

## 6 Documents and other artefacts, real and virtual

In the course of this chapter we consider two further kinds of data to which ethnographic researchers need to pay attention: documentary sources and material artefacts. Both are easily overlooked. In recent times, there has been so much emphasis, in some quarters, on the study of face-to-face interactions, on encounters and situations, that other key features of the social world could be forgotten. For example, many of the social settings we study are self-documenting, in the sense that their members are engaged in the production and circulation of various kinds of written material. Government departments and many kinds of other organization generate and consume huge amounts of documentation. These include reports on 'cases', financial records, rule-books, organizational charts, timetables, memoranda, and so on. These may be on paper or in electronic form, or both. And, often, there are multiple sources of relevant documentation for any setting or group of people one might study. Given this, we need to think of contexts as involving *documentary constructions of reality* (Coffey and Atkinson 2004): documentary sources construct 'facts', 'records', 'diagnoses', 'decisions', and 'rules' that are crucially involved in social activities (see Prior 2003, 2004). Moreover, this is not just a matter of words: images can be involved in this process too, as Ball (2005) illustrates in relation to the practical work of the police and road users on public highways.

It is equally important to notice that the organization of collective social activity involves the creation, use and circulation of material artefacts. A great deal of practical mundane activity is concerned with the manipulation of objects of one kind or another. Social worlds are created out of material goods as well as from interpersonal relationships, and meaning inheres in them. They have often been given less attention even than written documents, but can be equally important.

In this chapter we will consider how these two kinds of material can be understood within the ambit of an ethnographic approach to the social world.

### Documentary sources

Ethnographic work in its various guises has frequently been employed in the investigation of essentially oral cultures, or at least that is how they have been treated. Whether they were the non-literate cultures of much social anthropology, or the street cultures and demi-monde beloved of many sociological fieldworkers, the social worlds studied by ethnographers have often been largely devoid of written documents other than those produced by the fieldworkers themselves.

Although it was not the only rationale originally proposed for ethnographic fieldwork as a method, the fact that the 'exotic' societies studied by anthropologists had no written history was given as a major justification of the method, as well as of the synchronic functionalist analyses that initially went with it. Rather than attempt to reconstruct an essentially unknowable past, anthropologists were inclined to concentrate on the construction of working versions of the present. They turned their backs on conjectural history. There was, therefore, more than a coincidental relationship between ethnographic methods and the investigation of non-literate cultures.<sup>1</sup>

By contrast, sociologists of the Chicago School made rather more use of written materials, such as the records of social workers, diaries and letters. Indeed, they sometimes requested written life histories from those they were studying. For example, Thomas and Znaniecki (1927) in *The Polish Peasant in Europe and America* – generally regarded as an early classic of American sociology – relied substantially on written documents, mainly letters but also a life history. Thomas (1967) employed the same approach in *The Unadjusted Girl* (1924). He collected personal documentary accounts, in the belief that 'the unique value of the personal document is its revelation of the situations which have conditioned the behaviour' (Thomas 1967: 42). In both cases what we have is a dense accumulation of personal accounts, which were arranged thematically and juxtaposed in order to draw out the regularities and contrasts in 'definitions of the situation' (Thomas 1967: 42).

In a rather similar vein, early use of the term 'participant observation' designated the generation of documents by participants who might in contemporary parlance be called 'informants'. For instance, in the research that produced *The Gold Coast and the Slum*, Zorbaugh (1929) persuaded people who inhabited the exclusive society of Chicago's 'gold coast' to generate such 'inside' accounts. They were the participant observers as much as Zorbaugh himself.

Most of the settings in which contemporary sociologists and anthropologists work today are literate and contain a plethora of documents: not only are their members able to read and write, but this capacity is also an integral feature of their everyday life and work (Smith 1987, 1993). In many instances, therefore, ethnographers need to take account of documents as part of the social setting under investigation. Indeed, these documents may play a central role in the activities taking place there, in a way that they generally did not in the settings investigated by early Chicago School sociologists.

Documents can provide information about the settings being studied, or about their wider contexts, and particularly about key figures or organizations. Sometimes this information will be of a kind that is not available from other sources. On other occasions they may provide important corroboration, or may challenge, information received from informants or from observation.

Equally important, documents may be of value in stimulating analytic ideas. The development of generic concepts demands a broad and eclectic reading of textual sources (formal and informal, factual and fictional) on differing substantive topics. This means that there are rarely clear demarcations around what documents will and will not be of value. It also means that wide reading should inform the generation of

1 Of course, this is much less true today; indeed, anthropologists have taken a specific interest in literacy: Goody (1968, 1986, 1987); Street (1984); Gee (1996); Cook-Gumperz (2006).

concepts throughout the research process, rather than being limited either to the initial stage of planning or to that of writing up. By and large sociologists and anthropologists are not conspicuously good at this. The textual variety of an Erving Goffman is a rare accomplishment. His work shows how documents may play a key role in facilitating comparative analysis; both generating a sense of how the case(s) investigated are similar to and different from others, and indicating the limits to any generalizations that it may be tempting to make on the basis of the study. A much more recent example is provided by Gupta's use of 'a prize-winning novel written by an official of the Uttar Pradesh (U.P.) state government, and the accounts of corruption by one of the major social anthropologists of India, F. G. Bailey' to help make sense of the stories about corruption in his own fieldwork data (Gupta 2005).

In a literate culture, it is possible to draw on all sorts of documents, both those generated independently of the research as well as ones specifically elicited by the researcher. We shall begin with a discussion of documents as 'secondary' sources for the ethnographer, and then turn our attention to a more detailed examination of the ethnography of settings where the production and use of documents is an integral feature of everyday life.

### **Types of document and their uses**

There is often a quite bewildering variety of documentary materials that might be of some relevance to the researcher. These may be distributed along a dimension ranging from the 'informal' to the 'formal' or 'official'. At the informal end of the spectrum there are many 'lay' accounts of everyday life that the enterprising and imaginative researcher can draw on for certain purposes. These include fictional literature, diaries, autobiographies, letters, and mass media products. Some of these will be produced in multiple copies and made widely available, some not.

There are, for example, numerous categories of persons in contemporary society who publish versions of their own life story:

More than ever before in history, men of affairs, including politicians, military leaders, and business executives, are intent upon recording their experiences, personal as well as public, for posterity. In recent decades a number of American governmental leaders, including those in the military have, after resigning from their official posts, published their memories or personal accounts in which they seek public support for causes that the bureaucracy may have rejected during their period of office.

(Sjoberg and Nett 1968: 163)

In the decades since that observation was made, nothing has changed. The output of memoirs continues unabated.

There are, too, a large number of first-hand accounts published by less politically eminent folk, including those drawn from the criminal underworld, and the realms of sports and entertainment. Similar personal accounts can be found in newspapers and magazines, or can be culled from radio and television documentaries and chat shows, or found on the web. These accounts by or about leading scientists, musicians, artists, celebrities, and others add to the list of contemporary social types represented in published documents.

