2000, nearly all (18.5 million) occurred in developing countries. Approximately 10.5 million of the unsafe abortions were performed in Asia, 4.2 million in Africa, and 3.8 million in Latin America and the Caribbean. Practically all of the estimated 68,000 women who die from the complications of unsafe abortion each year live in developing countries of Asia (34,000), Africa (30,000), and Latin America and the Caribbean (4000).

Governments vary widely in their attitudes to abortion. Some provide medical services, while others criminalize abortion, with severe penalties. Termination of pregnancy is illegal in both India and China.

In an imbalanced sex ratio of 120 males per 100 females in China, where the one child policy was strictly enforced, preference for males resulted in 7999 were female fetuses. In India, where the procedure was performed for any reason through the decision in Roe versus Wade in 1973 allowed American women to seek an abortion for any reason through the 13th week of pregnancy. Abortion as a form of birth control was practiced in many countries of Eastern Europe and Japan and continues to be used as an option in developing countries like China and India which wish to stabilize their populations.

New methods, such as testing the amniotic fluid to detect the sex of the fetus earlier in the pregnancy, have made it possible to abort the fetus if it is not of the desired sex. Such sex selection is almost always in favor of male children. In one study of 8000 abortions in India, 7999 were female fetuses. In China, where the one child policy was strictly enforced, preference for males resulted in an imbalanced sex ratio of 120 males per 100 females in 2000. Today, tests to determine the sex of the fetus are illegal in both India and China.

Advocates of legalized abortion cite the dangers to women of unsafe abortion, and the problems of over population and unwanted children. Those opposed to abortion feel that it is akin to taking a human life. The moral versus legal distinction between late abortion and infanticide continues to be a matter of heated legal debate in countries such as the United States of America.

Infertility and Its Solutions

If unwanted pregnancies are a problem, so too is the inability to have children. About 10% of couples of reproductive age are infertile. Women with partners who are infertile or subfertile may turn to artificial insemination by donor. In vitro fertilization is a method of assisted reproduction in which a man's sperm and a woman's egg are fertilized in the laboratory and then transferred to the uterus of woman for implantation and development. Usually, two to six embryos are placed in the uterus at any one time. The procedure was developed to bypass blocked or missing fallopian tubes of infertile women.

If the women's reproductive organs are not functioning properly or if pregnancy may endanger her life, prospective parents may seek a surrogate mother. In surrogate pregnancy, or a contracted pregnancy, a woman carries a child for other persons with the intention of giving up that child when it is born. The surrogate mother is often also the baby's biological mother, although she may be implanted with another woman's fertilized egg. While most surrogate pregnancies occur in Western countries, they are on the rise in developing countries.

Pregnancy and childbirth have many meanings for women, couples, families, communities, and countries. The psychological dimensions of motherhood and bringing new life into the world are as important as the physical aspects of being pregnant and giving birth. The role of culture, economics, social expectations, and healthcare policy are also important factors in the well being of pregnant women and mothers.

Preventing Pregnancy

Any method of avoiding pregnancy is called 'birth control'. The term was coined in 1914–15 by Margaret Sanger, founder of the birth control movement in the United States and an international leader in the field. Reliable methods to prevent pregnancy were developed in the twentieth century as a consequence of scientific advancements and better knowledge regarding the functioning of the human body. Birth control methods can be either temporary or permanent. Today, modern contraception and sterilization techniques allow greater control over fertility, providing women with reproductive
freedoms not possible earlier. However, even before the advent of modern medicine and contraception, fertility had begun to drop in industrialized countries, probably due to later marriage and ‘natural’ methods of birth control based on the woman’s menstrual cycle, abstinence, or withdrawal. At the turn of the nineteenth century, American women bore an average of seven children. By 1900, white women in the United States had halved their fertility to 3.56 children.

There are both chemical as well as mechanical ways of preventing pregnancy, methods that prevent sperm and egg from coming together to form an embryo. Birth control devices and methods have increased in number and sophistication; the vast majority is female centered.

Most methods of birth control are temporary or reversible. The birth control pill was first used in the 1960s. The pill, as it is popularly known, contains hormones (progesterin and estrogen) that interrupt the normal cycle of ovulation by creating an imitation pregnancy. Highly effective if used correctly, its side effects are generally mild: nausea, headaches, and weight gain. However, the pill is not advised for women over the age of 35 years. Diaphragms, caps, and shields are barriers made of thin latex or silicone that are inserted into the vagina to cover the cervix and thereby block the opening of the uterus. These devices are usually used with a spermicidal cream or jelly. A flexible contraceptive ring inserted in the vagina prevents pregnancy. The ring is usually left in place for 3 weeks and taken out for a week. An intrauterine device (IUD) is a small T shaped device usually made of plastic that is inserted in the uterus by trained medical personnel. An IUD prevents a fertilized egg from being implanted in the uterine walls, a necessary condition for the growth of the embryo. IUDs can be used to prevent pregnancy for 5–12 years and can be removed when the woman wishes to become pregnant. However, these devices can cause cramps, bleeding and even infection, and are not considered suitable for all women. Pregnancy can be avoided by inserting an implant containing the hormone progestin under the skin of a woman’s upper arm to prevent ovulation. A plastic patch that releases progestin and estrogen can be placed on a woman’s skin to protect against pregnancy for up to 1 month. An injection containing progestin prevents pregnancy for up to 12 weeks.

Condoms are contraceptives made of thin rubber and are traditionally used by males. Male condoms function as birth control devices by preventing sperm from escaping and coming into contact with an egg cell. Less popular is the female condom, a thin sheath of polyurethane that is inserted into the vagina, thereby lining it. Condoms are also used to prevent the transfer of sexually transmitted disease (STD) between partners. Emergency contraception in the form of pills containing high doses of progestin and estrogen can be used after unprotected sex to prevent pregnancy.

Unlike the methods listed above, surgical sterilization is a permanent method of birth control. The surgery can be performed on either a man or a woman. Vasectomy in males prevents the sperm from being ejaculated with the semen. In women, ligation of the fallopian tubes (tying the tubes) keeps eggs from reaching the uterus. This procedure too must be done in a medical facility. Sometimes, a woman becomes pregnant even after undergoing tubal ligation. Such women face a high risk (60%) of an ectopic pregnancy.

Fertility and Population

National governments are cognizant of the critical role of fertility in population stabilization and development. Countries are concerned about the social and economic ramifications of births within their boundaries, particularly if they perceive fertility to be either too high or too low. Total fertility rate (roughly the number of children a woman has during her reproductive years), has dropped by over one third in both developing and developed countries since 1960. In developing regions, the highest fertility rates are found in Africa, with Uganda heading the list in 2006 with a total fertility rate of 6.9. Africa on the whole has a total fertility rate of 5.1, Latin America and the Caribbean 2.5, Western Asia 3.4, Southern and Central Asia 3.1, and Southeast Asia 2.5.

Many less developed countries that consider their birthrates too high have official government policies to reduce birth rates. On the other hand, most developed countries, especially those with fertility levels below the replacement level of 2.1 are concerned about the challenges they will face if their populations continue to shrink. Many of these countries including Japan, South Korea, and most European nations have adopted pronatalist policies that encourage more births. In 2006, South Korea and Taiwan each had a total fertility rate of 1.1. The rates in some European countries were only marginally higher. Total fertility rate was 1.2 in Belarus, Ukraine, Bosnia Herzegovina, San Marino, and Slovenia; while Germany, the Czech Republic, Bulgaria, Hungary, Greece, Italy, Spain, Slovakia, Russia, and Moldova had a slightly higher rate of 1.3. With the exception of Iceland which is at replacement level fertility, all European countries have birthrates well below 2.1.

Experiences and Hazards of Pregnancy and Birth

As health professionals and societies continue to define pregnancy as an abnormal condition, pregnant women’s bodies are often seen as sick, misshapen, ugly, fat, and
'out of place'. Geographers in particular have investigated the mutually constitutive relationship between women's bodies and their use and experience of space/place, providing insights into the nexus between social relationships, power, and the female body. They have found that as pregnancy progresses, women may curtail their use of public space and reduce or stop activities that could draw attention to their growing bodies. In contrast, as the pregnancy enters its final stages, public expectations intensify, and women's bodily autonomy wanes. Moreover, getting pregnant at an early age, below the age of 15, is more prevalent among women in developing countries, and of the reproductive tract and disabilities for the woman.

Factors affecting maternal morbidity and mortality could draw attention to their growing bodies. In contrast, as the pregnancy enters its final stages, public expectations intensify, and women's bodily autonomy wanes. Moreover, getting pregnant at an early age, below the age of 15, is more prevalent among women in developing countries, and of the reproductive tract and disabilities for the woman.

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of 35. Teenage mothers face a high risk of serious pregnancy related complications and the likelihood of pregnant teenagers dying from obstetric problems is at least 20% higher than for women in their twenties. The risks are amplified for pregnant women less than 15 years of age. Obstetric problems are much greater for women who are in the later years of their reproductive period: high risk pregnancies usually occur in girls less than 18 years of age, women who are older than 35 years, among women with more than four births, and those who give birth less than 2 years apart.

Childbearing among women less than 20 years of age is of particular concern in both the developing and developed worlds. Also sometimes referred to as teenage pregnancy, this phenomenon has both physical and social dimensions. From a biological standpoint, a teenager is not ready for pregnancy. Pregnancy associated hypertension is greatest in early and first pregnancies. The disproportion between the mother’s still underdeveloped pelvis and the full term fetus is greatest in females less than 18 years of age. The risk of experiencing obstructed labor, which occurs when the birth canal is too narrow or deformed for the passage of the infant, is directly related to maternal age, developmental stage, and stature. Obstructed labor is a leading cause of maternal mortality and morbidity among adolescent mothers in the developing world. Adolescents are less likely to seek prenatal care and also to seek unsafe and late abortions which can have a detrimental effect on their health. In 2000, approximately 59% of all unsafe abortions in Africa are performed on young women aged 15–24 years. In the developing world, the highest teenage birth rates of 143 per 1000 women aged 15–19 years are found in sub-Saharan Africa. Adolescent pregnancies in developed countries usually occur outside of marriage and teenage motherhood is associated with lower educational levels, higher rates of poverty, and poorer life outcomes for both the teenage mothers and their offspring. Hence, many governments of industrialized countries are working on reducing the number of adolescent pregnancies. In the developed world, teen birth rates are highest in the United States, approximating nearly 50 per 1000 women aged 15–19 in 2000, although the country has seen a fall in teenage births over the years. Within Europe, the United Kingdom has the highest teen birthrate of about 30 per 1000 women.

Women over 35 years of age also face added health risks when pregnant or giving birth. Many more women in industrialized countries delay having children, apparently in response to the needs of their careers. Older mothers are more likely to miscarry, develop complications such as diabetes and hypertension (high blood pressure) during pregnancy, and their offspring are more likely to suffer from congenital defects.

Clinical Causes of Maternal Morbidity and Mortality

Maternal morbidity or illness during pregnancy and delivery can be induced by a number of clinical causes. The most common of these are hypertension during pregnancy, hemorrhage, obstructed labor, anemia, sepsis, and ruptured uterus. In the mid 2000s, WHO estimated that globally over 300 million women suffered from the short or long term complications of pregnancy and childbirth, with 20 million new cases being added every year. More than half a million women die of complications from childbirth annually, making this a leading cause of death globally for adult women of reproductive age. Hemorrhage, eclampsia, and sepsis are particularly dangerous signs of morbidity, but also account for three fourths of all maternal deaths worldwide.

‘Hemorrhage’ or bleeding during pregnancy is widely regarded as dangerous to the successful completion of pregnancy. Bleeding early in the pregnancy can lead to a miscarriage. Heavy bleeding during or after childbirth can lead to shock, organ failure, and even death if the blood loss is not quickly stemmed through blood transfusion, medical drugs, or surgery. Hemorrhage is a major cause of maternal deaths worldwide.

Hypertensive disease is potentially dangerous as it can lead to eclampsia, a primary clinical cause of maternal illness and death. Swelling, especially of the face and hands, is widely regarded in the medical community as a signal of possible preeclampsia. The regular monitoring of the pregnant woman’s blood pressure, checking her urine for traces of protein and her face and hands for swelling, all signs of possible preeclampsia allows early detection and treatment.

‘Obstructed labor’ can result in vesicovaginal and rectovaginal fistulae (tears between the vagina and either the bladder or the rectum) causing incontinence as urine and feces leak through the vaginal opening. Most women who develop untreated fistula have given birth at home with no assistance from a skilled birth attendant. In Nigeria, it is estimated that 1 in 10 women suffers from the condition following childbirth. In addition, because of the stigma linked to their condition, women and girls with obstetric fistulae are often abandoned by their husbands and excluded by families and communities. In India and Pakistan, some 70% of women with fistula have been abandoned or divorced. Many are forced to live lives of isolation and abject poverty. Obstetric fistulae account for 8% of maternal deaths worldwide.

‘Infections’ such as STDs, especially chlamydia, if not diagnosed and treated can also lead to pelvic inflammatory disease (PID), which has severe and irrevocable effects: infertility, ectopic pregnancy, chronic pelvic pain, and recurrent infection. Infections that occur during pregnancy are called congenital, while perinatal
infections occur around the time of birth. Congenital syphilis and congenital HIV infection can be passed from mother to child. Babies born to mothers with chlamydia or gonorrhea or both can develop an eye infection that may lead to blindness if not treated or shortly after birth. HIV infected mothers' risk of transmitting HIV to their infants range from 13% to 45%. Syphilis and genital herpes appear to be associated with both intrauterine growth retardation and premature delivery, while gonorrhea, chlamydia, and trichomoniasis affect uterine growth and produce premature delivery.

Infections can also occur if aseptic procedures are not followed during the delivery. Frequent vaginal examinations and prolonged or obstructed labor are risk factors for infection. Fever and inflammation are symptoms of infection and can be minimized by maintaining sanitary conditions. Among the long term consequences of infections during childbirth are chronic problems such as pelvic inflammatory disease and secondary infertility as well as complications in succeeding births.

Societal Causes of Morbidity and Mortality

Every society has cultural practices and social norms that influence reproductive health, pregnancy, and childbirth. Religious and personal beliefs and behaviors; social institutions and customs, economic means and constraints, and government policies also affect women's health during pregnancy and childbirth. Female morbidity and mortality are not just functions of physical differences between the sexes, but are also rooted in differences in roles and status in the societies in which they live. In the developing world, gender biases often result in the neglect and undervaluation of girls and women, as seen in their low social status and the discriminatory traditional practices they may face. These factors compounded by poor environmental conditions often result in health problems for women during their reproductive years, particularly during pregnancy and childbirth. Among the most important factors affecting mortality in childbirth are inadequate nutrition and access to quality medical care, where 'access' is affected both by the cost of available care, and distance from health services.

Undernutrition leads to high rates of maternal mortality and morbidity. It also increases the risk of giving birth to a low birthweight infant (i.e., an infant weighing less than 2500 g). If the pregnant woman is well nourished and in good health, complications of pregnancy and childbirth can be reduced. A deficit of adequate amounts of iron, which in its extreme form can cause anemia, increases the risk of both maternal mortality and morbidity. Extremely high prevalence rates of anemia of between 30 and 50% are reported for low income women in tropical countries. In South Asia, over 60% of pregnant women and nearly as high a percentage of nonpregnant women in their reproductive years were found to be anemic. Factors that contribute to the high level of anemia among pregnant women in South Asia include poor dietary practices during pregnancy, infection, malabsorption of nutrients, and malaria. Iodine deficiency has severe negative consequences for mothers and infants, causing impaired mental function, and in creased rates of spontaneous abortions, still births, and infant deaths. Iodine deficiency exists in pockets throughout the world, most often occurring in inland mountainous regions or floodplains where the topsoil is leached of iodine by rain, flooding, glaciation, or snow.

Cultural practices such as female genital cutting (FGC) also called female circumcision or female genital mutilation have grave effects on the well being of women during their reproductive years. The procedure involves cutting or removing the external female genitalia for nontherapeutic reasons. FGC is traditionally practiced among societies mainly located in a band of African countries north of the equator, from Mauritania and Guinea in the west to Somalia and Egypt in the east. It is also found in some parts of South Asia in less extreme forms. It is most often carried out by traditional practitioners on girls that range in age from a few days old to 20 years old. FGC can cause pain, severe bleeding, infections, and even death. It makes childbirth very painful and the woman more prone to infection. FGC is banned in most Western countries, but has accompanied immigrants from areas where it is traditionally practiced.

Families who continue to observe the practice may view genital cutting as both culturally and religiously prescribed, making it difficult to eradicate. There is concern that legislation against FGC may be counter productive, forcing it underground where it is performed in unhygienic settings. Recently, African countries such as Eritrea and Egypt have banned FGC. it has the approval of state governments only in Sudan and Somalia.

Policies for Improving Maternal Health

Special care for pregnant women through public health services was a relatively late development. It was only in the 1930s, about 30 years after the formalization of labor and delivery care that women were offered regular check up during pregnancy as an integral part of maternal care even in a developed country like the United Kingdom.

During the United Nations Decade for Women (1976–85), as the magnitude and scale of the problems associated with poor maternal health became increas ingly apparent, international agencies and government programs placed an emphasis on the health of women during the childbearing period of their lives, but particularly during pregnancy and childbirth. The World
The Health Organization's (WHO's) Safe Motherhood Initiative (SMI) in 1987 was the first to focus specifically on the health of women. In cooperation with other international institutions, the WHO aimed to reduce the health risks of pregnancy and childbirth worldwide through this initiative. The actions proposed included better community based healthcare, referral facilities especially in cases of emergencies, and transport systems.

The SMI's target was to reduce maternal mortality by at least half by the end of the twentieth century. The program has been successful in some countries like Egypt, where the national MMR was halved between 1992–93 and 2000. However, it has not been uniformly successful in all developing countries.

Today, particularly in the developing world, the majority of maternal deaths is preventable through measures such as screening to detect women at high risk (such as very young women, older mothers, women with STDs, and other reproductive tract infections); referring women with complicated pregnancies to higher level care and encouraging them to deliver in health facilities, and providing tetanus toxoid immunizations, iron/folate supplements, and where necessary, malaria prophylaxis to pregnant women. Other measures include ensuring that all pregnant women receive pelvic examinations and monitoring of their weight and blood pressure.

High priorities for care at delivery include provision of hygienic supplies, the training of birth attendants (both traditional and public health staff), and the maintenance of a referral system for complications. The averting of maternal mortality through the combined effects of antenatal (prenatal) care and safe delivery especially for high risk pregnancies are among the most cost effective interventions for adults, and have been highlighted and adopted as specific goals at all key international conferences since the 1990s that focused on the health of women and children. Such major global conferences include the World Summit for Children in 1990, the International Conference on Population and Development in 1994, the Fourth World Conference on Women in 1995 and their 5 year follow up evaluations, and the United Nations General Assembly Special Session on Children in 2002.

The political momentum of the policies formulated at these conferences was echoed in the Millennium Development Goals (MDGs). Goal 5 of the MDGs is to 'improve maternal health'. Its target is to reduce the maternal mortality ratio by three quarters between 1990 and 2015. The goals and targets coupled with a consensus about how to tackle maternal mortality technically, greatly improves the prospect of reducing women’s death and disability rates due to pregnancy and birth.

International efforts to reduce maternal mortality are also looking to assist states deliver the right services to women through their health systems, particularly in rural areas in developing countries.

Advocacy for improved maternal health and women's health overall, as articulated in the conferences in Cairo and Beijing, are grounded in the notion of women's rights. There is also greater recognition that women's reproductive rights, such as choosing when, if, and how to give birth should be safeguarded and promoted. Pressure to restrict and rescind access to abortion, forced sterilization of minority women such as the Romani in government run health facilities in the Czech Republic and Slovakia not only during the Communist era, but also as recently as 2003; and the restriction of access to an array of contraceptives are all regarded as infringements on women's reproductive rights.

The idea that women's health status is a result of the accumulation of conditions that began earlier in life has led to looking at maternal issues within the context of the life cycle approach. The life cycle refers to the entire span of an individual's life from birth to death. Organizational initiatives such as the Women's Global Network for Reproductive Rights (WGNRR) underscore the need to address a wide range of issues concerning maternal health, mortality, and childbirth, not just fertility control. Currently, even programs that promote women's reproductive health are steering away from a narrow focus on the biological aspects of fertility such as pregnancy and birth, and looking to improve sociocultural aspects that impinge on the lives and health of girls and women over the entire life cycle. Recognizing that all of society is implicated in women's health, the organizational frameworks of many reproductive and maternal health programs also look to incorporate men and indeed, all of society in the process.

See also: Body, The; Chicago School: Health Geography; Medical Geography.

Further Reading

Relevant Websites

Introduction

The private/public divide is a central concept in political and legal debate, as well as much everyday conversation. Because of this prominence, as well as the frequency with which the concept is articulated in spatial terms (refer ring either literally, or metaphorically, to the distinction between public and private spaces), it is also of con siderable interest to many human geographers, particu larly those concerned with issues such as gender, power, and property. While the private/public divide is a com mon entry point into debates about the organization of space and society, the meanings of the terms private and public are often unclear. There is a lack of consensus on how they should be used, and what they refer to. This ambiguity of meaning appears to add the rhetorical power of the divide by lending it flexibility: in many arguments, opposing sides can and do invoke the dis tinction to support radically different views.

The private/public divide has been characterized as one of the grand dichotomies of Western thought. It is a conceptual opposition that divides the world into two mutually exclusive categories, which together appear to account for all elements of human life and experience. This distinction is not only all encompassing, but also hegemonic in that it tends to subsume other social distinctions (e.g., politics/economics and work/home). While the private and the public are understood as opposites, they are also inseparable: to speak of one particular sphere of life, such as health care, as being the private suggests that there is a private alternative. Similarly, public space stops where private space begins (and vice versa). Because private and public are generally thought to account for the entirety of the human world (although geographers have identified alternative ways of characterizing some spaces), it follows that the extension of one sphere (or space) will invariably reduce the scope or power of the other.

Expansions and contractions of public and private in fluences, and spaces, typically prompt normative judge ments. In neoliberal discourse, for example, governmental intervention into the free market is often portrayed as a worrying, inefficient, and unjustified intrusion of public authority into the private world of freely contracting individuals. Many people, of course, contest this assess ment – but typically do so using the same broad vocabulary of public and private spheres. This points to the pervasiveness of the assumption that all elements of the human world can, and should, be labeled as either public or private (although fair minded individuals can and do disagree as to how this labeling should proceed).

Historical Distinctions

In discussing public and private, we are dealing with categories of Greek origin. In the Greek city state, Hannah Arendt writes, the private/public distinction mapped onto a distinction between the polis, which was common to all free citizens, and the oikos, or household. The public sphere of the polis was constituted by political speech and common action, the latter including the waging of war and competition in athletic games. This realm existed by virtue of a patrimonial slave economy centered on the private sphere of the oikos. The labor that was performed in this sphere by women, slaves, children, and foreigners provided household masters with the foundation and autonomy that were pre requisites for engaging in public life. While private life was a realm of necessity (both economic and biological), the public sphere was envisioned as a realm of freedom. The polis provided a setting in which citizens could distinguish and immortalize themselves: while citizens interacted as equals, each sought to excel. Arendt recommends this public sphere as a model for refocusing politics on the public good – although in so doing ar guably paints herself as an apologist for a world in which only a handful of males were able to participate in public life, with the great majority of the population slaving (often literally) to satisfy their private needs under constant threat of violence.

If a clear distinction between public and private was characteristic of the Greek city state, the same could not be said for feudal Europe. Under feudalism, royal and ecclesiastical authority, the apparatus of the state, the economic world of production and consumption, and the domestic life of the family were all part of a unitary hierarchy. This was a system based upon a web of per sonal ties and dependencies, and all aspects of life were at once personal and political. Change was brought by a variety of factors, including the emergence of liberal
political thought, which argued for a private realm within which every rational individual was free to exercise his own judgement and make choices (particularly in matters of economic exchange and religious belief). This personal freedom came to be expressed in the form of individual rights which determined the boundaries of state power.

The right to religious freedom secured one of the first spheres of private autonomy, promising that the individual (and, by extension, the family unit) was not accountable to external authority in matters of belief. In particular, the authority of the state to coerce individuals to accept or reject particular conscientious beliefs was circumscribed. While this foundational liberal principle is well known, its application continues to be highly contested: especially within the spaces of public institutions such as schools, and occasionally parks, court houses, and legislatures.

With the ascendancy of this school of thought, and the rise of a mercantile economy, social and economic relations began to lose their directly political character: a civil society of privately contracting individuals began to stand in opposition to the public authority of the state. Jürgen Habermas provides a highly influential account of this process, which culminated in the emergence of a bourgeois public sphere, in which relatively prosperous individuals came together to debate questions of public interest in a so called rational manner. He goes on to describe and evaluate this sphere in a largely aspatial fashion, presenting it as a suite of institutions and activities that mediated between a private sphere founded on the free market (often referred to as civil society) and a formal public sphere of state authority. Through reasoned written communication, as well as face to face debate, Habermas claims, the emergent European bourgeoise created public opinion. While aware of the exclusion inherent in this sphere (e.g., of the working class and, in many instances, of all women irrespective of socioeconomic status), Habermas praises its normative potential as an ideal for participatory political action.

**Contemporary Definitions**

Defining the private/public divide today is no easy task, in part because of its lengthy and much debated heritage. One useful starting point is the observation that it does not refer to a single dichotomy, but rather a set of interrelated binary distinctions. While unifying or common themes may be identified among these alternate definitions, four of which are considered below, they also differ in important ways: they point to different phenomena, rest on different understandings of the social world, and are underpinned by different ideologies. Identifying and analyzing these alternative definitions can become so complex a task that one loses sight of the social meaningfulness of the terms involved. Although no single, unproblematic definition of the private/public distinction can be offered, and although scholars sometimes advance incompatible conceptualizations, the words private and public still appear to mean a great deal in everyday life. To speak of public space, for example, is to suggest certain expectations about access, ownership, and use of that space — even though we may not be certain who owns that space, or for what purpose.

Some understandings, or conceptualizations, of the private/public divide are particularly prominent in academic, legal, and popular discourse, and four are considered here, following the work of Jeff Weintraub. The first approach is strongly associated with liberalism, and prevails within much economic debate and public policy analysis. It equates the difference between public and private with that between the state and the market economy. It is often invoked within discussions over whether a particular good or service (again, health care is a pertinent example) should be supplied by the market, or subject to some form of governmental intervention up to and including complete state control. Such arguments often center on where the line between the public (as the state) and the private (as the market) should be drawn: they seldom ask whether it should be drawn at all, or whether it should be conceived of in altogether different terms.

A second understanding of the distinction is based in classical and republican philosophy, and understands the term public to refer to active political life, which is envisioned as analytically distinct from both the private realm of the market and administrative matters of government. At the heart of the public realm, in this model, is discussion, deliberation, and decision making about issues of legitimate collective concern. It is this understanding which is typically invoked when people speak of participating in public life, or contributing to public debate. The work of both Hannah Arendt and Jürgen Habermas, referred to above, sought to characterize and theorize the public life of active citizens (in Ancient Greece and nineteenth century Western Europe, respectively). Habermas, for example, identified a public sphere which was a site for the production and circulation of rational debate, and the communication of common concerns. It was conceptually distinct from both the formal apparatus of government, and the market economy.

A third distinction centers on different forms of social activity, counterposing the intimate relationships found in the family home with the social interaction of diverse individuals and groups found elsewhere. According to this view, public life is not about politics (however this term might be understood) but about social interaction with strangers and casual acquaintances. This understanding of public life is often invoked in considerations...
of the extent to which urban public spaces promote (or inhibit) social activity – a central concern of new urbanism, for example.

Finally, feminist thought conceives of the difference between private and public in terms of the distinction between the family and the wider economic and political order. In general terms, the family home is seen to represent the private realm, as is the case for those theorists primarily concerned with different forms of sociability. The public sphere is not defined solely in terms of social interaction, however, but also in terms of the state, the official economy of paid employment, and arenas of public discourse. A central concern is the relationship between the public sphere of formal economic production (and paid labor) and a private sphere of domestic reproduction (and unpaid labor). Feminist scholars have developed powerful critiques of this distinction, noting not only the exclusionary nature of the public realm, and the exploitation which can occur in the private realm, but also the connectedness of the private and the public, a point considered in the following section.

In reflecting on these conceptions of the private/public divide, and others, it is possible to follow authors such as Weintraub, and Benn and Gaus, in identifying multiple axes of differentiation:

1. What is political versus what is nonpolitical.
2. What is personal versus what is societal.
3. What is hidden versus what is open, revealed, or accessible.
4. What is individual, or pertaining only to a distinct group of individuals, versus what is collective, or of concern to the whole community.

Each of these axes is expressed as a dichotomy. Yet it is possible to conceive of public and private as existing on a continuum, which allows identification of degrees of publicness and privateness. Thus, a space in public ownership, such as a remote park or beach, might be perceived as relatively private when visited by very few people, but grow to be more public as it becomes more widely known, popular, and/or accessible. While such a continuum is appealing, it cannot alter the fact that there are separate sets of criteria that may be used to define public and private in the first instance (in this case, the third axis identified above is most pertinent).

Clearly, the private/public distinction is complex, and somewhat treacherous. This is true in both theory, and political practice – where those spheres of life often identified by those on the left of the spectrum as properly public are consistently characterized by many on the right as properly private (and vice versa). For example, left wing thought conventionally recognizes a legitimate public role in limiting and regulating the economic power of property owners, while right wing thought often emphasizes the need to protect the privacy of such power. Conversely, many in the left support greater privacy in matters of civil liberties and reproductive choices, while many of those on the right advocate public regulation and stronger state control in these areas. The private freedoms recognized by left and right are often opposed, sometimes diametrically, although once again we can see at least one commonality: both sides generally believe in the normative and analytic value of labeling particular phenomena, public or private.

Maintaining the Distinction

The liberal distinction between the private sphere of economic activity and the public sphere of government action is today the most commonly invoked private/public distinction. It is powerful for a number of reasons. First, it maps on to a spatial distinction between real property owned by private individuals and corporations, for their own use and benefit (i.e., private space), and that owned by local government and the state, typically for the use and benefit of the wider public (i.e., public space). Second, it is policed by the legal system, which invests considerable energy in maintaining the boundary between the private realm of individual actions and the public sphere of state action. Moreover, the compartmentalization of human affairs and concerns into public and private spheres is often presented as preordained and politically neutral. Yet, as the discussion of left and right wing political positions above suggested, maintaining a meaningful distinction between matters of state concern, and those of concern only to private actors, is a difficult and ultimately ideological process. Indeed, a number of scholars have suggested that the distinction is arbitrary and ultimately unsupportable.

One critique notes that public authority is thoroughly caught up in activities deemed private – not least of all because it is the state that defines, protects, and lawfully abridges the rights of individuals (including the rights of private property owners). This school of thought points to the implausibility of a private economic realm, when the free market is in fact a political choice, and one that is made possible by virtue of public enforcement of private property and contractual rights, especially within the legal system. Such arguments connect to a long tradition of socialist thought which presents the liberal private/public distinction as serving a primarily ideological purpose. Far from reflecting natural or innate differences between the state and the market, it functions primarily to depoliticize the inequalities that result from private ownership and control of property. If one accepts this line of reasoning, the relevant question for political debate becomes not whether the state ought to intervene in private affairs, but on whose behalf it is already intervening.
A related critique, advanced by many progressive political groups, seeks to publicize, and politicize, issues traditionally deemed private. They have highlighted, among other issues, racial and gender discrimination, exploitation in the workplace, violence against women and children, and the impacts of private decision making on the natural environment. One consistent theme of struggles against oppressive social relations has been to change their designation from private and nonpolitical concerns to legitimate issues of public interest and political intervention. In this they have achieved considerable success. However, it is not only the political left that can reconfigure the private/public divide: right wing thought has responded to the rise of progressive politics with forthright reassertions of individualism and private property rights (often envisioned in absolute terms).

Additional critiques of the private/public divide can be found within feminist thought. Feminist analyses of the distinction have taken at least three forms: some have deployed it as an analytical tool for examining prevailing social relations, others have sought to alter it by challenging existing designations of particular arrangements as public or private, while a third approach has sought to collapse the distinction altogether as part of a broader critique of the dichotomies that pervade Enlightenment thought. One school of thought within the third of these approaches emphasizes what women’s unpaid domestic labor reproduces (both physically and ideologically) the paid labor that the capitalist economy requires. Taken to its logical conclusion, this argument subverts the collapse of a whole range of relationships that have been understood to encompass the right to exclude (the archetype being the private home). This basic geographical manifestation of the private/public distinction plays an important role in shaping social behaviors and expectations. Most children are taught, from a relatively young age, about the meanings of property boundaries, and why they cannot enter privately owned spaces without permission. The benefits of private property ownership have been understood to encompass the right to exclude not only other members of the public, but also the public authority of the state (although today the latter right is significantly conscribed by an array of legislation). Public space, by contrast, is ideally open to all.

At first glance, public and private seem to exhaust the possibilities of property ownership. On closer inspection, however, the situation is more complex. Many geographers have reflected on the extent to which much of the public life of cities now occurs in privately owned spaces, especially spaces of consumption such as shopping malls. These spaces are clearly open to the public, on whose custom they depend, and have become sites of public sociality – often to the detriment of publicly owned streets, parks, and squares in downtown areas. At the same time, they are privately owned and controlled, with management free to invoke the law of trespass to exclude unwanted guests for almost any reason (or, indeed, for no reason at all). Accordingly, shopping malls, retail tunnels and walkways below and above cities, and privately owned festival sites have been labeled quasi public spaces.

The rise of quasi public spaces, especially in suburban locations, has prompted a variety of responses in downtown areas concerned about real or potential decline. One such response has been to remake the downtown’s public owned spaces in the image of private commercial spaces. This has involved increased regulation and policing of public spaces with a goal of attracting middle and upper class consumers back to the city. In many instances, this has entailed an increasing role for local private property owners and major corporate tenants in governance, greater levels of private commercial activity, and a prominent role for private security in enforcing rules of public comportment. The net effect, it has been suggested, is to create quasi private spaces, which are formally owned by the state, in the name of the public, but are subject to control by private interests, often to the detriment of the poor and homeless. For many authors, this privatization combined with increasingly intense and exclusionary regulation, constitutes the death of public space.

In some respects, this characterization is not unreasonable – the principles of public stewardship and open access are severely eroded, while the power of private actors is significantly increased. Yet, a privately controlled and public space without members of the public present, preferably in large numbers, would be a failure, even by the relatively narrow terms of its...
regulators and promoters. What such transformations often entail are partnerships between public (governmental) and private (commercial) interests to redevelop a space so as to make it more attractive to a relatively prosperous, consumption oriented, security conscious public, and to foster bourgeois forms of public sociability, at the expense of more marginal publics previously present in that space. In the process, some public (collective) interests, such as the desirability of a relatively safe, economically productive downtown, may be advanced, while others, such as social justice, and right to exercise free expression, may be circumscribed.

In considering such issues, the multiple meanings of the private/public divide are once again apparent. With respect to material space, it is clear that merely identifying the owners of a particular site as either public or private actors may go only part way to describing how private and public interests are weighted at that site. Moreover, while the terms public and private are almost invariably used in opposition, it is clear that many spaces cannot be neatly characterized as one or the other. There are many sites at which public and private interests converge. In contemporary Western cities, the shopping mall is often a particularly clear example of this convergence. Moreover, however, we can also observe that state authorities have a long standing interest in regulation and surveillance of the family home, and the rights of private property owners to use space as they see fit are often extensively conscripted in the public interest. In some less developed countries, activities which appear deeply private to many Western eyes – such as personal cooking and cleaning, as well as small scale commercial activity – occur in the public space of the street. Thus, the geographies of state regulation, as well as those of everyday social life, often bear only a partial resemblance to formal distinctions between private and public space.

