# Global change research methods: Human geography

- 3.11. Petr Daněk Methodological transformation in human geography
- 10.11. Jiří Malý Population projections concepts, methods, data and modelling
- 17.11. Public holiday no lecture!
- 24.11. Ondřej Mulíček Methods and techniques of spatio-

temporal dynamics research

- 1.12. Ondřej Šerý Methods of field research in human geography
- 8.12. Robert Osman Cognitive mapping methods: mental map, semantic map
- 15.12. Jakub Trojan Project management methods in geographical research

#### Methodology – method - technique

Methodology: A branch of philosophy dealing with the study of research methods

Method: a structured procedure for bringing about a certain objective, like acquiring knowledge or verifying knowledge claims

Steps used to answer the particular research question

\* Technique: a particular procedure used as a part of a method, such as data sampling, collection of data from the sample, analysis of data (using quantitative or qualitative techniques), interpretation of results

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# APPROACHES TO "DOING" HUMAN GEOGRAPHY



- 1. Immersed observation (Carl Sauer,...)
- 2. Spatial Science (Peter Haggett, ...)
- 3. Reflexive Research (Linda McDowell, ...)

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Carl O. Sauer
Berkeley school of cultural geography

#### "Magical Transformation" by Sauer **\*** Researcher leaves university • He travel to the "wilderness, with a backpack \* Open minded: no expectations, no hypotheses, no prepared questions • He tries to forget about life at home • He walks through the countryside, observes, occasionally talks to farmers \* Search for the "meaning of the landscape" • why the landscape looks the way it does **\*** Research techniques: walking, photographing, drawing, taking brief notes **\*** "Magical transformation": geographical knowledge arises purely from the personal presence of the observer in the landscape 🗮 It is intuitive 5

# Two dimensions of the immersed observation

- Personal presence and the ability to observe directly
  - = the oldest traditions of geographical research.
- **\*** Two dimensions of this tradition:
  - 1. Personal presence
    - "being there,, travelling to places to be explored

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- 2. The actual act of observation
- **\*** Both controversial

#### a. "Being there" – personal presence

- The origins of geography are in the expeditions of exploration
  - Scientist (geographer) = explorer (Indiana Jones)
  - Geographers members of expeditions of exploration
    - Since James Cook 1768 expedition to the Pacific
  - Alexander von Humboldt (South America) beginnings of a systematic field research
- \* This tradition is now problematic:
  - How credible are these works?
  - Some explorers were more agents of the empire than researches



#### "Being there" – personal presence

- The tradition of exploration has led to the acknowledgment of importance of the field research
  - Sauer: "Field research should be a voyage of discovery, not a mapping exercise"
    - "The more energy we invest into creating predefined categories, the less likely it is that something new is discovered"
- It resulted in the inclusion of field research in geography education at universities
  - "*Field Geography*" since the 1950s in the UK
  - Journal Field Studies since 1959
    - "The object of study is the landscape, so we must learn to look at it with our own eyes, not only through media such as maps, literature and films"

# Is ,,being there" enough? A critique of the traditional way of field research Geographers in the field: they may reproduce the same hierarchical relations with the subjects of research (,,natives,,) as colonial expeditions

- Using their influence and power to draw knowledge, work, and skills from the subjects of research
- a problem not only of research in colonial Africa, but also when researching rural areas, minorities, illegal migration, the sharing economy...
- Our presence can be disturbing
- Personal presence is important, but we cannot assume that we have *the right to research* 
  - We have to negotiate to get access to the community
    - formally (permission...)
    - and humanly (morally)
    - to think more about the consequences of our presence

# b. Observation

# Sauer: "geographical knowledge rests on an disciplined observation"

- "Geography is, first of all, knowledge acquired by observation, ordered by reflection; from there comes a comparison and a synthesis"
- "No knowledge is more important to a geographer than 'seeing what's there.'"
- The ability to observe should be developed from childhood
  - first by observing the domestic landscape, then the travels abroad
- Sidney Wooldridge: "an eye for country"
- Geographical Field Group (the 1950s in the UK)
  - Objective: to pull geographers out of the office and into the field 10