Of course, such biographical and autobiographical accounts will rarely, if ever, be those of the actual people we are studying at first hand. They can, nevertheless prove valuable resources for the ethnographer. They can be a source of ‘sensitizing concepts’ (Blumer 1954): they can suggest distinctive ways in which their authors, or the people reported in them, organize their experiences, the sorts of imagery and ‘situated vocabularies’ (Mills 1940) they employ, the routine events, and the troubles and reactions, they encounter. Read in this light, they can be used to suggest potential lines of inquiry and refine ‘foreshadowed problems’.

Documents of this sort have rather particular characteristics. Authors will have interests in presenting themselves in a (usually) favourable light; they may have axes to grind, scores to settle, or excuses and justifications to make. They are often written with the benefit of hindsight, and are thus subject to the usual problems of long-term recall. Authors have a sense of audience that will lead them to put particular glosses on their accounts. For some purposes, such considerations must be treated as potential sources of bias in accounts of this sort. But, looked at from another perspective, the sources of bias are data in themselves. As we noted in Chapter 5, as important as the accuracy or objectivity of an account is what it reveals about the teller’s interests, perspectives, presuppositions, and discursive strategies.

Such accounts can be used, with appropriate caution, for comparative purposes. They can furnish information (albeit partial and personal) on groups and settings that are not available for first-hand observation. As a general category of data, published biographical and autobiographical sources are subject to a further sort of ‘bias’ in that they tend to over-represent the powerful, the famous, the extraordinary, and the articulate. But even that can also be a strength, since it is precisely people in such social categories who are often difficult to research directly.

Since the mid-1990s there has been a considerable resurgence of interest in the sociological analysis of biographical or autobiographical accounts. While that interest goes well beyond the scope of ethnographic research, ethnographers can incorporate many of the insights from this research field (Reed-Danahay 1997, 2001; Plummer 2001; Chase 2005). The growth in scholarly interest reflects a renewed emphasis on the study of narrative forms, temporality, and memory. It reflects too a focus on the intersection of the ‘personal’ and the ‘social’ (Erben 1993). As Stanley (1993) summarizes some of these concerns:

I see a concern with biography and autobiography as fundamental to sociology, because I perceive the grounds of their sociological interest lying within the epistemological problematics concerning how we understand ‘the self’ and ‘a life’, how we ‘describe’ ourselves and other people and events, how we justify the knowledge-claims we make in the name of the discipline, in particular through the processes of textual production.

(Stanley 1993: 50)

These sociological perspectives on ‘lives’ and ‘documents’ also often reflect commitments to a feminist standpoint. Documentary sources may be drawn on to recuperate the otherwise muted voices of women and other dominated groups, and feminist scholarship particularly affirms the intersection of the personal and the social (Stanley 1992; Evans 1993).

In the collection and investigation of 'informal' documentary materials, the fictional – even the most popular and ephemeral – can be used profitably. The most banal ('pulp' or 'pot-boiler') fiction is often replete with images, stereotypes, and myths bearing on a vast range of social domains. Indeed, the lack of literary merit characteristic of such genres reflects the fact that it unquestioningly trades on stocks of common knowledge and conventional wisdom. Here too, then, we can become sensitized to cultural themes pertaining to sex, gender, family, work, success, failure, class, mobility, regional variations, religious beliefs, political commitments, health and illness, the law, crime, social control, etc. These are not necessarily to be read at face value, as accurate representations of social reality, but can suggest themes, images, or metaphors. This is no less true of more 'serious' fiction: novels can suggest different ways of organizing experience, and alternative thematic models. We need not shy away from the careful use of literary sources. As various authors have pointed out, there is a long and complex set of relationships between literature and the social sciences (for example, Lepenies 1988; Cappetti 1993). As Davis (1974) noted in the mid-1970s, ethnographers and novelists alike find themselves telling 'stories'.<sup>2</sup>

Of course, by no means all informal documents are published, in the sense of being widely available via multiple copies. Unpublished personal diaries, or works of fiction, are sometimes available. There are also informal documents produced in the field that can illuminate key social relationships. In her study of girls' friendships, Hey (1997) made considerable use of the notes that the girls passed to one another in the course of lessons. She comments that they 'represented in their most condensed and dramatic form' some of the key themes of her book (Hey 1997: 2).<sup>3</sup>

At the other end of the spectrum are sources of a more 'formal' nature, and these include other published ethnographies. There is every reason for the sociologist interested in, say, hospitals or clinics to examine works on a variety of other institutional settings – schools, courts, welfare agencies, religious houses, police stations, university departments, or emergency services, for example. The precise selection of settings, and the lessons drawn from them, will depend on the analytic themes being pursued. Through such comparisons one might trace the variety of 'degradation ceremonies', the conditions of 'information control', or the moral evaluation of 'clients'. There is, in principle, no limit to such comparative work, and no prescriptions can be offered. The part played by serendipitous discoveries and unpredicted insights will be considerable here, as in all creative work. One must establish the right conditions for serendipity, however, and that includes attention to sources of many sorts. As Glaser and Strauss (1967) remark with characteristic enthusiasm:

Theorizing begs of comparative analysis. The library offers a fantastic range of comparison groups, if only the researchers have the ingenuity to discover them. Of course, if their interest lies mainly with specific groups, and they wish to explore them in great depth, they may not always find sufficient documentation bearing on them. But if they are interested in generating theory, the library can be immensely useful especially . . . for generating formal theory. Regardless of which type of theory the theorist is especially interested in, if he browses intelligently

2 See Chapter 9 for further discussion of parallels between ethnography and literary analysis.

3 Nowadays, such data may no longer be available to the researcher; text messaging is probably used instead.

through the library (even without much initial direction), he cannot help but have his theorizing impulses aroused by the happily bewildering, crazy-quilt pattern of social groups who speak to him.

(Glaser and Strauss 1967: 179)

As in Goffman's work on topics like 'total institutions' (Goffman 1961; see also Perry 2007), the imaginative use of secondary documentary sources allows for the elaboration of 'perspective by incongruity' (Burke 1964; Lofland 1980; Manning 1980): that is, the juxtaposition of instances and categories that are normally thought of as mutually exclusive. Such sources and devices are ideal for heuristic purposes: they can rejuvenate jaded imaginations and spark off novel conceptualizations. In his or her imagination the researcher is free to wander at large among diverse social scenes, gathering ideas, insights, hypotheses, and metaphors.