Summary

There are many options available when seeking to draw a line between private and public. Yet, whichever option is adopted in a particular case, the result can be socially and politically meaningful. In particular, as both feminist and socialist critics of the divide have noted, the characterization of certain issues and spaces as private typically has the effect of shielding them, at least partially, from critical analysis in the public world of debate and democratic decision making. This is not necessarily to condemn the private/public distinction, nor to advocate its demise; it is simply to recognize its social power. Indeed, abandoning the distinction could also produce socially and politically deleterious results: it would undermine the right to privacy, and potentially expose every aspect of human life and activity to greater external scrutiny, particularly scrutiny from impersonal institutions. For some commentators, this is the recipe for a totalitarian nightmare.

Early theorists of the divide often suggested that a clear and unproblematic boundary can and should be drawn between private and public: for both Arendt and Habermas, the public sphere of political action was founded upon a private sphere devoted to production and reproduction, yet properly distinct from it. Much contemporary debate is more critical. Geographers have contributed to this critique in a number of ways, in particular by illustrating that private and public may be more tangled than often thought. While it is common place to characterize the owners of spaces as either private or public, this distinction is formalistic, and belies the extent to which private and public interests and concerns often overlap in the same space.

See also: Central Business District; Feminism/Feminist Geography; Home; Liberalism; Malls/Retail Parks; Neoliberalism; New Urbanism; Philosophy and Human Geography; Public Space; Public Spaces, Urban.

Further Reading

Glossary

**Deregulation**  It refers to the shift in societal organization away from government-led regulations and procedures toward market-based systems of allocations alongside increased private responsibility for social and economic outcomes. The term ‘market liberalization’ is often sued as a synonym for deregulation. Market liberalization refers to the removal of government regulations controlling the nature and extent of market transactions.

**Keynesian**  Keynesianism refers to the practices of macroeconomic management based on the writings of British economist John Maynard Keynes (1883-1946). Keynesian asserts that the level of economic activity in a domestic economy is based on the level of aggregate demand - due principally to private consumption, investment spending, exporting, and government expenditure. Economic management based on Keynesianism principles assumes that government expenditure can be manipulated to a society’s advantage to compensate for the relative performance in other forms of demand. Keynesianism thus asserts a prime role for governments in the positive management of modern economies. Keynesian was the predominant form of economic management in industrial economies in the decades after World War II.

**Governance**  It refers to the assemblage of laws, regulations, and conventions that control and steer the operations of a society. This assemblage also includes the institutions that build and reproduce these laws, regulations, and conventions.

Introduction

Privatization is the transfer of publicly owned or publicly operated means of production to private ownership or operation. The argument for this transfer is usually that privately run enterprises are subject to the discipline of the market and therefore they will be more efficient. A related argument for privatization is that enterprises that are privately owned are more valued and better maintained. Both arguments support a view that privatization maximizes public benefit and welfare.

The nature and extent to which states should be involved in the affairs of the market are as old as the idea of the state itself. Urgings for privatization are equally historical. The discussion here, though, focuses on the contemporary period and its antecedents in the years following World War II.

Types of Privatization

Privatization is a complex thing. It is the subject of intense political and economic debate, yet often with indistinct or confusing categorizations. In order to provide some clarification, four distinct forms of privatization are discussed in the following.

**Sale of Public Assets**  The most common form of privatization is the sale of publicly owned enterprises, also called state owned enterprises or SOEs, into private ownership. In developed nations this form of privatization has involved the widespread sell off of SOEs and utilities that were established or nationalized in the two decades following World War II. During this period it was common for governments to take control of the production of goods and services in certain sectors for specific public interest reasons. One reason was to protect the public from unreasonable behavior by a producer that might have had a natural monopoly for the supply of a good or service giving it unreasonable power over price, delivery conditions, or quality. Examples of natural monopolies in the post war period included postal and telecommunications services, public health and education services; water, electricity, and gas supply; police and most public transport services.

Another common reason why states expanded public ownership was to build their capacity to generate national economic growth and prosperity. Common post war nationalizations and SOE startups involved mines, steelworks, coastal shipping lines, airlines, banks, and insurance agencies. Government enthusiasm for public ownership often over rided strict economic management criteria, however, with public ownership pursued for reasons of national sentiment rather than purely in the pursuit of efficiency or fairness. Owning a national airline, for example, became a common practice.

Public ownership of productive enterprises was even more pronounced in the communist bloc nations, now rebadged as the transition economies. These are the economies emerging from long periods of state socialism and communism, especially the former USSR and the Eastern European nations. The sale of state owned assets and enterprises has been a key component of privatization in these nations in their transformation.
from command to market economies, although the actual nature of privatization has varied markedly from one nation to the next. Privatization in Russia has involved a variety of means including the distribution of ownership shares to Russian citizens through voucher schemes, share auctions, and outright sales of SOEs to both domestic and foreign interests. In contrast, the Czech and Slovak Republics have relied heavily on voucher privatizations while Hungary’s privatizations have involved a high concentration of direct foreign sales.

A major impediment to the success of the privatization programs in the transition economies has been the slowness in implementing appropriate regulatory systems to govern the operation of private markets and to determine the conditions of private ownership including rights to ongoing transfer. Another has been the tardiness of the banking system across the transition economies to meet the demands of the newly privatized entities. A further issue, not yet adequately addressed, and one which has been most manifest in the large utilities, has involved the problem of labor displacement as newly privatized or marketized enterprises seek productivity gains by drastically cutting staffing levels.

Public ownership of productive enterprises has been a more recent phenomenon in developing countries. Typically, these nations have had only a short period of independence following their emergence from European colonialism in the mid and late twentieth century. Consequently, national control and operation of public enterprises in developing nations have been limited. Nevertheless, the reversal of public ownership in these nations has been as prominent as in developed and transition economies. According to the United Nations Conference on Trade and Development (UNCTAD), a majority of the 50 largest privatizations in the world during the 1987–99 period were in developing countries. The most common form of privatization of SOEs in the developing world has been by direct sale to both domestic and foreign interests.

Some of the most significant privatizations of SOEs around the world have been British Airways (1987), British Steel (1988), Deutsche Telekom (1996), the Italian gas and energy producer ENI (1996), the French oil and gas producer Total (1996), the Chilean telecommunications company ENTEL (1986), the Commonwealth Bank of Australia (1991–96), and the Canadian electricity utility Ontario Hydro (1999).

Shift from Provision to Procurement

Privatization also refers to a shift in responsibility for the provision of basic and community services. A common expectation around the world is that nation states will organize the provision of basic services to their citizens. Many of these services fall into a category called public goods, which are goods or services that are created through universal provision. This means that most, if not all, of the benefit of the good or service is severely curtailed should it only be offered as a private or commercial commodity. A suburban road is one example since its purpose is to give all residents of a neighborhood access to a common thoroughfare for movement to and from their homes. The personal and private provision of roads in urban areas makes no sense. A viable suburban road can only exist as a public good. Likewise, a public health service is a public good since the general health of any community depends critically on the maintenance of minimum levels of health among all individuals such as by the control of communicable diseases through immunization and vaccination programs. So too, day to day life requires a universal police service to ensure the orderly and safe movement of people and goods including the protection of property.

Yet many governments, while retaining responsibility for ensuring that basic, or public, goods and services are available, have privatized their provision. This means they have moved to a model of procurement and away from one of direct provision. In education, health, or child care, for example, this has involved direct payments by governments to private providers to ensure citizens have access to services without governments being directly responsible for their provision. Sometimes this type of privatization is accompanied to cover part of the cost with exemptions provided to some users on equity or need criteria. Many of the world’s public health systems now rely on private providers with a contributory or co-payment requirement of users. Other examples of the shift in government role from provision to procurement include privately operated toll roads and railways, contracted garbage services, private water supply companies, the substitution of private security for public policing services such as at football matches and rock concerts and for protection of more exclusive private property, and even military functions such as supply, ordinance, and frontline roles in the Iraq war (2003–).

The shift to procurement can also involve enlisting agencies from the nonprofit sector. This has become increasingly common in the provision of welfare and employment assistance services with governments engaging charity and religious based organizations, for example, to manage high risk groups on a contract basis. Commonly, not for profit groups are seen as effective ways to target those householders seemingly beyond the service capabilities of government agencies and private (for profit) providers.

Shift to Market-Based Regulatory Systems

Privatization also refers to the shift in regulatory roles away from centralized determination by governments and
government agencies. This type of privatization is also a form of deregulation. Some of the impetus for regulatory shift comes from globalization. Examples include the removal of controls over the exchange rates of national currencies and the interest rates chargeable by private lenders, the setting of global standards in a wide variety of industrial sectors by the privately run International Standards Office, and the monitoring of global health standards by the partially privatized World Health Organization. At a national level, examples of the shift away from state led regulatory systems include industry based regulatory bodies, sometimes called self regulation systems, such as involving the media sector, public advertising or product safety; shifts away from centralized, state administered labor regulations to work arrangements based on employer–employee contractual relations; and the replacement of authorities with responsibility for the conduct of social and sporting events with bodies drawn from the voluntary and community sectors. The shift in regulatory responsibility away from the state, or the abandonment of regulations altogether, are often described by reformers as market liberalization policies.

Transformation of the Modern State

Privatization in its broader sense refers to the contemporary political transformation of the role of the state. This transformation elevates a preference for laissez faire liberalism above state centered collectivism as society’s principal organizational rationale. A regime of privatization is seen to maximize efficiency and enhance individual choice and freedom through a reliance on private property rights and market forces. State led collectivism, on the other hand, is seen to produce heavy handed regulation, inefficient bureaucracy, and a brake on progress. In this broad sense, then, privatization is a mode of societal and economic organization within the ideology of neoliberalism which has specific preferences for private ownership, monetized ways of measuring value, market based regulation and control arrangements, and individual, merit based reward and advancement systems. Privatization, according to proponents of neo liberalism, is seen as more capable of delivering a prosperous, efficient, and equitable modern society.

If this were indisputably true, however, then the embrace of privatization around the world would be uncontroversial. Yet privatization is a contested and controversial process. Importantly, theoretical arguments over how best to allocate economic responsibilities between markets and the state are enduring. Markets are preferred when they operate under certain conditions. Usually these are that there are no significant externalities in production or consumption, that the product is not a public good, that the market structure is not monopolistic, and that information transfer costs are relatively cheap. When some or more of these conditions are absent, markets have a tendency to fail on efficiency, effectiveness, and fairness grounds requiring some form of state led organizational vehicle, SOE, or utility to take a lead role. When market failure is likely, then, government intervention or takeover, to a greater or lesser extent, is desirable.

For these reasons, privatization, in any of its forms, has not overwhelmed the organization and provision of goods and services around the world. While privatization has shifted significant resources and means of production across to the private sector, the state still remains a key producer of public goods, the prime regulator of economy and society, and the most significant entity for the advancement of social well being in sustainable and equitable ways.

History of Privatization

In the developed world, the focus of privatization has been the dismantling or diminution of the powerful and pervasive type of nation state that was assembled in the post World War II period, especially in the UK, Western Europe, Australia and New Zealand, and to a lesser extent the USA. The presence of the state rose in four major ways: as a hands on manager of a nation’s macro economic conditions; as an active regulator of society’s industrial, social, and environmental affairs; as a major producer of social and public goods and services; and as a producer of producer and consumer goods and services for commercial sale.

The motivation for this rise was threefold: (1) rehabilitation following the war, (2) economic insurance following the 1930s depression, and (3) Cold War competition between the developed world and the industrially advancing communist nations of Eastern Europe. In the UK, for instance, there was extensive nationalization of mines and industrial production such as iron and steel production, major investment in state owned transportation systems and utilities, and the rollout of comprehensive national health and social welfare systems. Likewise, post war French governments nationalized and developed air transportation, banks, insurance, mines, utilities, armaments and aircraft manufacturing, and even the Renault motor vehicle operations. As early as 1949, the French state owned over one fifth of the nation’s industrial capacity.

The substantial levels of economic growth that delivered widespread benefits across the Western nations also ensured that the mix of public and private involvement in economic production and management remained relatively stable in the 1950s and 1960s. Moreover, this mix became a model for economic growth
and development for newly independent developing nations. Prolonged worldwide economic stagnation in the 1970s and 1980s, however, saw the capacity and role of the Western nation state attacked vigorously. Privatization became a significant part of a conservative reform agenda in a conscious move to shift control and ownership of productive resources to private sector entities. At the same time, those activities left in state control and responsibility were subject to reforms which have been described by some as “the marketization of the state.” This involves the application of performance measures and operational principles that require government agencies to perform as if they were operating in a prices led market system.

Britain’s privatization program was particularly aggressive following the election of a Conservative government in 1979 under the leadership of Prime Minister Margaret Thatcher (1979–90). By the time of the defeat of John Major’s (1990–97) Conservative government in 1997, UK privatization sales are estimated to have totaled £65 billion and the contribution of nationalized industries to gross domestic product (GDP) estimated to have fallen from a 9% share to just 2%. Privatization was adopted for similar reasons elsewhere in Europe though at a more measured rate. In the US, where nationalized industries were historically rare compared to Europe, privatization activity during this period, especially under the leadership of President Ronald Reagan (1980–88), was directed more at diminishing the role of the state as a macroeconomic manager and as a regulator.

The collapse of communism in Eastern Europe in the late 1980s and early 1990s saw the onset of massive privatization measures in that region. As we have seen, the rapid shift to capitalism in what are now known as the transition economies involved widespread dismantling of systems of state planned and state controlled development and the sell off of SOEs. The pattern of privatization in the transition economies of Eastern Europe drew heavily on what became widely known as Thatcherism.

Concerted privatization programs in the developing countries also date from this period. The initial impetus for the sell off of SOEs came from rising public in debt and, related, a desperate need to raise public finance. Sheding SOEs and a preference for market liberalization and privatization became critical parts of the International Monetary Fund’s (IMF) structural adjustment programs for developing nations in need of assistance. An IMF led structural adjustment program typically involved a retreat from Keynesian based fiscal strategies in favor of fiscal austerity and balanced budgets, a reliance on liberalized markets for the allocation of productive resources and for international trade, the promotion of private property as the dominant form of ownership, and a concentration on good governance – especially through law and order, and anticorruption campaigns – rather than active economic management as the prime duty of the state. Support for market liberalization and privatization in the developing nations came also from multilateral donor and regulatory agencies which added to the compelling nature of the liberalization and privatization agenda.

China, as ever these days, is a special case. Privatization of the Chinese economy commenced in the late 1970s with the drive for national economic reform. Privatization commenced first in the agricultural sector with a massive transfer of land ownership into private household management under the household responsibility scheme, collective ownership falling from 93.5% of agricultural land in 1978 to just 7.9% in 1985. In the non-agricultural sector, privatization has been advanced primarily by the encouragement of the growth of privately owned small and medium sized enterprises with only limited sale to date of China’s SOEs. Nevertheless, the penetration of the Chinese economy by private enterprise in the 1980s and 1990s was very significant with nonstate enterprises contributing 71.8% of industry output in 1998 compared with 21.3% in 1980. Similar transformations have occurred in the retail, transport, and construction sectors.

**Impacts of Privatization**

There is a substantial literature which measures and analyzes the impacts of privatization. This literature finds that privatization has, in general, led to higher rates of growth in national income and wealth creation but these have come at the expense of increased levels of social and regional inequality.

While the benefits of privatization are, arguably, widely available due to the general boost to national income that is generated, the costs of privatization are invariably borne disproportionately by certain groups and regions. This follows especially from the labor shedding that typically follows privatization programs. Regions that host SOEs or utilities targeted for privatization thereby suffer higher than average unemployment rates especially where these regions have specialized historically in SOE or utility activity. Examples of such vulnerable regions include coal and hydro regions that have spawned electricity generating authorities, and specialist industrial cities and regions that are dominated by SOEs.

Paralleling these negative regional experiences of privatization is the impact on specialized occupational groups. Increased efficiencies from a privatized SOE or utility can result from labor intensification, the
substitution of capital for labor, outsourcing to other private sector firms, and from technical change and innovation. All of these will reduce employment demand for workers with traditional, inflexible skills working in jobs designed specifically for a particular SOE or utility. These workers will find transfer to new jobs difficult especially if they are older and located in vulnerable regions.

Beyond workers and regions, assessing whether any particular nation is worse or better off following its experience of a substantial privatization program is a very difficult task given the highly complex reasons for successful economic performance. Yet strong, consistent growth in the developed world, in many newly industrialized countries, and in China and India during the 1990s and the first decade of the twenty-first century, has coincided with the implementation of liberalist economic management policies, including privatization. Not surprisingly, then, the world’s general experience of privatization has changed the way we think about the state and about the economy in profound ways.

The state is now a much changed entity from the immediate post-war years, seen as having different responsibilities, significantly different operating domains and territories, and much altered capacities. These flow directly from an acceptance of a reform package with privatization at its center, including floating exchange rates; a preference for monetary policies over activist, or Keynesian, macroeconomic tools in national economic management; a shift to individual over collective responsibility in social and industrial settings; and, in general, a trust in market procedures rather than centralized planning for the distribution of productive resources and outputs.

The Political Debate over Privatization

Placing the market as the central organizing device for the organization of society derives directly from neoliberalist arguments about the value of markets as effective organizational devices. There are various rationales for the primacy of the market and therefore for privatization in its various guises. The main one draws on arguments from the writings of Frederick Hayek (1899–1992) which advanced the view that privately run markets are capable of processing an infinite number of wishes and preferences as compared to governmental bodies which can only conscientiously consider a handful of pieces of information relating to an issue. Hayek considered the market to be both a more efficient regulator of human endeavor as well as a more democratic arbiter for the allocation of resources to households with competing needs and wants. A provider that fails to match the standards desired by a population will go out of business, according to Hayekian thought, while all sorts of inefficient, corrupt, and undesirable practices are seen as being cultivated within government-run regulatory regimes especially because of the inability of the regulator to process all relevant information.

Hayek was the prime motivator for a package of reforms – trust in markets, the adoption of privatization, the shift away from a central role for the state in economic management – devised in the US in the mid-1970s through the aggressive political activity of the Chicago School led by Nobel Prize winner Milton Friedman (1912–2006). Labeled neoliberalism, the market-based philosophy underpinned Thatcher’s social and economic reforms in the UK in the 1980s, and then elsewhere, in the ensuing decades. Market-based neoliberalism has now displaced social collectivism as the dominant mode of social organization in most Western societies. This can be seen in the expectation that individuals are primarily responsible for a household’s economic well being, that privately organized production systems outperform those organized by the public sector, and that market failure itself is caused primarily by inappropriate intervention or regulation measures by the state and its agencies, an argument articulated most prominently by public choice theorists led by Chicago School economist George Stigler (1911–91).

Privatization, then, as a core component of neoliberalism, is associated strongly with the world’s experience of early twenty-first-century economic growth and prosperity. Born from economic crisis in the 1970s, how well liberal market approaches to economic and societal management can survive or even assuage substantial economic crisis is as yet unknown. Supporters point to the efficiency of a market-based system to produce rapid adjustments to economic shock and so prevent crisis. Skeptics point to the vulnerability of a society, especially its less powerful sections, to respond to shock or crisis when its collaborative resources and capacities have been largely eroded by privatization.

See also: Neoliberalism; Regulation.

Further Reading


**Relevant Websites**

http://www.privatization.org
A program of Reason Foundation devoted to providing information on privatization, government reform, contracting out, and public/private partnerships.
http://www.itcilo.org
International Training Centre.
http://www.reason.org
Reason Foundation: free minds and free markets.
http://www.worldbank.org
The World Bank.
Determinism and Possibilism

Since the birth of geography as an academic subject, there have been problems in arguing that physical geography and human geography really were parts of the same discipline. They were tied together, however, in regional study. Geographers would study a region by discussing its structure and relief, its climate, and its vegetation and soils, and then go on to discuss its economic activities, usually concentrating on primary industry. The justification for this approach was the idea that the physical attributes of the region were in some sense causes of the human attributes. When most people were engaged in farming, mining, or resource based manufacturing, this made some sense, although modern technology and subsidy systems may overcome a hostile environment, and tertiary and quaternary industries do not have obvious environmental controls.

Nevertheless, the idea that the environment determined the success or failure of human cultures was perhaps a useful balance to the intellectual life of the late nineteenth and early twentieth century. It was interesting to note that areas with similar climates often tended to have similar economies, such as the relationship between citrus fruits and Mediterranean climate (as found in California, central Chile, South Africa, southwest Australia, as well as the Mediterranean region itself). Less happily, racist ideas about national character could be explained by environment — Africans were lazy because of the heat, Britain was a successful colonial power because of the 'stimulating' climate. This idea that environment determined human activities was one of the few theoretical statements generated in geography at this time. Environmental determinism (sometimes 'environmentalism') was adopted among others by Friedrich Ratzel, Ellen Semple, Ellsworth Huntington, and Griffith Taylor. Even the young Carl Sauer was heavily influenced: "Geology is indeed a subject of every day importance in Tennessee, for upon it depend the wealth or poverty, progress or stagnation, even the political convictions of its sections to an extraordinary degree."

Although possibilism is regarded as the antithesis of determinism, they have in common the idea that environment affects human actions; they just differ according to the rigidity of the effect. Possibilists see the environment as offering a set of possibilities from which human groups can choose. It was championed by the French school, led by Paul Vidal de la Blache and Jean Brunhes.

This debate had begun in the early twentieth century but was still active in the 1950s, featuring articles by A. F. Martin and Emrys Jones, although, for the first time, geographers were beginning to take an interest in how people affect the environment instead of how the environment affects people. Very influential in this respect was the publication in 1956 of Man's Role in Changing the Face of the Earth, a collection of essays edited by William L. Thomas.

Spate and Probabilism

O. H. K. Spate (1911–2000) was primarily a regional geographer, best known for his work on the Indian subcontinent. Starting out as a historical geographer at Cambridge, he worked in Rangoon and became an expert on the geography of the Indian subcontinent. After working at Bedford College, London and the London School of Economics, in 1951 he became professor of geography in the Research School of Pacific Studies at the Australian National University in Canberra, Australia. In addition to his regional geography publications, Spate was interested in methodological issues, such as the relationship between geography and history and the determinism/possibilism debate. He first described the concept of probabilism (originally spelt 'probablism') in a paper largely concerned with evaluation of the work of historian Arnold Toynbee and determinist geographer Ellsworth Huntington, read to the Royal Geographical Society and published in the Geographical Journal in 1952.

Spate felt that "neither environmentalism nor possibilism is adequate without large qualification." His rejection of the former (environmental determinism) seems obvious today — clearly different people have adjusted to similar environments in different ways. His rejection of possibilism is less convincing. He uses an example of the close correlation of voting maps with physical maps of the American South, which he claims shows a very strong influence of mountains on people, concluding that "possibilism simply will not do." Probabilism is presented as a middle position. Clearly it is distinguished from determinism by the admission that cultural and social factors are important in how people adjust to their environments. It is distinguished from
possibilism by the acceptance that environment may have an impact on this adjustment. The possibilist Fevrye claimed “there are no necessities but everywhere possibilities.” Spate argues that these possibilities are not all equally likely, and the physical environment influences how probable they are.

In 1956, Spate was invited to give a lecture in Cambridge, and he took the opportunity to address the old debate of ‘possibilism versus determinism’. He argued that ignoring the question was effectively empirical description without understanding or rational explanation, and this would reduce the influence of geography on other subjects. He believed that geography “of its nature … must constantly regard both sides of the equation, man [sic] and land.” If geography is to be a science, it must seek explanation and geography can only be distinguished from economics or sociology by geography’s “preoccupation with the factor of land.” Possibilists are criticized for “minimizing the land factor to such an extent that they are writing sociology, without sociological techniques.”

The lecture is relatively kind to determinists. Spate cites Griffith Taylor’s remark that possibilists “for the most part come from western Europe and the United States, where industrial technology is most massively deployed and has its most dazzling achievements.” Those who have lived in more extreme climates, such as Australia, like Taylor and Spate himself, “might be less certain that geographical controls hardly count.”

Thus Taylor, a late determinist, had argued that most of the interior of Australia was determined by the environment to be uninhabitable. It was therefore a waste of time to encourage immigration in order to populate the empty areas of the continent.

Spate points out that more recent determinists have moved to a weaker position. As Tatham argued a few years earlier, “The terms they use are more moderate, ‘control’ is replaced by ‘influence’ and ‘influence’ by ‘response’ or ‘adjustment.’” Spate also quotes possibilists like Tatham and Brunhes who clearly appreciate that the physical environment is important for humanity. He sees “a tendency towards the narrowing of the gap” between determinists and possibilists, and tries to define common ground which would reconcile the two schools and allow geographers to get on with the job of solid geographical interpretation.

Spate’s attempt at reconciliation is based on three principles. First, “there is an irreducible minimum of influence by the physical environment which, however, acts negatively and permissively, not by positive mandate.” Second, “that this is but part of the complex of causation which results in the observed facts,” the cultural environment also being of great importance. Third, “that the problem is often not so much a matter of an all or nothing choice or compulsion, but a balance of probabilities.”

Evaluation of Probabilism

The concept of probabilism has some appeal as a compromise between the extremes of determinism and possibilism, but it is questionable whether it is really necessary. No possibilist would deny that some possibilities are more likely to be adopted than others, or that environmental factors may influence the probabilities of choice. As Crowe pointed out in discussing Spate’s original paper, probabilism is really just a variant of possibilism, dressed up to be more acceptable to determinists.

The reaction to the idea of probabilism was fairly muted, largely because of growing concern that human activity was influencing the environment to its detriment. Human effects on the environment began to seem more important to study than the environment’s effect on humanity.

It could also be argued that the determinism/possibilism debate was upstaged in the late 1950s and 1960s by the spread of the quantitative revolution and the redirection of geographical research that it implied. An important theme in quantitative geography has been the use of probability models to represent geographical processes, by Les Curry, Michael Dacey, and others. It may be tempting to see this approach as linked to Spate’s ideas, which could be seen as a precursor to the spread of statistical methods based on probability models. However, Spate himself was an opponent of the quantitative revolution, and early quantitative work owes much to economics and plant ecology, and little to Spate’s concept of probabilism — although Curry claims to have become interested in probability through studying the relationship of rainfall to grass growth.

The type of models developed in the quantitative revolution also served to reduce the impact of the whole debate to which Spate’s concept of probabilism contributed. Environment could have little effect on people if activities take place on an isotropic plain, as assumed in agricultural location and central place theory. There was a change in how geography itself was defined, away from the human/environment focus toward the study of spatial processes and relationships. Even though environmental
studies have become so important subsequently, few, if any, geographers have returned to the theme of how environment constrains human activities.

See also: Possibilism; Postdevelopment; Quantitative Revolution.

Further Reading


There may be two states, health and disease, and it may be assumed, for example, that in one time period 451 people were healthy and 451 were sick. The probabilities of transition from one state to another can be estimated, and these probabilities can be used to predict future states.

Among the first geographers to draw attention to probability models was Les Curry in his work on climatic change and on the ‘random spatial economy’ and Michael Dacey in his probability models for the location of houses and settlements. David Harvey, in *Explanation in Geography*, provided a pragmatic discussion of these approaches, relating them to the then standard hypothetico deductive model of scientific enquiry. A problem is that different probability models require expertise in different aspects of mathematics, often beyond the competence of those trained as geographers. However, mathematicians, engineers, economists, and others have developed the methods to test ideas of interest in human geography.

Some of the simplest models are concerned with the probabilities of transition from one state to another. For example, somebody may or may not have a particular disease. There may be two states, health and disease, and it may be assumed, for example, that in one time period...
there is a probability \( p \) that an individual will make a transition from health to disease, and a probability \( 1 - p \) that the individual remains healthy. Likewise, there is a probability \( q \) that there will be a transition from sickness to health and a probability \( 1 - q \) that the individual will remain sick. It is possible to project the future incidence of the disease in this system, depending on the values of \( p \) and \( q \).

The system can be made more complex by introducing other states. Thus it may be possible to move from the state of sickness to the state of death. In this case, the probability of moving from death to either health or sickness is zero. Models of this general type are used in demography and have been adapted to include systems where the states are regions and probabilities of moving from one region to another are used to investigate the long term consequences if current trends continue. If the probability of moving from one state to another is constant in the sense that it is independent of how long an individual has been in the origin state, the system is said to have the Markov property. Such systems are called Markov chains.

**Normal Probability Models**

Most of the body of statistical theory adopted by geographers in the 1960s was based on the normal distribution, which was the basis of the standard forms of correlation and regression analysis. A standard (Ordinary Least Squares or OLS) multiple regression analysis (perhaps the most widely used statistical technique) can be regarded as fitting a series of probability models. The response (or dependent) variable \( Y \) is regarded as having a normal distribution whose mean is a linear combination of certain explanatory (or independent) variables \( X_1, X_2, \ldots \) (and whose variance is the same for each case in the data set). A series of models is fitted, usually starting with one explanatory variable and step by step incorporating other explanatory variables. A model can be stated:

\[
Y_i = \beta_0 + \beta_1 X_{1i} + \epsilon_i
\]

where \( Y_i \) is the value of the response variable for case \( i \), \( X_{1i} \) is the value of explanatory variable \( X_1 \) for case \( i \), \( \beta_0 \) and \( \beta_1 \) are parameters calculated in the model to optimize goodness of fit, and \( \epsilon_i \) is an error term whose value is regarded as being taken from a normal distribution with mean zero and standard deviation constant for all cases. For example, \( Y \) might be life expectancy in country \( i \) and \( X_1 \) might be country's gross national product (GNP). If the model is fitted to appropriate data, it is possible to assess whether GNP could have an effect on life expectancy, to estimate the direction and approximate size of the effect, and the overall success of the model in estimating life expectancy across the data set. Note that GNP does not tell you exactly what life expectancy is in any country, it just gives an indication of the probable range of values, subject to influence from other factors not in the model, including random variation.

Having fitted a probability model which states that life expectancy follows a normal distribution around a mean equal to a linear function of GNP, further models can be fitted using other variables which may be related to life expectancy. If \( X_2 \) is the literacy rate of country \( i \), \( X_3 \) is the level of urbanization in country \( i \), and so on, it is possible to fit any of a set of models, differing in which of the available \( X \) variables are used, for calculating the mean of the normal distribution. Models can be assessed using a goodness of fit statistic (\( R^2 \), the coefficient of determination, is commonly used in OLS regression). This gives some insight into whether the model could reasonably be supposed to have generated the data and which of the \( X \) variables have the greatest influence on \( Y \) (controlling for the other \( X \) variables in the model).

Statistical significance tests can be used to evaluate both the model as a whole and each of the \( X \) variables. It is customary to use type 1 error (the probability of rejecting a null hypothesis that is true) as a criterion for deciding whether a particular \( X \) variable is significant or not in modeling the distribution of the \( Y \) variable. By convention, this value is set at 0.05 (sometimes 0.01) and there has been controversy over the implications of this rather arbitrary choice.

Interpretation of goodness of fit is not always very straightforward. Even a very high \( R^2 \) value does not mean that the model reveals the actual process generating the data for \( Y \); the \( X \) variables and \( Y \) may both be influenced by some other factor. Nor does a very poor \( R^2 \) mean that the \( X \) variables have no effect on \( Y \) – a real effect may be masked by failure to include a very important \( X \) variable, or by a very large error term. Or, of course, there may be a strong but nonlinear relationship.

**Issues in Probability Models**

Unfortunately the normal distribution applies only to continuously distributed variables, and hence is not applicable to categorical data (appropriately modeled with binomial or multinomial probability models) or count data (appropriately modeled with the Poisson probability model). Even continuously distributed variables are not necessarily normal, but in many situations they can be transformed to approximate normality. For example, the distance decay relationship commonly found in studies of human movement can be modeled as a negative exponential function, which can in turn be transformed to
normality using a logarithmic transformation. Of course, many geographical processes cannot be represented by relatively simple probability models like this, and there is plenty of scope for developing and applying a range of more complicated and realistic models.

The role of time in probability models must also be considered – attempts to test the geometrically elegant central place theory fell foul of the absence of a time dimension to the processes regarded as responsible for the geometric pattern studied by Walter Christaller and August Losch. In contrast, other geographical processes, such as spatial diffusion, had an explicit time dimension and were more amenable to probabilistic models. It is sometimes argued that the study of spatial variation cannot be viable unless time is considered too. While probability models can be formulated without reference to time, such models will not be very realistic unless a time element is included to reflect the historical development of the system under study.

Another important issue is spatial dependence, where the value of a variable at one place is (in part) a function of its value at other places. This could result from a contagion or diffusion process. Even without such a process taking place, many geographical distributions are spatially autocorrelated, simply because they are affected by some other variable not included in the model. Ideally, one might attempt to remove or reduce apparent spatial dependence by including such a variable or variables. In practice, this may be difficult or impossible. From the classic work of Andrew Cliff and Keith Ord on spatial autocorrelation to more recent work on local indicators of spatial association and on geographically weighted regression, efforts have been made to develop probability models to take account of this factor.

Examples

Today the use of probability models tends to be embedded within sub fields of geography, rather than attempting to relate to the whole of human geography. Studies of population geography and medical geography offer good examples of how probability models are used today. For example, the study of spatial interaction shows an increasing sophistication in the use of probability models. The early attempts by the so called ‘social physics’ group and by Torsten Hagerstrand and Gunnar Olsson regarded the amount of interaction between two places as generated by a normal or lognormal distribution whose mean is a function of origin and destination size and distance (and perhaps other variables). This allows the use of OLS multiple regression as outlined earlier. In this context, it is possible to test whether incorporating the effect of distance (or, more successfully, the log of distance) on interaction improves on the model without a distance variable, assessable either in terms of the significance of the relevant β parameter or the improvement in goodness of fit.

The study of human interaction was revolutionized by Alan Wilson whose work on entropy maximization changed the probability model from the normal distribution to the multinomial distribution (approximated by the Poisson). This was then restated by Robin Flowerdew and Murray Arkin in terms of Poisson regression analysis, allowing a similar set of probability models to be fitted as in the normal distribution case. An advantage of the Poisson model is that the Poisson mean is equal to the variance, so that goodness of fit can be calculated unambiguously without a potentially large variance term obscuring the issue. Fitting a series of probability models via the Poisson distribution usually leads, however, to such conclusions as ‘the model fits better if variable λ is included, but it is not good enough to be an adequate explanation of the data’. One reason why the Poisson distribution often fails to account for all the variation in the data is that it assumes individuals behave independently, which is clearly unlikely in many types of human interaction, such as migration. Probability models can be fitted based on relaxation of this assumption; these are likely to be modifications of the Poisson distribution such as the negative binomial model.

The binomial logistic model has also been used extensively in human geography in recent years. It is appropriate for situations where an event does or does not happen in a particular case. A common example in medical geography concerns whether or not a person has contracted a specific disease. The simplest probability model might be that each person has an equal probability of having the disease, but it is often the case that other factors may alter the probabilities. Again, there may be a set of potential explanatory variables and a series of probability models can be fitted using these variables, either singly or in appropriate combinations. In this case, the explanatory variables can be used to estimate the logistic (log odds ratio) function, and the probability of the observed data assessed, given the model results. Another important application of binomial or multinomial models is in discrete choice theory, where somebody’s choice of one alternative over one or more others is modeled as a function of a set of other variables. Logistic, Poisson, OLS, and other statistical models have been grouped together as ‘generalized linear models’, which have a common structure but differ according to the probability models employed.