#### Observation: a critique of "ocularcentrism"

- The geographer puts himself in the position of a privileged observer
- who is gazing down at people and places like in an exhibition
- Derek Gregory: "The World as an Exhibition "

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- However, visual images of landscapes and people are not "innocent" records, but created **representations** 
  - D. Livingstone: Visual representation is an "Artistic Vision"
    - influenced by the effort to meet the aesthetic (and political) demands of the time
    - it depicts the "natives" as the observer wants to see them
    - This applies to all kinds of visual representation, incl. photography
  - James Ryan (1997) shows the cultural constructions contained in photographs of distant places
  - A geographer isn't a neutral observer, but creates representations of people and places 11

Observation: a critique of "ocularcentrism"
\* Derek Gregory: "*academic gaze*" - owning a place through its observation

- Gillian Rose: "This scientific ("objective") view involves an attempt to own, to subordinate the phenomena it observes"
- **How to avoid ocularcentrism?** 
  - The observation (sight) should not be accorded such a priority in geographical research
- Other senses should be used especially hearing
  - Listening to what people are saying
    - Introduction of qualitative methods to human
       geography

# 2. Spatial science





Geography is the art of the mappable.

— Peter Haggett —



# Spatial science

- Solution States Stat
- Methods that can be used to reveal the hidden laws (regularities) in spatial structures were sought
  - Statistical tests
  - Mathematical modelling
  - Iocalization analyses...
- - can overcome any bias of the observer (it was believed)
  - scientist (geographer) = a completely disinterested observer
  - looking for an objective explanation
- **\*** Quantification
  - In particular, the use of numbers was seen as an "objective" representation of what was happening in the real world

# Spatial Science: A Critique

Spatial fetishism: Unable to see what's not on the map

- \* The supposed objectivity of the scientist is false
  - It is not possible to step out of the social context (status, gender, race, ...)
- **\*** Reduces methodology to technique
  - A lot of attention paid to the correct execution of statistical tests and analyses, but not to how the data on which the test is performed is obtained, and how the results are interpreted

#### \* It lacks an ethical dimension

• It tries to provide a scientific explanation, to describe the problem, but it does not look for a way to overcome even the obvious discrimination and inequality

#### 🕷 Not relevant

- Does not respond to social, economic and political problems
- K Geographers have lost interest in obtaining primary data
  - Statistical analysis of secondary data prevailed
  - Ackerman: "field research is no longer necessary (perhaps only validation of the results)"

#### Spatial Science: "Office Geographers"

- Mathematical and statistical analyses and models were important, not the data with which they were carried out
- Places analysed from a distance, often without personal experience
  - instead of fieldwork and observation
- \* Almost no interest in the **construction** of data, just a specific (narrowly understood) **interpretation** of data
- Responding to criticism: statistical analytical techniques are used, but only as one among several methods
  - greater attention paid to data construction
  - awareness of the limited explanatory power of both data and techniques

## **3. REFLEXIVE RESEARCH**



# **REFLEXIVE RESEARCH**

- Criticism of how geography was being "done" (mainly criticism of the spatial science)
- 1. It did not deal with how people themselves participate in the formation of their own world
- 2. The "political" aspect of the research was missing
  - Who is the research done for?
  - Who benefits from it?
- \* The answer: be reflexive, pay explicit attention to one's own research approaches
  - conceptual, practical, political and ethical implications of the research
  - What the research brings: (a) to us (the researchers), (b) to the people we study, (c) to the society
- 1. Humanistic geography
- 2. Radical geography

# HUMANISTIC GEOGRAPHY

- Critical of how spatial science understands human beings
  - Just a subject of research, without own will, interests, expectations and emotions, without creative power, without moral values...
- **\*** Tuan, Entrikin, Ley, Samuels, Buttimer ...
- \* Attempts to understand the subjective human beings in all their complexity, as perceiving, thinking, feeling, acting
  - Dehumanized geography needs to be "populated"
- Subject of study: people and their *inner lives* 
  - rather than spatial structures and the (supposed) laws of positivist science