In addition to the sorts of documentary source we have referred to up to now, in a literate culture it is possible to emulate researchers like Zorbaugh (1929) and draw on the ability of informants to generate written accounts specifically for research purposes. By such means one can gather information that complements other data sources in the field. Some versions of research have indeed drawn extensively on such indigenous written accounts. The entire tradition of 'mass observation' in Britain rested on the ability of literate volunteers to produce 'native' accounts of everyday life around them (see Stanley 2001). The revival of the Mass Observation Archive has again depended on such written documents:

The writing has been generated in response to a call from the Mass-Observation Archive, repeated at intervals over the years, for people to take part in a form of collective autobiography. No special skills, knowledge or qualifications are required, only an enjoyment of writing and a willingness to put thoughts and experiences on paper in a discursive way.

(Sheridan 1993: 27)

This emphasis on the collection of demotic accounts, characteristic of Mass Observation, is but one version of wide possibilities for the collection of documentary evidences. The use of diaries of different types is often an important adjunct to fieldwork. An influential version of this strategy was advocated by Zimmerman and Wieder (1977), who used a diary technique in their study of counter-cultural lifestyles. They comment that, while they were committed to participant observation, there were settings and activities that remained hard for them to observe directly. They therefore recruited insider informants, who kept detailed diaries over seven-day periods. Subsequently, the researchers subjected each informant to a lengthy and detailed interview, based on the diaries,

in which he or she was asked not only to expand the reportage, but also was questioned on the less directly observable features of the events recorded, on their meanings, their propriety, typicality, connection with other events and so on.

(Zimmerman and Wieder 1977: 484)

Narratives are also sometimes solicited by ethnographers. For example, Nygren and Blom (2001) collected short narratives from social work students dealing with problems

that they had experienced. They note not only the advantages that such data can have, but also its drawbacks by comparison with interviews. Combining the two methods could, of course, overcome these.

Solicited written accounts, such as diaries and narratives, are especially useful ways of obtaining information about the personal and the private.<sup>4</sup> When carefully managed, and with suitable cooperation from informants, the diary, in particular, can be used to record data that might not be forthcoming in face-to-face interviews or other data collection encounters. Sexual behaviour is one obvious example. For instance, one major study among gay males made extensive use of personal diaries in order to obtain information on the types and frequencies of sexual practices (Coxon 1988, 1996).

Similarly, Davies used personal diaries in her study of student midwives (Davies and Atkinson 1991). Her research shows some of the anxieties and coping strategies associated with status passage, as experienced nurses became novice midwives. It is noticeable from the responses Davies obtained that the students were able to use the research diaries as a kind of personal confessional, often addressing the researcher directly about private anxieties, sources of anger, and frustrations. These personal accounts were complemented by interviews and observations.

Diaries of this sort can also be used to pick up the minutiae of day-to-day social action. Robinson (1971), in the course of an investigation of the experience of illness, persuaded a series of married women in South Wales to keep a diary on the health status of the members of their households. The diaries were kept over a four-week period. They enabled Robinson to gain some insight into the daily symptomatic episodes and health-related decisions characteristic of everyday living. Many of the episodes reported were minor, though by no means insignificant, and could easily have been overlooked in retrospective accounts produced in, say, interviews or questionnaires.

This sort of procedure has also been used in work on educational settings. Ball (1981), for instance, used diaries in combination with a range of other techniques, including sociometric questionnaires on friendship choices. He explicitly notes the value of combining such data sources:

The sociometric questionnaires failed to pick up the casual friendships that existed between pupils outside school, and made it appear that they had no such contact. In addition, they failed to pick up the cross-sex friendships that were established at this time. Perhaps the notion of 'friendships' is too narrow and ill-defined to account for these other kinds of adolescent relationships. . . . The entries in the diaries that several of the pupils wrote for me did, however, refer to these contacts.  
(Ball 1981: 100)

Research-generated documents of this sort embody the strengths and weaknesses of all such personal accounts. They are partial, and reflect the interests and perspectives of their authors. They are not to be privileged over other sources of information, but nor are they to be discounted. Like other accounts, they should be read with regard to the context of their production, their intended or implied audiences, and the author's interests. Equally, one must note that a written account is not a debased version.

4 An alternative strategy, of course, is to provide informants with audio-recorders that they can use to record day-to-day events, their own thoughts and feelings, and so on. There is an interesting question about what differences there could be between written and oral diaries.

Given the historical and intellectual roots of ethnographic work, one can often detect a romantic legacy that privileges the oral over the literate. It is easy (but wrong) to assume that the spoken account is more ‘authentic’ or more ‘spontaneous’ than the written.<sup>5</sup>

We have discussed a range of documentary sources, but we have not yet paid attention to the investigation of social activities that directly involve generating documents. Fieldwork in literate societies – especially in formal organizations – is likely to encompass the production and use of documents of various kinds. In the following section we turn to such activities and their documentary products.

## **Documents in context**

In some settings it would be hard to conceive of anything approaching an ethnographic account without some attention to documentary material in use. For instance, in his study of locomotive engineers, Gamst (1980) drew on a range of documentary sources:

Some documents are published, for example: rule books, timetables, technical manuals for use of equipment, and instructional, regulating, and investigating publications of many kinds used by railroads, trade unions, government, and other firms. Unpublished documents include: official correspondence, reports in mimeographed and other forms, railroad operating bulletins and circulars, train orders, operating messages, and sundry other items.

(Gamst 1980: viii)

Whether or not one would draw on all such sources, one would certainly expect an ethnography of work on the railway to make full reference to such features as operating schedules and timetables (whatever disgruntled passengers might feel). A similar instance is provided by Zerubavel (1979) in his formal analysis of time in hospitals; he necessarily draws on such sources as timetables, work rosters and clinical rotations, as embodied in organizational documents. In many organizational settings the use and production of such documents are an integral part of everyday life (Prior 2003).

Similarly, the ethnographic study of scientific work – especially the genre of ‘laboratory studies’ – cannot proceed adequately without acknowledgement of the work of writing. For instance, Latour and Woolgar (1979), in their classic study of a biomedical laboratory, document the centrality of written outputs. The scientific laboratory is fundamentally preoccupied with what these authors call ‘inscriptions’: that is, representations of natural phenomena, and the texts that are the products of the laboratory. Scientific papers are the currency that circulates within and between scientific research groups. One cannot address the complex social realities of scientific work, and the production of scientific knowledge, without paying serious attention to how and why scientific papers are written. The sociology of scientific knowledge is now replete with studies of written texts and other forms of representation (for example, Lynch and Woolgar 1990). And the same approach may be extended to all organizational and professional settings.

Douglas, writing in 1967, commented on the increasing importance of ‘official’ numerical data in contemporary society (see also Porter 1995; Power 1997), while

5 Derrida (1976) has identified this as a key theme in Western thought.



simultaneously regretting the relative failure of sociological commentators to address this as a topic:

Throughout the Western world today there exists a general belief that one knows something only when it has been counted. . . . Considering the importance of such statistics for the formation and testing of all kinds of common-sense and scientific theories of human action, it is a remarkable fact that there is at present very little systematic knowledge of the functioning of official statistics-keeping organizations.