An important extension to probability models is multilevel modeling, which is based on the idea that in some situations there may be some important influences operating at different scales – for example, the educational achievement of children may be modeled in terms of individual level and school level factors, and...
perhaps even a regional level effect. A multilevel model incorporates error terms at all these scales.

**Assessment of Probability Models in Geography**

It may often be thought that there are many factors affecting processes in human geography – indeed, it is a truism that most explanations in human geography are multifactorial. Further, many possible influences on geographical outcomes may be unrecorded in a data set, or even impossible to measure. This suggests that it may be impossible to construct adequate probability models. Indeed, the failure of probability models to reflect such factors (people’s emotions and values, for example) was one of the main reasons for dissatisfaction with the quantitative revolution in the 1970s and 1980s.

Failures of another kind occur too. There may be strong theoretical reasons for expecting a particular model to be a significant improvement, but the data may fail to support this result. Of course, the theory may be wrong, but it is also possible that the data are insufficient to establish a true theory. In terms of classic hypothetico deductive reasoning, a null hypothesis, that the alternative hypothesis, that the additional data, can be rejected if the evidence is sufficient, but the simpler model could have generated the observed data, can be rejected if the evidence is sufficient, but the alternative hypothesis, that the additional X variable improves the model, cannot be – though a failure to affect a goodness of fit statistic is a fairly clear signal to change tack.

The use of probability models may be frustrating in another way. Often probability theory is limited in its technical development, so a probability modeler may have to choose between a model that is imperfect in its assumptions or no model at all. It is a matter of judgment, and perhaps of the modeler’s quantifiable abilities, which direction to take.

In fitting models of the types discussed above, we are operating according to the standard hypothetico deductive method, with the difference that we accept that there will be counterexamples and falsifying a hypothesis depends on the number or proportion of counterexamples, not just the existence of one. Most of human geography is based on very complicated situations, and any theory can only match the main points of the relationships under study. The variation in the values of a variable Y can be split into ‘explained’ and ‘unexplained’ variation. Unexplained variation can come from three sources: omission of important explanatory variables from the model (perhaps because these variables have not been measured or cannot be measured); mis specification of the probability model; and random variation, whose magnitude depends on the variance of Y. The combination of these factors may be thought of as a combination of chance factors and a potentially large number of minor effects which are too small to be significant in the regression model.

See also: Choice Modeling; Probabilism; Regression, Linear and Nonlinear.

**Further Reading**


Projections

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Glossary

Azimuth The horizontal direction of a line measured clockwise from a line of reference, which is usually true north.
Chronometer A portable timekeeping device capable of showing time with considerable precision and accuracy.
Developable Surface A surface that can be flattened to form a plane without compressing or tearing any part of the original surface. The three commonly used developed surfaces for map projections include a cylinder, cone, and plane.
Graticule The combination of latitude and longitude.
Isocols A symbolization method designed to graphically illustrate the amounts of angular or areal distortion on a map projection.
Map Projection The systematic transformation of the Earth's curved two-dimensional latitude and longitude values onto a planimetric surface.
Rectangular Grid System A plane coordinate system based on a map projection in order that latitude and longitude positions can be easily converted into Cartesian coordinates.
Reference Globe A conceptual model of the Earth that is reduced to a specific stated scale corresponding to the intended map scale.
Rhumb Lines A line on the Earth's surface intersecting all meridians at the same angle.
Scale Factor The ratio of an infinitesimally small distance on the map at a given point to the true distance found on the reference globe.

Introduction

Whether discussing petroglyphs, stick charts, topographic maps, or maps produced online, map projections are an essential element of any mapping effort. A map projection transforms the Earth's spherical two-dimensional coordinate system called latitude and longitude to the plane or planimetric map surface. Throughout history, map projections have been developed to meet various mapping purposes that satisfy societal needs. Early pursuits were philosophical in nature such as cosmography, where there was a spiritual need to map the relationship between the heavens and the Earth, or for the quest of geographic knowledge, where scholars and explorers at tempted to illustrate the known world. Other societal needs emerged as sea going technology improved – better ship designs facilitated ocean going navigation and thus propelled exploration, colonization, and extended political power. Modern activities such as air travel, delineation of borders, space travel, and search and rescue operations rely upon map projections that accurately map the Earth's coordinate system. Of course, cultural differences in the way societies have viewed their geographic surroundings have led to various incarnations of projections and their applications. Moreover, societies have used projections in such a way as to advance their own ideological agendas, often with unconscionable results. Progress in both mathematics and computer technology has facilitated the development of hundreds of map projections for a variety of applications.

Earth's Coordinate System and Shape

Creating a map projection begins by considering the Earth's coordinate system. For thousands of years, scholars, scientists, and even lay people have labored to develop coordinate systems that would provide the ability to accurately locate positions on the Earth's surface. The spherical two-dimensional coordinate system widely accepted today is credited to Hipparchus (2nd C. BC) who arranged lines of latitude and longitude in a systematic fashion by tying their locations to astronomical observations. The angular degree values used to describe a location's latitude and longitude are in a sexagesimal base 60 system credited to the Babylonians about 1900 BC. Collectively, latitude and longitude are often referred to as the Earth's graticule.

The ancient Greeks, Chinese, and undoubtedly other civilizations knew that the Sun's direct rays made a predictable annual progress across the Earth's surface signaling the solstices and equinoxes. These astronomical occurrences were used to delineate the first recognized lines of latitude. Other lines of latitude were arbitrarily assigned to important cities or delineated climate zones. Today, we understand lines of latitude running east to west across the Earth's surface, but we use them to measure locations north or south of the Equator (an assigned origin of 0° latitude). Since lines of latitude are parallel on the Earth's surface, they are also called parallels. A location's latitude value is the angle between a point on the Equator and another point located either north or south of the Equator. The vertex of the angle is at the Earth's center. Values of latitude range from 90° N to 90° S – the North and South Poles, respectively (see Figure 1a).
Lines of longitude were established differently and with far greater effort. Lines of longitude, also known as meridians, are north–south lines connecting the Earth’s two poles. The term meridian comes from the noon day episode when the sun is the highest in the sky marking the mid day meridian. Since longitude is related to the duration of the Earth’s rotation, computing accurate longitude location was difficult until John Harrison invented the chronometer in the 1760s. Even after Harrison’s invention, longitude remained problematic in that, unlike latitude where the Equator is a natural origin, no natural origin for longitude existed. Lacking a natural origin resulted in individual countries adopting different longitude origins until an internationally agreed upon prime meridian at Greenwich, England, was adopted at the International Meridian Conference in 1884. We now accept that lines of longitude run north–south converging at the poles and measure locations east or west of the prime meridian (an assigned origin of 0° longitude). A location’s longitude is the angle formed between two planes passing through both poles where one of the planes is aligned with the prime meridian and the other plane is located either east or west of the prime meridian. The vertex of the angle is at the Earth’s center. Longitude values range from 0° to 180° – the prime meridian and the international dateline, respectively (see Figure 1b).

Various ancient societies speculated on the Earth’s shape through philosophical or religious means. There was a general consensus of a spherical Earth, although the exact nature of its spherical shape was largely unknown. Other Earth shapes were set in accordance with a religious view. For instance, a Hindu Earth envisioned a hemispheric dome supported by elephants standing on the back of a turtle, while a Christian view saw the Earth as a flat disc surrounded by an all encompassing ocean called a T in O map (see Figure 2). In 1687, Isaac Newton published *Principia Mathematica Philosophiae Naturalis* in which he presented his theory on planetary motion, centrifugal force, and how these ideas influenced the shape of a rotating planetary body. According to him, a planetary body should take on an oblate ellipsoid – flattened at the poles but bulging at the Equator. Contrary to Newton’s proposition, in the early 1700s, Jean Dominique Cassini and later his son Jacques promoted the Earth’s shape to be a prolate ellipsoid – flattened along the Equator and bulging at the poles. The intellectual debate that ensued was another extension of the long standing antagonism between England and France. Not until the 1750s was the Earth shape issue laid to rest.

![Figure 1](image1.png)  
**Figure 1** Lines of latitude (a) and longitude (b) on the Earth’s surface.

![Figure 2](image2.png)  
**Figure 2** Stylized representation of a T-in-O map.
when the results of two independent surveys measuring 1° latitude along a meridian near Peru (modern day Ecuador) and a meridian near the Arctic Circle in Lapland were reported. The surveys proved that Newton was correct. Today, satellite measurements reveal the Earth's diameter to be approximately 1/298 longer than the polar diameter. This diameter difference is significant in that spherical or ellipsoidal Earth models inherently vary in their ability to represent the Earth's shape more accurately and thus impact various mapping goals. In general terms, spherical Earth models will result in a less accurate representation of the Earth's shape, but are suitable for small scale mapping purposes, such as thematic maps of a country. On the other hand, ellipsoidal Earth models more closely reflect the oblateness and are appropriate when more accurate representations are needed, such as in topographic mapping.

Conceptual Development of Map Projection

The graticule rests upon a two dimensional spherical Earth. However, maps and the projections upon which they are based are generally thought of as existing on a two dimensional plane or a map. Thus, how the spherical graticule is projected onto a flat plane is the problem addressed and solved by projections. A map projection transforms all coordinate values on the Earth's surface (latitude, longitude, coastline, borders, etc.) onto a two dimensional plane through a systematic process, usually involving mathematical manipulation. Prior to the advent of computers, mathematical computations were carried out manually. In today's GIS environment, however, the projection process is handled quickly through transparent mathematical equations that transform the Earth's spherical coordinate values into x and y Cartesian coordinates.

The projection process will be presented here in a conceptual framework involving four steps. The first step conceptually scales the Earth's enormous size to the same scale intended for the final map. In other words, if a map is to be shown at a scale of 1:1 000 000, then the Earth is conceptually scaled to a reference globe whose scale is also 1:1 000 000, where 1 inch on the reference globe represents 1000 000 inches on the actual Earth. The second step places a developable surface in contact with the reference globe (see Figure 3). A developable surface is a surface such as a plane, cylinder, or cone that can be unrolled into a flat surface (e.g., a map) without any tearing or shearing. Depending on the kind of developable surface used, contact with the reference globe is made tangent at one point, tangent along one line, or secant along two lines, producing a standard point, standard line, or standard lines, respectively. No distortion is found on the map at the standard point or line(s), and the scale factor is equal to 1.0. At all other locations on the projection, the scale factor will be greater or less than 1.0 suggesting distortion is present. Knowing how the scale factor varies across a projection is important in understanding distortion patterns and ultimately for what mapping purpose the projection is suited.

Figure 3  Positioning the plane, cylinder, and cone developable surface to the reference globe. Then, by unrolling the developable surface the planar, cylindric, and conic class of map projections are created.
How the developable surface is positioned with respect to the reference globe results in a specific aspect of a projection. The aspect allows a specific geographic area to be brought to the projection’s center. There are three general aspects of a projection: equatorial, polar, and oblique (see Figure 4). A projection whose aspect is equatorial has the projection’s center positioned somewhere along the Equator, whereas a polar centered projection has its center placed at one of the two poles, and an obliquely centered projection has the center located somewhere between one of the poles and the Equator. Once a developable surface has been positioned in a particular aspect with respect to the reference globe, the landmasses and graticule can be projected onto the developable surface.

The third conceptual step involves ‘projecting’ the graticule, coastline, and any other lines on the reference globe onto the developable surface. The fourth step involves cutting along the long axis of the cylinder or cone to unroll the developable surface, thus displaying the map. Since the planar developable surface is already flat, it does not require this fourth step. The developable surface of a plane, cylinder, or cone produces a projection with a distinctive graticule appearance that can be used to classify projections according to the graticule arrangement. Map projections developed from a plane, cylinder, and cone are commonly called planar, cylindric, and conic projections, respectively (see Figure 3). In the polar aspect, the planar class arranges the parallels as concentric circles centered about one of the poles while the meridians radiate outward from one of the poles as straight lines. In the equatorial aspect, the cylindric class arranges the parallels as straight parallel lines while meridians are straight, equally spaced lines that intersect the parallels at right angles. The conic class arranges the parallels as circular arcs centered about a pole, with meridians that radiate as straight lines from the pole. Other projection classes are possible that are a variation of the plane, cylinder, or cone. For example, pseudo cylindric projections represent the parallels as straight lines similar to the cylindric class, but the meridians are curved (see Figure 5a). Polyconic projections conceptually involve the use of many cones and result in curved parallels similar to conic projections, but the meridians are curved rather than straight lines (see Figure 5b).

Map Projection Properties and Distortion

Measuring areas, angles, distances, or azimuths on maps can produce different results than if those measurements were taken directly from the Earth’s surface, a consequence of distortion introduced during the projection process. However, projections can be developed allowing specific measurements to be preserved so that when maps are used to measure, for example areas, those areal measurements will accurately reflect the corresponding areas on the Earth’s surface. Projections can also be created that specifically maintain angles, distances, or azimuths.

**Figure 4** The equatorial, oblique, and polar aspect of a cylindrical projection.
Map projections generally preserve one spatial relationship while sacrificing all others. Preserving a spatial relationship or property for a specific map purpose is one of the fundamental reasons why several hundred projections have been developed. Map projections that maintain areas on a map in true relation to the Earth's surface are called 'equivalent'. As an example, consider a projection showing Japan. If the projection is equivalent, then the map user will be able to measure the total land area of Japan on the map and obtain 374,744 km², which is the correct area of Japan. Map projections that preserve angles are called 'conformal'. Assume a surveyor measures several angles on the Earth's surface as part of a boundary survey. Once the survey is complete, the surveyor may want to produce a map that preserves those angles that comprise this boundary; a conformal projection will correctly show the angles on a map. Distances and azimuths are two other spatial relationships that can be preserved on a projection, but in limited ways. Distances on the Earth can be preserved on equidistant projections, usually along all meridians or from a straight line drawn from the center of the projection to any point on the map. Calculating azimuths is a common practice used in navigational applications. As with the equidistant projection, azimuthal projections limit how true directions can be represented on a map. Azimuthal projections permit azimuths to be correctly represented as an angle from a reference line (usually true north) to a line extending from the center to some point on the map. It is mathematically impossible for distances or azimuths to be preserved throughout a projection in all directions.

Not all projections preserve a specific property. Compromise projections do not preserve any specific property, but rather reduce the amount of overall distortion compared to a projection that preserves a single property. For example, equivalent projections contain considerable angular distortion while conformal projections possess high amounts of areal distortion. Often this scenario reduces the desirability of using one of these properties for a mapping application, especially at smaller scales. In general, compromise projections result in maps that represent landmasses closer to their appearance on the reference globe than other projections where a single property is preserved.

Map Projection Distortion

Map projections manipulate scale factors across a projection to preserve a particular property. Where this property is not maintained some level of distortion will exist. In order to understand the rate at which the scale factors change on a projection and ultimately the use for which a projection is suited, distortion can be quantified and visualized. Quantifying distortion relies upon mathematics to determine the amount of distortion in areas, angles, distance, and azimuths that results from the projection process. While quantifying distortion provides one avenue of analysis, it is often more advantageous to graphically illustrate distortion on a projection using a symbolism method. One such approach is to use isolines to map the amount of angular or areal distortion across the projection. Doing so creates very distinctive distortion patterns that are usually tied to the developable surface and location of the standard point, line, or lines. For example, isolines on the Behrmann cylindrical equivalent projection are parallel to the standard line which, in this case, coincides with the Equator (see Figure 6).

Another popular method of showing distortion on a projection is to utilize Tissot’s indicatrix. In the 1860s, Nicolas Tissot presented his indicatrix as a quantitative and graphical assessment of how scale factors and thus distortion change across a projection. Recall, that the projection process results in a point, one line, or two lines where the scale factor is 1.0 implying no distortion is present. At all other locations on the projection the scale factors will be less or greater than 1.0, implying some level of distortion. Where the scale factor is 1.0 on a projection, the indicatrix is represented as a unit circle. At all other locations the indicatrix will take on various sizes and or shapes (see Figure 7). If the indicatrix appears as a circle either larger or smaller than the unit circle, the scale factor has been uniformly altered in all directions at each point, but angular relationships are maintained, as they would be on a conformal projection (see Figure 7a).

If the Indicatrix appears as an ellipse of the same size as the unit circle, then the scale factors have been
manipulated so as to preserve areas, and so we have an equivalent projection (see Figure 7b). If the indicatrix appears as an ellipse and is not the same size as the unit circle, then the scale factors have not been manipulated so as to preserve angles or areas (see Figure 7c).

Mathematics and Map Projections

There is a clear connection between the development of projections and the evolution of mathematics. Mathematical ideas, such as trigonometry, developed some 5000 years ago, provide the foundation for modern projections; yet, the first projections developed during the time of Thales (600 BC) and Ptolemy (CE 100) up to and including the period of the Renaissance did not explicitly rely upon mathematical equations. Rather, geometrical construction utilizing the compass, dividers, and a ruler in concert with knowledge of the characteristics of the Earth’s graticule were the guiding principles used to create projections. These techniques resulted in crude representations of the graticule. Parallels were often drawn as circular arcs rather than mathematically correct curves, making it impossible to create a projection that maintained, for example, correct areal relations across the map. Familiar projections such as the equirectangular, gnomonic, orthographic, and stereographic were originally developed through such geometrical construction techniques. The corresponding mathematical equations for these projections would not be developed until after the Renaissance.

By the end of the Renaissance, geometrical construction techniques were gradually being replaced by mathematical rigor as new ideas about mathematics were being formalized. Several mathematical developments greatly facilitated the development of projections: tables of logarithms, the Cartesian coordinate system, and calculus. Tables of logarithms, credited to John Napier (1550–1617), reduced the computational burden in computing projection formulas and allowed two or three decimal place accuracy. In the 1630s, Descartes developed analytical geometry, which combined the idea of algebra (numbers) with geometry (lines and shapes) to produce the familiar x and y Cartesian coordinate system. Analytical geometry showed how to translate problems in geometry into problems in algebra by using a coordinate system to visualize the problem and the result. Calculus, developed in the early 1700s, is credited to both Isaac Newton and Gottfried Leibniz. Newton synthesized many of the existing mathematical principles of his time, while Leibniz developed many of the symbols routinely used in calculus (e.g., $\int f(x) \, dx$). Calculus has many applications in the field of map projections. For example, calculus can be used to compute distortion values on a projection by measuring infinitesimal changes in the scale factor in several different directions or is useful when the cartographer wishes to produce a map projection exhibiting a particular pattern of distortion.

In concert with these mathematical developments, new definitions of the Earth’s shape were evolving along with advances in surveying techniques, which spurred the need for projections capable of mapping more accurate coordinates. In the late 1700s, John Lambert developed several projections, including the well known conformal conic (see Figure 8a), cylindrical equivalent (see Figure 8b), azimuthal equivalent (see Figure 8c), and a lesser known equivalent conic (see Figure 8d). Lambert’s approach to creating these projections was novel in that he was the first to use specific mathematical criteria, such as the preservation of angles and equality of area, in generating the projections. He also developed the concept for the Earth to be represented in a circle while maintaining conformality, which would later be formalized by Joseph LaGrange, whose name is credited to the projection (see Figure 9a). Lambert also arrived at formulas for projecting the polar aspect of the Mercator projection in a spherical context. Patrick Murdoch (1700–74) was likely the first to generate a table of distances of parallels along a meridian for the Mercator projection on an ellipsoid Earth model rather than a spherical model, which precipitated the advent of ellipsoidal mapping.
Figure 7  Tsos’s nd catx on the Mercator conforma (a), Eckert-Gre fendorff equ va ernt (b), and the Eu er equ d stant (c) projections.
Figure 8  Four projections developed by Johann Lambert including the conformal conic (a), cylindric equivalent (b), azimuthal equivalent (c), and conic equivalent (d).

Figure 9  The LaGrange conformal (a), transverse Mercator conformal (b), Airy azimuthal (c), Pierce conformal (d), and Littrow conformal (e) projections.
Several mathematical accomplishments relating to projection development during the 1800s include: ellipsoidal/conformal mappings, least squares, and elliptical functions. Carl Friedrich Gauss (1777–1855) described mathematically the conformal transformation of an ellipsoid model of the Earth to the plane and is credited with the term conformality. Gauss applied his ellipsoidal based conformal mapping concept to the Mercator projection creating the familiar transverse Mercator projection (see Figure 9b). This projection would later become the standard for many countries’ large scale topographic mapping endeavors. Least squares is a mathematical principle that attempts to find, for example, a ‘line of best fit’ to a set of data by minimizing the sum of the squares of the differences called residuals between the fitted line and the data. George Airy (1801–92) applied this principle to minimize the sum of squares of errors in scale, which led to the development of his minimum error azimuthal projection (see Figure 9c). Airy’s minimum error projection is neither equivalent nor conformal, but rather balances the errors creating moderate distortion throughout the projection. Elliptical functions were also investigated during the 1800s. Historically, elliptical functions were associated with the problem of solving the arc length of an ellipse. The conformal projections resulting from a derivation of elliptical functions are generally obscure and have limited applications, but some, like the Pierce (see Figure 9c) and Littrow (see Figure 9d), have found their way into navigational applications.

The field of map projections saw continued mathematical progress in the 1900s. A notable development during this time includes logarithmic projections in which scale does not change in a linear fashion but rather logarithmically. In 1957, Torsten Hägerstrand used a special tapered azimuthal projection (see Figure 10) to highlight the center portion of the map specifically to show migration patterns near Lund, Sweden. Other magnifying glass azimuthal projections, such as those developed by John Snyder in the 1980s, give the appearance of using a magnifying glass to view the Earth at a distance from outer space. The 1900s also saw the application of projection formulas to cartograms. Cartograms can be used to show demographic data (see Figure 11), for example, the voting districts within a state can be scaled to the number of popular votes a candidate receives. Other cartograms show the distance from the

![Figure 10](link-to-image.png) The Hägerstrand logarithmic projection centered on the Middle Eastern region.

![Figure 11](link-to-image.png) A cartogram of Maryland’s population in 1950.
center of the map to be in proportion to some metric, such as travel time or shipping costs. Although cartograms first appeared in the mid 1800s, it was Erwin Raisz who, beginning in the 1930s, discussed the application and construction of cartograms in his *General Cartography* Building on Raisz’s initiative, in 1963, Waldo Tobler developed the mathematical basis around which area-based cartograms could be constructed by adapting for molas for equivalent projections.

**Map Projection Applications**

Throughout history, map projections have been applied to a variety of mapping purposes to suit societal needs. To begin, the proliferation of map projection development that began in Europe during the 1600s took considerable time before permeating into and being adopted by non Western societies. Thus, for purposes of discussion, projection applications in non Western and indigenous societies will be treated first, followed by Western projection applications after the 1600s.

**Non-Western and Indigenous Societies’ Application of Map Projections**

Evidence suggests that projection applications in the non Western and indigenous societies shared common purposes with their Western counterparts: navigation, star charts, gazetteer maps, cosmography, and administrative oversight. However, implementing projections for these purposes took on different approaches according to specific societal beliefs and practices. With indigenous societies, maps were produced to supplement information that was already known about the local or broader landscape. Indigenous maps usually were not the inventories of information to which the Western world is accustomed, but presented a judicious selection of information on the map designed for a specific purpose. Interaction with the local environment played a key role in how space was organized in map form. For example, the Oceanians developed maps of their environment that were organized according to their experiences while navigating at sea. Knowledge from their mental maps of island locations, ocean currents, and swells was organized spatially into a map form known as ‘stick charts’. With stick charts, known islands were symbolized by shells arranged in correct topological position based on their relationship to the constellations. The shells were tied to sticks of bamboo that represented the various ocean currents and swells. This map form was used as teaching instruments for young navigators or as reference devices examined prior to sailing.

Map projections were also developed to meet religious requirements. One interesting projection application to come out of the Islamic tradition allows Muslim worshipers to determine the Qibla – the direction to the Ka’ba in Mecca. Qibla projections have the useful property of being able to find the correct azimuth from any point on the map to the projection’s center (Mecca). This property is called retroazimuthal and is the opposite of the azimuthal property, where the directions computed from the center of the projection to any point on the map are true. The Craig retroazimuthal projection (see Figure 12a), developed in the early 1900s, is an example of a projection in which the Qibla can be determined. Asian societies organized space in unique ways. For example, in traditional Chinese society, the map and the landscape it represented were viewed in combination with language to communicate information about a specific place. In other respects, early Chinese maps relied upon conventions of direct and indirect measurements of ground distance and direction in attempts to draw maps to scale. The rectangular grid pattern formed a kind of projection that served as a measurement tool for distances and areas but not as a locational device. It would not be until the early 1600s that the influence of Western map projections would find their way into Chinese cartography.

**Application of Map Projections after the 1600s**

Map projection applications after the 1600s fall into one of five broad categories: cartometric activities, atlas mapping, topographic mapping, research, and miscellaneous investigations. Cartometric activities involve the accurate measurement of areas, angles, distances, and azimuths and rely upon projections that preserve these spatial relationships. Atlas mapping is associated with thematic maps, where the preservation of areas is important, and with general reference maps, where the appearance of the landmasses is not excessively distorted. Topographic mapping requires an ellipsoidal Earth model, as well as a conformal projection for large scale mapping. Research also provides for experimentation and usually results in projections that are not widely used or known. Miscellaneous investigations highlight map...
projections’ versatility as being able to satisfy a variety of interesting and unique mapping purposes.

Cartometric Applications

In the 1400s, advances in ship building design and other nautical instrumentation technologies were making long distance exploration into uncharted waters more feasible. This expanding frontier greatly increased geographic knowledge and the need for maps to represent these new discoveries. In addition, ocean going commerce between nations was becoming an important activity. The portolan chart was one of the first navigational aids that enabled sailors to lay out a sailing course on a map. While these maps were generally produced without showing the graticule, contemporary observation suggests that the equirectangular projection with its square graticule was at least a likely foundation. However, the eventual watershed projection for navigation was the Mercator projection (see Figure 12b), developed by Gerardus Mercator in 1569, and probably one of the most recognizable projections. A conformal cylindric projection, the Mercator, was never intended to be displayed as a world map, although many atlases of the nineteenth and twentieth centuries relied heavily upon this projection for their world maps. Rather, the Mercator projection was designed to permit rhumb lines drawn on the projection to be straight lines. This characteristic was particularly useful to navigators in that they could lay out a rhumb line on the map and then follow its compass direction from the origin to destination.

Significant leaps in transportation occurred in the twentieth century, which ushered in the ‘air age’. Projections were called upon that highlighted a view of the Earth from space and allowed, for instance, airline routes to be correctly displayed. The gnomonic projection (see Figure 13a), known for centuries, was re-introduced since it shows all great circles and therefore the shortest routes as straight lines. Other projections utilized during this time included the azimuthal equidistant and orthographic. For instance, the azimuthal equidistant projection (see Figure 13b) shows the entire world in a circle and allows the distance from the center of the projection to any point to be accurately computed. On the other hand, Richard Edes Harrison’s Look at the World: The Fortune Atlas for World Strategy relied heavily upon the orthographic projection (see Figure 13c) to show the spatial association of various landmasses around the world.

The launch of satellites and the ability to track their paths on the Earth required the creation of special projections. In the early 1970s the United States launched Landsat, a government-funded satellite program. Developing a projection that displayed the ground track of the satellite’s swath path at correct scale that was also conformal proved to be a problem. John Snyder, a

![Figure 13](image-url)
chemical engineer, developed the space oblique Mercator projection as a solution to the problem. Later, in 1977, a cylindric projection was developed by Snyder that displayed the ground tracks of the Landsat satellite as straight lines (see Figure 14). Today, satellite ground tracking maps rely upon the equirectangular projection, with curved rather than straight orbital paths being shown.

Topographic Applications

Beginning in the 1700s, ellipsoidal Earth models, advancements in surveying instruments coupled with the ability to determine longitude, and the political leverage that was gained from accurate countrywide surveys necessitated that coordinates be mapped with greater accuracy than ever before. From these great surveys, the topographic map was born. Cassini de Thury developed the Cassini projection (see Figure 15), which was used for the official topographic map of France. The Cassini projection has a polar aspect of the plate carrée with the central meridian passing through Paris and drawn to correct scale for the ellipsoid. Other ellipsoidal based projections that today have association with large scale topographic mapping and were mathematically described during the 1700s include the Lambert conformal conic and the transverse Mercator conformal projection, which are both heavily used by various US government agencies. The transverse Mercator projection is also known as the Gauss–Krüger projection (see Figure 9b) in various parts of the world since Carl Friedrich Gauss (1777–1855) and Louis Krüger were responsible for articulating the mathematical principles for the ellipsoidal form of this projection. This projection is in use in over 80% of the world’s large scale topographic mapping programs. In the 1800s, due to its ease of construction, the equivalent Bonne projection replaced the Cassini projection for large scale topographic mapping and was subsequently adopted by numerous European countries for their topographic mapping. During the 1820s, Ferdinand Hassler of the United States Coast and Geodetic Survey recognized that a new projection was warranted during the geodetic survey of the United States and developed the American polyconic projection (see Figure 16a), which was subsequently employed as the projection for large scale topographic mapping by the United States Geological Survey until the 1950s.

Topographic maps will often include a rectangular grid system superimposed on top of a map, which assists in computing distances on the map. Rectangular grid systems are not new. In fact, the administration of land holdings was prominent in early societies. For instance, Roman cadastral maps implemented a rectangular grid system as a way to systematically inventory their land holdings. In modern times, the ellipsoidal version of the transverse Mercator projection is also the basis for grid systems, such as the Universal Transverse Mercator (UTM) and the British National Grid. In fact, most countries have implemented some kind of grid system as part of their national mapping programs. For instance, the United States has adopted the ellipsoidal version of the polar aspect of the stereographic projection for the Universal Polar Stereographic (UPS) grid system of the
polar areas as a complement to the UTM, which extends between 84° N and 80° S. The transverse Mercator and Lambert conformal conic are two projections that serve as the foundation for the United States’ State Plane Coordinate System (SPCS), a grid system designed for state level mapping purposes.

Atlas Mapping Applications

Atlases had their beginnings in the later Middle Ages and focused on mapping the known world, but it was during the 1800s that atlas mapping, with special emphasis on thematic treatments and regional depiction, began to be practiced in earnest. Prior to the 1800s, atlases utilized projections that represented the world, hemispheres, and continents. Hemisphere maps relied upon one of the several globular and planar projections. The simple conic, Bonne and sinusoidal projections were commonly applied to continental or country maps as they depicted geographic regions in correct area relations and were aesthetically pleasing with curved meridians or parallels. Two other notable projections that eventually found their way into atlases were Hassler’s polyconic projection (see Figure 16a) and Albers equivalent conic (see Figure 16b). Heinrich Albers (1773–1833) developed his conic projection for a general map of Europe. In the early 1900s, Oscar Adams of the US Coast and Geodetic Survey derived the ellipsoidal form of the Albers equivalent conic projection as the standard projection for the United States with two standard parallels at 29° 30’ N and 45° 30’ N. Since its development, the Albers projection has seen significant usage in commercial atlases throughout the world.

The Mercator projection found its way into the classroom as wall maps and in atlases in the twentieth century. Objections to the extreme distortion on the Mercator projection led to a host of other projections being proposed. James Gall, Carl Braun, Alphonos van der Grinten, Osborn Miller, and Arno Peters were some of the individuals who proposed alternatives to what was seen as the considerable distortion found on the Mercator projection when used for world maps. Probably the most controversial of these projections was the Peters cylindric (see Figure 17a). Presented in Germany in 1974, the Peters projection is equivalent and visually resembles the Gall orthographic (see Figure 17b), which was developed by the Reverend James Gall in 1855. In 1983, Peters also published an atlas called Die Neue Kartographie, which relied on the Peters projection almost exclusively. Arno Peters championed the claim that his projection, which stretched the Equatorial region in a north–south fashion, gave a fairer representation to the less developed countries than did the Mercator, which greatly exaggerates landmasses in the mid and upper latitudes. Peters’ promotion was not lost to cartographers who strongly rebuked his claims of the projection’s excellence and out of their angst various publications resulted countering Peters’ claim. The scholar’s objections to the Peters projection were not heeded by more socially based organizations such as the Vatican and UN that have adopted the projection in some fashion. The significance of the Peters projection rests not on what
agency adopted the projection, but rather that projections no longer were viewed in a mathematical vacuum or simply as a by product of mathematical quest for knowledge. Instead, projections, just as maps, can convey hidden messages and a particular point of view that might not be immediately obvious.

The twentieth century also witnessed the development of many new projections designed for atlas mapping. Chief among these are the pseudocylindric projections. Max Eckert developed six pseudocylindric projections during the 1920s; of these six, the Eckert IV and VI (see Figures 18a and 18b) are both equivalent and have been used considerably for atlas mapping. Another well known pseudocylindric projection was developed by John Goode in 1925. After experimenting with the sinusoidal and Mollweide projections, Goode fused the two, using the sinusoidal to map latitudes between ±40° 44′ 11.8″ N and S, and the Mollweide outside this range. The resulting Goode projection (see Figure 18c) is pseudocylindric, equivalent, and interrupted in order that landmasses can be shown with reduced distortion. Beginning with the fourth edition, the Goode projection became the standard projection for Rand McNally’s Goode’s Atlas. Possibly, one of the more recognizable pseudocylindric projections is the Robinson. Developed in the 1960s, Arthur Robinson was approached by Rand McNally to develop a world projection that was, among other criteria, uninterrupted, contained the least possible shearing, showed landmasses with a low amount of area distortion, possessed a simple graticule, and would be suitable for readers of all ages. After examining existing projections, Robinson crafted his own orthophanic (right appearing) projection (see Figure 18d). Instead of developing specific mathematical functions to generate the graticule, Robinson chose to geometrically construct the graticule to look right and thus preserve the appearance of the landmasses and configuration of the graticule as they appeared on a globe. Mathematical formulas were subsequently developed for computer based plotting of the Robinson projection, and it was later adopted by National Geographic Society in 1988 for use in their world maps.

Map Projection Research

Research in map projections has become an activity that has generated considerable interest in the scientific community. Some recent research activities include determining the appropriate projection for global raster based data sets, selecting appropriate projections, and designing the optimal projection. As more and more satellites are orbiting the Earth, a greater number of global raster based data sets are available. To work with these data sets in a GIS environment, a projection has to be applied. Research has suggested that, depending on the cell resolution of the raster data set, not all equivalent projections produce the same results – some distort the cells to a greater extent than other equivalent projections. Another research front focuses on assisting in selecting map projections. One of the research approaches involves developing an expert system that generates a list of recommended projections according to various input parameters supplied by the user. Another approach is to develop an interactive online wizard, such as the United States Geological Survey’s Decision Support System to help select a map projection. There also have been attempts to create optimal projections that fulfill a specific criterion. Frank Canters, Aribert Peters, and John Snyder each have embarked on their own attempts to create projections that exhibit low error. For example, Snyder utilized a technique described by Chebyshev in the 1850s.

![Figures 18](image-url) The Eckert IV (a) and VI (b) equivalent, Goode homolosine equivalent (c), and Robinson compromise (d) pseudocylindric projections.
where a region can be shown conformally with low error bounded by lines of equal distortion (isocols). The isocols can be circular, oval, regular polygons, or rectangular in shape. Chebyshev’s technique inspired Snyder to create the GS50 projection. This is a low error conformal projection of the United States using isocols that bound the outline of the United States.