# Humanistic Geography: Methods

- But wait how to get closer to people?
- How to get to know their inner lives?
  - New methods needed!
- Methods that would give some structure for meeting people, for "listening to their voices"
  - interviews (semi-structured, unstructured interviews)
  - focus groups
  - Narrative (oral) histories
  - Ethnographic techniques
  - Participatory methods
- \* A return to Sauer's ,,immersed observation", but with much more attention to people
  - Geographers spent weeks in the company of individuals, observing their lives and discussing with them the significance of places, environments and landscapes

# Example: David Ley in Philadelphia

- Method: interpretative social research
  - Based on participant observation
  - Permanent residence in the ghetto (from January to July)
  - Systematic procedure for obtaining "field data"
    - Daily notes research diary
    - impressions, events, interviews... (unstructured day-to-day findings)
    - + interviews, police reports, local government reports...
  - + observation graffiti, destroyed cars, abandoned houses
- A diverse mix of data and ways of their interpretation
  - "Interpretative research"

# Ethics and Values in Research

- Ethical issues –important because of the close relationship between the researcher and the people she/he studies
  - questions of personal relationship to the project, to people and places
  - How does the personality of the researcher affect the way research is conducted?
  - How does he/she represent the people he/she works with?

# Ethics and Values in Research

- Example: John Rowles: Studying the geographical experience of aging people
  - the last "friend" of the dying Stan; he wishes that Stan would not die so that he could finish his research, but at the same time he blames himself for this way of thinking
  - There is no general guide on how to answer these questions
  - Miles away from dehumanized spatial science

# The subjectivity of the researcher

- Sauer: My subjectivity doesn't matter
- Spatial science: objective methods, independent of who performs them
  - *Abler*: "Personal life must be completely separated from scientific research"
- Humanistic (and feminist) geography: The personality of the researcher is as important a part of the research process as theory, data and methods.
  - Anne Buttimer: "Personal values can never be completely separated from the design, conduct, and evaluation of research."
  - Moreover, it is useless to try, because it deprives us of an important starting point for ethical evaluation (and also limits creativity).

### RADICAL GEOGRAPHY

- Origins: just "mapping" the unequal distribution of wealth and power
  - social and environmental problems, poverty, discrimination, injustice...
- It soon embraced the philosophy of Western Marxism
  - David Harvey (1973): Social Justice and the City
- Methods of data construction: questionnaires, statistical data (quantitative)
  - They were not much different from the older, positivist geography
  - However, the goal was different: criticism of the status quo, the fight against injustice, the search for solutions
- Conceptually and politically more "radical" and "new" than humanistic geography, but methodologically not

#### Example: William Bunge in Detroit

- "Society for human exploration"
- Research field: inner city, ghetto, slums
- Staying in the place or frequent visits (,,being there")
- Main goal: to help the marginalised groups, to find and implement a solution
  - e.g. places where traffic accidents involving children occur

#### "advocacy geography"

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- Solution: urge local authorities to take action; If not, they set up civic groups with local residents and implemented projects themselves.
- bottom-up research, focused on specific, topical issues
- common to the humanist G: "immersion" in the community
  - Local people as active creators of their environment, not recipients of the "dictates" of scientific laws.

#### FEMINIST GEOGRAPHY

- Begun in the 1970s with the aim of documenting the different spatial behaviour and place perceptions of women
- It quickly grew into a fundamental critique of the unequal roles of women and men in society
  - "Gender Division of Urbanized Space" (McDowell)
- The need for new methods: how can we make the voices of those who fear discrimination or even secretly suffer violence heard?
  - Personal engagement of researcher, her/his immersion in the topic (,,*Intensive research* ")

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- Qualitative research, non-quantifiable data
- in-depth interviews, "oral history", life stories

# Reflexive research – Comparison with traditional (Sauerian) geography

- It is not possible to separate research from personal life and the status of researcher in society
  - The separation of everyday life and the ,,field" is unattainable
- # effort to get as much information as possible before the field research
- \* The "field" is often small localities "here at home"
  - Shopping mall, central city, gated community, ghetto...
- trying to get to know places and people thoroughly (just like Sauer)
- Strongly proactive

inventing new research tools (how to get data...)

It considers important to devote a chapter to methodology