(Douglas 1967: 163)

Since Douglas made those observations, there has been an increasing amount of work along the lines suggested (see Prior 2003, 2004). However, in comparison with the sheer volume of 'literate' record-keeping and documentation in contemporary society, the coverage remains at best patchy. There is still, apparently, a tacit assumption that ethnographic research can appropriately represent contemporary social worlds as essentially oral cultures. Many studies of medical settings, for instance, focus exclusively on spoken interaction between medical practitioners and their patients, or between health professionals, with relatively little attention to activities of reading and writing. As Rees remarks: 'Both medicine and medical sociology have to a large extent neglected the record. Indeed, so rarely is it mentioned that one could be forgiven for thinking that medicine is a purely oral discipline' (Rees 1981: 55).

Pettinari (1988) demonstrates the value of close attention to 'writing' in a medical setting. Here is provided a detailed account of how surgeons write their reports on operations, and in particular of how junior surgeons learn such occupational skills. There are ways in which the operation is represented competently in surgeons' reports, and the appropriate formulations are acquired over time with professional experience. The written account is a fundamental element in the everyday organization of surgical work. Its production and use are an important focus for an ethnographic account of surgery in general.

In a similar vein is Coffey's (1993) ethnography of accountants in training. Based on fieldwork in an office of an international accounting firm, she documented aspects of trainees' acquisition of accountancy expertise. She studied bookkeeping skills together with the trainees, and describes how they acquired skill and judgement in reading documentary sources such as balance sheets. It would clearly be absurd to represent the world of the corporate accountant as non-literate or as non-numerate – and a comprehensive ethnographic account must include reference to how organizational documents are read, interpreted, and used.

Because of the critique of 'official statistics', stemming largely from the ethno-methodological movement, some contemporary ethnographers may feel reluctant to engage in the systematic use of documentary data. We believe that they are right to treat seriously objections against employing 'official' data simply as a resource not a topic, but that they would be wrong to ignore such materials. The point of departure for critics of 'data from official sources' was the contention that, traditionally, the tendency had been for sociologists to treat such information at face value, and not to pay adequate attention to its character as a social product. This opens up an important area of investigation, rather than implying that official data should be ignored.

It is, of course, a long-standing concern of sociologists that data derived from official sources may be inadequate in some way: that they may be subject to bias or distortion, or that bureaucracies' practical concerns may mean that data are not formulated in accordance with sociologists' interests. The ethnomethodologists, on the other hand, proposed more radical problems. Cicourel (1976) remarks, for instance:

for years sociologists have complained about 'bad' statistics and distorted bureaucratic record-keeping but have not made the procedures producing the 'bad' materials we label 'data' a subject of study. The basic assumption of conventional research on crime, delinquency and law is to view compliance and deviance as having their own ontological significance, and the measuring rod is some set of presumably 'clear' rules whose meaning is also ontologically and epistemologically 'clear'.

(Cicourel 1976: 331)

The argument is that rather than being viewed as more or less biased sources of data, official documents and enumerations should be treated as social products: they must be examined, not relied on uncritically as a research resource.

In this way attention is diverted towards the investigation of the socially organized practices whereby rates, categories, and statistics are produced by those whose job it is to generate and interpret such phenomena. An early example of work in this vein was that of Sudnow (1965) on the production of 'normal crimes' in a Public Defender's office. Sudnow details the practical reasoning that informs how particular crimes or misdemeanours become categorized in the course of organized activities such as plea bargaining. Thus, he looks 'behind' the categories of official designations and crime rates – based on convictions – to the work of interpretation and negotiation that generates such statistics. In addition to Sudnow's ethnographic study of crime rates, other studies of the same period included those of Cicourel (1967) on juvenile justice, and of Cicourel and Kitsuse (1963) on the organization of educational decision-making, the categorization of students, and their official biographies. More recent research in a similar vein includes a welter of constructionist accounts of social problems (see, for example, Holstein and Miller 1989, 1993). Similar in focus are Prior's studies of the social organization of death, with particular emphasis on the classification of causes, and of mental illness (Prior 1985, 1989, 1993). In this context one should also note the observations of Prior and Bloor (1993) on the life-table as a cultural and historical artefact.

The origins of the 'official statistics' debate in sociology were potentially misleading, important though the general perspective was. Issues became polarized quite unnecessarily. The problems associated with data from official sources were important, and they related directly to classic problems of sociological analysis, such as the explanation of suicide (Douglas 1967; Atkinson 1978); but they were by no means unique. The careful ethnographer will be aware that all classes of data have their problems, and all are produced socially; none can be treated as 'transparent' representations of 'reality'. The recognition of reflexivity in social research entails such an awareness (Holstein and Miller 1993). As a result, there is no logical reason to regard documents or similar information as especially problematic or totally vitiated. As Bulmer (1980) remarks in this context:

Firstly, there is no logical reason why awareness of possible serious sources of error in official data should lead to their rejection for research purposes. It could as well point to the need for methodological work to secure their improvement. Secondly, a great many of the more thorough-going critiques of official statistics relate to statistics of suicide, crime, and delinquency, areas in which there are special problems of reliable and valid measurement, notoriously so. The specific problems encountered in these fields are not, ipso facto, generalizable to all official statistics whatever their content. Thirdly, cases of the extensive use of official data – for example, by demographers – do not suggest that those who use them are unaware of the possible pitfalls in doing so. The world is not made up just of knowledgeable sceptics and naive hard-line positivists.

(Bulmer 1980: 508)

In other words, then, while drawing some inspiration from the ethnomethodological critique of ‘official statistics’ and similar documentary sources, we by no means endorse a radical view which suggests that such sources are of no value as a resource. Data of this kind raise problems, to be sure, but they provide information as well as opening up a range of analytic problems that are worth investigation. The ethnographer, like any other social scientist, may well draw on such documents and representations. Furthermore, he or she may be particularly well placed to engage in principled and systematic research bearing on their validity and reliability as data, through first-hand investigation of the contexts of their production and use.

Rees (1981), in his work on medical records, indicates the situated significance of readership and authorship within a professional setting:

What the House Officer writes, and the way in which he goes about constructing the history and examination, is one way his seniors can make inferences about the standard of his other activities. The supposition others make is that a House Officer who writes an organized and clearly thought out account of his work will be well organized in the way he carries out those activities. By paying attention to the construction of the account, and by ensuring that it conforms to the accepted model, the House Officer is able to influence one of the ways in which he will be judged by his seniors.

(Rees 1981: 58–9)

This reflects Garfinkel’s (1967) remarks on records, where he suggests that they should be thought of as ‘contractual’ rather than as ‘actuarial’. That is, they are not literal accounts of ‘what happened’ but are tokens of the fact that the relevant personnel went about their business competently and reasonably (see also Prior 2003). This is something that was taken up by Dingwall (1977b) in his study of the education of health visitors. He writes about the students’ production of records of their visits to clients, and notes that since the actual conduct of the work is invisible to the supervisor, the record is the main focus of administrative control. Likewise, the record constitutes a major means of self-defence for these ‘face-workers’. And, of course, the role of documents, of various kinds, in regimes of ‘transparent’ accountability has increased substantially in recent decades, with the rise of the ‘audit society’ (Power 1997).