Miscellaneous Investigations

Space exploration and the subsequent mapping of planets have provided an interesting arena for the application of projections. Projecting other planetary bodies in our solar system has generally relied upon familiar conformal projections. Since planetary applications usually concentrate on topographic features, conformal projections depict round craters as round features, which are expected by most map users. In planet wide mapping series, the Mercator projection (see Figure 12b) is normally used for equatorial regions, the Lambert conformal conic projection (see Figure 8a) for the mid latitudes, and the stereographic conformal projection (see Figure 19a) for polar areas. For instance, NASA’s Cassini–Huygens mission to Saturn has produced maps of various planetary bodies using the stereographic planar, equidistant cylindric projection. As a variation of this rule, the National Geographic Society published a global map of Mars using the Winkel Tripel projection (see Figure 19b), which is a compromise projection.

Map projections have also found their way into the popular realm through company logos and artistic endeavors. Global Van Lines, a worldwide moving company, incorporates a likeness of the Mollweide pseudocylindric projection as part of their logo. Various airlines such as Pan Am and Continental have included planar projections as part of their logos reinforcing the ‘air age’. The American Association of Geographers adopted the Berghaus star projection showing the world in a five pointed star. Even postal organizations around the world have routinely included maps as part of post age stamps. In the early 1900s, the United State Post Office published a stamp that used the Werner projection, which is shaped like a heart and is thus appropriate for Valentine’s Day letters (see Figure 20).

Selecting Map Projections

One of the more problematic issues when dealing with map projections is how to select one for a given mapping situation. Part of the problem stems from the fact that there are hundreds of map projections that have been developed. Moreover, selecting a map projection often involves balancing the map’s purpose with several competing map projection parameters (e.g., selecting where to place the standard parallels) and characteristics (e.g., which projection property is necessary). To help in selecting a map projection, various selection guidelines have been developed in both nonautomated and automated environments. Several selection guidelines will be briefly summarized. Then, a selection guideline will be described in detail that offers some guidance on how to select a projection.
Nonautomated Selection Guidelines

An elementary nonautomated selection guideline links the latitude range of the geographic area under consideration to the map projection class. In this guideline, the planar class is suitable for polar regions (60–90°), the conic class is recommended for mid latitude areas (30–60°), while the cylindric class is appropriate for locations situated near the Equator (0–30°). This particular guideline places a close relationship between the latitude extent of the geographic area to be mapped and each class' ability to select the standard point or line(s) that coincides with that geographic area. For instance, Mongolia is located at approximately 50° N latitude and accordingly can be represented by a conic projection with two standard lines.

Taking a different approach, Derek Maling developed a selection guideline that included the amount and kind of distortion present on a map projection as well as the intended use of the projection. He viewed certain mapping situations associated with logical map projection choices where the choices are determined by the kinds and amounts of distortion present on the map projection. For instance, those mapping situations involving navigation require conformal projections while thematic mapping requires equivalent projections. This dichotomy is based on the concept that conformal projections, while preserving angular relations, do not maintain areal relations whereas equivalent projections, while preserving areal relations, do not maintain angular relations. All other properties and thus map uses require projections that compromise on amounts of angular and areal distortion. He frames his selection guideline as a continuum where conformal and equivalent projections are at opposite ends of and are useful for navigation/topographic and thematic maps, respectively. Other amounts and types of distortion (small areal distortions), as positioned along this continuum, are associated with a given mapping situation (e.g., atlas mapping).

Arthur Robinson and his colleagues describe a selection guideline that closely associates the projection properties with the map's purpose. The first issue they discuss is to consider the projection property. Maps that require the measurement of angular relationships such as navigational activities or recording movement (e.g., meteorological monitoring) require a conformal projection. Conformal projections which they recommend include the Mercator, transverse Mercator, and Lambert's conformal conic. Small scale general reference maps that involve the comparison of areas require equivalent projections. This requirement is based on the fact that some symbolization techniques (such as dot mapping) require equivalency in order to portray relative densities correctly. Recommended equivalent projections include Albers conic and Lambert's azimuthal. Mapping the entire world often poses the greatest challenges when choosing a projection because the amount of distortion varies widely on most world map projections. As Robinson and his colleagues mention, some projections such as the Goode's equivalent interrupted projection (a combination of the sinusoidal and Mollweide) displays the world with lower overall distortion than other noninterrupted maps. Planar projections such as the azimuthal equidistant, orthographic, and gnomonic have steadily increased in popularity since the advent of air travel as these projections show hemispheric views of the world. For instance, Google Earth has relied upon the general vertical perspective projection (an azimuthal projection) to display its maps. Robinson and his colleagues also note that some projections have been designed to meet specific purposes. For example, the space oblique Mercator projection was developed to monitor the ground track of satellites.

Automated Selection Environments

While these and other nonautomated selection guidelines are useful tools when considering a map projection, caution must be exercised, especially for those without a background knowledge in map projections. In most cases, to successfully work through a nonautomated guideline, the user is expected to have a certain level of map projection knowledge. Another problem is that these nonautomated guidelines will often recommend several candidate map projections, which leaves novice users ill equipped to select a single projection from even a small group. For instance, returning to the elementary nonautomated selection guideline discussed earlier, when considering a map projection for a mid latitude region, the conic class is recommended. However, there are dozens of conic projections from which to choose and without further guidance, the user is left with an arduous task of selecting among these conic projections. To alleviate this issue, several attempts have been made to develop automated selection guidelines where users interact with computer software (e.g., expert systems) to select a projection. Using expert systems or "artificial intelligence", specific procedural rules can be developed that link the requirements of a mapping situation to the appropriate projection parameters and characteristics. The result of developing these procedural rules is to help users with limited projection knowledge to choose a projection that matches their specific requirements. This process is accomplished through interaction with a graphical user interface where the expert system presents the rules to the user in a transparent fashion, thus minimizing the level of projection knowledge required by the user.

There have been a handful of attempts at automating the process of selecting a map projection. Two selection guidelines that have been developed within the context of an expert system are John Snyder's EMPSS and...
(Expert Map Projection Selection System) and Timothy Nyerges and Pitor Jankowski’s MaPKBS (Map Projection Knowledge Based System). With both systems, the selection process is guided by a series of questions that queries the user about issues such as the geographic area under consideration, map purpose, preferred projection properties, and final map scale. Users of both systems view general questions first. Next, based upon users’ responses to these general questions, more specific questions are posed to which users respond. During the entire selection session, the more specific questions are tailored to the users’ particular mapping situation. Ultimately, both systems return a single named projection that matches the requirements set forth by the user. While this expert systems approach to selecting map projections seems advantageous, unfortunately, neither systems were developed beyond the prototype stage.

Two other automated approaches to the selection process have also been developed. William De Genst and Frank Canters created their automated approach to selecting map projections. In their approach, they assume that the importance of selecting a projection is based upon the map’s purpose and the mapping situation largely determines the features that the map projection must include. Thus, their approach interacts with a user to determine the various map projection features that should be retained on a map. Some of the important features to be considered include the outline shape of the map (e.g., rectangular), representation of the pole (e.g., a line), shape of the parallels and meridians (e.g., both lines curved), and the spacing of the parallels and meridians (e.g., both equally spaced). In addition, any special features of the map such as the desired property or aspect are also considered. Once these features are obtained from the user, a specific projection is recommended. In another attempt, the USGS has created an online map projection selection guideline. This guideline begins by asking users to choose the geographic region of interest (global, continental, and regional). Once this region is identified, users are prompted other questions about the nature of the mapping situation such as desired property and type of data. An interesting aspect of this portion of the selection guideline is interaction level. For example, if users choose continental, then a world map appears permitting users to point and click with the mouse on the desired continent. Having supplied all requested input, a specific named projection is returned along with a graphic illustrating the projection’s appearance.

Table 1: An adaptation of Snyder’s nonautomated projection selection guideline for maps of the world

<table>
<thead>
<tr>
<th>Property</th>
<th>Characteristic</th>
<th>Named projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conformal</td>
<td>Constant scale along Equator</td>
<td>Mercator</td>
</tr>
<tr>
<td>Conformal</td>
<td>Constant scale along a meridian</td>
<td>Transverse Mercator</td>
</tr>
<tr>
<td>Conformal</td>
<td>Constant scale along a great circle</td>
<td>Oblique Mercator</td>
</tr>
<tr>
<td>Equivalent</td>
<td>uninterrupted</td>
<td>Lagrange, August, or Eisenlohr</td>
</tr>
<tr>
<td>Equivalent</td>
<td>interrupted</td>
<td>Muller, Eckert IV or VI, McBryde or McBryde-Thomas</td>
</tr>
<tr>
<td>Equivalent</td>
<td>Oblique aspect to group continents</td>
<td>Boggs eumorphic, Sinusoidal, Hammer (a modified azimuthal)</td>
</tr>
<tr>
<td>Equidistant</td>
<td>Centered on a pole or a city</td>
<td>Other miscellaneous pseudocylindrics</td>
</tr>
<tr>
<td>Straight rhumb lines</td>
<td>Polar or oblique azimuthal equidistant, respectively</td>
<td>Orthographic (any aspect)</td>
</tr>
<tr>
<td>Compromise distortion</td>
<td>Miller cylindrical or Robinson pseudocylindric</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: An adaptation of Snyder’s nonautomated projection selection guideline for maps of hemisphere

<table>
<thead>
<tr>
<th>Property</th>
<th>Named projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conformal</td>
<td>Stereographic (any aspect)</td>
</tr>
<tr>
<td>Equivalent</td>
<td>Lambert azimuthal (any aspect)</td>
</tr>
<tr>
<td>Equidistant</td>
<td>Azimuthal equidistant (any aspect)</td>
</tr>
<tr>
<td>Global look</td>
<td>Orthographic (any aspect)</td>
</tr>
</tbody>
</table>

Recommendations on How to Select a Map Projection

One of the more comprehensive and accessible guide lines was developed by John Snyder. His approach casts the selection process in a hierarchical series of questions that ultimately leads to a recommended projection. To begin, his guideline asks about the spatial location of the geographic area to be mapped. In his approach, the Earth is categorized into three geographical areas: World, hemisphere; and continent, ocean, or smaller area. Under each geographic area he provides a series of increasingly detailed questions that steps a user through the guideline ultimately leading to a recommended projection. Under the world category (see Table 1), the
next question determines the desired projection property (e.g., conformal, equivalent, equidistant, straight rhumb lines, or compromise). Once the projection property is identified, then the characteristic is chosen. With conformal projections, the characteristic determines how and in what fashion scale should change across a projection. The Mercator, transverse Mercator, and oblique Mercator are some of the projections that satisfy this characteristic. For equivalent projections the characteristic focuses on whether an interrupted or noninterrupted projection should be used, or if an oblique aspect is needed. Various pseudocylindric projections are offered. The characteristic for equidistant projections is where to position the projection’s center. Straight rhumb lines and compromise distortion are two additional properties that can also be considered. For maps of a hemisphere (see Table 2), the deciding factor is the required property. Conformal, equivalent, equidistant, and global look can be satisfied by the stereographic, Lambert azimuthal equivalent, azimuthal equidistant, and orthographic projection, respectively. Maps showing a continent, ocean, or smaller geographic area (see Table 3) include several criteria. The first consideration looks at primary directional extent of the geographic region. For instance, regions that extend east to west include Russia or Canada, north–south include Argentina or Vietnam, while equal extents include Antarctica or the Indian Ocean. Once the directional extent of the land mass is determined, the center of the geographic area of interest is selected. Specifying the center of the geographic area (e.g., near or away from the Equator) defines the projection’s aspect. The decision rests whether the mapping situation calls for a conformal or equivalent property. In some cases, a special property is needed such as straight rhumb lines, straight great circle routes, or correct scale along meridians.

The Future of Map Projections

Map projections solve the problem of transforming the Earth’s two-dimensional spherical coordinate system onto a flat surface. The utility of projections on maps and mapping software to accurately locate points on the Earth’s surface cannot be understated. The quest for developing the most accurate map representation for each given application will likely continue to fuel the field of map projections. However, computer environments have begun to create situations in which map projections are no longer as important as they once were. For instance, virtual worlds are now possible in which the user can interact in a true three-dimensional environment, thus removing the necessary step of projecting the Earth’s spherical two-dimensional coordinates onto a planimetric surface. While this technology provides an interesting solution to handling the Earth’s coordinate system in a true three-dimensional environment, everyday GIS users still struggle with map projection issues such as coordinate conversions, datum transformations, and re-projection. These issues are not likely to vanish in the short term. In fact, map projections will continue to be an important body of knowledge for those in the mapping fields to understand for the foreseeable future.

See also: Cartography, History of; Geodesy; GIScience and Systems; Indigenous Geographies; Indigenous Knowledge; Indigenous Mapping; Mapping, Non-Western; Mapping, Topographic; Photogrammetry/Aerial Photography.

Further Reading


Relevant Websites


http://mcmcweb.er.usgs.gov/DFSS/

Introduction

Rural protests have become an increasingly common feature of contemporary politics in many countries. The form that rural protests and campaigns take varies, as do the issues that they address and the constituencies that are mobilized. Farm incomes and changes in agricultural policy, global trade relations and regulations, hunting and animal welfare, land rights and social justice, resource management, the development of rural land, and the rationalization of rural services, have all generated protests. These seemingly disparate concerns are connected by their discursive positioning as core elements in the social construction of rurality adhered to by particular groups, such that protests are represented by their protagonists as not just about farm incomes or the right to hunt, but as a defense of a rural culture and way of life against external interference. In other circumstances, protests may reflect a more aspirational ruralism, seeking to promote an imagined rural idyll by, for example, opposing industrial development in the countryside. In both cases, contemporary rural protests in the developed world may be regarded as expressions of a new ‘politics of the rural’ in which the meaning and regulation of rurality itself is the core issue of debate.

Contemporary rural protests in the developed world have also engaged new participants in political activity. Indeed, although there is a historical tradition of rural protest in most countries, the twentieth century saw the rise of corporatist and insider strategies of rural political representation and policymaking, mitigating against rural political protest. The emergence of a new wave of rural protests at the end of the twentieth century may therefore be presented as a reaction to the failure of conventional rural politics to adequately respond to the disruption of rural restructuring. New organizations have appeared in the vanguard of rural protests, including the Countryside Alliance and Farmers for Action in Britain and the Confédération Paysanne in France, and have often adopted new political tactics and strategies, including direct action. As such, it has been argued that contemporary rural protests in the developed world might be considered as a new social movement, recognizing the underlying emphasis on rural identity, the reliance on participatory involvement, the loose and fluid organizational structures with an absence of centralized leadership, the eschewing of traditional party politics, and the conscious use of the media to convey protest messages, with some ‘stunts’ aimed primarily at achieving media coverage. However, this proposition remains controversial with critics pointing to the organizational and ideological incoherence of rural protest groups, their largely middle class composition, and the prominence of traditional rural elites in leadership positions.

A stronger and longer tradition of rural protests can be found in the developing world, where rural social movements such as the Movimento dos Trabalhadores Rurais Sem Terra (MST) in Brazil and the Bharatiya Kisan Union and the Karnataka State Farmers’ Union in India have campaigned on issues including land rights, social justice, and resistance to externally driven agricultural ‘modernization’. While these concerns may appear to be very different to those of rural protesters in...
the developed world, they share an underlying sense of rural identity and commitment to protecting a rural way of life. Moreover, the integration of agrarian economies in the Global North and South under globalization has promoted a common agenda for rural campaigners in contesting the liberalization of agricultural trade, expressed through the formation of an international farmers’ coalition, Via Campesina, and protests at meetings of the WTO.

Also, there are notable geographical differences in the extent, nature, and significance of rural protests within both the developed and developing worlds. Rural protests have, for example, achieved a far higher profile in Europe in recent years than in North America or Australia. Similarly, there are marked differences in the social and political forms of rural social movements in Africa compared with Latin America and Asia. Understanding these variations, their causes, and their consequences is one way in which geographers have a particular contribution to make to the analysis of rural protests and social movements. Geographical analysis can also illuminate understanding of the spatial strategies implicit in rural protests, from blockades and land occupations to the organizational strategies involved in mobilizing a dispersed rural population to the transposition of rural protests to external urban and international locations. Finally, geographers have an interest in rural protests because they revolve around an essentially geographical struggle to resist homogenization and integration, to protect local difference, and to defend distinctive forms of social, economic, and cultural activity that are perceived to constitute a rural identity associated with the particular, if ill defined, territory of ‘the countryside’.

**Historical Rural Protests**

Rural protests have a long history. In preindustrial Europe, rural areas not only accommodated the majority of the population, but also were the areas of weakest state control. Extreme poverty and the authoritarian rule of local landowners also contributed to tensions that sparked rebellions such as the Peasants Revolt in fourteenth century England and the jacqueries uprising in fourteenth century France. Additionally, rural areas attracted radical campaigners such as the Levellers and Diggers in seventeenth century England, who challenged existing property and political structures and sought to build new utopian settlements. While these protests appear to have little in common with contemporary rural protests they are, significantly, often appealed to by modern protesters who seek to gain legitimacy by positioning their actions as part of a long historical tradition.

Outside Europe, rebellions and protests in rural regions of Asia, Africa, and Latin America formed part of the struggle against colonialism, and in particular, resistance to the forcible appropriation of land, labor, and resources for imperial economic activity. In North America, farmers’ uprisings that had started as anti-colonial agitation became interventions in the political development of the early United States, defending settlement rights and opposing perceived excessive taxation through protests including Shays's Rebellion of 1786 and the Whisky Insurrection of the 1790s. A strain of rural radicalism continued in America into the early twentieth century, branching on the one side into the ill-fated populist and agrarian socialist movements, and on the other into vigilantism, but with both sides combining electoral politics with public protests and occasional direct action.

Industrialization provoked a new wave of rural protests, including both antitechnology movements such as the English Luddites and working class mobilizations such as the Australian shearsers’ strike in 1891. Yet, in dustructuralization also contributed to the petering out of rural protests in much of Europe, North America, Australia, New Zealand, and New Zealand. Depopulation reduced the potential pool of protesters, while the rise of resource capitalism promoted a new political settlement for rural regions that militated against protests as a political strategy. The new political settlement rested on three core elements. First, capitalist agriculture (or other forms of resource capitalism such as forestry) was positioned at the core of the rural economy and society. Farmers were encouraged to think of themselves as business owners, and workers were encouraged to identify with the interests of agriculture as an economic sector. Second, agricultural exceptionalism meant that agriculture was given preferential treatment in government policy, including price supports, subsidies, and protectionist trade policies. Third, rural (or, more particularly agri-cultural) interests were given privileged access to government through close knit policy communities that incorporated the major farm unions and, in some coun-tries, rural based political parties that exploited coalition politics to monopolize agricultural ministries – most notably the Country Party in Australia (later renamed the National Party). The smooth functioning of the system generally meant that rural protests became unnecessary, occurring only occasionally either to reinforce the negotiating position of farm unions, or as the result of conflict between rival farm unions (as in France).

**Modern Farm Protests**

The political stability described in the section above held as long as insider groups such as farm unions and rural political parties continued to deliver results to rural constituents. By the late twentieth century, however, the
political settlement was coming under pressure from several directions and its ability to deliver became compromised. This happened in the United States in the 1970s when the agricultural policy community weakened just as farmers faced a mounting debt crisis. Disaffected farmers formed the American Agricultural Movement, a network of loose cells with no formal leadership that organized a farm strike and two ‘tractorcade’ protests in Washington, DC. The first tractorcade, in January 1978, attracted 3000 farmers to the capital, while the second, in February 1979, caused traffic congestion with a 40 km long line of tractors. In Australia, high interest rates and weakened farm union influence with a newly elected Labor government prompted 25 000 farmers to participate in a demonstration in Canberra in July 1985; while in New Zealand, farmers protested against the radical de regulation of agriculture proposed by another newly elected Labour government, despite support for the policy by some in the Farmers Federation. In all three cases the farmers’ protests ultimately proved to be unsuccessful and subsequent policy reforms and structural adjustments have reduced the capacity for rural protest in these three countries by drastically altering the structure of the agricultural sector.

European farmers have arguably been more successful in resisting, or at least delaying, attempts to reform the Common Agricultural Policy (CAP). Early reforms in 1982 were abandoned after 100 000 French farmers marched through Paris in protest undermining the French government position, and farmers in Britain and elsewhere protested against the introduction of ‘milk quotas’ in 1984. Increasing farmer militancy in Europe has also been associated with disaffection with established farm unions. In France, discontent in the early 1990s with the handling of renewed CAP reform efforts by the Fédération Nationale des Syndicats d’ Exploitants Agricoles (FNSEA) union led to defections to breakaway groups including Co ordination Rurale and the Con federation Paysanne, which adopted more confrontational direct action tactics such as road blocks. In Britain, growing farmer discontent at the handling of the bovine spongiform encephalopathy (BSE) crisis in 1996 and falling farm incomes in 1997 provoked a series of protests by dissident farmers including port blockades, town center rallies, and pickets at supermarkets and food processing plants. Over 100 protests are calculated to have been organized by farmers in Britain between summer 1996 and March 2000. The loose network of activists which had organized these protests formalized themselves as a new organization, Farmers for Action, in May 2000. In September 2000, Farmers for Action played a key role in the blockade of fuel depots across Britain in protest at increased fuel taxes, copying farmer led fuel protests that had already been successful in Belgium, France, Germany, Italy, Norway, the Netherlands, Spain, and Sweden.

Rural Restructuring and the Politics of the Rural

Structural adjustment in agriculture has been just one dimension of a wider process of social and economic restructuring in rural regions of the developed world over the last quarter of a century. This has encompassed economic restructuring, including a shift in economic significance and employment from traditional primary industries such as farming and forestry to consumption based economic activities such as service industries and tourism, in migration to rural areas as part of a trend of counterurbanization, and associated patterns of second home buying, gentrification, and rising property prices; growing environmentalism and increased regulations to protect rural landscapes, plants, and animals, and the increased mobility and prosperity of rural residents producing new lifestyle patterns that have, combined with neoliberal economic policies, stimulated the rationalization of rural service provision. These processes of rural restructuring have not only disrupted traditional rural political structures, creating opportunities for new political groups and practices to emerge, but have also undermined the discursive stability of the ‘countryside’ as an imagined space. It has hence been suggested that the late twentieth century witnessed a transition from ‘rural politics’ – concerned with the management of rural in dustries and land – to a ‘politics of the rural’, in which the meaning and regulation of rurality itself is the primary focus of conflict and debate.

One of the first people to observe the consequences of rural restructuring for the politics of rural areas was a Belgian rural sociologist, Marc Mormont. Writing in the 1980s, Mormont argued that rural spaces are now the focus of competing ideas about their form, function, and development, giving rise to new ‘rural struggles’ in which emergent rural social movements fight to promote their particular vision of rurality. Mormont cited as examples of such rural struggles conflicts over a tourism development and over a village school, thus directing attention to the local scale. In the two decades since Mormont’s article, local rural conflicts of this type have become commonplace in rural localities across the developed world. They range from very locally focused campaigns against specific building developments or the closure of a local post office, to more significant protests against major developments such as new roads, airports, and quarries or to defend certain cultural practices. Local rural protests are usually grassroots led, engage new participants in political activity, and employ a range of different tactics including rallies and demonstrations, petitions and letter writing campaigns, interventions in local elections and, on occasion, direct action. Often, local rural protests have been initiated by in migrants seeking to defend their financial and emotional investment in the rural idyll, yet...
it is erroneous to reduce rural conflicts to local income tensions, and rural protests can mobilize participants from all sectors of the rural population, for a variety of motivations.

Many local campaigns have been successful in achieving their goals, but many have been frustrated in their attempts to affect real change due to the limited power of rural local government. This has led to the banding together of pluri local coalitions and the refocusing of attention at the regional or national scale. The rescaling of the politics of the rural at the national level has also been prompted in some countries by legislation that has been perceived to threaten rural communities or cultures, including notably the National Competition Policy in Australia (which deregulated elements of agricultural trade and service infrastructure provision), and legislation on hunting in Britain and France.

Indeed, hunting has sparked some of the most passionate and high profile rural protests of recent years, most notably in Britain. It is also interesting because unlike many rural protests it concerns not a physical site, or a set of economic interests, but the perceived right of rural people to participate in an activity that they regard as central to their culture and way of life. In Britain, ‘hunting’ commonly refers to the pursuit of wild mammals by hounds and has been the focus of political conflict for several decades. The election of a Labour government in 1997, however, was considered by hunting supporters to pose a significant threat to their sport. They responded by forming a new pressure group, the Countryside Alliance, from three smaller pro-hunting organizations. Between 1997 and 2005 the Country side Alliance organized three major demonstrations in London – the Countryside Rally (July 1997, with 120,000 participants), Countryside March (March 1998, 250,000 participants), and Liberty and Livelihood March (September 2002, 408,000 participants) – as well as a series of smaller long distance marches, regional rallies, demonstrations outside parliament and party conferences, town center events, and publicity stunts. Yet tensions also developed within the Countryside Alliance over strategy and particularly the balance between protests and conventional political lobbying, leading to a number of breakaway factions. These splinter groups, including the Countryside Action Network, the Rural Rebels and the ‘Real Countryside Alliance’, tended toward more direct action tactics, including road blockades and the appropriation of prominent landmarks to convey pro-hunting messages. However, while these protests undoubtedly delayed hunting legislation, they failed to prevent a ban on hunting with hounds being introduced in February 2005.

Hunting has also been the focus of rural protests in a number of other European countries, as well as in some parts of the United States, albeit with a lower profile than in Britain. In France, proposals to limit the hunting season for migratory birds prompted both demonstrations and the formation of a new political party, Chasse, Pêche, Nature et Tradition (CPNT), which polled 12% of the vote in the 1999 European elections. In Belgium, the establishment of a Flemish Environmental Network of protected wetlands in which hunting would be prohibited led to a protest march by 20,000 hunting supporters in Gent in May 2003, organized by Platform Buitenbeheer (‘Countryside Platform’) under the slogan “March for a Liveable Countryside.”

Significantly, several of the larger rural campaign groups have explicitly made connections between different issues affecting rural areas. The Countryside Alliance, for example, was deliberately named to associate the core issue of hunting with wider concerns about the future of the British countryside and has over time developed a broader campaigning platform, including agricultural issues, affordable housing, and rural service provision.

Rural Protests in the Developing World

As the trajectory of rural protests in the Global North has been shaped by eras of industrialization and rural restructuring, so the trajectory of rural protests in the Global South has been shaped by colonialism, de-colonization, political struggle and revolution, modernization and uneven development. Rural social movements emerged in the 1960s and 1970s, building on the heritage of rural resistance to colonialism to mobilize protests opposing externally driven agricultural ‘modernization’ programs that threatened peasant livelihoods, or repressive state action against rural communities (or sometimes both). More recently, rural protests have challenged agrarian and economic reforms associated with neoliberal policies, including those imposed on developing countries by global institutions such as the World Bank. Some commentators suggest that these contemporary protests represent a ‘new wave’ of rural movements, characterized by a mixed social base of rural peasants and urban proletarians, leadership from ‘peasant intellectuals’, an ‘antipolitical’ strategy and use of direct action tactics, an internationalist vision and the ideological fusing of Marxism and ethnic politics. Others, however, contend that this model is subscribed to as an ideal that finds only partial articulation in rural social movements.

Contemporary rural protests in the developing world have commonly addressed the interlinked issues of land reform, agricultural modernization, and political and social justice. The MST in Brazil, for example, founded in 1984 to campaign for a more equal
distribution of land, expressly positions itself as part of a wider struggle for social and political reform. The MST has adopted a range of tactics, including a national protest march in 1997, but its primary tactic has been land occupations – appropriating unproductive land for the settlement of landless families. Between 1985 and 2000, the MST averaged 345 land occupations a year, claiming 23,598 ha of land and resettling over half a million families. Land occupations have been a feature of rural protests in a number of other developing countries, including Ecuador, Malawi, Paraguay, the Philippines, South Africa, and Zimbabwe, often with state support or complicity. Elsewhere, protests over land rights have opposed the sequestration of property from peasant farmers, including resistance to urbanization in China, where it has been reported that an average of 230 rural protests a day were held in 2005, mostly against land seizures.

Peasant movements have also been active in resisting neoliberal agrarian reforms, opposing the spread of genetic modification technologies sponsored by global agri-food corporations, and promoting alternative, sustainable, forms of agriculture. The Karnatakat State Farmer’s Union in India, for example, successfully opposed the promotion of genetically modified (GM) cottonseeds and field trials by Cargill and Monsanto. Moreover, in some regions, peasant protests have fused with wider political struggles, most famously in the Chiapas region of Mexico, where the Zapatista movement (EZLN) has mobilized a peasant base in an armed uprising that has combined land and agrarian questions with indigenous rights and calls for regional autonomy.

Rural protests in the developing world have therefore addressed a range of issues, and have often championed concerns that are not necessarily exclusively rural, yet they share a common emphasis on peasant identity and a commitment to the social, economic, and environmental sustainability of rural communities. Groups such as the Bharatiya Kisan Union in India have staged protests over a range of interconnected rural issues, including electricity supply, sanitation and education, as well as agricultural prices, presented as part of a rural–urban struggle.

Globalization and Rural Protest

Rural protests in the Global North and the Global South may have developed along different trajectories, but globalization means that rural campaigners in the North and South are increasingly facing shared, or at least, interlinked, challenges. Globalization can spark rural protests in a number of ways. Increased global mobility of migrants, for example, forms a background to protests by migrant rural workers (such as the farmworkers movement in the United States), as well as more reactionary protests by rural residents against illegal immigration or asylum processing centers. Equally, the global dissemination of ‘universal’ environmental and animal welfare values has informed protests over resource exploitation, animal husbandry, and hunting, often involving international pressure groups. Conflicts such as protests against the commercial logging of ‘old growth’ forest in British Columbia have achieved global publicity and support through these networks.

It is, however, economic globalization and particularly the liberalization of global trade in agricultural commodities that has become a key focus for rural protests in both the Global North and South. Farmer groups in Mexico, for example, combined to protest against the North American Free Trade Agreement in 2003 under the slogan “El Campo no Aguanta Más” (The Country Can’t Take It Anymore). Anti-free trade protests have also been staged by farmers in Bolivia, Colombia, Ecuador, South Korea, and Thailand.

The expansion of free trade areas, and concern at imports, is equally a focus for rural protests in the Global North. Vehicles carrying food imports have been targeted by farm protesters in Britain and France; in Poland, farm groups have mounted roadblocks in protest at imports and at accession to the European Union (EU); while the ‘Resurrecting Rural and Regional Australia’ campaign in 2004 united various rural protest groups in campaigning against agricultural deregulation, a free trade agreement with the United States, and foreign takeovers of companies. Yet, unlike rural movements in the developing world, these protests have tended to be insular and protectionist and have not looked toward global solidarity.

A notable exception is the Confédération Paysanne in France. The Confédération Paysanne has been a key protagonist in rural protests since the 1980s, but achieved global attention in August 1999, when José Bové led a protest dismantling a McDonald’s restaurant in Millau, sparked by increased US import tariffs on Roquefort cheese imposed in retaliation to an EU ban on US hormone treated beef. Bové has targeted McDonald’s as a symbol of globalisation and in his trial in June 2000 he further confronted globalization, calling as witnesses rural campaigners from Poland, the Philippines, Senegal, Brazil, and the United States. A free antiglobalization festival, attended by an estimated 100,000 supporters outside the court, reinforced the message.

The desire to build global solidarity between rural protest movements led to the formation of Via Campesina in 1993, an international farmers’ coalition that now represents over 140 organizations in over 60 countries. Significantly, these include not only the MST, the Bharatiya Kisan Union, and other peasant movements in Latin America, Africa, and Asia, but radical European
farmers unions including the Confédération Paysanne, as well as the National Farmers Union of Canada and the National Family Farm Coalition in the United States. Via Campesina has organized farmers’ protests at meetings of the WTO, including at Cancun in September 2003 where Korean farmers’ leader Lee Kyoung hae publicly committed suicide to highlight the effect of trade liberalization on Korean rural communities. The demonstrations at WTO meetings, along with other events such as transnational ‘caravans’ of farmers from Latin America and Asia through Europe and North America, form ‘convergence spaces’ through which the disparate interests of rural groups can be melded into a singular protest and the barriers of space and scale can be overcome.

See also: Citizenship and Governmentality, Rural; Peasant Agriculture; Resistance; Social Movements.

**Further Reading**


**Relevant Websites**

www.confederationpaysanne.fr

Confédération Paysanne.

www.countryside.alliance.org

Countryside Alliance.

www.mst.org.br/mst/home.php

Movimento dos Trabalhadores Rurais Sem Terra (MST).

www.viacampesina.org

Via Campesina.
Psychoanalysis

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Glossary
Analysand  The patient in psychoanalysis.
Ego  The part of the mind that concerns the sense of self and mediates between the unconscious and conscious, as well as the Id, Superego, and social reality.
Hermeneutics  A branch of knowledge that concerns the art, science, and philosophy of interpretation.
Id  An unconscious part of the mind that is associated with immediate gratification and the primary instinctual impulses of aggression and sexuality.
Inductive Reasoning  The process through which general conclusions are reached through the evaluation of particular events and observations.
Method  A systematic means or particular procedure that is used to collect data and is guided by methodology.
Methodology  The systematic theoretical analysis of methods, as well as the study of the directions and implications of empirical practices, techniques, and the research process.
Superego  The part of the mind associated with moral agency, self-critical conscience, as well as social standards and imperatives.
Transference  The redirection to a substitute, typically the analyst, of former infantile feelings toward a significant person – typically one’s parents.
Unconscious, The  A partially inaccessible and dynamic part of the mind that mainly consists of repressed thoughts, injunctions, and feelings that profoundly influence our conscious lives.

Introduction

Psychoanalysis is characterized by ongoing critical reassessments of its clinical methods. Although psychoanalysis is composed of different and often contrary theorizations about the human mind, all psychoanalytic ‘schools’ are united by a reliance on the methods of talking, listening, and interpretation. Much of the literature on psychoanalytic methods is underpinned by enduring debates about psychoanalysis’s relation to science. On the one hand, Sigmund Freud (1856–1939), who founded psychoanalysis during the late nineteenth century, always strived to establish psychoanalysis as a scientific project. On the other hand, Carl Jung (1875–1961), who in 1913, famously ushered in the first major break from the Freudian paradigm, was unconcerned about whether psychoanalysis was scientific or not. Beyond psychoanalytic circles, numerous scholars working in the sciences, social sciences, and humanities have passionately lauded or vehemently condemned psychoanalytic methods vis à vis questions about scientific validity.

While debates about the (un)scientific status of psychoanalysis are obviously bound up with different understandings of science and psychoanalysis, the following questions have been regularly raised ever since the early twentieth century: First, to what extent can psychoanalytic objects, processes, and hypotheses such as the unconscious, libido, repression, transference, the death drive, and the Oedipus complex be empirically observable, testable, and causally explained? Second, how can psychoanalytic concepts become useful and rigorously integrated into non psychoanalytic methodological practices? Third, to what extent can clinically based and individually centered psychoanalytic methods be used for the investigation of social contexts by social scientists and texts by scholars working in the humanities?

In response to the above questions, some commentators have argued that psychoanalysis is nothing but a glorified sectarian dalliance composed of fairy tales that demand absurd, that is, unscientific conceptual leaps of faith. Other commentators, however, dismiss such condemnations because of their single mindedness, lack of rigor, and narrow understandings of what constitutes science, scientific inquiry, and psychoanalysis. To be sure, whenever psychoanalysts make theoretical propositions about psychical life, they are often at pains to avoid falling into the traps of reductive reasoning and totalizing knowledge claims. Whenever one reads a psychoanalytic text (especially Freud’s), one is sure to encounter as much doubt and hesitation as certainty and assuredness. For the most part, psychoanalysis relies on inductive reasoning whereby general theories of the mind are derived from and based on particular and repeated empirical observations in clinical settings.

Given the psychoanalytic goal of explaining seemingly ‘irrational’ behavior, the alleged idiosyncratic even ‘crackpot’ psychoanalytic concepts such as the unconscious, the death drive, and Oedipus complex are used not so much as an attempt to faithfully capture or mirror psychical ‘reality’, but rather as a conceptual strategy in which to explain or take into account the iterations of enigmatic and hitherto fore inexplicable psychical phenomena. It is on the question of how to
explain the psychical dimensions of seemingly irrational social and spatial behavior that human geographers increasingly began to turn to psychoanalytic theories during the mid 1990s. As a result, psychoanalytic geographies have become an important subfield in human geography. And yet, extensive critical assessments of the validity, value, and potentiality of psychoanalytic methods in human geography are rare. Put simply, geographers have found psychoanalytic concepts much more valuable than psychoanalytic methods. In addition, the use of psychoanalytic methods in geography usually involves adding psychoanalytic concepts to already existing methods and methodologies. There are at least three main reasons for this situation:

First, psychoanalysis has been frequently viewed by a significant number of geographers with a cautiousness that borders on suspicion that even borders on paranoia. Geographers’ paradigmatic commitments to social constructivism, historicism, and cultural studies have meant that we are easily disturbed by the allegedly cultural and a historical psychoanalytic concepts such as the unconscious, the drive, and desire. While many geographers are correct to assert that these concepts cannot be entirely reduced to the effects of discourse, the social, history, culture, and biology, most geographers find the theoretical use of an abstract psychoanalytic concept much more palatable and legitimate than the prospect of methodologically enacting psychoanalytic concepts and methods in the lived spaces of research. Second, because geographers have, for the most part, selected concepts and literatures that conform to and emerge from the above dominant paradigms in human geography, much of the radicality and thus the very points of psychoanalytic epistemologies and ontologies have been elided. Thus psychoanalysis is widely viewed in geography as both an extravagant and redundant theoretical detour: psychoanalysis spends too much theoretical time on problems that could be more easily tackled with other, thriftier theoretical frameworks. And so, geographers have parried or simply foreclosed discussions about the commensurability of psychoanalytic methods with existing methods in human geography. Third (and related to the first reason), the methodological tenets shared by psychoanalytic and psychotherapeutic practices have convinced some geographers, most notably Stuart Oliver, that psychoanalytic methods are simply best confined to clinical rather than social settings.

Despite this lack of engagement and uncertainty about psychoanalytic methods in human geography, there are a number of ostensibly psychoanalytic methods in geography. Before turning to geographers’ rendering of psychoanalytic methods, let us first briefly elucidate some key psychoanalytic methods.

**Key Psychoanalytic Methods**

In a psychoanalytic session, it is the patient, rather than the analyst, who does most of the work. This is why in psychoanalysis, the patient is often referred to as an ‘analysand’ – the gerund term highlights the active role of the person under therapy. Here, ‘work’ refers to analyst’s job of facilitating the analysand’s task of discovering and ‘working through’ unconscious material that has, for example, been repressed (expelled from consciousness into the unconscious), foreclosed (excluded from consciousness and the unconscious), or disavowed (unconsciously denied yet acknowledged). During the early years of psychoanalysis, Freud noted how difficult it was for analysands – despite their best intentions and efforts – to recuperate the most important and painful unconscious memories. Freud’s notion of ‘resistance’ refers to these various struggles and blockages. According to Freud, resistance mainly consists of defense mechanisms that included rationalization, repression, regression, displacement, and reaction formation. The ‘defenses’ helped to protect the conscious mind from aspects of reality deemed unacceptable or dangerous. In order to overcome resistance and access unconscious material, Freud originally used the method of hypnosis and the power of suggestion. Freud, however, soon abandoned the method of hypnosis because it was unpredictable and not many patients were able to enter a hypnotic state. Freud soon turned his attention on fine tuning numerous methods, including three methods that have become extremely important for nearly all practising psychoanalysts. It is to the key psychoanalytic methods of free association, transference, and analytic listening that we now turn.

**Free Association**

Having abandoned hypnosis, Freud began to develop the method he called ‘free association’ that basically involves encouraging analysands to say whatever is in or comes into their minds no matter how silly, embarrassing, or confusing those thoughts may be. One of the main reasons analysands lie on comfortable couches that face away from the analyst is to facilitate the process of free association. The primary goal of free association is to build a substantial amount of material in a way that unfolds an associative network of the analysand’s unconscious. Freud also used free association as a method to enable the analysand to recall or accidentally come across a crucial, perhaps even pivotal for the analytic treatment, forgotten memory. The main point of free association, however, was not to discover or unearth the analysand’s ‘big secret’, but rather, to elucidate in speech and over a long period of time the analysand’s psychical
conflicts that kept at bay certain memories and wishes from the conscious mind.

Transference

Much of psychoanalysis relies heavily on the ‘cathartic method of treatment’, that is, the task to make patients feel the emotions of previously repressed or forgotten early childhood memories. Now, all this free associating talk about infantile memories means that the relationship be tween the analyst and analysand is quite a peculiar one. A common outcome of this relationship involves analysands' reenactment of intense infantile emotions, demands, ex periences, and identifications in the analytic session by projecting them onto the analyst. Freud called this process ‘transference’. When Freud first encountered transference, he initially categorized it as another form of resistance. Later, Freud regarded transference as a unique way to facilitate analytic progress. For example, the analysand may begin to transfer powerful feelings such as love and hate onto the analyst that they once directed toward their mother or father. Through transference, the analyst be comes a substitute for the analysand’s original parent. Thus, Freud believed that transference usefully revealed the analysand’s history (especially their childhood ex periences) because it involved the repetition of previously learnt behavior. Freud also encountered the process of countertransference wherein the analyst may transfer their unconscious feelings back onto the analysand. Notably, there is much debate in psychoanalytic literature about the extent to which transference and countertransference aid or restrict psychoanalytic treatment.

Analytic Listening

The French philosopher Paul Ricoeur (1913–2005) once likened psychoanalysis to a ‘hermeneutics of suspicion’. Ricoeur’s comment brings to the fore how psychoanalysis is preoccupied with developing interpretative techniques that discern meaning in subtexts, disguises, and multi plicities. Exemplary here is the method of analytic listening. For Freud, analytic listening consisted of taking a position that adopted a meditative state of ‘evenly hovering attention’. Put differently, analytic listening is open and attentive to new observations and alternative meanings in what the analysand says. In order to achieve this openness, analysts had to avoid the following: at tributing a single meaning to the analysand’s speech; succumbing to countertransferential suggestion; holding onto particular memories of what the analysand had said previously; and cultivating desire and judgment when listening to the analysand. Furthermore, analytic listening requires that the analyst listens in an engaged manner and is attentive to the numerous psychical dimensions and registers of the analysand’s speech. When an analysand speaks, analysts are trained to listen to not just one voice, but to many voices, that is, to the polyvalocity of speech. Here, psychoanalysis attends to three hermeneutic ‘horizons’ or temporalities: the time of the analysand's discourse, the time of the analytic session, and the time of the patient’s life. For Anna Freud (1895–1982), analytic listening meant that the analyst position themselves ‘equidistant between Ego, Id, and Superego’.

Obviously, given the psychoanalytic premise that the unconscious exists and has effects, analysts themselves will always import unconscious judgments, biases, desires, etc. Methodological conundrums and inevit abilities such as these are central to the vast psycho analytic literature on methods and one of the reasons why Freud famously dubbed psychoanalysis ‘the im possible profession’.

Psychoanalytic Methods in Geography

Psychoanalytic geographers have yet to use the key psychoanalytic methods of free association, transference, and analytic listening. As we shall see, however, the methods that are used by psychoanalytic geographers import many of the methodological commitments outlined above. To be sure, much of critical human geographical research is replete with processes that are comparable to free association, transference, and analytic listening. Think, for example, of the free association like meandering pronunciations and spontaneous ramblings voiced during unstructured interviews. Think, for ex ample, of the powerful transferential bonds that often develop between the researcher(s) and researched during interviews, ethnographies, and focus groups. Think, for example, of the degree to which geographers, especially feminist and poststructuralist geographers, attempt to foster data collection techniques and conditions that are comparable to analytic listening: attendance to self reflexivity, mindful of multiple viewpoints and meanings, recognition of the situatedness and partiality of know ledge, vigilance toward power dynamics, and appreciative of the ineluctable instability of insider/outsider and researched/researcher distinctions.

It is important to recognize that psychoanalysis and its methods have at once significantly and subtly influ enced how researchers in social sciences such as geog raphy conduct and conceptualize research processes and subjects. How so? Put simply, it is difficult to underestimate the impact psychoanalysis has had on the development of the critical and social theories that infuse so much of human geography's methodologies. It is perhaps more accurate to state, then, that geographers have yet to systematically or explicitly use the afore mentioned key psychoanalytic methods. Geographers'
tentativeness toward psychoanalytic methods is neither an inevitable outcome nor has it anything to do with the intrinsic properties of psychoanalytic methods. In the discipline of sociology, for example, free association has been used to explore the emotional dynamics of small social groups such as families. Geographers' tentativeness toward psychoanalytic methods is best understood as the result of a more general hesitation toward psychoanalytic epistemologies and ontologies. Such tentativeness is marked by the inverted commas that often surround psychoanalytic concepts in geography such as the unconscious, and, as we shall see, in some of the following methods that geographers have adopted under the aegis of psychoanalytic geographical research.

The following section is not exhaustive, but rather representative of the most recent and extensive examples of how geographers have engaged with psychoanalytic methods. The first subsection exemplifies how geographers have used psychoanalysis to theoretically evaluate current methods and methodologies in geography. The next subsection illustrates how a psychoanalytic method is concretely used in a research setting. The subsequent subsection reveals how psychoanalytic theory has been used to inform interpretative and explanatory frameworks that try and make sense of complex socio spatial processes.

**Empathy and Identification**

To date, Liz Bondi's work on empathy and identification is one of the most incisive and extensive theoretical as sessments of the potential benefits of using psycho analytic methods in geography. Bondi asserts that psychoanalytic understandings of identification and empathy provide 'conceptual resources' that can enhance feminist understandings of fieldwork, specifically, questions about how positionality and power infuse the dynamics between the researcher and the researched. It is important to note that Bondi does not wish to forge a distinctive form of therapeutic or psychoanalytic fieldwork, but rather, to explicate some psychoanalytic insights that can theoretically enhance already existing research methods.

Bondi primarily draws on an 'object relations' psychoanalytic approach. Briefly, proponents of object relations such as Melanie Klein (1882–1960), Michael Balint (1896–1970), and British psychoanalysts, including Donald W. Winnicott (1896–1971), Ronald Fairbairn (1889–1968), and Harry Guntrip (1901–1975) emphasize the role of the drive by considering the concepts of identification and empathy. The former term (following Melanie Klein) consists of, on the one hand, the projection or unconscious expulsion of aggressive impulses and 'bad' objects onto other people and, on the other hand, unconscious processes of introjection, that is, the internalization of 'good' objects. Empathy primarily involves the capacity to understand the emotional con dition of another person through oneself, especially through acts of listening. Bondi addresses how the interview process (like many other social interactions) is structured by conscious and unconscious divisions and exchanges of labor exemplified by the process of one person talking while another listens. Researchers, then, are often tested on their ability to receive, process, and then give back to the researched unconscious material. As Bondi notes, the process of empathy is quite unlike identification because through empathy the researcher offers, rather than expels, unconscious material in a way that can be easily handled and 'owned' by the interviewee. Given the extent to which interviews can involve oscillatory processes of observation and participation, as well as intensely affective exchanges of anger, confusion, and sadness, Bondi makes a convincing
case that the concept of empathy is extremely useful to reflect on, if not orient, the very practices of qualitative interviews.

‘Playing’

Beginning with the object relations thesis that adults' sensations, perceptions, and experiences of landscape are profoundly influenced by their infantile experiences of the Self with the Other (mother/primary caregiver), Amanda Bingley’s (an experienced practicing psycho therapist) research tackles the key psychoanalytic ques tion of how to access and interpret elusive unconscious processes. For Bingley, any methodological gap pre venting the import of practices of therapy into academic research is ultimately a negligible one. In order to tackle the question of the relationship between the unconscious and adults' experiences of landscape, Bingley enlists two concepts from Winnicott: the first, 'potential space' or 'intermediate space', is a space through which meditative, fluid, transitional, and exploratory demarcations of Self and Other (e.g., person, people, landscape, object, etc.) take place during infancy. Such a space is replete with the interconnective capabilities of 'objects' (see above). The second concept is the 'transitional object' which typically includes the breast, food, a toy, and blanket. Such tran sitional objects are mediators and travelers between permeable inner and outer psychical worlds which, through acts of 'playing' (inverted commas in original), help to establish a potential space. In addition, transi tional objects usher in 'unintegrated' states (between the capture of reality and threat of integration) for their users, meditate between fantasy and the real world, and become more sophisticated as we grow older. For Winnicott, potential space creatively infuses existing and possible cultural worlds of art, music, literature, and stories.

Bingley’s research involves the creation and maxi mization of the conditions of a potential space and states of 'unintegration'. How is this achieved? Bingley's research involves practical workshops composed of 12 adult participants. Key here is how Bingley’s research is informed by Jacques Burgess’s use of 'small group' ana lyses that draws on the work of S.H. Foulkes (1898–1976). Notably, Bingley uses a wide range of methods of in cluding in depth interviews, verbal feedback, and artistic three dimensional modeling in group workshops as a way in which to address sensory experiences from the in formants' earliest childhood to the present day. Bingley’s main research method, however, is the art therapy and Jungian technique of sandplay. Through sandplay, research participants are able to become part of a potential space. Sandplay, which involves participants playing (often with their eyes closed) with wet and dry sand with their hands, feet, and tools such as small buckets, brings to the fore tactile rather than visual ex periences of the landscape. Thus, research participants can 'get in touch with touch', and, in so doing, attend to not only an overlooked sense, but also their over looked emotions. In this way, sand acts as a transitional object because it is a blank canvas or screen onto and through which participants can materially enact alter native psychical and sensory registers. Sandplay opened up new sensory landscapes for the participants and prompted numerous childhood memories and hitherto fore unarticulated associations that straddled a psycho phenomenology of being 'in here' and 'out there', identifications with sand figures, precipitation of free association.

Bingley notes that much of the entire project worked through what Winnicott calls a 'facilitating environment' or 'holding environment': a space that thrives on and fosters trust, empathy, and knowledge building. For example, Bingley traveled to potential participants' homes in order to ensure they felt secure and thus hopefully willing to be involved in the research. In addition, like the analyst, Bingley did not seek to impress her judgments or even observations on the results of the participants’ sandplay. By creating a facilitating space and 'holding' the research group, Bingley not only brings to our attention the relevance of various psychoanalytic concepts for methodological discussions, as well as our questions about society and space more generally, she also provides one of the most focused methodological accounts of how to conduct psychoanalytic methods in geography.

‘Tracking’ and ‘Mapping’

The final two psychoanalytic methods discussed in this article, 'tracking' and 'mapping' (inverted commas in the originals), are exemplary of how geographers adopt a psychoanalytic framework in order to interpret socio spatial phenomena. Mapping and tracking, used by Heidi Nast and Steve Pile respectively, are both used to elab orate socio spatial analyses, rather than subject based research.

In Real Cities, Steve Pile toys with our assumptions about what is 'real' in urban life. Pile's central thesis (following the sociologist Robert Park) is that a city's state of mind or personality is as important, that is, as real as its built environment. Inspired by the rebellious methods of the Situationist International and several contemporary novelists, Pile aims to reveal why urban imaginations, fantasies, and emotions matter because they are thoroughly material and political. Pile's notion of the real city brings to the fore how cities are unsettling and overdetermined, that is, the outcome of multiple social, psychical, and political forces. To illustrate this thesis, Pile uses the Freudian–Marxian analytic

The main method in Pile’s empirical analyses is what he calls ‘tracking’ which aims to ‘get at the circulation of urban imaginaries’ and things such as postcards, billboards, advertisements, architecture, shop windows, cereal boxes, graphic novels, (installation) art, tourist leaflets, newspapers, theater sets, buildings, graffiti, fantasies, information, stories, and ideas that circulate in cities, including London, Singapore, New York, and New Orleans. Tracking, then, is a method that is open to the contingency and multiplicity of possible objects, scenes, events, and processes. As a result of ‘tracking’, Pile’s interpretations and narrative, echoing Freud’s dream analyses (a topic that Pile has previously explored), focus on the spaces of short circuits, disconnects, and coincidences.

Pile posits that it is not sufficient to simply ‘ground’ our theories vis à vis the method of grounded theory. Put differently, Pile rejects the idea that when we do research we must bring into concrete realms our abstract concepts and theses. An adequate understanding of the material, Pile asserts, demands an adequate understanding of the immaterial. Alongside extensive archival research, Pile uses 82 black and white illustrations that are as sparkling and flat as the urban spaces they underscore. By addressing the visual, Pile’s maneuver (in contrast to Bingley’s) echoes Gillian Rose’s work on methodology and her use of psychoanalytic concepts such as ‘lack’ and the ‘gaze’ in order to examine the visual.

As mentioned earlier, a key motive for geographers to adopt a psychoanalytic theoretical framework is because of its explanatory power of seemingly irrational behavior. Exemplary here is Heidi Nast’s work on the segregated spaces of racism and racial fear in the context of US cities and the fears of black men raping white women during and after transatlantic slavery. For Nast, the causes of racist violence such as lynching are not entirely caught up in the social. Rather, racist violence emerges precisely because there are limits to the social: not everything can be socially articulated or collectively put into words and collectively acknowledged.

Underpinning Nast’s research is the psychoanalytic idea that in order to explain phenomena, one focuses not so much on the links between the Particular (e.g., diverse locales) and the Universal (e.g., global forces), but rather, on the links between the Singular and Universality, that is, on how a detailed phenomenon marked by excess, exception, and intangibility reveals a universal logic. For Nast, there are three interrelated singular events vis à vis the lynching of black men in post Reconstruction settings. First, of the thousands of black men who were lynched, many of them were castrated. Second, many lynchings were celebrated publicly with hundreds and thousands of white children and family members in attendance. Third, many lynchings of black men were justified as a response to the alleged rape of a white woman. Nast argues that these three singularities are indicative of the universal logic of the Oedipal family qua a hegemonic mode of socio spatial organization that legitimates racist violence.

In order to explicate these points, Nast adopts the method of what she calls ‘mapping’ – a mélange of the orietical and empirical investigation that is sensitive to historical geographic contexts and highly informed by psychoanalytic theories. Like Pile’s method of tracking, Nast’s mappings focuses on specific material objects that include white colonial mother dolls, frontispiece illustrations, films, poems, and a magazine cover. Unlike Pile’s ‘tracking’ which predominantly embraces the magical realism of space, Nast’s mapping is primarily an interpretative strategy through which to explain the causes that infuse the irrational violence of racist landscapes. In so doing, Nast addresses questions about the repression of geopolitical mechanisms and forces and the circulation of desire. Nast also takes her cue and expands upon two methodological sources: First, Fredric Jameson’s notion of the ‘political unconscious’ that seeks to methodologically avoid the alleged apolitical individualism in psychoanalysis. Second, Gilles Deleuze and Félix Guattari’s critique of what they see as psycho analysis’s all too routine uncritical acceptance of the Oedipal family as a unit that structures and defines desire. Much of Nast’s method of mapping is informed by what she calls ‘nodal thinking’ which involves attending to spaces not so much as parts of larger story, but rather as spaces through which stories are (un)told and structures can take hold.

Conclusion

In the beginning of this article, the author argued that one of the reasons for geographers’ hesitations about using psychoanalytic methods is the idea that psycho analysis and its methods are best left lying on the couch, rather than brought out into social scientific research arenas. There is a certain irony here of course, because Freud did not want psychoanalysis and its methods to be left to a cadre of expert physicians. What mattered to Freud was good training and experience rather than professional diplomas. This is not to say that it is high time geographers began to psychoanalyze their research subjects, nor is it to dismiss the profound ethical questions about the use of methods that may usher in forms of therapy. Rather, the question of psychoanalytic methods in geography prompts us to remember that much of the
value of research coincides with the extent to which the research embraces new questions and theoretical frameworks.

It is only very recently, via the work of Mary Thomas and other geographers, that the long held critical axiom that research questions, theoretical frameworks, and methods are fundamentally inseparable is finally being considered in geography from a psychoanalytic perspective. This work is extremely important not only because it promises to enrich how human geography is 'done', but also further explicate the methodological distinctions between data generation and data analysis. In so doing, geographers may begin to formulate exciting and truly radical research projects wherein psychoanalytic methods are as equally relevant and valuable as the psychoanalytic concepts that they ultimately depend on.

See also: Affect; Critical Geography; Feminist Methodologies; Grounded Theory; Interdisciplinarity; Language and Research; Other/Otherness; Polyvocality; Psychoanalytic Theory/Psychoanalytic Geographies; Psychotherapy/Psychotherapeutic Geographies; Reliability and Validity; Self-Other; Situated Knowledge, Reflexivity; Situationism/Situationist Geography; Subjectivity; Surrealism/Surrealist Geographies; Uncertainty.

Further Reading

Psychoanalytic Theory/Psychoanalytic Geographies

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Glossary

Analysand The patient in psychoanalysis.
Ego The part of the mind that registers the sense of Self and mediates between the unconscious and conscious, as well as the Id, Superego, and social reality.
Id An unconscious part of the mind that is associated with immediate gratification and the primary instinctual impulses of aggression and sexuality.
Identification A process, primarily involving the Ego and the Superego, through which the human subject psychically adopts and incorporates an attribute or attributes (e.g., values, images, words, mannerisms, social roles) from another person or persons.
Jouissance Often translated as enjoyment, this Lacanian term refers to an intensely painful pleasure that is at once fascinating and threatening to psychical well-being and social stability.
Repression The process by which disturbing thoughts, wishes, and memories are expelled from consciousness into the unconscious.
Superego The part of the mind associated with moral agency, self-critical conscience, as well as social standards and imperatives.
Uncanny, the The English translation of the German word unheimliche which literally means ‘un homely’ and originally used by Freud to designate a mild and specific form of anxiety that is derived from encounters with familiar objects that have become suddenly strange.
Unconscious, the A partially inaccessible and dynamic part of the mind that consists of repressed thoughts, injunctions, and feelings that profoundly influence our conscious lives.

Introduction: What Is Psychoanalytic Theory?

Critical evaluations of a theory (from the Greek word theoria meaning ‘contemplation’ and ‘speculation’) seldom proceed by asking whether a theory is true or false. Theories are primarily hypothetical propositions that attempt to explain and analyze phenomena. Theories also help to guide speculative thinking, coordinate research questions, inform methods and methodologies, as well as provide interpretative frameworks through which we can make sense of complex data. Strictly speaking, then, theories provide neither ‘right’ or ‘wrong’ results, nor ‘good’ or ‘bad’ answers. Most critical evaluations of a theory usually pose the following questions: What are the epistemological assumptions, ontological implications, and methodological ramifications of a theory? How is a theory geographically and historically situated? How, why, and where has a theory been contested and revised? In what ways and to what extent is a theory compatible or incompatible with other theories? What is the relation between a theory and practice? Mindful of the above questions, let us turn to some fundamental theoretical maneuvers in psychoanalysis.

Psychoanalysis mainly consists of clinical ‘practices’, techniques, methods, and theories that seek to reduce psychical suffering. Psychoanalysis was first developed by Sigmund Freud (1856–1939) during the late nineteenth century and has been continually revised, disputed, and deformed within and without psychoanalysis. Like the psychoanalytic subject that is traversed by numerous conflicts and splits, for example, between conscious and unconscious life, as well as between biology and cultural significations, psychoanalysis is composed of unruly and sometimes unkind paradigmatic divisions. Let us briefly illustrate this point with three oft cited examples. First, Freud once vehemently demanded that his former ‘crown prince of psychoanalysis’, Carl Jung (1875–1961), stopped using the term ‘psychoanalysis’ because of Jung’s theoretical differences. Second, in 1953, Jacques Lacan (1901–81) was famously expelled from Inter national Psychoanalytical Association because of his idiosyncratic clinical methodology that rejected the rule that analytic sessions end after 50 minutes. And finally, during the early 1940s, Melanie Klein’s (1882–1960) emphasis on aggression and the early development of the Superego in very young children prompted fierce and prolonged controversies with orthodox Freidians lead by Anna Freud (1895–1982) and the British Psycho Analytical Society.

In addition to its renowned theoretical volatilities, psychoanalysis is arguably a hybrid theory par excellence because its numerous theoretical approaches incorporate ideas from sources as diverse as literature, philosophy, philology, mythology, astrology, political economy, neuro science, religion, biology, anthropology, mathematics, and topology. Now, what makes psychoanalysis different from other psychological and psychotherapeutic approaches? Much of psychoanalysis is concerned with the interpretation and clinical intervention of unconscious thoughts, memories, and desires. While psychoanalysis is composed
of many and oftentimes contrary theoretical approaches, all psychoanalytic ‘schools’ of thought are united by their theoretical attempts to explain the suffering that ensues from ostensibly superficial and inexplicable feelings such as chronic guilt, remorse, jealousy, powerlessness, persecution, self-loving, and selfloatning. Taking it as axiomatic that the unconscious is an ineluctable mode of psychic apprehension, rather than simply a sociohistorical construct, psychoanalytic theory makes the radical claim that people are ultimately cut off from and cannot know what they want. Such a theoretical assumption ushers in two key psychoanalytic premises about subjectivity: people are not biologically or in stinctually predisposed to desire or love certain objects. This is why, for example, Freud asserted that people are no less predisposed to forge heterosexual than homo sexual or bisexual relationships.

Second, psychoanalysis does not take it for granted that people will necessarily pursue their own self interests. Crucial here, is the psychoanalytic theoretical emphasis on what Freud called the ‘drive’ (Trieb). Very briefly, the drive is a concept that concerns how human subjectivity and sexuality are not entirely determined by biological and cultural forces. Freud argued that human pleasure and procreation do not coincide easily and cannot be understood in terms of ‘natural’ or ‘normal’ behavior. In psychoanalysis, perversion is always the norm. In contrast to the innate attribute of instinct, Freud argued that the psychical and somatic montage of drives coordinated human sexuality. By insisting on the exist ence of the dynamic unconscious and the importance of the drive, psychoanalysis theorizes a series of deceptively simple, pertinent, and troubling questions. For example, psychoanalysis asks: Where does psychical pain come from? Why do we repeatedly put ourselves in harmful situations? Why and how do certain stultifying thoughts get ‘into’ our minds given the contexts and contingencies of our lives? What happens when we fall in and out of love? What is the relationship between ethics and desire?

In formulating answers to these questions, psycho analytic theory asserts the importance of real and imagined events that take place during the formative years of our early childhood. Why? During the first 5 or so years of our lives, we spend a great deal of our time acquiring language, learning cultural codes, and forming role models. Moreover, this period of our lives involves the never to be entirely reconciled trauma of psychically separating ourselves from our mother or primary care taker. Psychoanalysis contends that these events are critical in the formation of sexual difference and gender roles through unconscious formations of desire, defenses, identifications, and fantasies. Critical here are psycho analysis’s various retheorizations of Freud’s notion of the ‘Oedipus complex’, that is, the shifting psychical battlefields and pathways through which boys and girls organize their desires for and against their mothers and fathers. For most psychoanalysts, the Oedipus complex takes place once the infant has been through the ‘oral’, ‘anal’, and ‘phallic’ stages of psychosexual development.

Although Freud once dubbed psychoanalysis a ‘depth psychology’, psychoanalysis does not contend (as it is usually supposed) that the unconscious is a dark and primal thing that hides and gurgles away in the shadowy depths of people’s minds. Rather, psychoanalysis asserts that the unconscious takes place in the heart of people’s lives and everyday processes such as speaking, thinking, and dreaming. Furthermore, psychoanalysis suggests that the unconscious can speak and be interpreted like a ciphered message. For most psychoanalysts, the unconscious is the accumulation of other people’s spoken words, that is, the aggregated subtle din and babble of people’s desires, demands, compliments, scolds, as well as cultural codes, more generally. This is why Lacan famously called the unconscious “the discourse of the Other.”

The clinical task of getting the unconscious to speak and then make sense of what it says is highly complex. To begin with, psychoanalysis takes a lot of time: on average, analysis takes place several times a week and usually lasts about 6 years. Analysis is never a question of simply bringing the unconscious into consciousness. Rather, the main psychoanalytic task is to relationally understand by obliquely mapping and partially unknot ting the tangled web of unconscious thoughts, wishes, fears, and so on. When analysts listen to what their analysands say, they do not simply focus on the content or meaning of their speech. A psychoanalyst focuses on the ‘form’ of what the analysand says, that is, ‘how’ the analysand talks: their stutters, slips, hesitations, repetitions, silences, and deviations. Here, psychoanalytic theory privileges the role of social discourses over the individual because psychoanalysis asserts that language always trumps our intentions: when we say something, we always say something more than we meant to say, when we speak, we always leave elements of doubt. Psycho analytic theory also proposes that language is material, that is, words and signifiers have material effects. For example, words can wound, deliver emotional stings, incite actions, prompt blushes, define bodies, create feelings, forge memories, andinder pain. Psycho analysis, then, makes the following key theoretical wager: talking – putting things into words – can not only illu minate unconscious thoughts, desires, and goals, etc., but can also alleviate the pain of the speaker’s symptoms.

However, why does psychoanalytic theory focus so heavily on the unconscious? Because psychoanalysis theoretically adheres to the ‘principle of sufficient rea son’, that is, the belief that when something happens, it does so because of a specific reason. On this point, psychoanalysis makes three important and somewhat
unorthodox theoretical maneuvers vis-à-vis causality and psychological phenomena: first, psychoanalysis contends that mental events such as dreams, symptoms, and fantasies are composed and result from numerous rather than single causes. In Freud's words, all psychical phenomena are 'overdetermined'. Second, psychoanalysis theorizes cause not in terms of lawful and linear determinations, but rather, in terms of the indefinite and contingent. According to psychoanalysis, cause takes place when something unexpectedly fails or goes awry. Third, psychoanalysis posits that cause and effect do not and cannot coexist on the same empirical or phenomenal field. Psychoanalysis argues that it is a theoretical error to conflating cause and realization. From a psychoanalytic perspective the primary causes of people's behavior cannot be entirely present in, coincident with, or coincident with the realms of their consciousness. This is why psychoanalysis insists on 'going beyond' the conscious parts of people's psychical lives and attending to what is unthinkable and unknowable, that is, the unconscious parts of people's minds. The theoretical strategy here is not so much an attempt to faithfully capture or mirror psychical 'reality', but rather to explain or take into account the iterations of enigmatic and inexplicable psychical phenomena. In so doing, psychoanalytic theory is extremely pragmatic: it prefers working hypotheses to metaphysical guarantees.

One of the most pragmatic tenets of psychoanalysis is its theoretical investments in thinking about the complex geographies of psychical life. Taking seriously the idea that space is dynamic and expressive, psychoanalysis argues that our feelings and the causes of their feelings do not simply take place as a result of forces that move back and forth between the 'insides' and the 'outsides' of our heads. According to psychoanalysis, feelings and subjectivity itself are inherently spatial because they take place through psychical, corporeal, and discursive processes that involve, for example, fragmentation, displacement, condensation, introjection, and splitting. It is important to note that these key psychoanalytic categories are not spatial metaphors or conceptual allegories. These are categories through which psychoanalytic theory tries to answer questions about how our psyches and social worlds 'really' work.

Given the extent to which psychoanalysis attends to the spatialities of psychical phenomena, it should be hardly surprising that psychoanalytic theory has become a major theoretical approach in human geography. Moreover, Steve Pile asserts that psychoanalysis is a 'spatial discipline'. How so? A quick glance of any psychoanalytic text will reveal how psychical life is theorized in terms of the interactions and interdependencies between different places or locales within, outside, and between people's minds, words, and worlds. Thus, psychoanalysis provides a rich theoretical vocabulary in which to 'map' the inter- and intrasubjective dimensions of space and society. However, psychoanalytic geographies are not simply the inevitable result of psychoanalysis's theoretical commitments or sensitivities toward space. It is important to consider geography's disciplinary contexts through which psychoanalysis has become relevant and legible to many human geographers. It is to a partial and brief examination of how and why psychogeography was first adopted by geographers that we now turn.

Psychoanalytic Geography

Geography's 'Discovery' of the Freudian Unconscious

Like geography, psychoanalysis has an abiding interest in the worldly. Psychoanalysts are frequently engaged in inductive reasoning whereby theories derive from the space-time singularities of people's lives, that is, the uniquely topsy-turvy worlds of people's broken hearts, shattered dreams, and recurrent tears. To be sure, psychoanalysis is spelt 'psychoanalysis' not 'psychanalysis' or 'psych'analysis'. This quiet, yet indelible 'o' that is inscribed between 'psych' and 'analysis' is the mark of an orb – an Earth signifying 'psych'. In the same way that 'psych' and 'analysis' are categories through which psychoanalytic theory tries to prevent the 'urgent and absorbing problem' of the growing 'menace of war'. Thus, on questions about interpretation, passion, and expression, many disciplines in the arts and humanities find theoretical engagements with psychoanalysis indispensable, if not unavoidable. But when and why did geographers start to engage with psychoanalytic theory? What was it about psychoanalysis that first incited geographers' interest? And how have the numerous theoretical approaches that compose psychoanalysis been used by geographers?

Pile has written extensively on the disciplinary connections and questions through which geographers came to 'discover' the Freudian unconscious. Briefly, during the 1970s, many geographers worked in the subfield of 'behavioral geography'. Behavioral geographers, rejecting the discipline's 'quantitative revolution' that reduced humans and human relations to statistical phenomena such as dots on a grid, examined the spatial dimensions of...
reasoning, decision making, place attachment, mental images, behavior, environmental perception, and cognition. Pile notes that behavioral geography was shackled with a fundamental theoretical problem: it did not possess an adequate theorization of how the mind worked vis-à-vis the phenomenal environment. Many behavioral geographers worked with a troublesome ‘black box’ model of the mind which conceptualized the mind as an ultimately chaotic, obscure, and unknowable entity. Furthermore, by the late 1970s and early 1980s, behavioral geography was increasingly critiqued by the ‘humanistic’ and ‘radical’ geographers. These two groups critiqued behavioral geographers for neglecting important dimensions of human subjectivity and agency. On the one hand, humanistic geographers, influenced by phenomenology and qualitative methodologies, brought to the fore the importance of cultural symbolic meanings. On the other hand, radical geographers, drawing on Marxist theories, tackled issues of cultural power structures. Theoretical questions about how the mind worked, however, still lingered. Specifically, humanistic geographers’ reliance on the vague analytic category of ‘experience’ and radical geographers’ heavy reliance on the binary of structure versus agency both proved insufficient to address the complex ways through which cultural meanings and spaces were contest and (re)produced.

By the end of the 1980s, geography underwent a significant ‘cultural turn’. Partly a result of the increasing importance of the ‘cultural’ dimensions of the political events in the New World Order (e.g., the fall of the Berlin Wall, the Tiananmen Square protests, growing white nationalism in the United Kingdom and France), and partly the result of other ‘cultural turns’ across the social sciences and the humanities, many geographers (initially those working in the UK) began to focus on the inter pretation of the social spaces of power, resistance, and struggles ‘alongside’ the contingent and contextual spaces of identity, subjectivity, and representation. Among these ‘new cultural’ geographers, Pile asserted that psychoanalysis offered rich theoretical and methodological frameworks in which to practice and engage with the intersubjective dimensions of ‘interpretative geography’. Published in 1991, Pile’s intervention was crucial in the inauguration of a subfield that would soon become referred to as ‘psychoanalytic geography’.