In various ways, then, records have considerable importance in certain social settings. In some, the production of ‘paperwork’ is a major preoccupation. Even in organizations

that have people-processing functions, this usually involves the translation of events into records of those events which can be filed, stored, and manipulated. Such files are a primary resource for members of the organization in getting through their everyday work. Often, the exigencies of record-making can play an important part in organizing the work that gets done, and the routines used to accomplish it. Records of previous encounters with clients can be used to formulate appropriate objectives and activities for a current consultation. As Dingwall (1977b) writes of his student health visitors:

The good health visitor can derive sufficient data from the face sheet to identify the relevant areas of her knowledge about clients and the tasks she should be accomplishing in a visit. Unusual events are flagged in various ways. Thus, a child who is at risk may be marked by a red star on the card. Particular social problems may be pencilled on the cover.

(Dingwall 1977b: 112)

Heath (1981) has also commented on this sort of use of medical records in the context of doctor–patient encounters. He explains how general practitioners use their record cards to open the encounter with the patient:

It is often through the elaboration of the appropriate record's contents, prior to the initiation of first topic, that the doctor is able to render the relevant characteristics of the patient, and thereby design a 'successful' first topic initiator.

(Heath 1981: 85)

Records, then, are used to establish actors as 'cases' with situated identities, which conform to 'normal' categories or deviate from them in identifiable ways. Records are made and used in accordance with organizational routines, and depend for their intelligibility on shared cultural assumptions. Records construct a 'documentary reality' that, by virtue of its very documentation, is often granted a sort of privilege. Although their production is a socially organized activity, official records have a certain anonymity which leads to their treatment by members as objective, factual statements rather than as mere personal belief, opinion, or guesswork. (It is, of course, the case that some records may contain specific entries, such as differential medical or psychiatric diagnoses, that are explicitly flagged as tentative or contested.)

It should be apparent from what we have outlined already that there are many locales where literate social activity is of some social significance, and may indeed be of major importance. Modern industrial and administrative bureaucracies, and professional or educational settings, are obvious cases in point. It requires little reflection to remind oneself of how pervasive are the activities of writing and reading written documents. And even in the case of settings where documents are not a central feature there is often an enormous amount of written material available that can be an invaluable research resource.

The presence and significance of documentary products provide the ethnographer with a rich vein of analytic topics, as well as valuable sources of data and information. Such topics include: How are documents written? How are they read? Who writes them? Who reads them? For what purposes? On what occasions? With what outcomes? What is recorded, and how? What is omitted? What does the writer seem to take for granted about the reader(s)? What do readers need to know in order to make sense of

them? The list can be extended readily, and the exploration of such questions would lead the ethnographer inexorably towards a systematic examination of each and every aspect of everyday life in the setting in question.

The ethnographer who takes no account of such matters, on the other hand, ignores at his or her peril these features of a literate culture. There is nothing to be gained, and much to be lost, by representing such a culture as if it were an essentially oral tradition. In the scrutiny of documentary sources, the ethnographer thus recognizes and builds on his or her socialized competence as a member of a literate culture. Not only does the researcher read and write, but also he or she reflects on the very activities of reading and writing in social settings. Thus, such everyday activities are incorporated into the ethnographer's topics of inquiry as well as furnishing analytic and interpretative resources.

We have concentrated here for the most part on written documents, but it is perhaps worth stressing that materials containing images of various kinds, whether plans, drawings, photographs, or sounds are also often available. The mass media are a major source here, but by no means the only one. Images of various kinds are often part of the documents that are generated via organizational work, for example prospectuses for schools and universities, brochures of various kinds, the pictures (in print and online) that play a key role in the buying and selling of houses, etc. Many of the same questions need to be asked about these materials as about written documents; though the kinds of analysis used are likely to be distinctive (Emmison and Smith 2000; Pink 2004b).

Heath's work on technologically mediated action provides a series of key examples. Heath and Luff, for instance, analyse collaborative work and interaction in control rooms of the London Underground system, where visual data on screen is a key feature of everyday work (Heath and Luff 2000). In settings of scientific and medical work, visual culture may also be of fundamental importance, with data themselves being constructed in visual terms. Dumit's ethnography of brain-imaging is but one recent example: the striking images of brain scans he reproduces do not just illustrate the text. The visualization of brain function is what the bioscientists *do*, and their scientific work is intensely visual in character. Consequently, what is important here is not just the 'visual analysis' of scientific work, but the analysis of scientific visual work. There is, in other words, a direct homology between the social action under investigation and its ethnographic representation (Dumit 2004).

## **Artefacts**

Just as ethnographers can sometimes overlook the literate quality of many social settings, they often seem to ignore the role of material artefacts. While the rise in studies of material culture has brought some of the relevant issues to the fore, there remains a tendency for material goods and objects to be neglected in ethnographic work, being left within a circumscribed boundary of specialist interests. Our (all too brief) account here is intended merely to remind ethnographers that the 'fields' in which they conduct fieldwork are populated not only with social actors, but with 'things' of many sorts.

Of course, the ethnographic gaze has encompassed material culture since the earliest days. Malinowski's classic anthropological research among the Trobrianders included a close reading of the building of a canoe, and how the practical construction work simultaneously evoked and aligned cooperative social relations. Likewise, his account

of reciprocity and exchange relationships in the *kula* system necessarily involved some attention to the *material* goods that are circulated among exchange-partners across the archipelago. However, this focus on material artefacts is not very common in present-day ethnographic studies.

Rather than treating the analysis of such artefacts as a separate domain, we wish to stress that material goods, objects and traces need to be analysed in their broad ethnographic contexts. Moreover, the ethnography of everyday life demands attention to its material features, and how social actors engage with physical things. This is much more than just applying attention to physical surroundings and material context. There are many social phenomena that are impossible without the use of material goods. There are many social relationships that are crystallized and embodied in material objects. There are many forms of work that necessarily imply the competent and skilled manipulation of physical resources, whether as an official part of the job or in the production of 'homers', artefacts for personal use (Anteby 2003).

For instance, Atkinson's publications on haematologists highlight some of the material work that goes into the production of medical facts and opinions. Haematologists spend a lot of time *talking* about their patients, and transforming those patients into 'cases', 'opinions' and 'diagnoses' (Atkinson 1995). But their work is not just accomplished through talk. They also have to manipulate the physical traces of the body: the blood and bone-marrow have to be collected and read for signs of disease. This involves their physical manipulation, through techniques such as staining, in order to render them visible and legible. The preparation of a slide for microscopic inspection demands a certain physical and perceptual dexterity, as does use of the microscope itself. The skilful activities of inspecting physical traces of peripheral blood or bone-marrow are embedded in the exchange of talk between professional colleagues, or in teaching encounters. Objects, traces, skills and talk are mutually implicated, and the ethnography of professional knowledge-production has to take account of them.