One recent and valuable assessment of psychoanalytic geography is Felicity Callard’s (2003) article, ‘The taming of psychoanalysis in geography’. According to Callard, much of the taming involves geographers’ dissolution of psychoanalytic concepts into psychological concepts. How so? Geographers often rely on interdisciplinary and assimilatory secondary literatures that promote historicist, culturalist, and social constructionist rather than psychoanalytic understanding of subjectivity and spaces. In addition, in contrast to psychoanalysis, many critical human geographers uncritically adhere to progressive theorizations about subjectivity that laud and take for granted people’s capacity and willingness for political resistance and transformation. In addition to reevaluations of psychoanalytic theorizations in geography is the emergence of geographers’ engagement with psychotherapies. This work, pursued by Liz Bondi and others, is important because it brings to the fore related and alternative approaches to the sine qua non of psychoanalysis: the reduction of somatic and psychological suffering.

Theories and Research Themes in Psychoanalytic Geography

Like psychoanalytic theory, psychoanalytic geography is difficult to categorize. Put differently, it is difficult to discern or impose a neat paradigmatic boundary around what is and what is not psychoanalytic geography. In what follows, the contours of three important theoretical approaches that compose psychoanalytic geographies are elaborated — Freudian, Lacanian, and object relations theory approaches — and their attendant theoretical questions and research agendas. What follows is an overview of keywords and research themes, rather than an exhaustive account of what constitutes psychoanalytic geography. Readers are thus encouraged to read and read beyond the references cited below, as well as the cross references.

Dreams, the Unconscious, and the Uncanny

Pile contends that a major reason behind the enduring critical attention devoted to Freud’s groundbreaking book, The Interpretation of Dreams, is because the work demonstrates the incisiveness of Freud’s ‘spatial thinking’. Freud attempts to understand the shifting and elusive meanings of dreams and how they ‘work’ by drawing on spatial analytic categories such as ‘condensation’, ‘displacement’, and ‘associative paths’. Notably, Pile illustrates how Freud’s ‘dream spaces’ are not only caught up in the revisions and reversals of personal desires, but also the illuminations and reflections of social things. For these reasons, Pile theorizes urban spaces as dream spaces. Theoretically, Pile uses the Freudian–Marxian analytic categories of ‘city work’, ‘magic work’, ‘dream work’, ‘emotional work’, ‘time work’, ‘blood work’, ‘grief work’, and ‘space work’ to show how emotions and fantasies do ideological work in city life. Psychoanalysis enables Pile to show how an effective ‘grounding’ of theories (whether psychoanalytic or not) not only requires an adequate understanding of materiality and space, but also an understanding of the immaterial. To illustrate this theoretical point, Pile draws on the psychoanalytically inflected social theories of Walter...
Benjamin in order to interpret cities as urban 'phantasmagorias', that is, alluring space–time processions of optical illusions, secret desires, irrational anxieties, imaginary figures, moody misdeeds, and fantastic stories. Pile's psychoanalytic geography also explicates how dreams are a key part of everyday political geographies. How so? Dreams involve politics because they incite struggles: not everyone shares the same dreams and/or nightmares. For Pile, dreams are also political because our ability to shape and intervene in the world is partially determined by how we are gripped by the world of dreams.

One of the most extensive and influential investments in human geography of how the Freudian unconscious works in sociospatial formations is Heidi Nast's research on 'mapping the unconscious'. Like Pile's assessment of dreams, Nast asserts that the unconscious plays a significant role in everyday life and politics. Nast provides insight into how the unconscious plays a constitutive role in the spatial organization of violence, injustice, and exploitation in US racist landscapes in the context of southern plantation, post Reconstruction settings, and the educational policies and urban renewal programs in 1950s Chicago. Underpinning Nast's investigations are two psychoanalytic maneuvers. The first idea concerns how a geographical explanation of a social phenomenon can proceed not so much by empirically mapping the links between the particular (e.g., the local) and the universal (e.g., the global), but rather by dialectically connecting the universal to the singular, that is, the exceptional. How does this distinctly Freudian (and indeed Hegelian) theoretical mode of analysis play out in Nast's interpretations? For Nast, there are three interrelated singular events. First, thousands of black men were not only lynched, they were also castrated. Second, many lynchings were not clan destiny or secret, but rather public celebrations consisting of hundreds even thousands of white family members. Third, numerous lynchings of black men were frequently libidinized as threats toward white women qua mothers and thus become 'repositories' of colonial and racist violence.

From a Freudian psychoanalytic perspective, social relations are ultimately compromise formations that are borne out of, require, 'and' continually fail to gentrify the repression of an underlying and antagonistic trauma. From a psychoanalytic perspective, social and cultural realities are not simply contingent and constructed; they are also extremely volatile and vulnerable to the dictates of aggression. In theorizing this relationship between social space and traumatic fissuring, several geographers have drawn on Freud's notion of the uncanny. For example, Rob Wilton has examined the uncanny effects of an HIV/AIDS hospice in Los Angeles's suburban landscape and Derek Hook has examined the ideological roles and uncanniness of monuments in Pretoria, South Africa. Notably, Laura Cameron has examined the over laps between Freud's theories and Arthur G. Tansley's work on plant ecology. In addition, Mary Thomas has considered Freud's notion of the unconscious to rethink qualitative methodology in human geography using the example of narrative data analysis.

**Imaginary, Symbolic, and Real Spaces**

Jacques Lacan is widely cited as the most significant psychoanalytic theorist since Freud. It is difficult to underestimate the influence of Lacanian theory in the humanities, cultural studies, gender and sexuality studies, and increasingly, via the extensive work of Slavoj Žižek (1949–), the social sciences. Lacan's thinking stretches over five decades and is extremely complex. Lacanian theory is united by the theory of the 'registrars'. During the 1970s, Lacan examined knots from the point of view of their topological properties. Lacan devoted much theoretical attention toward the Borromean knot which is composed of three interlocking and constitutive rings. For Lacan, the Borromean knot aptly illustrates the structural interdependence of three registers that compose psychical life: the Imaginary, Real, and Symbolic. Lacan theorized these three registers not as discrete
entities but rather, as the musical connotation suggests, in terms of proximate relations of discordance and harmony. What do these registers mean? Very briefly, the Imaginary (the focus of Lacan’s work in the late 1930s and 1940s) refers to dual or binary relations that do not in volve the imagination per se, but rather concern the Ego and its illusions of totality, liability to fragmentation and lures, narcissism, rivalry, and aggressiveness. The Symbolic (the focus of Lacan’s work in the 1950s and early 1960s) is a noun that primarily refers to language, cultural rules and conventions, exchange, measurement, lack, death, and the unconscious. The Imaginary also shields people from the disturbances and chimerical effects of the Real. The Real (the focus of Lacan’s work in the late 1960s and 1970s) is probably the most mis understood and complex of Lacan’s registers. In a nutshell, the Real takes place through sublime, contingent, and terrifying phenomena. Crucially, we cannot directly confront, obtain, or grasp the Real. Rather, the Real in volves near misses or barely elided encounters that subist outside, disturb within, and are unavailable to Symbolic signification and Imaginary wholeness. Spar tially, the Real concerns phenomena that are, on the one hand, anamorphic qua forever elusive limits and, on the other hand, obdurate qua disturbances that are always cropping up and tripping up things. For example, if the discursive constructions of race concern the Symbolic and racial identification concerns the Imaginary, then racism concerns the Real. Interestingly, for Steve Pile, Lacan’s three registers can be roughly mapped onto and through Henri Lefebvre’s spatial triad of ‘lived space’ (or, representational spaces), ‘conceived space’ (representations of space), and ‘perceived space’ (spatial practices).

Lacan’s theory of the three registers, as well as the works of Freud and Jacques Derrida (1930–2004), inform much of the theories, or better still the e criture feminin e (feminine writing) of three influential French feminists: Luce Irigaray (1930–), Hélène Cixous (1937–), and Julia Kristeva (1941–). Numerous feminist geographers have drawn on the writings of Irigaray, Cixous, and Kristeva to examine the patriarchal biases that infuse cultural prac tices, knowledge, representations, as well as corporeal and visual spaces. For example, Gillian Rose has mainly drawn on Irigaray’s understanding of the Imaginary to question masculine demarcations between ‘real’ and ‘nonreal’ spaces. Jenny Robinson has used Kristeva’s concepts of the Symbolic, abjection, and the semiotic to emphasize the ineluctable vulnerabilities and failures of sociocultural borders and distinctions. Given that Lacan was highly and openly skeptical of feminism, many geographers have questioned the value and via bility of Lacanian psychoanalysis. And yet, feminist geographers such as Virginia Blum, Heidi Nast, and Liz Bondi have acknowledged the relevance and potential of Lacan’s theories to challenge heteropatriarchy and spatial oppression. One way this potential is being realized is through Lacan’s oft misunderstood category of the Real. Paul Kingsbury, for example, has drawn on Žižek’s political readings of Lacan’s category of jouissance that basically means an antagonistic and excessive libidinal charge in order to theorize the links between the social bonds of exploitation and domination in the context of tourism and consumption. In so doing, Kingsbury’s work builds on Felicity Callard’s argument that psychoanalysis is often theoretically ‘tamed’ in geography.

Other notable Lacanian approaches in human geog raphy include Robert Wiltson’s work on physical dis ability, Ben Page and Jon Goss’s research on the politics of production and commodification, and Stephen Healy’s examination of the ethics and social fantasies that reside in informal caregiving and healthcare delivery in the US.

**Boundaries of Selves and Others**

The third main theoretical approach in psychoanalytic geography is informed by object relations theory. Briefly, proponents of object relations such as Melanie Klein (1882–1960), Michael Balint (1896–1970), and British psychoanalysts, including Donald W. Winnicott (1896–1971), Ronald Fairbairn (1889–1964), and Harry Guntrip (1901–75) emphasize how (following Freud’s notions of an ‘object’ and ‘object relation’) the psyche’s interactive and intersubjective world is made by and through rela tionships ‘and’ objects. From this perspective, ‘relations’ are first and foremost ‘inter’relationships wherein the psyche not only constitutes its objects, but is also con stituted by, composed of, and relates to itself through objects. ‘Object’ refers to how something, typically a person, body parts, and somatic sensations, or a character role can become the medium, procurer, and/or locus of the drive.

According to object relations theory, infants begin to develop a sense of self through a growing awareness about how their bodies are separate from their mother’s or primary caretaker’s body. As boundaries between the infant’s self and the external world become increasingly demarcated, the infant realizes the extent of its vulner ability. The child’s subsequent experiences of loss, sep aration, abandonment, desire, fear of dissolution, and anger produce an ambivalent response to the mother. When the mother provides food, warmth, love, and comfort, she is a ‘good’ object. However, if the mother leaves the child on her or his own and does not provide gratification when demanded, she becomes a ‘bad’ object. In this way, the mother is loved for providing love and hated for the withdrawal of love. The child is faced with a dilemma because it cannot comfortably hate or express anger because it fears punishment and thus the child must control these emotions. This ambivalence pervades the child’s development and structures its responses to
the qualities its mother once provided (loss, love, comfort, etc.) later in life.

David Sibley's work, informed by object relations theory, has influenced a great deal of social and cultural geography. Asserting that the delimitation of communities and social groups involves the same difficulties as constituting oneself and others, Sibley examines how dominant social groups shore up their power by enforcing boundaries that secure dominant groups' sense of purity and sameness through the exclusion and marginalization of other groups that are typically codified in terms of impurity, defilement, and shame. Sibley shows us the extent to which these psychosocial processes rely heavily on modern media representations of threats and vulnerability that are configured along axes such as race, gender, sexuality, class, and age. Sibley elaborates how these representations such as newspaper photographs labeling gypsies as 'criminal types' are a crucial element in the social construction of 'good selves' and 'bad others'.

Stuart Aitken and Thomas Herman have drawn on two object relations concepts. The first, 'potential space' or 'transitional space', is a space through which meditative, fluid, transitional, and exploratory demarcations of Self and Other (e.g., person, people, landscape, object, etc.) take place during infancy. Such a space is replete with the interconnective capabilities of 'objects'. The second concept is the 'transitional object' which typically includes the breast, food, a toy, and blanket. Such transitional objects are mediators and travelers between permeable inner and outer psychical worlds which, through acts of 'play-ing' (inverted commas in original), help to establish a potential space. According to Aitken and Herman, these two concepts (especially potential spaces) provide useful and 'refreshing' ways, to understand how in Western contexts children develop and form identities through and because of the dynamisms, fixations, and uncertainties of language. And with non-representational theories, psychoanalysis focuses on how affect and imperceptible yet material forces are situated within complex sets of unfolding intersubjective relations and representations.

And yet, on numerous points that have yet to be fully explicated by geographers, as well as this small encyclopedia article, in many ways psychoanalytic geography is quite different from the above theoretical approaches in geography. How so? In a nutshell, the zine qua non of psychoanalytic theory is its contention that the human subject is fundamentally and forever radically split and conflicted: on the one hand, our minds are divided in terms of consciousness and the unconscious. On the other hand, our bodies are forcibly carved by the dictates of biology and language or cultural significations. Taking into account these two divisions, much of psychoanalytic theory is concerned with understanding how the world must be organized and work in ways that people can hold onto something that resembles 'sub jectivity' and 'reality'. Who can doubt the importance of how the geographies of these 'things' – subjectivity and reality – will always inform the world that we live in, as well as all our impassioned theorizations?

See also: Affect; Behavioral Geography; Cognitive Geography; Critical Geography; Critical Theory (After Habermas); Feminism/Feminist Geography; Human Geography; Humanism/Humanistic Geography; Interdisciplinarity; Landscape; Language and Research;
Non-Representational Theory/Non-Representational Geographies; Other/Otherness; Place; Poststructuralism/Poststructuralist Geographies; Psychoanalysis; Psychotherapy/Psychotherapeutic Geographies; Self-Other; Situationism/Situationist Geography; Subjectivity; Surrealism/Surrealist Geographies.

Further Reading


Relevant Websites

http://www.pep.org/
Psychoanalytic Electronic Publishing.
Psychotherapy/Psychotherapeutic Geographies

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Glossary

Autoethnography A method of qualitative research in which the researcher treats his or her own experience as the subject of ethnographic investigation. This approach rejects the traditional separation between researcher and research subject and entails a form of ethnography conducted by the researcher on the researcher.

Cartesian Relating to the seventeenth-century French philosopher René Descartes, the term Cartesian is often used for key ideas from his work, including his framing of mind and matter as a dualism, that is, as two mutually exclusive and exhaustive categories.

Nondualistic Concepts and approaches that break with Cartesian dualisms and use both–and, rather than either–or, formulations.

Psyche An aspect of human being and vitality. From the Greek concept of self, psyche may be translated as mind, soul, or spirit. It is sometimes linked with soma, as in psyche-soma, to refer to an integrated, holistic view of human being.

Psychogeography A branch of psychological speculation or investigation and a political movement concerned with the effects on the psyche of the geographical environment.

Psychotherapeutics Methods of treating disease or alleviating suffering by nonphysical, psychic means including spiritual healing as well as psychotherapy.

Psychotherapy A way of responding to illness, distress, or suffering by nonphysical or psychic means. Psychotherapy has its origins in psychoanalysis and is sometimes referred to as a psychological therapy or a talking therapy. Many different forms of psychotherapy are available.

Situationism A revolutionary international political and artistic movement active during the 1960s that sought to engage the disruptive and creative possibilities of everyday events and contexts.

Soma The material body, typically in contrast with the soul, mind, or psyche. It is sometimes linked with psyche, as in psyche-soma, to refer to an integrated, holistic view of a human being.

Subjectivity Qualities of a human being that characterize human subjects’ situated self-experience. Subjectivity is often associated with feelings, perceptions, and beliefs of human individuals. However, a sense of individuality is itself an aspect of subjectivity and is not necessarily inevitable or universal.

Transference A concept used in psychoanalysis to describe how a person’s patterns or habits of relating are transferred from one context (typically that of early life with parental figures) to others. Psychoanalysts use the idea of transference to describe key aspects of their experience of how their patients relate to them, which they theorize in terms of early relationships with caregivers.

Introduction

What Is Psychotherapy?

The words psychotherapy and psychotherapeutic come from the Greek and are subject to a variety of translations and interpretations. As a therapy, psychotherapy aims to treat, heal, cure, or ameliorate illness, distress, or suffering. This therapy may be understood as a medical intervention, as an alternative or complement to medical interventions, or as a wholly different activity or practice, perhaps construed as personal development or as a philosophy of life. Definitions of the psyche on which psychotherapy focuses include soul, spirit, and mind. These share reference to something other than, or at least not confined to, physical form. Under the influence of the Cartesian distinction between mind and body, psychotherapy may be understood to entail the treatment of the (nonphysical) mind or psyche, as opposed to the (physical) body or soma. The terms soul and spirit are preferred to mind by those who reject Cartesian dualism in favor of a more holistic and nondualistic philosophy. They also connect psychotherapy more closely to traditions of faith healing than to scientific medicine.

According to the Oxford English Dictionary, isolated usage of the word psychotherapy can be traced to the middle of the nineteenth century, with more common occurrence initiated in the 1890s. The appearance of the word in Sigmund Freud’s work helped to ensure its rapid spread and its increasing association with forms of therapy derived in some way from the so called talking cure of psychoanalysis.

The term psychotherapeutic is used as both adjective and noun. Apart from pertaining to psychotherapy, it also refers to the treatment of disease by psychic means, including hypnotism and spiritual healing as well as psychotherapy. In this sense its meaning has tended to remain somewhat broader than psychotherapy’s association with the so called talking cure. As a noun, it is
almost invariably plural – psychotherapeutics – and refers to the various methods of treatment involved in treating the mind, soul, or spirit by psychic means.

This article focuses primarily on psychotherapy as a term that refers to a group of practices, including and derived from or inspired by psychoanalysis. Some versions involve talk. Others use music, art, and other modes of communication. Some involve meetings between one practitioner and one person seeking help. Others involve couples, families, and groups who may work with one or more practitioners. The theories of personhood, psyche, illness, suffering, and healing on which psychotherapists draw vary widely, including three main groups, namely psychoanalytic theory (including its various post-Freudian branches); scientific, cognitive, and behavioral psychology; and a diverse array of humanistic philosophies. These different theories generate numerous debates and conflicts over the nature of subjective life, the sources of psychic suffering, and more specific or practical issues such as diagnosis, therapeutic techniques, and training requirements. Different positions within these debates are associated with brand names or schools of psychotherapy such as Lacanian, Kleinian, Jungian, object relations, relational, cognitive behavioral, rational emotive, person centered, existential, gestalt, transpersonal analysis, transpersonal, drama therapy, and many others. What unites different approaches to psychotherapy across these different traditions and schools is their status as practices (not solely theories) and congruence in relation to key aspects of their theories of practice, notably the central importance accorded to the therapeutic relationship. This article leaves aside theoretical and practical differences and debates between traditions and schools of psychotherapy. Instead, it discusses geographical themes pertaining to psychotherapy as a diverse but nevertheless related family of practices.

The Influence of Psychotherapy

Psychotherapy (including such practices as psychoanalysis, counseling, counseling psychology, clinical psychology, analytic psychology, arts therapies, family therapy, relationship therapy, and hypnotherapy) has become increasingly widespread and influential since the early twentieth century. To some extent psychotherapy has replaced older ways of responding to distress, suffering, and problems in living, such as spiritual healing, pastoral care, the Catholic confessional, retreats, and asylum. However, the growth of psychotherapy signals more than a replacement of traditional with modern responses to illness, suffering, and distress. A wide panoply of psychological ideas and practices, including psychotherapy, have transformed human societies, and, in some ways, human subjectivity itself. Broadly psychotherapeutic approaches permeate many aspects of modern societies and recruit people into an expansive sense of individual subjective life. In so doing, psychotherapy contributes to ways of conceptualizing persons as embodying interior lives: it imputes to human beings private lives of the mind and internal subjectivities that actively open up what might be thought of as interior geographies. In this context it is hardly surprising that people have sought and been guided to forms of assistance, support, or treatment that claim to address subjective, emotional, and psychological distress. Arguably, culture, the state, and modern modes of governance are themselves saturated with the psychotherapeutic, simultaneously conceptualizing people as psychological consumers, citizens, and subjects, and calling people to mobilize and attend to the subjective interiors constructed through such conceptualizations. Hence suggestions that we live in a therapeutic culture governed by a therapeutic state and subject to therapeutic modes of governance. Psychotherapeutic geographies are an expression of and response to these same trends.

Geographies of Psychotherapy

Geographers have studied the spatial distributions and forms of numerous phenomena, some of which relate to psychotherapy, including, for example, the geographical incidence of mental illnesses, the historical geography of madness, the availability and accessibility of psychiatric services, and the spatial experiences associated with specific mental disorders. However, rather limited attention has been paid to the spatial distribution and forms of psychotherapy and psychotherapeutic practices. This article therefore suggests an agenda for such research, which would help to delineate geographies of psychotherapy.

Historical Geographies of Psychotherapy

Where are which forms of psychotherapy and psychotherapeutics found and how have these distributions evolved? Geographers have begun to approach these questions through explorations of certain strands of psychological, psychiatric, and psychoanalytic thinking, such as the establishment of child psychology in late nineteenth century New York and case studies of the application of psychoanalytic and psychiatric ideas in experimental schools and mental institutions, work well represented by a special issue of Environment and Planning D: Society and Space edited by Elizabeth Gagen and Denis Linehan. Alongside such studies, some other aspects of the historical geography of psychoanalysis are well known. Sigmund Freud’s position as founding father is widely accepted, linking the origins of psychoanalysis to late nineteenth century Vienna. His early patients,
collaborators, and followers were also located in Central Europe, drawn primarily from affluent Jewish communities, with the entry of Carl Jung into the field welcomed by Freud partly as a signal that psychoanalysis might be taken up by other ethnic and social groups. By the early twentieth century Freud’s ideas had arrived in North America, and by the 1930s, under the shadow of Nazism, many central European psychoanalysts were themselves on the move, migrating to numerous countries around the world.

We also know that Freud’s ideas were received and developed differently in different places. For example, in the USA, psychoanalysis rapidly became the exclusive preserve of the medical profession and was effectively incorporated into medical–psychiatric practice. By contrast, in Europe, psychoanalytic training has always remained open to those who do not hold medical qualifications, which, in the early twentieth century, enabled women to gain access at a time when their entry to medical training was nonexistent or very limited. Highly influential lay (i.e., nonmedical) psychoanalysts include Melanie Klein. While some European psychoanalysts were and are medically trained, the relationship between psychiatry and psychoanalysis developed rather differently in Europe from North America. Nonpsychoanalytic approaches to psychotherapy have traveled too. Key figures in the mid-twentieth century development of humanistic psychotherapy include the American Carl Rogers, the German Fritz Perls, and the Canadian born, US trained Eric Berne. Among these and other influential figures, some initially trained as psychoanalysts but subsequently broke with traditional psychoanalytic approaches, while others never immersed themselves in the psychoanalytic tradition. Many trained, practiced, and taught in different countries, posing interesting questions about the interrelationships between places and the development of particular psychotherapeutic practices. The impression on local landscapes of these psychotherapeutic practices has begun to be explored by geographers and is a theme to which this article returns in due course.

Turning from practitioners to those accessing psychotherapeutic services, we find extraordinarily complex patterns of provision. In the US and the UK, for example, services are located in the public, private, and third or voluntary sectors. Exactly what is available where, to whom, and on what basis varies enormously. Research on mental health services has demonstrated that patterns of referral to specialist psychological and psychiatric services are patterned by race, class, and gender. However, we know remarkably little about geographical questions that open up more complex and differentiated accounts of the role of historically and geographically contextualized traditions of psychotherapy in relation to specific cultural landscapes.

**Geographies of Psychotherapeutic Provision and Inclusivity**

In his fascinating cultural history of American psychoanalytic psychotherapy, Philip Cushman has argued that a mutually reinforcing relationship developed between particular psychotherapeutic ideas about inner lives and the rise of a consumption based economy. Thus, the possibility of enriching one’s interior sense of self through the acquisition of consumer goods and services was propagated, if not actively fostered, through psychosynthesis, which also found itself responding to, and consumed by, some of those for whom such a project led to emotional distress and illness. While suggestive, this account pays minimal attention to place, implying a homogeneous view of America. However, the images of psychotherapy associated with, say, New York and California are sufficiently different that we might pose questions that open up more complex and differentiated accounts of the role of historically and geographically contextualized traditions of psychotherapy in relation to specific cultural landscapes.

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Provision within health insurance schemes is also highly dependent too. While other approaches to psychotherapy do not depend so strongly on the training and selectivity. In primary or community care, unevenness appears to be the norm. For example, in the UK, some primary care health services include counseling and others do not. Where such services are available, some general practitioners (family doctors) refer their patients while others do not: it appears that some regard counseling as a useful and relevant component of primary care while others regard it as irrelevant and perhaps seek to resist the rise of psychotherapeutic modes of response to distress and disease. The unevenness of primary care services is magnified in the voluntary sector, which depends heavily on local initiative. Moreover in this sector, many services are designed for specific sociodemographic groups (young people, women, ethnic minorities, etc.), and others focus on particular problems (relationship difficulties, addictions, survivors of sexual abuse, etc.), generating highly complex patchworks of provision. Psychotherapy provision has also been expanding in workplaces, with some, but not all, employers providing employee assistance programs or in house provision. Provision within health insurance schemes is also highly...
variable. In all of these cases, very little is known about the ensuing geographies of provision.

Alongside questions about the geographies of provision are questions about the accessibility and inclusivity of what is available. Services may be perceived in socially exclusive ways, despite apparent intentions to the contrary. For example, in the UK relationship counseling services have struggled to shake off a long standing reputation for being intrinsically middle class, in terms of the social backgrounds from which both their counselors and their service users are drawn.

The geography of provision and inclusivity of psychotherapy services is further complicated by matters of confidentiality, and fears about visual exposure and stigmatization. For example, some people from minority ethnic groups prefer to see a practitioner from any ethnic background other than their own; some people refuse to use services where their attendance might be observed by people they know; some service users prefer to travel considerable distances rather than using otherwise more convenient services in their own residential localities. Services respond with locational strategies, such as sitting in multi use buildings, and by resisting restrictions on access based on tightly drawn geographical boundaries.

**Micro-Geographies and Experiential Spatialities of Psychotherapy**

Different forms of psychotherapy are often highly prescriptive in their configuration of bodies, furniture, furnishings, décor, doors, and windows, generating distinctive micro geographies. They generally require two or more people meet in a room that is private and free from external impingements. Other people do not peep in, conversations cannot be overheard, telephones do not ring, and external noises are not intrusive. Rooms are generally not highly personalized in the sense of containing images and artifacts that reveal much about the personal life of the psychotherapist, but they are never theless welcoming and comfortable rather than austere and impersonal. Within such rooms the spatial organization of bodies and furniture varies. In classic psychoanalysis and psychoanalytic psychotherapy, the analyst or service user lies on a couch, with the psychotherapist out of their line of vision. Other forms of psychotherapy position participants face to face seated in comfortable chairs, placed at a (culturally specific) respectful distance, without other furniture in between. These arrangements are not arbitrary but are grounded in ideas about subjectivity and intersubjectivity. The use of the couch is informed by the idea that reducing visual other orient tation and encouraging physical repose supports analy sand's to engage with and focus on their own subjective experience. The use of chairs facing one another is informed by egalitarianism – reducing the symbolic differences between participants – and by the idea that it is useful to engage more explicitly with intersubjective interaction. Thus, underlying ideas are expressed, repre sented, and/or performed through spatial configurations.

The subjective spatialities underlying psychotherapy practices are elaborated in many other ways within the concepts on which practitioners draw. For example, practitioners' descriptions of psychotherapy utilize ideas about the subjectively felt positions of practitioners and service users. The authority attaching to practitioners is often troubled or actively disavowed through accounts that make use of numerous spatial concepts, such as the notion of the practitioner being at the same level as, or alongside, the service user, or accompanying them on their journey. The idea that subjective experience is layered, with one set of feelings underneath another, offers another form of spatiality. So too do appeals to depth, as in ideas about going into things in depth, touching on deep feelings, or meeting at relational depth. Ideas about boundaries are also prominent in psychotherapeutic thinking and practice. Boundaries may refer to limits of time and space in which participants in psychotherapy meet, and to the forms of interaction that are or are not permissible. Sexual contact is strictly prohibited, while views on other forms of touching vary. The concept of boundaries is also used to delimit roles, with interactions between participants outside the psychotherapeutic relationship generally being proscribed or minimized. These ideas produce imaginative geographies of subjectivity and inter subjectivity, and illustrate the scope for further exploration of the spatial forms of subjectivity promulgated within psychotherapeutic practices.

**Psychotherapeutic Possibilities of Geography**

Alongside questions about the geographies and spatialities of psychotherapy are questions about the ways in which geography might be psychotherapeutic or might actively mobilize psychotherapeutic concepts. Such psychotherapeutic possibilities stem from attributes of the world on which geographical study focuses and from ways of studying that world.

**Environments, Places, and Landscapes as Psychotherapeutic**

That particular environments might impact upon the human psyche has long been recognized. Within the geographical tradition, the notion that the physical environment might mold or even control human personality, constitution, and culture has a long history, epitomized by the development of environmental
determinism in the early twentieth century. A directly causal, deterministic framing of the relationship between physical environments and human life subsequently fell into disrepute. Other ways of approaching and conceptualizing the psychic impacts of specific environments (including streetscapes, buildings, gardens, and wilderness) have subsequently developed. For example, the situationist movement of the 1960s sought to transform everyday life through experimental interventions designed to foster playful, idiosyncratic, and creative engagement with urban surroundings, in place of normatively controlled behavior in these spaces. This has been taken up in a modern psychogeography movement, which advocates nonpurposeful wandering and observation, especially in urban spaces. It assumes that geographical environments impact upon people’s emotions and behavior, but that the potential (and potentially transformative) pleasure and creativity of these impacts are screened out as a result of the overwhelmingly functional, purposeful character of these environments. 

If environments impact on subjective experience, then these effects may be psychotherapeutic in the sense of alleviating suffering or distress by acting on the human psyche. The idea that particular environments, places, and landscapes might have restorative, curative, or healing properties has led to a body of research on therapeutic landscapes. As the term indicates, this research is not organized according to whether healing is understood to work via the psyche or the soma. Rather it adopts a holistic, nondualistic approach to well being, health, and illness. Sources of healing are often attributed to nature, including spring water, fresh air, forests, flower meadows, rural environments, wilderness, and animals. But these elements are themselves saturated with cultural meanings and actions, resisting any binary distinction between nature and culture. How the modes of healing associated with therapeutic landscapes work (if at all) is the subject of debate. While waters rich in minerals, sunshine, and exercise may be understood to work on the body, numerous appeals are made to spiritual aspects of healing, often including the journey’s or pilgrimages undertaken by those in search of relief from suffering.

Thus, psychotherapeutics would appear to be important in therapeutic landscapes. Overlapping with geographical study of therapeutic landscapes is work in environmental psychology. As well as examining how environments influence people, environmental psychology informs the design of built environments, urban parks, nature reserves, and other places with a view to enhancing health and well being. Again, holistic concepts of health and well being are deployed, implicitly invoking psychotherapeutic dimensions to this way of approaching people–environment relations.

If environments of particular kinds, or designed in particular ways, can contribute to healing by psychic means, this suggests that some kinds of people–environment relations may be psychically damaging or unhealthy. For example, for people who suffer from phobias of animals like snakes or phenomena like thunderstorms, these elements of environments generate intense suffering. In vertigo and agoraphobia, relationships to space are the source of powerful distress. In these examples, a variety of ways of reconceptualizing, reordering, or otherwise reframing the relationship between sufferer and source of phobic fear may help to alleviate the intense emotional response to these environmental stimuli. The environment that induces terror is thereby recruited into a new, more psychotherapeutic, role. A related perspective is taken up in the idea of ecotherapy, which attributes mental, emotional, and spiritual disease to a supposed lack of healthy connection to the natural world. Ecotherapy claims to heal by helping people to reattune themselves with, and to love, the natural world. Although seeking to reintegrate human beings and the natural worlds, it relies on a notion of pristine nature extensively criticized by human geographers.

Geographical Study as Psychotherapeutic

Through its focus on the world in which we live, geography and geographers seek the betterment of human life. Insofar as this entails alleviating suffering, geography can reasonably claim to be therapeutic. However, in many cases, this involves using geography and insights from geographical research to raise awareness and to inform policy and practice in ways that have little to do with psychotherapy. Nevertheless, geographical study may work on the student or researcher in ways that entail a form of psychotherapeutic action. This is perhaps most obvious in the case of geographers who are aware that the choices they make about the focus of their work reflect preexisting personal preoccupations. In such circumstances, the research may be undertaken as a way of expressing and working through concerns, and maybe suffering, by psychic means. Examples include explorations of experiences shared by the researcher as well as the research subjects whether pursued through autoethnography, auto/biography, or other means. In other cases, researchers’ motivations may not be linked in any overt way to matters of personal concern. However, the psychoanalytic concept of the unconscious suggests that researchers may be drawn to particular topics or approaches for reasons beyond their conscious awareness. Perhaps without knowing it, we sometimes use our research to work through unconscious dynamics. In this sense too, therefore, doing geography may be psychotherapeutic.
A different kind of psychotherapeutic possibility for geographical study entails the use of psychotherapeutic ideas to inform the concepts and practices of geography. There are three fields in which such possibilities have been explored. First, psychoanalytic geography is in formed primarily by psychoanalysis but primarily as a theory rather than a practice. In some contexts, such as postcolonial geography, theoretical ideas are mobilized in ways that actively avoid engaging psychotherapeutic possibilities in ways that might be construed as psychoanalytic subjectification. However, elsewhere the difference between therapy and practice is more actively blurred, for example, in this author's own attempt to offer a psychoanalytically inflected autobiographical account of stages on journeys between human geography and psychotherapeutic practice.

Second, arguments have been made for the relevance of psychotherapeutic ideas to the field of emotional geographies. In this context it is argued that psychotherapeutic concepts provide useful resources for emphasing and exploring the relationality, betweenness, and intersubjective mobility of emotion. Psychotherapeutic ideas also hold the potential to contribute to performative approaches to emotion, in which the articulation, expression, and performance of emotion are understood not as representing interior emotional states but as doing emotion or affect. In so doing, psychotherapeutic ideas contribute to rapprochement between geographical work that explores affect from the perspective of nonrepresentational theories and emotional geographies that focus on narrative accounts of personal experience.

Third, reworking and developing Steven Pile's earlier call to consider the relevance of psychoanalytic concepts of transference and counter transference for interpretative human geography, psychotherapeutic ideas have been used in relation to debates about methodology, including aspects of data generation and analysis. Examples include the use of nonverbal methods to access preconscious or unconscious experiences, and consider ation of transferential dynamics between interviewers and interviewees in the conduct and analysis of research encounters.

See also: Agoraphobia; Autoethnography; Dialectical Reasoning and Dialectical Materialism; Emotional Geographies; Emotional Knowing; Feminism/Feminist Geography; Health Systems and Health Services; Healthcare Accessibility; Historical-Geographical Materialism; Marxism/ Marxist Geography I; Marxism/ Marxist Geography II; Mental Health; Nature; Psychoanalysis; Psychoanalytic Theory/Psychoanalytic Geographies; Self-Other; Situationism/Situationist

Further Reading


Relevant Websites

http://www.allaboutpsychotherapy.com
http://www.ahpweb.org
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http://www.worldpsyche.org

World Council for Psychotherapy.
The idea of goods or services as 'public' rather than 'private' emerged in the context of attempts to understand, on the one hand, what was called 'market failure' in the provision of goods and services; and on the other, to make sense of that range of goods and services that tend to be provided by the state. Under conditions of market failure, markets, literally, do not form and so there is a problem of provision. This can be particularly acute where the production of private goods or services depends on that provision; that is, where goods and services that can be and are produced for markets depend for their production on goods and services that 'cannot' be produced for markets. Accordingly, much of what the state does is providing conditions of production that capital cannot provide itself. In order to understand the idea of market failure, consider the following examples:

- In many American cities, there is a demand for light rail service. Its attractions lie in its capacity for reducing commuting times and costs and congestion. However, it is likely to be underprovided by private firms since not all the benefits it provides are ones for which it can collect revenue. Consequently, profitability is less than it might be. Stations provide enhanced access to those living close by and conceivably this will influence what people are willing to pay for the service. However, landowners also benefit and can extract increased rents from land in the vicinity of stations. Yet this is not a benefit that the light rail company can charge them for. So revenues are less than they might otherwise be and the incentives to providing light rail service appropriately reduced, perhaps to the point that no service is provided at all.

- Consider now the case of air pollution from heavy industry. There is a good deal of evidence that it adversely affects the health of people living in the vicinity. Yet there is no market in clean air. The firms in question enter into markets in order to secure the labor power they need, along with the raw materials and instruments of labor. But there is no market in air as a receptacle for their effluent. One result is that their production costs are reduced and their profit ability increased. So clean air has certain public good characteristics; if it is provided, its consumption, even where that consumption degrades it, as in the case of the smoking chimney, cannot be restricted, for example, by charging for it. Like light rail, markets fail to emerge for the provision of clean air, and state intervention to control pollution, subsidize light rail, or whatever, is warranted.

In both cases, there are what are called 'externalities' at work. In the light rail case, the putative private company would provide benefits to landowners that it could not internalize: these are what are known as positive externalities. The benefits do not appear as revenues in the firm's accounts and so profitability is less than it might otherwise be. In the air pollution case, the industrial firms are imposing costs on people, in the form of health costs, which they do not compensate them for: costs that, unlike labor costs, raw material costs, do not appear in their accounts. These are negative externalities.
Again, in both cases, geography enters into our understanding. Air pollution has a geography, and so too, by definition, does access to light rail stations. There will also be various knock on effects of a broader geographic scope. In each instance, housing markets over larger areas of the city are likely to be affected as the overall geography of residential desirability is altered. In other cases of public goods, however, or rather of their degradation, the effects may be less limited in their geographic scope. The obvious case here is global warming where market failure in the sale of the atmosphere for the purpose of absorbing carbon will have effects on sea level that are world wide. This has implications for the geographic scale at which regulation should occur.

There are also, just as clearly, different degrees of publicness in the consumption of various ‘goods’ and ‘services’. The benefits of light rail transit can obviously be internalized by the provider to a substantial degree; and if they were able to purchase the land around the (planned) stations prior to construction, or prior to news of construction leaking out, then the enhanced rents could also be appropriated, allowing more of the benefits provided to be internalized. The same goes for something like education. It has some features of a private good in that its benefits can be internalized in the form of enhanced career prospects and therefore wages. But some might argue that it also has some public features through instilling civic virtue and through the enhanced taxability of the wealthier. There is, in consequence, a public interest in providing education.

The carbon content of the atmosphere, on the other hand, with all its implications for the earth’s energy budget and therefore for global warming, is as pure a public good as it is possible to imagine. This is because the privately appropriable benefits that accrue to a firm that engages in reduction of carbon emissions are so in finitessimally small. Rather the benefits are almost entirely public and beyond internalization by the firm in question. Yet recent attempts to create a market in rights to use the atmosphere as a repository for carbon through the idea of carbon credits, suggest that this might be a premature conclusion; rather that the degree to which a good is public or private depends on the degree to which it has been commodified so that it can enter into market transactions. Some goods might seem to be more easily commodifiable than others. Capitalist societies, however, have proven extraordinarily adept in pushing back that particular frontier. Among other examples, one thinks of the way in which recording instruments in automobiles can connect with stationary monitoring equipment, so allowing a market in urban space to emerge with the consequence of forcing motorists to internalize the costs of the congestion that they impose on other motorists. So it would seem that whether a good is more public than private or vice versa is far from set in stone. This is not just a matter of technology. Institutions are also important in the attempt to create a world market in carbon credits.

One thing that is already clear is that the distinction between the public and the private is a very slippery one indeed. This is not just because what seemed to be public can become private, or at least, more private than it was. It is also the fact that the provision of what we regard as private goods depends upon the provision of others that are more clearly public. If private goods are to be produced, then there have to be institutions to protect private property and enforce contracts, and that provision cannot be private since it is itself subject to market failure. Typically, of course, this is where the state steps in, though we should be careful not to reduce public provision to that particular mode. The state has not been alone in providing those conditions for capitalist production that capital cannot provide itself. Historically the reproduction of labor power has depended substantially on the institution of the family as well as on mutual aid mediated by wider circles of kin and friendship. Without the fact of trust in the relations of firms one with another, with their workers, and consumers, an economy based on exchange would break down entirely. The recent literature on governance also underlines the danger of a simple state market polarity in talking about public goods.

Even so, the state in the advanced capitalist societies is hugely important in the provision of a wide range of goods and services, including highways, education, financial support for the unemployed, public health and in some instances housing, mass transit, airports, public parks, to mention only a few. As recent rhetoric around neoliberalism and pushing back the boundaries of the state reminds us, however, the identification of what is public and therefore appropriate for the state as opposed to private provision is highly contested. This is not just a matter of changing technology and institutional possibilities as might have been implied by the discussion here of urban congestion and carbon emissions. Rather it depends a great deal on just how desperate capital is to widen its opportunities for profit making, and this is something that varies over time in accordance with the rhythms of capital accumulation on a global scale.

Applications in Human Geography

As far as human geography is concerned, the idea of public goods and the drawing out of their geographic implications makes its historic entry early in the 1970s. The background to this was the interest in social relevance. This was in part and in turn a critique of the spatial quantitative work of the 1960s and its inability to
cope with issues of power or the state; but also, and quite indissolubly, it was a response to the sense of an urban problem subsequent to a heightened awareness of inequalities in the city brought about by the civil rights movement. Human geography was not alone in this. The field of urban economics underwent vigorous growth during that period, and from virtually nothing, and while it was less radical in its approach than what ensued in human geography, particularly in its public choice incarnations, its emphasis on externalities, public provision, and the proper role of the state was an important catalyst.

With respect to that period and the enlivening of work on a more socially relevant human geography through the introduction of ideas about public goods, state provision, and externalities, two names stand out: David Harvey and Julian Wolpert. Harvey's direct contribution was more fleeting, corresponding to what he termed in his book *Social Justice and the City*, his liberal phase. Of particular interest is his paper on urban form and the redistribution of real income which appeared as Chapter 2 in his book. It testifies to a quite profound immersion in the urban economics literature of the time and an ability to draw out its implications for the politics of geographic change in the city. It was largely through Harvey that the idea of externalities entered the geographic literature.

Like Harvey, Wolpert had been a central figure in the spatial quantitative revolution, but something of a maverick, calling into question some of the underlying social assumptions of that work. Initially that had to do with the impossibility in a geographically differentiated world of the assumption of perfect information. The *post hoc* predictions of location theory just did not seem to work. By the early 1970s, and in the same vein, he had turned to the question of how power relations condition location and it was through him that the important idea of locational conflict entered the literature.

Through the work of Wolpert and his students, like Michael Dear and Jennifer Wolch, locational conflict became one of the more enduring ways in which the idea of externalities and therefore public goods assumed a role as part of the conceptual apparatus of human geography. The idea was a simple one but with important ramifications. Wolpert's attention had been originally drawn to the politics surrounding the urban renewal and highway projects of the 1960s. People were impacted by them in their residential neighborhoods and this often resulted in opposition, and then attempts on the part of the state to co-opt and defuse. Apart from the fact that the idea was a nice rebuttal of the frictionless location process implied by location theory, on reflection it was found to have substantive applications of considerable breadth. Elaine and Julian Wolpert, for example, went on to show how it could be applied to the concentration of halfway houses for those released from mental institutions. Still later, it was to resonate with what became known as NIMBYism and was developed by Robert Lake in new ways; Lake's contribution was to show that conflict over the location of land uses regarded as nuisances depended on the degree to which those land uses were needed, and therefore on the 'production' of garbage, a population of the homeless, and so on: in short, productions of external effects that were subject to social control.

A second development in the 1970s that clearly followed from the introduction of ideas of public goods was that of welfare geography. This idea was already implicit in Harvey's essay on urban form and the redistribution of real income. Externalities fields had obvious and divergent effects on people's well being. Market forces, particularly the real estate market, mediated access to those externalities and tended to reinforce the inequalities resulting from the distribution of the product among profits, rents, and most variably, wages.

An additional layer was added by variations in public provision: variations, that is, in the provision of education, public safety, and other services like street lighting and recreational facilities. In the American metropolitan area these variations could be considerable as a result of a quite distinctive and intense jurisdictional fragmentation. Again, the real estate market played a part in access to these public goods: public in the sense that they were not provided through the market, there were difficulties in such provision, and the state had assumed responsibility. Housing values were bid up where the tax rate/public provision combination was more favorable and bid down, so allowing purchase by poorer families, where it wasn't. Accordingly geography entered into an understanding of welfare geographies not simply through the fact of differentiation but also through the movements, particularly residential, that mediated access.

Much of this literature, however, was of a highly descriptive nature. Seemingly the major objective was an identification of the variations, and how poor people were the ones who ended up with the least favorable bundles of public goods and in those neighborhoods most exposed to the negative externalities of air pollution, traffic congestion, crime, and so forth. The ideas of territorial justice and the importance of introducing some redistributive measures, if only implicit, were typically present. In short, welfare geography was stuck in what one might call, not too unkindly, a liberal rut. To the extent that there was analysis, it was in terms of the dynamics of a market economy and the role that competing local governments and neighborhood organizations played in attracting land uses with positive externalities and pushing the negative elsewhere. This was useful and certainly helped shed light on Harvey's old problem of the distribution of real income. It also endures in work on environmental justice. But it had...
Public Goods, Externalities, and Their Necessary Conditions

Finally in this article, how might we develop a more critical position on the question of public goods, particularly as they relate to human geography? What are the underlying assumptions that are typically taken for granted and left unexamined? And how might public goods, externalities, and the practices surrounding them, relate to broader, more all embracing conceptions of the social, or more accurately the ‘sociospatial’, process? Several points can be made here.

1. The first is the sociohistoric specificity of public and private goods and the distinction between them. They assume a world of commodification, one in which commodities are produced with commodities, but in which commodification encounters barriers. Not all goods and services can be commodified. Yet it is on the provision of some of these in some form or other that the commodification of other goods and services depends. Initially these would have included a legal system through which to enforce private property rights and contracts. Later, some regulation of the money supply that was above the imperatives of the market place would have been necessary. Historically, we have seen, this provision of goods and services in the noncommodity form has tended to be through the state, though not exclusively.

2. The second point has to do with how we should interpret externalities. The standard view is simply one of market imperfections that can be eliminated. This can be achieved through the provision of appropriate monetary or regulatory incentives or, where positive externalities are of such a magnitude as to preclude private provision, assigning production to the state. There are alternative understandings. The one which is explored here is a reinterpretation in terms of contradictions within the capitalist mode of production. The capitalist mode of development is characterized by an unprecedented socialization of production. There is an extensive and intensive interdependence mediated, among other things, by the division of labor and by means of production that are worked on or with, collectively. It is through that socialization that productivity, and so production, are enhanced. This social character, however, the deval opment of all round interdependence, enters into contradiction with the way in which the product gets appropriated, that is, privately. The structurally given goal of the capitalist is not to facilitate the net rev enues of others but to enhance his/her own. To the extent that production generates negative external ities, then they are to be dumped on others rather than internalized, and regardless of how this affects the
social character of the conditions on which individual production depends, such as the reproduction of some shared resource. Where the use values produced cannot be sold or sold only with difficulty, but they are nevertheless necessary conditions of production, then, and assuming a logic of individual profit maximization, they will not get produced.

Examples are not difficult to find. They would include:

- Issues in the reproduction of labor power: These are a mixture of negative externalities like pollution and health and safety in the workplace, and market failures in the provision of use values; use values that, because they benefit other capitalists do not get produced. Capitalists systematically under invest in the training of workers given the fact that workers are free to leave, take their talents with them, and so provide other capitalists with a free good. Likewise, capitalists do not support workers when they are unemployed. They want workers to stay around until business picks up again, but there is no guarantee that former workers who they might well have otherwise supported will not be rehired by other firms.

- The commons: The over-pumping of aquifers, over fishing of the oceans, and overuse of the air as an absorber of effluents are well known examples. Since in these instances an essential condition of production is free, profitability is higher, encouraging increased investment and use, and so the erosion of the common resource base itself. In other cases, common resources can result in under investment in neighborhoods and disincentives to rehabilitation of properties.

Just as clearly, this contradiction between the social character of production and the private character of appropriation tends to get suspended. Shared conditions of production subject to market failure in their provision do tend to get provided. There are regulatory initiatives designed to limit the erosion of the commons. The state is of major significance in all these instances, though the role of various forms of inter firm governance should also be recognized.

But the important qualifiers are ‘tend’ and ‘suspend’. The public and the private, the sphere of the production of goods and services in their public form and the private economy, exist in a relation of considerable tension. While capital requires state intervention if it is to accumulate, it also resists it, typically producing the degrading, inadequately funded public sector of which Galbraith complained so many years ago in The Affluent Society, but also in more class specific forms than he would have admitted. The general support of the labor movement for greater state intervention, and historically for the planning that promised to internalize externalities by eliminating the hostile relations between firms, and between firms and labor, is not coincidental. Even so, the discursive environment has tended to work to the advantage of capital. The powerful notion of money as the measure of all things – if contested by, among others, the environmental movement – has been an essential part of the debate about state regulation and provision. The emphases and silences of cost-benefit analysis are eloquent testimony to this and can be turned to capital’s advantage when it demands state intervention as well as shedding doubt in those instances where it is resisting it.

Furthermore, the contradiction is never abolished; it is merely suspended, only to be displaced somewhere else, some other time, and in some other form. Shifting pro vision into the public realm does not eliminate negative externalities. State agencies have their own agendas and their different policies often work counter to one another, as Theodore Lowi demonstrated. And the very fact that the state must obey capital’s laws of motion if it is to tax and so obtain the revenues necessary to carrying out its functions means that internalization in one place will be accompanied by externalization onto another. Through land use planning, local governments can regulate land use so that synergies are exploited and the incompatibilities that would lower land values are avoided. But local governments have no incentive to make their plans compatible with those of their neighbors.

*See also:* Neighborhood Change; NIMBY; State; Planning, Urban; Welfare Geography.

### Further Reading


Glossary

- **Applied Geography**: The application of geographical knowledge and skills to the resolution of real world social, economic, and environmental problems.
- **Deep Policy Analysis**: Analysis that questions the assumptions on which policy intervention is based and that is more likely to be used by policy makers to understand policy impacts than to help design new policies.
- **Policy-Driven Research**: Research instigated by policy makers to understand particular public policies.
- **Policy Geography**: Geographical enquiry for the specific purpose of addressing a policy problem identified by policy makers.
- **Policy Maker**: Politicians and government agency employees who have command of the institutions that give approval to public policy actions.
- **Policy-Relevant Research**: Activity decided upon by the researchers themselves that may involve critiques of public policy and support to groups and individuals seeking to change the existing public policy agenda.
- **Public Geography**: Geographical enquiry that involves engagement with individuals and groups that are seeking to influence the policy made by public agencies.
- **Public Policy**: Action which employs the authority of a government agency to commit resources in support of a preferred value or activity.
- **Shallow Policy Analysis**: Analysis that accepts the aims and assumptions of policy makers.

Introduction

Public policy is ultimately the responsibility of government agencies that make choices to do something or to do nothing affecting the community or some section of it. Groups outside of government contribute to public policy by recommending courses of action for public agencies to act upon and possibly by campaigning or otherwise seeking action on their recommendations. Whether the recommended actions are actually taken up is a measure of the influence obtained but the absence of implementation does not preclude the ability to claim relevance to public policy. Consequently geography may be judged to contribute to policy when it offers a solution to a problem requiring the attention of government irrespective of whether that solution is acted upon. Over the long term, the public policy ambition could be said to have failed if there was a consistent inability to influence policy decisions. Over the short term, policy related geography can be distinguished from other forms of geography in going beyond the understanding of a phenomenon of social concern to guidance on what action should be taken in relation to that issue.

The application of geography to policy is generally viewed as desirable and something that geographers should actively seek to encourage. Nonetheless the relationship between geography and policy is subject to much debate partly as there is no agreement over what counts as a contribution to public policy. Three audiences have been recognized:

- **At the top of the policy making hierarchy are the politicians and officials linked to central government agencies whose actions potentially have national and international implications. As well as serving these decision makers and policy designers, geographers may assist outside groups vying for influence over 'high level' policy.**
- **Public policy making is also a function of local and regional government agencies that operate within structures set by national government. A trend in many countries has been for more policy to be devolved to second and third tier levels of administration. Geographers may direct their policy guidance to these agencies and the associated interest groups focussed at this tier of activity.**
- **A 'domestic' audience for public policy has been envisaged in terms of the institutions and individuals associated with the places where geographers themselves work. Addressing this internal audience can be justified as a case of 'putting one's house in order' before addressing others. This argument believes, for example, that geographers who recommend greater wage equality in their advice to policy makers in central government might have more credibility if they have first addressed this issue in their own workplace.**

Some evaluations have criticised geographers' contribution to public policy for giving too much. On the other hand, if policy influence is restricted to the lower tiers of policy making, there can be an implication that it is of lesser significance to that directed toward national policy. That implication is even greater if only internal influence is sought and consequently national policy makers are generally seen to be at least one of the
audiences to aim for either directly or by supporting others who aspire to change national policy settings.

**Reasons for and against Policy Connection**

Gaining influence over policy making substantiates the claim that human geography is a critical social science generating insight into economic, environmental, and social issues. In this context, engagement with policy is viewed as a way of making sure that geography remains relevant to society at large rather than being a subject of interest only to other geographers. Some geographers go further and argue that policy related research is valuable in its own right as compared with it being viewed as a secondary or ‘grey’ area of activity of lesser status than ‘theorizing’. As well as geographers’ motivation to be policy orientated, the demand from policy makers also affects participation in policy related geography. Since the 1990s, policy makers in many countries have espoused increased interest in so called ‘evidence based’ policy and this implies an increased interest in basing policy decisions on research data. More generally, governments tend to expect universities to make a contribution to the community, and engagement in public policy development is one way that academics including geographers can meet this expectation.

At the same time, it is important to recognize that some geographers say policy related research should be avoided. One concern is that it risks geography being hijacked or subverted by the organizations that sponsor or utilize the work. This might arise where policy related research is commissioned by agencies that limit the scope of investigations over what geographers might have preferred and which then control the release of findings and the researcher’s ability to comment on them. Such a situation can be mitigated where there is a diversity of policy agencies sponsoring research. For some ‘radical’ geographers such protection is insufficient as policy agencies tend to support the status quo, whereas geographers should work with a wider agenda including the fundamental transformation of society. This requirement was most famously made in a landmark article by the influential geographer David Harvey who encouraged geographers to ask “what kind of geography for what kind of public policy.” Harvey’s critique has been influential, encouraging many geographers to prefer to absorb new philosophical approaches and debates from social and cultural theory rather than directing attention to policy questions within the scope of existing agencies.

Geographers aiming to reform rather than transform the fundamentals of society have at least four ways to make public policy contributions. First, they may apply existing geographical theory or techniques to help understand and solve ‘real world’ social, economic, or environmental problems. Second, geographers may undertake research that evaluates public policy initiatives or that tests the assumptions guiding policy interventions. Third, geographers may be contracted by public agencies to investigate an issue of concern to policy makers. Such a relationship may give direct opportunity to influence a matter of immediate relevance to policy makers, as well as encouraging wider dialog between public officials and geographers. Four, policy makers may be professional geographers, as when academics are appointed to the boards of public bodies, or have completed a geography qualification before joining a government agency.

Despite multiple channels for participation, many geographers who want to see geography influence public policy believe that the discipline’s contribution has fallen short of what it should be. One obstacle is that exerting influence over policy requires understanding of the policy making process and this draws on skills and behaviors that are more likely to be possessed by political actors than geographers. This challenge is one that geographers potentially share with academics in other disciplines too and so it can provide only part of the explanation. Two main reasons can explain why geography has had a relatively minor influence over public policy: policy makers may view geographical theories and techniques as less helpful than those from other disciplines or geographers may not make sufficient appropriate effort to make their discipline relevant to public policy. Some mix of these explanations may also explain the impact obtained but it is helpful to examine each possible explanation in turn.

**Policy Makers Exclude Geography**

A preference for guidance from other academic disciplines than geography is one reason policy makers tend to sideline the discipline. Among academic disciplines, public policy draws most on economics for guidance and especially welfare economics. Welfare economics is based on the notion that individuals, through market mechanisms, should be relied upon to make most social decisions. The methods of analysis used by welfare economists recognize instances where markets cannot be relied upon to distribute resources efficiently. To use economists’ language, there are times when markets cannot aggregate individual utility maximizing behavior (meaning decisions to purchase or not purchase some good or service) so as to optimize overall social welfare. When this occurs, markets are said to fail and there is a justification for government actions to supplement or replace markets.
Welfare economists recognize many sources of market failure, but there are a number of archetypal situations that are used to justify a need for public policy.

- Natural monopoly: in industries with large capital requirements and large economies of scale, such as railway networks and power generation, it can be difficult for new businesses to compete with established ones. Where one or a few firms dominate an industry, the lack of competition can reduce the ability of individuals to make welfare maximizing decisions.

- Imperfect information: to maximize welfare, individual decisions must be made on the basis of all available information but there are instances where either producers have no incentive to reveal information about their product or service or consumers do not have the expertise to evaluate the information given and instances where both failures arise.

- Externality: these arise in relation to those costs of production that are not paid for by the producer and in relation to those benefits that are not paid for by buyers of the producer's output. Externality is an incentive to overproduce some things, where costs are avoided, and underproduce things where benefits are not fully remunerated.

- Common property goods: resources that are open for anyone to draw upon risk being used unsustainably where individual decision makers maximize their current use of the resource without regard to its long-term future. This context is known as the tragedy of the commons.

- Destructive competition: competition between enterprises that causes negative side effects for employees and society may be seen as a market failure where inadequate wages and workplace investment produce living and working conditions with high social costs.

As well as guidance on when policy makers may need to act, welfare economics is appreciated for its ability to inform the selection of an appropriate response. A further great advantage of welfare economics is that it can appear to offer a neutral and dispassionate justification for policy action. Policy makers are recommended to act because a market is failing and society will work more efficiently if corrective action is taken. This does not mean that welfare economics reduces public policy to a technical process. It is frequently difficult if not impossible to convert real world situations into the data needed by welfare economists to run their forms of analysis and even where they can it should not be imagined that policy makers are "won over" simply by evidence of a market failure. Policy choices are bound by political circumstances and made by political actors, often in response to political pressures. Neither should it be overlooked that there is much internal debate among welfare economists about the recognition of market failures and what, if anything, should be the response. Nonetheless, the market offers a benchmark and a rationalizing logic justifying policy intervention. In contrast, geographers tend to believe that policy recommendations must be justified by explicit statements of the researchers' normative values such as their position on human rights, equity, and local democracy.

Of course, geographers are free to draw on economics and frequently do so but they tend to be uncomfortable with the assumptions associated with welfare economics. For geographers, there is a preference to see markets as socially constructed phenomena created by actors whose perceptions and resources are a product of particular circumstances. Geographers devote more of their effort to understanding how the environment has constructed a market rather than analyzing whether the market is failing and how it should be corrected. Policy makers, on the other hand, tend to work with markets as they exist and from their perspective questioning of how a market has come about and how it might be constituted differently is not always helpful to their cause.

**Shallow and Deep Policy Analysis**

The scope of potential advice has been discussed in terms of the difference between shallow and deep policy analysis. Shallow policy research involves evaluating the impact of policy interventions and can be completed using standardized impact assessment methodologies. The aims and objectives of the policy research are prescribed by the agency seeking the evaluation leaving little scope for exploration of the issue outside the agency's narrow interests. Deep policy geography, on the other hand, is not restricted to the parameters and exclusions set by a policy agency and recognizes that the policy process itself is a worthy target of investigation, as well as policy outcomes. Whereas deep policy analysis potentially offers the greater insight, much of the demand for policy research is concerned only to obtain a shallow analysis.

Some geographers feel that other disciplines are more willing to engage in shallow policy research than are geographers. Geographers are, for example, frequently preoccupied with demonstrating the local embeddedness and path dependency of economic and social phenomena. Compared with economists they are also more likely to wish to collect their own data and to do this locally. Deep policy analysis may generate unique insights into the "real" nature of social and economic processes. It can also be viewed as knowledge that is more relevant to policy implementation issues and program outcomes than to the "front end" of the policy process where policy is first conceived and designed.
Geographers Exclude Policy

The dominance of economics presents a challenge but does not exclude geography extending some influence over public policy. Indeed there is a long tradition of practical application and policy relevance, going back to the involvement in cartography and mapmaking. From mapmaking has grown geography's contribution to the development of remote sensing and geographical information systems that permit increasingly sophisticated and analytical ways of collecting and interpreting spatial information. Such work forms part of 'applied geography' and can be contrasted with 'pure geography' that is focused on the development of theories, ideas, concepts, and methods. A synergistic relationship between these two sides of the discipline, with the development of theory and practice informing each other, would help to maximize the contribution of geography to policy making. In practice, the two sides of geography have often existed as alternative endeavors rather than operating as a smooth continuum of activity. This lack of connection has provided one context in which the geographical profession itself has responsibility for the influence it exerts over public policy.

An idealized relationship between pure and applied geography envisages two way interactions. Pure research develops principles and methods that are picked up by applied geographers to provide the framework for asking questions about an issue of policy relevance and to provide a normative standard against which current and future social conditions may be judged. In the opposite direction, applied research that tests theories and methods in the 'real world', arguably the ultimate proving ground for new ideas, offers a further means for refining theory.

Opportunities for mutual learning exist and are sometimes acted upon but practical considerations and philosophical objections have acted against ongoing engagement between pure and applied geography.

Practically, there tends to be cycles in the relative importance of pure and applied geography rather than an ongoing interaction. At any point in time, activity has concentrated on either the pure or applied forms of geography leaving a neglected cousin whose fortunes change more from perceived over indulgence of the other side of the family than through the transfer of insight and skills. Starting in the late nineteenth century up to the 1990s, Michael Pacione drawing on a schema first developed by Peter Taylor identified three periods when applied geography was in the ascendancy (the late nineteenth century, the period from the end of World War I to the start of World War II and the mid 1980s) separated by two periods when pure geography was dominant (the early twentieth century and from 1945 to the 1970s) and speculated that post 1980 the discipline had shifted back to pure geography. That speculation seems to have been confirmed by a growth of comment since the end of the 1990s on the need for geography to demonstrate its policy importance.

Cycles in the focus of academic enquiry have a number of potential origins. One interpretation is that they link to the state of the world economy. Thus during the 1930s and 1980s, at times of economic recession, applied geography flourished in fields such as land use planning and regional development. During periods of national economic expansion it appears that geographers may have felt less obligation to work in applied areas or had more opportunity not to do so. Such connections are interesting to explore but other explanations should not be overlooked as well. When one side of the discipline attains a measure of dominance there is perhaps an inevitable reaction in demands to redirect activity. This certainly seems to have occurred in the debate about the relevance of geography that took hold in the 1970s. Since the 1960s, leading edge human geography was dominated by increasingly abstract forms of spatial analysis, such as point pattern analysis, nearest neighbors, and factorial ecology. Critics of this form of work pointed to a growing disparity between these kinds of sophisticated techniques and understanding of how real places and social groups were changing. The call to make geography 'relevant' was responded to with a surge of interest in themes such as territorial social indicators, territorial social justice, and the need to match the provision of public facilities with need.

The calls to make geography relevant illustrated an other source of the separation of pure and applied geography. During the 1960s, the development of computers facilitated more complex statistical modeling than was previously possible and provided researchers with many opportunities for novel investigations. Disciplines tend to develop through such waves of intellectual fervor rather than in a steady incremental fashion. During a period when some exciting new area of theory, ideology, or method is opening up it is perhaps inevitable that the applied role of geography assumes lesser status. The decade from the mid 1990s was another time of intellectual fervor as human geographers were drawn into debates around postmodernity and new cultural perspectives, once again leaving relatively few geographers to progress policy related studies.

A lack of integration risks pure research delivering theories and concepts that are too underdeveloped for practical application. An influential criticism of the perseverance of geographers has been made on this basis by Ann Markussen. She has argued that much contemporary economic geography works with 'fuzzy concepts', defined as entities, phenomena, or processes that possess two or more alternative meanings. Reliable identification or application by different readers or researchers is difficult.
when dealing with fuzzy concepts. New concepts still under development may inevitably have a degree of fuzziness. They can be deliberately vague so as to appeal to a range of different audiences. For Markusen, of more significance is that a lack of desire to guide action has allowed standards for admissible evidence to drop too low. A tolerance of under researched fuzzy concepts commences a downward spiral of declining precision and evidential confirmation and then increasing distance from the policy community. Markusen’s judgment that the key concepts exciting economic geography, such as flexible specialization and its associated spatial tendency of reagglomeration, have remained fuzzy is controversial but she does identify a genuine dilemma that geographers have faced. Geographers must be explicit about the values and priorities guiding recommended courses of action if they are to address policy. On the other hand, declarations of political preference can be seen to compromise the claims to be conducting ‘scientific’ investigation. Rather than deal with this potential conflict, Markusen argues that many geographers stay away from close engagement with the policy community.

Public Geography and Policy Geography

While there is much support for the idea that geography should produce useful knowledge, there are different perceptions as to the form that it may take. Drawing on the ideas of the sociologist Michael Burawoy, the UK geographer Kevin Ward has made a distinction between policy geography and public geography. Policy geography is conceived as a comparatively narrow activity directed to specific ends that are determined from the outset, whereas public geography is a more diffuse activity distinguished by the extent to which academics seek to engage with the community outside universities. This engagement may be through expanding the range of outlets for their intellectual products, such as writing in magazines, or by working with area based or other interest groups where the process of mutual learning may be the outcome as much as or instead of any particular campaign objective. Whereas policy geography is judged on its effectiveness to policy makers in helping design or evaluate an individual intervention, public geography is judged by its relevance or usefulness to groups outside the government’s policy making agencies.

The public versus policy geography divide overlaps with a distinction between policy driven and policy relevant research. The former is targeted on specific government policies and has a purely instrumental motive related to the introduction or modification of a particular policy stance. Activity that is both policy driven and policy directed involves geographers only after it has first been identified as a policy issue by others.

In this work, geographers may have little control over the agenda particularly if their involvement is as contractors to the agenda setters.

Policy relevant work may involve critical evaluation of public policy and activity supporting groups that are challenging public policy agencies such as trade unions, unemployed, or think tanks working to a different agenda than government agencies. With policy relevant geography, the decision to pursue an investigation or advocate on its behalf is made by geographers themselves and for this reason alone is more likely to characterize the work of university based geographers than policy driven research. Policy relevant activity can include the engagement geographers have with campaign groups linked to their area of geographical enquiry. For example, a geographer interested in the location of the defense industry and the fate of communities dependent on defense industry funding may be said to be engaged in policy relevant activity when supporting peace groups or giving public talks on the issue of converting defense based business to alternative nonmilitary markets. Geography can claim a larger engagement with public policy than is frequently recognized when including this type of contribution.

See also: Applied Geography; Cultural Geography; Embeddedness.

Further Reading


Relevant Websites

www.igu gapp.org
IGU Commission on Geography and Public Policy.
www.psi.org.uk
Policy Studies Institute is one of Britain’s leading independent research institutes.
Introduction

In general, public space is property that is open to public use, including streets, sidewalks, parks, plazas, malls, cafes, interior courtyards, and so forth. Much public space research equates public space with public property, but such an equivalence is historically and practically inaccurate. A more accurate definition would be that public space is that space where ‘the public’ is formed and thus social and cultural rules governing public behavior predominate. In this sense public space is definable in part only through comparison with more private spaces, or the spaces over which individual or small group sovereignty reigns. The public space of a restaurant is different from the private space of its kitchen; the public spaces of the city are defined in relation to the surrounding private spaces such as homes and offices. By extension ‘public space’ is often used metaphorically to describe a realm of practice where some sort of public interaction is possible. Scholars often speak, in this sense, of discourse constructing a public space. By this they mean that an opportunity for debate and discussion – a public ‘sphere’ – has been created. Whether used metaphorically or in reference to physical spaces, public space is understood to be essential to contemporary urban life.

Geographic Research on Public Space

Given its central role in contemporary urban life, public space is seen by many as under threat, and this sense of threat is what drives much research on public space in geography. The threat comes from multiple directions.

Early geographic research on public space – taking its cue from urban sociology, the work of great mid twentieth century urbanists like Jane Jacobs and William Whyte, and phenomenology – understood public space physically as the space between buildings in a city, and socially as both a space of community formation and of ‘strangers’ (tourists, visitors, outcasts). Geographers sought to understand the relative vibrancy of urban public spaces, analyzing what some called the ‘place ballet’ that developed through the relatively unscripted, but nonetheless norm structured interactions of people going about their business, hanging out, and moving through. For researchers in this tradition, the threat to public space comes from the homogenization of everyday life through modernist urban design and planning, suburbanization (which is also a triumph of private over public interest), or just plain neglect as people forsake the life of the street for the charms of television.

In many cities, the perceived abandonment, or dereliction, of public space was thought to leave it open for ‘colonization’ by marginalized peoples – the homeless, ‘bums’, delinquent youth, etc. Geographers have sought to trace the ideologies behind this sentiment,
the processes at work (especially in the wake of the massive rise of street homelessness in the United States in the early 1980s), the roles that public space plays in the lives of people who have little recourse to private space, and the ways that city elites have responded, which is often by radically transforming, and sometimes privatizing, public space. Research has therefore examined the structural transformation of Skid Row and the ways in which gentrification ‘produces’ homelessness, even as it is while seemingly being ‘threatened by’ the presence of homeless people in public space. It has also focused on graffiti and other means by which marginalized groups mark a public space as ‘theirs’. Urban planners, community organizers, and many city residents see homelessness, graffiti, gangs of teens on street corners, and so forth as evidence of the decline of public space.

Critical urban geographers, by contrast, often see the campaigns against these groups’ use of public space as itself a threat to its public nature. In this sense public space is seen not simply as the publicly accessible spaces of a city, within which a public forms and interacts, but a key battleground defined by struggles over inclusion and exclusion, visibility and violence, order and ‘anarchy’. The threat to public space perceived here in geographic research is the threat posed by dominant groups’ abilities to keep out those users and functions they do not like, coupled with urban planners’ and others’ desires to create new public spaces that are seen as safe for middle class residents, tourists, and, especially, inward capital investment. These are spaces such as festival marketplaces, malls, or rebuilt urban parks but with control vested in private conservancies or local property owners. From this perspective, orderly public space is seen as a pre-condition for urban redevelopment or gentrification. Herein, however, lies a contradiction: planners and cities try to sanitize spaces so that gentrification can proceed, but in the process, often create the very disorder they wish to eliminate, or at least make invisible.