These observations in a medical setting parallel a more general interest in ethnographic studies of scientific sites, such as laboratories and scientific networks. While a great deal of the sociology of scientific knowledge has been disproportionately concerned with the cultural-cognitive aspects of scientific controversy and discovery, some studies have explicitly incorporated an interest in the material circumstances of scientific work. Actor-network theory takes such an interest to an extreme (occasionally absurd) length. It makes no principled distinction between human and material actants within a complex of interrelationships. Hence, technical *equipment* can be analysed in terms of the theories of knowledge it embodies, and the active part it plays in shaping scientific knowledge. However, it is not necessary to engage in fully fledged actor-network theory in order to recognize the significance of materials in the *production* of scientific and technological knowledge. The ethnographer in this field needs to acquire some degree of technical expertise and an understanding of how material artefacts are made and used. This includes an appreciation of the physical qualities of things. A contemporary oral history of the Moog synthesizer, which played a significant part in the development of rock music, includes an appreciation of its technical qualities as well as the biographical relations in which it was embedded (Pinch and Trocco 2002). Ethnography and the archaeology of the present also converge in the analysis of computing and information technology (Finn 2001; English-Lueck 2002).

The 'thing-ness' of things in their material and social contexts needs to be understood by ethnographers. We are attentive to the nuances of social interaction, and we devote

a considerable amount of time and effort to the analysis of social action. We need to give equally appropriate attention to things. They have material qualities, based on their physical composition, they have surface texture, shape and colour. Ethnographers have not been particularly good at exploring the significance of *appearance* in the material world about them. The social worlds that many of them describe have been oddly empty spaces, with little or no attention paid to the physical surroundings. Those ethnographic worlds are often flat and monochrome, in that aesthetic qualities, such as colour, are ignored. Yet, if we want to make sense of many social worlds, we ought to take account of how they are physically constituted. It would, for instance, seem odd to describe work in a modern office setting without paying heed to its physical layout (walled rooms or open plan, number of floors, connections to other buildings, etc.), its colour schemes, its furnishings and the like. Such places are *designed* and their design embodies corporate interests and implicit values. These features both constrain the social relations of work in distinctive ways and are resources that are used and even 'redesigned' by workers.

Atkinson's (2006a) ethnography of the Welsh National Opera Company gives central attention to several aspects of its material context. The production and performance of an opera depend not just on singing and acting, and the key features of an opera go beyond the work of the director and the conductor. The realization of music theatre involves the creation of *material* circumstances, such as the design and construction of the set. Moreover, once the set has been created, it in turn poses *physical* constraints on but also provides material opportunities to producers and performers. Atkinson's monograph includes graphic accounts of how performers had to grapple (literally as well as metaphorically) with recalcitrant aspects of the set: walls that move unpredictably (*Simon Boccanegra*), or boats that are difficult to manhandle (*Peter Grimes*). Atkinson (n.d.) writes about how the props department in the opera company used their craft skills to engage in 'bricolage' to create the physical objects required for a new production. This department was also a physical archive of past productions, and a source of situated 'ethno-archaeology' through which the past achievements of the opera company could be traced. Individual pieces that had required particular ingenuity for their construction, or that have particular aesthetic value, are treasured by the props department as trophies of their own past 'operatic' triumphs.

Any theatrical performance, not least that of the opera, depends on material objects. However, as Erving Goffman showed many years ago, we all depend upon 'props' of various kinds in more mundane settings. Furthermore, there are ethnographic accounts that are explicitly focused on the collection and display of material artefacts. Macdonald's (2002) ethnography of London's Science Museum is an excellent case in point. She narrates the processes that went into the creation of a major museum exhibit on food. Such ethnographic examinations of the curating and display of material goods do more than documenting what happens in such esoteric places as museums and art galleries – important though those topics are in their own right. They also draw attention to more mundane aspects of material culture. The collection and display of objects is an important feature of mundane home cultures, for instance. Homes can be thought of as having 'museum-like' qualities, in that individual memorabilia or collections of objects can be self-consciously displayed. Hurdley's (2006, 2007) multimedia ethnography of mantelpieces in British homes is a useful case in point. The mantelpiece – the traditional structure over an open fireplace, still incorporated in modern homes that have central heating – is a key place for the display of ornaments, gifts, photographs

and the like. There is a situated aesthetic that informs many of these displays, and the mantelpiece arrangement is often a focus of the living room. Moreover, the objects themselves embody their owners' memories: memory is not a mental state from this perspective, but is inscribed in material objects, and in the autobiographical narratives that they evoke. Mantelpiece objects can also embody the personal ties and mutual obligations of gift relationships. A deceptively trivial space such as the mantelpiece thus provides a microcosm of everyday domestic, aesthetic and interpersonal arrangements. The homespun example of the mantelpiece also directs ethnographic attention towards the more self-conscious cultural phenomenon of 'collecting' art and other material artefacts (see Painter 2002; Belk 1995; Pearce 1994).

The physicality of social phenomena can be extended to incorporate an appreciation of the built environment and physical space. While it is by no means a universal failing, it is undeniable that many ethnographic accounts seem to lack a sense of *places and spaces*. This is not just a matter of putting things into a 'context'. Rather, we ought to pay serious attention to the material circumstances that constrain social activity, how a sense of place is reflected in individual and collective identities, and how places are *used* by social actors, just as they use any material and symbolic resources. There are, of course, some clear examples that can be drawn on for inspiration. Pierre Bourdieu's (1979) classic analysis of the Kabyle house is a case in point. He analyses the house not merely as a physical locus of everyday life, but also as a site of symbolic ordering.<sup>6</sup> In a similar vein, anthropological accounts of Mediterranean societies stress the significance of the house, and its relationship to the street, as a physical coding of respectability – especially as regards the women of the household – and as an affirmation of strongly differentiated gender roles.

The house as a physical embodiment of identity, and its material decoration, are explored by Gregory (2003) in her exploration of householders' aesthetic work on late Victorian houses. These include the house-owners' need to purify the house of traces of previous occupants (carpets and soft furnishings, décor and colour schemes, bathroom suites and fittings etc.), often expressed in quite violent terms ('ripping out' fireplaces, for instance). The *material* decoration and furnishing of the house are not simply backdrops to the everyday performance of identity and biography. They are deeply implicated in the joint construction of a household by (for instance) couples who transform an older house into their own domestic space. These issues of personal identity are often informed by a sense of the identity of the house itself: the 'authenticity' of the material fabric of an older house is an important aspect of such reconstruction. Fireplaces, doors, windows and other 'features' may – for some house-owners at least – need to be in period if their personal, emotional investment in the house is to be adequately rewarding. These are partly aesthetic judgements, of course. They are also partly reflections of collective taste: in previous generations, the 'modernization' of the home would have been a far more common goal than its restoration. But they are profoundly dependent on the ethno-aesthetic of the social actors themselves, and depend upon the values attached to material goods (see Reid and Crowley 2000; Valis 2003).