As a space of struggle, public space is unavoidably a political space. The exclusion of homeless people, racial minorities, and others from public space is thus often interpreted as a political act that has deep, political effects: it transforms who is and who can be part of the public. Writing in the wake of the uprisings in Eastern Europe, and especially the Tiananmen massacre of 1989, geographers have sought to understand how urban public space is a foundation for political life, a site where publics represent themselves to their members and to others. Public spaces – Tiananmen Square, Hyde Park, or the Plaza Mayor in Argentina – are staging grounds for protest and dissent. As public spaces are transformed – and all too often privatized – by urban redevelopment, gentrification, and the demands of global capital, many geographers argue, the space for dissent shrinks. At the same time, legal and policing practices – ranging from requiring permits for protest to creating large no protest zones around significant national or international events to simply banning individuals and groups from even being in a space – have been analyzed as a closing down of the political functions of public space, and especially as a reversal of rights to public space won over a long history of struggle from before the women’s suffrage movements to after the civil rights movement. In this analysis, public space is made public through struggle (it is not a given public in any meaningful sense), and it is made less public when dominant forces of order and control ‘win’.

In such analyses, public space is often presented as an ideal of openness toward which social groups struggle. However, other research shows that public space is always, even in the wake of such struggle, exclusionary. It is not infrequently a violent space. This violence and exclusion is gendered. Public space has often been a male space. In part this is an ideological scripting – male is public, female is private – and one that does not necessarily match reality (women have always worked in public spaces). In part it is a function of women’s fears of public space where sexual or other assault is a possibility – it is both a ‘random’ occurrence and a very real practice of exclusion – even as most violence against women occurs within the private space of the domestic sphere. In part it is because public spaces are made unwelcoming in other more ‘subtle’ ways (e.g., through sexualized imagery). And in part, despite the necessity of women’s labor in public settings, it is a function of patriarchal labor markets. Much feminist research on public space, therefore, has focused on the nature of gendered exclusions. This research has been joined by research on the normatively heterosexual nature of much urban public space.

Similarly, geographers have sought to understand how women, queers, people of color, the disabled, and others who are not normatively part of the public have differentially struggled for inclusion, while at the same time struggling to change the very nature of public space – to make it into something different than it had been. These struggles can be class based. The interests of middle and upper class women in creating a space for promenading and display in nineteenth century New York, for example, might be very different from the interest of Filipino domestic workers creating a space for recreation on their days off in twenty-first century Hong Kong. The interests of the working class gay men in the 1920s American city may be quite different from their middle-class counterparts after the Gay Liberation Movement of the 1970s. The struggles are different for the able and the disabled, for dominant and subordinate racial formations, and so forth. Here the threat to public space is both that under some conditions it is too open, and under others it is not open enough. It is too open in that it
threatens violence and expulsion through the ‘normal’ workings of racism, patriarchy, and heteronormativity; it is not open enough in that it will never really be public until struggles for greater inclusion are won. The geography of public space, therefore, can best be defined as the relationship between the physical materiality of specific kinds of (generally) publicly accessible spaces, the processes that structure inclusion and exclusion, and the struggles to change (or maintain) both the structures and form of public space. The interaction of these elements produces public space as (actually existing) public space.

Public Sphere/Public Space

If early public space research was rooted in urban sociology, phenomenology, and urban critique, the focus on structures of exclusion and inclusion has realigned it. It is now more frequently rooted in political economy, feminism, and political theory, especially as these relate to analyses of the public sphere and its role in democracy. The public sphere can be defined as the realm within which discourses circulate and public opinion is formulated. In Jürgen Habermas’s influential analysis, the public sphere was a realm apart from the state in which civil society developed. The early modern bourgeois public sphere of eighteenth and nineteenth century Europe comprised coffee house debates, relatively in dependent newspapers, journals and pamphlets, and other places where ideas germinated and were discussed. From this, the public sphere has been conceptualized as a sphere of rational debate, and as such there were norms of behavior that structured how people interacted.

Separate from the sphere of the state, it was also different from the private sphere. The home was the preeminent marker of the private sphere – a place of privacy, retreat, and shelter from the hurly burly of public life. The private sphere was not necessarily a sphere of rationality, as Habermas defined it. For Habermas, the public sphere comprised private individuals (people with access to the private sphere) who ventured into the public – engaged in public discourse – precisely for the purpose of forming ‘a public’. Habermas was most concerned with the structural conditions that allowed for the formation, and shaped, this public sphere. Consequently he sought to analyze the public sphere’s transformation as structural conditions changed – as technology created new modes of communication, as the public sphere was democratized by the demands of ‘the masses’ seeking political representation and power, and especially as the ‘private’ interests of the capitalist economy came to dominate public life.

Criticisms of this model of the public sphere are many: Habermas underplayed the role of gender relations in structuring the bourgeois public sphere, both glossing over the degree to which the private sphere was scripted as the sphere of bourgeois women and that women and other subordinated people had always been in the public sphere (as workers, for example) even if not of it (as recognized members of the polity); he too readily assumed that the Enlightenment bourgeois public sphere was a sphere to which all people aspired (that it was a universal ideal rather than a very specific construction); he theorized the public sphere as unitary, rather than highly fractured; and his concerns about the public sphere’s structural transformation were undemocratic, since he seemed to take the highly restricted sphere of the late eighteenth century as almost a golden age and the democratic struggles of the nineteenth century as a reason for that age’s demise. Not all these criticisms were entirely valid, but they have had the effect of sparking a lively debate about what the public sphere is, who has access to it (and under what conditions), and how race, gender, nationality, and other social relations are key components of the public sphere’s structure and the struggles over it.

Most prominently two revisions of Habermas’s model have become influential in geographic studies of public space. First, Nancy Fraser and others have developed the concept of subaltern counterpublic spheres. The argument here is that subaltern groups, with differential access to resources and power, ‘carve out’ separated spheres of discourse in which they create what Fraser calls ‘alternative publics’. Subaltern counterpublic spheres are, for her, ‘parallel discursive arenas where members of subordinated social groups invent and circulate counter discourses to formulate alternative interpretations of their identities, interests, and needs.’ The public sphere is not unitary; it is multiple and complex, although this revision does allow, as the term ‘subaltern’ indicates, for an understanding that some public spheres are hegemonic. Second, many scholars have questioned the relatively easy separation between public and private that underlies Habermas’s model. There is, they argue, no bright line between public and private. Rather, the boundary between the two is always socially constructed under specific conditions, and therefore a site of significant struggle. In this regard it is useful to understand actions as rela tively public or relatively private – placed, through historical contingency, social struggle, the relative success of subaltern counterpublics in making their claims, and so forth, along a continuum from most private to most public. It is hard to see the private sphere of the home as entirely private (the realm of private individuals), for example, given the way that the state, public opinion, and so forth actively structure what goes on there; and it is hard to see the public realm as fully public given the power of private actors.
(e.g., corporations monopolizing the media) to shape public action.

There are important implications of these two critiques for public space research. In part taking its cue from the second critique of the Habermasian model, a general assumption in geography is that public and private spaces, like public and private actions, exist along a continuum. Yet too much research on public space has quickly assumed that the continuum of space runs parallel to the continuum of actions: that public actions take place in public space, and private actions take place in private space. When this parallelism is broken, the result is a transgression. This assumption often holds even in studies founded in sophisticated arguments about the social construction of boundaries between public and private. But as Lynn Stacelthi has shown, it makes much more sense to see the continua of spaces and actions as orthogonal to each other (Figure 1).

Many actions scripted as 'public' take place in spaces understood as 'private' and vice versa – and not all of them are transgressive. Indeed, the ability to create a (relatively) private space for political organizing and alternative discourse is essential for the formation of alternative – or subaltern counter – publics. Study of the spaces of political action shows that they are not 'parallel discursive arenas' as Fraser puts it, but, precisely, 'alternative native spaces'.

The upshot of this analysis has been to introduce a third critique into the discourse on the structural conditions of the public sphere, namely, to show that physical space (and its structuring) matters to the kinds of publics and public spheres that can form. Little public sphere theory has carefully considered the material spaces that do and must form the foundation of the public sphere. The public sphere is written about almost as if it is simply an amorphous 'realm' or a 'medium' within which we all live – something like water for a fish or air for a mammal. Public space research, on the other hand, has sought to show that the shape and structure of the spaces available, how they are bounded and policed, who is included and excluded from them, all make a difference to what the public sphere is.

As a result, in geography and broader urban theory, there is a strong focus on the production of different kinds of public spaces, and on the processes and struggles through which specific spaces are made relatively more or relatively less 'public'. The sense of threat that drives much research in this vein is that despite the fact that public actions cannot be directly mapped onto public spaces, nonetheless, the kinds of public spaces socially available significantly shape possibilities for public action and for subaltern groups to be seen in and as part of the public. Public space research is thus increasingly focused on analyses of the myriad struggles over access to urban space, and, therefore, over the forms of exclusion that structure public space.

**Public Space/Exclusionary Space/Contested Space**

While the ideal of public space as politically, socially, and culturally open space has been a powerful force, both in shaping struggles over urban processes and in urban theory, the fact is that all social space is at some level exclusionary. Inspired by the arguments of Mike Davis in *City of Quartz* (which examined the urban restructuring of Los Angeles) and showed how this restructuring was ‘protected’ by closed circuit television, private security forces, the fortification of urban space, and the clearance of homeless people from downtown) and by the contributors to Michael Sorkin's *Variations on a Theme Park* (which explored the end of public space in the new American City), geographers in the 1990s debated the relationship between changes in governance in the wake of the Reagan/Thatcher revolutions, urban form, and the means by which certain groups were excluded from publicly accessible spaces.

Research on laws governing public space showed that public space in America and Britain (the focus of most of the research) was never ‘open’ in any full sense, but always highly regulated. But new laws in the 1980s and 1990s, focusing especially on homeless people, made the acts of exclusion both more blatant and, seemingly, more popular to the general public. Many people want and expect the homeless – and other suspect people like presumed gang members – to be excluded from public space. Under the banner of restoring ‘quality of life’, cities thus enacted laws that banned sitting on sidewalks, aggressive panhandling, sleeping in public areas, offering services like windshield washing, littering in ‘gang colors’, and so forth. All of these were attempts to keep homeless people, young people, and some people of color out of public space. Besides laws, cities experimented with softer means of exclusion including removing public benches or changing their design to discourage sleeping;

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**Figure 1** The continua of spaces and actions.
randomly turning on sprinklers (especially at night) on lawns that homeless people sat or slept on, removing lawns altogether and replacing them with prickly plants; massively expanding closed circuit television systems; and requiring business owners to fence off and lock up their garbage dumpsters.

Many cities also encouraged the formation of business improvement districts (BIDs) to maintain and police public space. BIDs are typically chartered by the city to cover a certain area (in New York City, for example, there is a BID in the Times Square area, another around Grand Central Station, another in the Wall Street district, etc.). The BID in each area assesses a fee – above and beyond normal taxes – from local business or property owners and uses the revenue generated to provide services, such as street sweeping and washing, general maintenance, and, especially, security. BIDs hire private security guards (in New York and San Diego they are often recruited from the ranks of the formerly homeless) who act both as ‘ambassadors’ (handing out tourist literature, providing directions) and as ‘enforcers’ (moving the homeless along, breaking up loitering youth). The latter function is highly controversial, and there have been several instances of abuse by BID security agents, who have greater latitude for moving people along than the police precisely because they are not publicly accountable in the same way the police are. But the important point for public space is that the combination of new taxing structures, little public oversight, and privatized maintenance and policing hands control — ownership, in a sense — of public space from publicly accountable government agencies to private interests (nearby property owners and businesses). In the process the modes of exclusion are transformed, and the nature of what Henri Lefebvre called “the right to the city” – the right to be actively involved in the production of the public sphere – is reworked.

Against this sort of exclusionary practice, as well as against what much research sees as a ‘corporatization’ of the city (the monopolization of visual public space by corporate advertising, the appearance of the same retail chain stores in every city and neighborhood, the corporate sponsorship of public squares, parks, and even streets), significant opposition has developed and public space has become a zone of contestation. Homeless people’s organizations, for example, have squatted on abandoned or derelict land and created self-governing encampments. These encampments are also a reworking of public space; they are no doubt exclusionary zones, but the modes and reasons for exclusion are quite different than those practiced by the BIDs. They exclude so as to create a space where an excluded people may live. In New York, similarly, community organizations and other groups squatted abandoned land that had reverted to city ownership when owners failed to pay taxes in the wake of the fiscal crisis of the 1970s. Many abandoned lots were turned into community gardens that added green space to the city, provided fresh vegetables and flowers in poor communities, made a space for community or political organizing, and encouraged revitalization of red lined neighborhoods. Though often fenced, and jealously guarded by their developers, such gardens created a new kind of public space. In addition, they were so successful in sparking community revival that by the 1990s the city sought to reclaim many of them to sell to private developers. Gardeners fought back and eventually many of the lots were transferred from the city to land trusts, changing the nature of public ownership and the modes of exclusion that shape the space.

On another track, corporate control of public space has been challenged by neosituationist activists such as Reclaim the Streets or Space Hijkackers. Using street theater, temporary occupations, and other strategies, activists take over public space for parties and festivals, usually without permission, and often against the wishes of public authorities. Their goals are to de commodify public space and, especially, to bring a sense of fun and play back into the city: to reclaim public space as a space of and especially for the people. Finally, despite often cumbersome permit processes and restrictive ‘time, place, and manner’ rules, public space still hosts political demonstrations, parades, and the like. Geographic research on the contestations over and in public space shows that predictions of its ‘end’ are premature; rather, rules of, and restrictions on, access to public space are constantly struggled over and transformed. In the process, what public space is, is transformed.

One of the ways the nature of public space is being transformed is through changing property regimes. Geographers have focused mostly on public space as space, without considering the ways in which that space is owned. Some publicly accessible space (malls, festival marketplaces) is privately owned. Some remains publicly owned but is privately controlled, as with BIDs – such public space can be labeled pseudo private property. New York’s community gardens were owned by the city, and were threatened; many are now owned by land trusts (which are private) and seem more secure as public spaces – even as their governance has now been transferred more firmly into private hands. Such changing relations of property can be crucial to the kinds of exclusions that are possible and therefore to the type of public sphere that may form. Relations of property structure — for good and for ill — the possibilities for the formation of subaltern counterpublics. Analysis of property (in rural, as well as urban settings) is becoming a key focus of geographic research on publicly accessible space.
Future Directions

Research on urban public space in Anglo American human geography has primarily focused on the English speaking world. Most case studies are from Britain, the United States, and Canada, although there is a significant minority of case studies focusing on non Anglo Europe. There is, however, comparatively little work on the non Euro American world, although public space is of obvious importance there, and in some ways is structured differently. Studies are now appearing of women’s use of public space in Istanbul, Jakarta, Hong Kong, and a suite of Indian cities; on quality of life initiatives in Mexico City; on homelessness and public space in Germany, Japan, and Scandinavia; and the on plaza life and urban restructuring in Latin America. In addition, there is some cross pollination between studies of changing urban property regimes and the changing politics of property in rural areas in both the developed and the developing world. This work has the potential to de provincialize Anglo American analyses of public space in the neoliberal era. At the same time there is a great need for more historical–geographic studies of Euro American public space to examine more carefully the forms of inclusion and exclusion that served as the foundation for the contemporary public sphere, the sorts of counterpublic spheres that have historically developed (and their effects), and, especially, the ways in which urban public spaces have historically been used by urban residents as they exercised – often against high odds – their right to the city.

See also: Homelessness.

Further Reading


Relevant Websites

http://www.grandcentralpartnership.org
Grand Central Partnership, a pioneering BID.
http://www.nlchp.org
National Law Center on Homelessness and Poverty, tracks legal changes to public space that affect homeless and other poor people.
http://www.justiceonline.org
Partnership for Civil Justice, a public interest legal organizations that tracks the policing of protest in public spaces.
http://www.pps.org
Project for Public Spaces, an advocacy group that seeks to create and maintain urban public space (often through private means).
http://rts.gn.apc.org
Reclaim the Streets London, a neo situationist organization dedicated to making spaces for the people.
http://www.spacehijackers.org
Space Hijackers, a neo situationist group of “anarchitects”.

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Public Spaces, Urban

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Introduction

Urban public spaces are at the center of a great deal of literature concerned with the public life of citizens. The material spaces most often referred to are the street (including the sidewalk or footpath), the park, and the civic square. Each of these types of space has its own historical legacy, but in broad terms they became increasingly standardized features of Western cities from the mid nineteenth century, with the rise of urban planning and increased investment by city governments in infrastructure for the general use and benefit of the public. Since this time, ownership of, and responsibility for, streets, parks, squares, and other such communal spaces has generally been invested in public authorities (i.e., branches of government), and all members of the public have been guaranteed access, typically without financial charge. Accordingly, they have been spaces in which city residents can encounter the broad spectrum of socioeconomic difference present in urban centers.

Since the early 1980s, the adoption of policies in tended to exclude some members of the public from these spaces, as well as privatization of various aspects of their management and ownership, has been seen by many geographers and other commentators to compromise their public character. This has given rise to theories of ‘the end of public space’, which point to increasing in tolerance, surveillance, regulation, and exclusion in parts of the urban environment previously envisioned as open and universally accessible. The ongoing rise of privately owned, commercial alternatives to conventional public spaces – most notably the shopping mall – is seen as a further threat to the existence of truly common spaces in the city. Accordingly, the actual ‘publicness’ of contemporary urban public spaces is highly differentiated.

The erosion of principles of public (governmental) ownership and control of these spaces, and of the ideal of universal access, is potentially a matter of concern for a number of reasons, not least of which is the importance of streets, squares, parks, and similar spaces for popular political action. One of the enduring uses of public spaces has been for marches, parades, and protests seeking to advance political goals, large and small. While much political organizing can occur in private and virtual spaces, the visibility associated with taking to the streets remains a powerful tool for achieving recognition, and sometimes, for effecting change. Put another way, many venues exist for communication among strangers and casual acquaintances, yet there is an enduring value as associated with face to face interaction, and occupation of, material public space. It is a way to express concerns, gain attention, and sometimes, garner respect. However, the political functions of urban public spaces are often compromised, particularly in the name of its commercial functions – attracting and encouraging consumption, appealing to the mobile upper and middle classes, and acting as a thoroughfare for individual movement.

Conceptualizing Urban Public Spaces

Urban public spaces take a multitude of forms, and serve a wide variety of purposes, and thus defy simple definition. Nevertheless, it is possible to distinguish between broad types of public space. One early distinction, offered by Michael Walzer, pointed to the difference between close minded types of space intended for only one type of use, and those which were open minded, where a variety of uses (and users) were tolerated. Many modern urban spaces – shopping centers, government complexes, highways, and dormitory suburbs – fell into the former category, and sought to preclude social mixing and political activity. By contrast, many of the more established outdoor public spaces of the traditional inner city – the street, piazza, and park – were open minded and offered opportunities for political action and civic discourse. Importantly, however, the unpredictability of open minded spaces was often perceived as threatening, and in practice, many developed at least informal exclusionary practices.

Notions of exclusion and access are also at the fore in Kurt Iveson’s examination of four models of public space, models which refer both to particular organiza tions of material space, and to different ideals promoted by theorists of public life. First, the ceremonial model of public space centers on large scale civic sites – most notably city squares and plazas – in which people gather, particularly to mark significant events in the life of
the nation or city. Historically, these spaces have been important sites for the display of state and church power, while more recently they have been subject to increasing corporate influence. By virtue of public ownership, central location, and large scale, they have also been key sites for political gathering and protest.

The second model centers not on particular publicly owned sites, but on the social mixing and sense of community promoted by certain traditional elements of urban design, such as high densities, mixed uses, pedestrian access, and shared facilities. This particular organization of urban space, and associated sociality, characterized many older central city areas in North America and Europe, especially those established prior to the advent of the automobile dependency. This community model of public space – where a vibrant public life traverses both publicly and privately owned urban spaces – has recently inspired New Urbanist alternatives to the privatism of conventional suburban design, as well as new forms of inner city property development. For example, since the 1980s cities have expressed renewed interest in mixed use complexes consisting of offices, shopping areas, and entertainment venues. This trend has been linked to gentrification, and the emergence of consumption driven urban lifestyles. Accordingly, urban public spaces are often (re)designed with the express intention of feeding this consumer culture and attracting members of the ‘spending public’.

The ethos behind the management and maintenance of urban public spaces is increasingly oriented toward the consumption patterns of a respectable middle class ‘community’.

By contrast, the third model of public space holds as its ideal not a sense of community, but notions of openness and accessibility. Reflecting liberal concerns for universal rights of participation in public life and affairs, it emphasizes the need for urban public spaces to which all residents can be admitted, irrespective of social position. Such thinking drove much urban planning prior to World War II, and exerted particular influence over the parks movement in the late nineteenth and early twentieth centuries. While contributing to improvements in urban quality of life, public spaces in the liberal model seldom, if ever, fully realized inclusionary ideals: while more recently they have been subject to increasing corporate influence. By virtue of public ownership, central location, and large scale, they have also been key sites for political gathering and protest. The imperative of reproducing the private sphere) underpinned efforts to exclude women from the public life of the city.

The fourth model of public space identified does not seek to privilege ceremony or community, nor to ignore difference, but to enable interaction between multiple publics. In this way, it is suggested, the true diversity of the public can be experienced: members of different groups can mingle and overlap in shared spaces, but need not become homogeneous. In a practical sense, embracing diversity in this way requires relaxing zoning and the segregation of different land uses, as well as regulatory controls over public space, so as to allow a broad spectrum of social expression. However, such imperatives appear to run contrary to many contemporary trends in the development and control of public spaces, as is noted below.

**Political and Economic Significance**

Urban public spaces are often envisioned as sites of political engagement. They are bastions for conveying political messages to large, diverse groups of people, which help to maintain democratic forms of citizenship. For example, parades, protests, and demonstrations are uses of public space that demand the witness of the surrounding public. Demonstrators from across the political spectrum routinely organize and join parades to express their views in the public arena. In doing so, they tend to draw upon a common set of symbols (e.g., banners, effigies, and flags) and actions (e.g., chanting and marching). Nowhere is this more visible than when parades are followed (or met) by counter parades, which use the same styles but promote opposing agendas.

Critically, the political significance of urban public spaces is appreciated not only by protesters and paraders, but also by corporate and government elites. This was evident in Baron Haussmann's reconstruction of Paris in the mid nineteenth century, which included an extensive set of public works, and the replacement of narrow streets with broad avenues and boulevards. These were intended to promote public order by inhibiting the ability of protest movements to establish blockades, and improving the ability of troops to move through the city.

Today, managers of urban space typically link the social and aesthetic qualities of the public environment to city image and prosperity. This has important ramifications, as can often been seen in cities hosting hallmark events, such as economic summits and major sporting contests. Preparation for these events, and the publicity they bring, often entails a series of ‘improvements’; streets
are repaved, historic buildings restored, and security greatly enhanced – sometimes to the point of outright militarization during the event itself. The homeless are frequently removed (e.g., to alternative accommodation provided in more peripheral locations), and street trading and informal economic activity prohibited. The emphasis is on the creation of a city that is safe, clean, and apparently devoid of economic and social problems. The perspectives of those displaced by such efforts are seldom sought out; instead, official and media discourses portray the poor and disenfranchised as an illegitimate presence in public space. Importantly, these same trends are evident in more enduring efforts to create tourist districts and historical precincts cleansed of physical and social discomforts, and presented as wholly nonconfrontational and harmonious.

The public spaces of the inner city are also routinely connected to economic prosperity. Following large scale deindustrialization in Western cities, and the increasing mobility of capital, many downtown areas experienced significant economic decline, and an associated deterioration of the built environment. One response has been large scale redevelopment projects oriented around service sector employment and consumption activities. Thus, derelict industrial sites have been transformed into landscapes of consumption: festival waterfronts, entertainment complexes, landscaped corporate plazas, shopping centers, large scale office high rises, residential developments, and recreation areas. Distinctive, and typically sanitized, landscapes of consumption are deemed essential for success both in attracting the local spending public (from the suburbs), and in interurban competition for investors and tourists.

The forms of exclusion that often accompany contemporary consumption oriented reformulations of urban public space run contrary to notions of urban public spaces as sites of freedom, anonymity, and excitement. This said, exclusion from public space is not without precedent. Concerns for moral order, and for the temptations and dangers associated with public spaces in the city, have long motivated formal and informal exclusionary practices. Imposing social and legal order on the city has often meant excluding women and children (at least as individuals, as opposed to as members of family groups) along with other potentially disruptive elements — the working class, the poor, and some visible minorities. This exclusion has been justified in terms of both protecting those targeted from insults and dangers, and protecting the broader society from the disorder associated with their presence.

These twin imperatives can be found, for example, in efforts to constrain the occupation of public spaces by migrant female domestic workers in cities such as Singapore and Hong Kong. Specifically, it has been claimed that these women should be sheltered from the moral and physical dangers that lurk outside the private home/workplace, and that the visual and social order of public space needs to be protected from mass occupation by disruptive ‘others’ marked out by gender, class position, language, and ethnicity. Similar justifications often underpin the exclusion of unaccompanied children, and older youths, from urban centers: it is claimed that young people are both vulnerable in public space (e.g., to violence and vehicular injury), and hostile to its values.

Ownership, Order, and Surveillance

Contemporary reorganizations of urban public spaces commonly involve significant roles for private (especially corporate) actors in aspects of design, surveillance, regulation, and maintenance. This trend toward privatization of public space is particularly marked in the United States, where private business improvement districts (BIDs) have taken responsibility for the maintenance of many public spaces. They replace traditional (and at least theoretically democratic) forms of control with privatized sets of rules and exclusionary policies. In broad terms, BIDs are voluntary associations of local businesses that tax themselves and pool funds to ‘improve’ urban public spaces through the provision of street lighting, closed circuit television (CCTV), security staff, cleaning, and street furniture. They seek to deliver cleaner, safer public spaces amenable to consumption oriented activities and the redevelopment of adjacent private property. BIDs are driven by profit seeking objectives, and are not accountable to local electors, but seek to forge urban public spaces that compete with other cities for tourists and investment, and with suburban malls for preferred (i.e., consuming) members of the public. Interestingly, the mall (together with other commercial landscapes) also contributes to privatization, by inducing the relocation of much public life onto private property.

An influential US literature in the 1990s characterized these trends as ‘the end of public space’, as public access and control of communal spaces had been thoroughly debased by development processes emphasizing private profit and the creation of bourgeois landscapes of consumption. These trends were linked to issues of gentrification, the neoliberal turn in urban policy, and the emergence of tourism and consumption led development as economic strategies. Downtowns now feature tourist ‘bubbles’ intended to shelter visitors from certain realities of city life, and fantasy landscapes oriented toward sanitized leisure and entertainment. These spaces in clude, for example, festival marketplaces, and new pedestrian systems (skyways, tunnels, etc.) that promise safer ways to travel through urban space, in part, through physical separation from the traditional public domain. In this environment, public spaces have not necessarily...
been ‘lost’; instead there is greater regulatory control over access to, and behavior in, public space. Often, access is contingent upon appearing to be a member of the consuming public.

The new found emphasis on consumption is not as straightforward as it may appear. The focus is on promoting formal types of consumption consistent with images of prosperity: thus, the consumption of alcohol in expensive bars and restaurants may be considered legitimate, and encouraged, in a way that the consumption of alcohol in down market taverns, or in a nearby park, is not. Some types of informal trading are similarly problemaic: Van Deusen’s recent account of the redevelopment of a civic square noted that hot dog vendors were deemed an illegitimate presence, as they did not sell the ‘right’ kind of product, and did not attract the ‘right’ kind of public to the space. This rhetoric led to the vendors being legislated out of the space. By contrast, up market cafes are often sought after tenants for such redevelopments, in part, because they offer a more affluent, refined form of consumption, which attracts more desirable (and more prosperous) members of the public. The messages sent by the presence of particular types of services about preferred uses, and users, of public space may be reinforced by more explicit messages in the form of signs, warnings, and quasi legal imperatives (e.g., do not litter, do not drink, do not sit, and do not skateboard).

Concerns around the increased exclusion from, and privatization of, public space are often more complicated than they initially appear. One issue is the language of privatization itself: public (state) agencies often lead the way in efforts to curtail public access, and while this is frequently done in collaboration with private actors, it complicates any simple picture of public versus private interests. Public policymakers have, for example, enacted laws to make life increasingly difficult for the urban homeless, by rendering their behaviors in public space illegal. In so doing, they have transformed the meaning of the term ‘public’ so as to exclude the homeless from membership: they have been redefined as symbols of all that is wrong with public space, and on this basis, their exclusion from it is deemed both appropriate and necessary.

These policies may be understood as part of a broader program of revanchism — that is, an aggressive attempt to recapture urban space from the poor on the part of the upper and middle classes. Revanchism was particularly evident in New York City under former Mayor Rudolph Giuliani, whose zero tolerance policies targeted low level public order offences and incivilities (e.g., pan handling, window washing, and graffiti) in the name of ‘getting tough on crime’ and ‘cleaning up’ the city. Revanchist policies seek to expunge unfavorable and unsightly activities/people from city streets and parks in order to increase the image and marketability of the city, and to establish new social norms around legitimate membership of the public. In pursuing this program, public and private actors have diminished (or ignored) the political significance of public space in order to promote its role in serving commerce. In particular, they act in the belief that the relatively prosperous do not wish to confront social difference, or disorderly people and behaviors, while participating in retailing, leisure, and recreation. In this atmosphere, consumption is the highest ideal, and nonconsumption is seen as deviant.

One of the most popular methods for ‘securing’ public space is CCTV. It attempts to increase the visibility of crime, disorderliness, and antisocial behaviors, partly so as to improve police responses, but also to encourage greater self regulation. A routine part of urban regeneration projects and efforts to promote the moral order of public spaces, CCTV is justified primarily on the grounds that it deters crime and increases safety. As with revanchist policies, local businesses often push for the installation of CCTV in public spaces, contending that it encourages a greater flow of potential consumers. Moreover, the technology is used as a drawcard for enticing investment in the city center. There is considerable debate over the effectiveness of CCTV, and one outcome may be the displacement of targeted individuals and behaviors to peripheral locations.

While such regulatory and technological changes have received much attention, there is a longer established, if prosaic, threat to the vitality and openness of urban public spaces: the automobile. The rise of the car degraded urban public spaces through direct demolition to facilitate the construction of highways and related infrastructure, but also through congestion, air and noise pollution, and creating physical dangers and inconveniences. Streets with multiple purposes became roads designed entirely for cars; open spaces used for social gatherings or children’s play became parking lots. As older forms of public mobility (buses, trains, walking, and cycling) have been replaced by privatized transport, many public spaces have been reduced to antisocial thoroughfares for private commuters. In this respect, the car undermines the public life of the city: as journeys between private spaces have become automobileized, they have also been privatized, and many traditional forms of social interaction and communication with strangers rendered unnecessary.

Contemporary trends in the control, management, ownership, surveillance, and (re)development of public space often appear to be overwhelmingly hostile to notions of inclusiveness, and to realizing the political potential of public space, especially for individuals and groups who are socially or economically marginal. Yet the picture is more complicated than this. First, exclusionary practices are not necessarily as rigid and
steadfast as they seem; forms of resistance and transgression remain possible. At a basic level, a significant gap often remains between regulatory expectations for public space, and actual practices: for example, bylaws against begging, sleeping, or skateboarding in public seldom result in the outright disappearance of those behaviors. Protests and parades continue, with or without official sanction, and continue to seek the power to define public memory, and promote particular ethical and political agendas. The intended order of public space is routinely subverted, both intentionally and unintentionally.

Second, exclusion is not the sole intent behind the trends. Rather, efforts to ‘improve’ or ‘redevelop’ public space typically seek to encourage greater access and use by selected elements of the public, albeit at the expense of others. In this respect, it is useful to understand ‘the public’ as fractured rather than unitary. Thus, for example, increased privatization, surveillance, and policing in an urban park may make the space more appealing and accessible for members of the public who might previously have avoided it (e.g., white collar workers), while simultaneously discouraging or actively inhibiting use by others considered less desirable. Moreover, many new developments incorporate and integrate public spaces, in self conscious attempts to foster appropriate forms of social activity, often with reference to ‘successful’ precedents such as the piazza. The common goal is to attract preferred members of the public, and to encourage them to linger, in part, by excluding those others who pose real or imagined threats to their comfort and safety.

Efforts to transform the socioeconomic character of public space in this way raise important questions about the rights of urban residents to use, and shape, their environment. They run contrary to Henri Lefebvre’s notion of the ‘the right to the city’ – an idea which suggests, at minimum, that, residents have the right to co-create the city by virtue of living it. This co-creation encompasses the right to participate in the production of urban spaces, and the right to appropriate them. Such notions fly in the face of much contemporary regulation, which is organized by, and for, social and economic elites, in a manner that reinforces the power of capital, especially in the form of private property rights. Indeed, some contemporary efforts to ‘improve’ urban public spaces are intended primarily to promote or jumpstart the development of adjacent private property.

Summary

Public spaces are a defining feature of Western urbanism, and have acquired considerable social, political, and economic importance, especially since the mid nineteenth century. While often thought of as universally accessible, in practice, use and access are often extensively regulated, in part because ‘open minded’ public spaces are unpredictable, and may threaten elite interests (e.g., in maintaining order). Moreover, questions about how public spaces are best organized extend beyond questions of access to encompass broader issues relating to design, sociality, and understanding of the term ‘public’.

While public spaces may be conceptualized in many ways, the broad trend toward increasing regulation and surveillance, much of it undertaken by, or on behalf of, private commercial interests, is thought to be compromising its public character. The political value of public spaces as sites of protest and demonstration is seen by many to be under significant threat, as is the social value attached to encountering difference. What is being prioritized, in many instances, is the economic value of public spaces: their potential to facilitate consumer activity, attract tourists and investors, and encourage private investment.

For some commentators, these trends signal ‘the end of public space’. The material environments in question are no longer provided for the benefit of the public, but are ordered around the imperatives of commerce (i.e., legitimate, orderly production and consumption). To achieve this, local institutions, both public and private, seek to impose a politics of vigilance that minimizes the risk of disorder. Others, however, suggest that urban public spaces retain some potential for political action and participatory democracy. From this perspective, city streets, parks, and squares continue to provide valuable opportunities for individuals and publics to represent their needs, hopes, and demands, and to (re)assert their ‘right to the city’. Nevertheless, the exercising of rights in public space is often disorderly, and frequently projects images that are not conducive to consumption and in vestment. The challenge, perhaps, is to ensure a balance between two public goods: safety and social justice. Public spaces must not be allowed to descend into contiguous violence or uproar (which will ensure they are inaccessible to many), but nor must they be reduced to mere tools for urban elites to advance their aims, often at the cost of further marginalizing those who are already vulnerable.

See also: Central Business District; Citizenship; City Marketing; Gentrification; Homelessness; Malls/Retail Parks; Neoliberalism, Urban; New Urbanism; Planning, Urban; Policing; Private/Public Divide; Public Space; Surveillance; Urban Design; Utopian Cities; Waterfront Development.

Further Reading

Van Deusen, R. (2003). Public space design as class warfare: Urban design, the ‘right to the city’ and the production of Clinton Square, Syracuse, NY. GeoJournal 58, 149-158.