The ethnographic appreciation of things should also extend to their creation and manufacture. As we have already noted, the rise of cultural studies and the associated emphasis on material culture have given rise to a rich vein of sources and analytic

6 For a critical assessment of his argument, see Silverstein (2004).



perspectives that can be drawn into the ethnographic imagination (see Miller 1998, 2001a, 2001b; Buchli 2002). They include the ethnographic analysis of processes of *design*, an aspect of contemporary material culture that has attracted considerable interest on the part of social scientists.<sup>7</sup> This includes ethnographic analysis of the design process (e.g. Henderson 1998; Salvador *et al.* 1999) and the creation of visual culture itself (Frosh 2003). The same is true of architecture, urban design or the analysis of spaces and places (e.g. Dodds and Tavernor 2001; Borden 2002; Podalsky 2002; Crowley and Reid 2002; Butler and Robson 2003). We are now more than ever aware of the significance of the 'environment', as simultaneously shaped and shaping in the performance of individual and collective identities.

We repeat here a caveat. We are not referring to these issues simply in the interests of documenting the 'contexts' of social activity. These are not epiphenomenal issues either. Ethnographic research needs to pay close and serious attention to the material goods and circumstances that are integral to the organization of everyday social life. People do not act in a vacuum. Not only do they do things with words, but also they do things with things. The sort of issues that researchers sometimes lump together as 'experience', 'biography' or 'memory' are often embodied in material goods and personal possessions. The performance of work involves a sustained engagement with material means. The enactment of ritual normally involves the manipulation of objects charged with special significance. These and similar kinds of social action all call for a systematic ethnographic attention to the material world. We do not need a separate specialism or subdiscipline of 'material culture' in order to address these issues. On the contrary, they should be incorporated into the fabric of ethnographic inquiry, just as they contribute to the fabric of social life.

Finally, we should note that while physical space and objects have always been important for human behaviour, in recent times the virtual spaces created through fixed and mobile communication devices and the internet have gained increasing significance. While some ethnographers have given much attention to 'online cultures', there has perhaps been rather less awareness of how these virtual spaces shape more ordinary forms of social interaction, how virtual interaction intertwines with that which is face-to-face, and so on (Franklin and Lowry 2001). Here, too, there is a danger involved in specialization, that these issues will be ignored where they are not the main focus of inquiry. Moreover, of course, this is a field of expanding significance.

## **Ethnography in digital spaces**

Digital technology has expanded our very notion of what constitutes a 'field'. Virtual fields and virtual fieldwork are now possible, and are assuming increasing significance in a social world that is simultaneously global and digital for some populations. Virtual communities and networks present particular challenges and opportunities for ethnographic research. Likewise, ethnographies of digital life itself are important aspects of contemporary social research. In addition, there are many opportunities to exploit digital technologies to reach particular research populations.

There are many kinds of informant who can be usefully accessed via the internet. For example, Stewart's research on people with irritable bowel disease included online access to sufferers. This is a very good example of how a potentially embarrassing or

<sup>7</sup> See Julier (2000) for a useful introduction.

stigmatizing condition can be studied 'at a distance' when face-to-face interviewing and personal recruitment to a study might prove more troublesome (Stewart and Williams 2005). In much the same way Susie Scott conducted an interactionist project on shy people and constructions of shyness. She was able to contact and interact with shy people through internet access. Shyness is another prime example of the sort of personal quality or characteristic that lends itself especially well to internet research. Contrary to what one might initially and naively believe, shy people can be very willing to talk at length about themselves, and they are extremely reflective about their own interactional style. Indeed, their behaviour is often shy precisely because they have a heightened sense of self, are alert to the interactional niceties of dialogic interaction and group dynamics. Scott found that informants could and would produce very full, self-aware accounts of shyness, and that they could find the impersonal channel of communication of the internet quite amenable (Scott 2004).

Such research does not necessarily study 'naturally occurring' communities that exist in cyberspace, although in the course of setting up noticeboards and chat rooms researchers can create temporary, research-situated groupings that approximate to online focus groups. Their advantage over face-to-face focus groups is that they can persist more or less indefinitely, and actors can be enrolled on a rolling basis, while participation is not restricted by constraints of time and travel. Equally, however, we recognize that, increasingly, there are 'naturally occurring' communities in virtual, digital space. Researchers who use online means of accessing informants and participants are often tapping into existing networks of social actors who maintain 'virtual' communities through sustained interaction by digital means. It is clear that, for some participants at least, this is a prime social reality, and a major source of identity (Gatson and Zweerink 2004; Hammersley and Treseder 2007).

Our historical preferences for face-to-face communities and intense, local sites of interaction should not blind us to the fact that contemporary forms of communication can transform our sense of what is 'local' into widely distributed networks, and that 'communities' can (and do) exist in many different forms. We should also not forget that, as we noted earlier, one of the earliest inspirations for Chicago sociology was *The Polish Peasant*. The starting point of this was the exchange of communications, by letter, between Polish settlers in Chicago and relatives and friends living in Poland. There is no intrinsic difference between the slow exchange of written communication and the instant exchange of electronic messages. The density and speed of the latter, however, can create a more intense sense of shared experience and of a shared social world.

There do exist, therefore, 'virtual communities' that operate only in cyberspace, and can only be studied ethnographically through the same medium. Cyber-ethnography deals with social action and social organization in such virtual settings. Matthew Williams (2006), for instance, has undertaken an ethnographic study of multi-user domains (MUDs) in which participants can take on virtual identities ('avatars'), and interact with one another in virtual worlds. Williams paid particular attention to mechanisms of social control within such domains, which are explicitly 'policed' and are also subject to less formal forms of social control. Williams acted as a virtual participant observer within these virtual worlds. His research amply demonstrates that the proper preoccupations of ethnographic fieldwork can be brought to bear in such settings. There are issues of identity, of community and of social control that are vibrantly relevant to virtual worlds as much as they are to any other kind. The processes

of negotiation, interaction and identity-formation are just as 'real' also. There is no fundamental distinction between 'virtual'; and 'real' environments in social terms, and research in the digital age needs to take account of that.<sup>8</sup>

## **Conclusion**

In this chapter we have focused on the role that the study of documents, physical objects and virtual communication can play in ethnographic work. These have not always been given the attention they deserve within ethnographic work, the primary emphasis usually being on data from interviews and participant observation in face-to-face rather than virtual settings. We have tried to show the potential offered by these sources of data in the context of work that also draws on the more usual sources.

In the next chapter we will look at issues surrounding the recording and preparation of data for analysis.

8 For useful discussions of virtual methods, see Markham (2004) and Hine (2005).

## 7 Recording and organizing data

In previous chapters we have examined the main sources of data that ethnographers use: observation and participation; participants' oral accounts, both those that are 'naturally occurring' and those elicited in interviews; plus documents and artefacts of various kinds. In this chapter we want to look at how these data may need to be preserved or recorded, and organized, in preparation for the process of analysis. What is involved here varies considerably depending upon the nature of the data. In the case of documents and material objects, relatively little processing may sometimes be required, though these data will need to be catalogued in ways that make them available for analysis. By contrast, in the case of observing patterns of social interaction and collecting participant accounts, the task of recording the data is much more significant and time-consuming.

Technological developments have had a major impact upon the sort of data available to ethnographers, on how it can be recorded, and on the task of organizing it so as to facilitate analysis. CDs, DVDs and the internet represent relatively new sources of data, and ethnographers have made increasing use of them. Going a little further back into the past, the production of relatively cheap and portable audio-, and then video-, recorders transformed much ethnographic data collection. And, in relation to organizing data, the availability of cheap but very powerful personal computers, and of word-processing programs and specialized software for handling textual data, has been very significant. In recent years, the rise of digital audio-recorders and cameras, and the increased capacity of computers to handle pictures and sound as well as text, have opened up new possibilities.

We will begin by discussing what may be involved in processing documentary and physical data, then examine the methods available for recording observational and interview material, including transcription. Attention will be given to how the analytic process must carry on alongside data processing. Finally, we will move on to strategies for data organization.

### **Documents and other materials**

We often need to collect and use documentary material from the research setting, as well as employing that from elsewhere. As we have noted, this kind of data can take a wide variety of forms (see Chapter 6). Some documents or material objects are freely available and can be retained by the ethnographer for later use. This is often true, for example, of such items as promotional material, guides, and circulars. Other documents can be bought or otherwise acquired. For example, material on the internet can often be downloaded and printed out.

Even when documentary sources are not produced in large numbers and are unavailable in electronic form, the researcher may be able to produce copies for retention (though here, and elsewhere, copyright issues need to be borne in mind). Photocopiers are available in some settings where research is carried out, and the ethnographer may be allowed access to them. The availability of relatively cheap and portable scanners also eases the problem considerably. However, what is produced by this latter means where text has been inputted into a word-processor, will almost always require considerable tidying up, correction, and filling in; much depends here upon the nature of the texts being scanned. It may also be possible to take digital photographs of posters and of other short texts.

Sometimes, there is no alternative to note-taking in recording the data from documents, or that pertaining to material objects. Here copying documents *in toto* may be necessary, but it is not always the most effective recording strategy. While it may reduce the danger of omitting something important, or losing the context, those advantages have to be set against the cost in time. It may be necessary to make judgements about which documents, and what parts of documents, are and are not to be copied. One can index a document so that the relevant sections can be consulted, as appropriate, at later stages of the research. This can be done relatively quickly, but it may only be of value if there will be easy future return access to the documentary sources concerned. One may also summarize relevant sections or copy them out by hand: by summarizing one can cover much more material, thus releasing scarce time for work of other kinds, but it will involve some loss of information and introduces an additional layer of interpretation.

These three modes of note-taking – copying by hand, indexing, and summarizing – are not mutually exclusive, of course, and each should be used according to the likely future accessibility of the documents and the anticipated use to which the notes will be put. Of particular importance here is whether they relate to central themes of the study or provide background information. These considerations may vary across different documents or even sections of documents, and judgements about them may change over time. It should also be remembered that written notes need not necessarily be made on the spot: where access to documents is restricted it may be more efficient to read indexes, summaries, or relevant sections into a portable audio-recorder, where this is possible, and then transcribe the recording later.

In the case of material objects, as with documents, copies or pictures may be readily available. Alternatively, it may be necessary to take photographs or make video-recordings, or perhaps to produce hand-drawn sketches. The use of photography and video-recording is discussed below.

## **Recording observations and interviews: fieldnotes**

Fieldnotes are the traditional means in ethnography for recording observational and interview data. Originally, these were handwritten, but now they can sometimes be inputted directly into a handheld or laptop. Whether fieldnotes can be written at all, how, and covering what issues, depends on the nature of the research, the setting(s) in which fieldwork occurs, and the role(s) taken on by the ethnographer.<sup>1</sup>

1 For detailed guidance about the production of fieldnotes, see Emerson *et al.* (1995). Sanjek (1990) offers illuminating discussions of various aspects of fieldnotes, in the context of anthropology.

The writing of fieldnotes is not something that is (or should be) shrouded in mystery. It is not an especially esoteric activity. On the other hand, it does often constitute a central research activity, and it should be carried out with as much care and self-conscious awareness as possible. A research project can be as well organized and as theoretically sophisticated as you like, but with inadequate note-taking the exercise could be like using an expensive camera with poor quality film. In both cases, the resolution will prove unsatisfactory, and the results will be poor. Only foggy pictures result.

Fieldnotes are always selective: it is not possible to capture everything. And there is a trade-off between breadth of focus and detail. What is recorded will depend on one's general sense of what is relevant to the foreshadowed research problems, as well as on background expectations (Wolfinger 2002). Moreover, as we shall see, the character of fieldnotes may well change, in terms of focus and detail, over the course of the research. The completion of fieldnotes is not an entirely straightforward matter, then. Like most aspects of intellectual craft, some care and attention to detail are prerequisites: satisfactory note-taking needs to be worked at. It is a skill demanding repeated assessment of purposes and priorities, and of the costs and benefits of different strategies. Thus, the standard injunction, 'write down what you see and hear', glosses over a number of important issues. Among other things, the fieldworker will want to ask *what* to write down, *how* to write it down, and *when* to write it down.

The making of fieldnotes has been part of the invisible oral tradition of craft knowledge, and many who embark on their first project have to find their own way of doing things. So let us try to deal with some of the practical questions raised above. First, when to write notes? In principle, one should aim to make notes as soon as possible after the observed action. Most fieldworkers report that, while they can train themselves to improve recall, the quality of their notes diminishes rapidly with the passage of time; the detail is quickly lost, and whole episodes can be forgotten or become irreparably muddled. The ideal would be to make notes during actual participant observation. But this is not always possible, and even when it *is* possible the opportunities may be very limited. There are often restrictions arising from the social characteristics of the research setting, as well as from the ethnographer's role(s) in the field.

If the research is covert, then note-taking in the course of participation will often be practically impossible. In many settings, participants do not carry around notebooks (paper or electronic), and are not visibly engaged in a continual process of jotting down notes. In many circumstances, such activity would prove very disruptive either preventing 'natural' participation or generating distraction and distrust. It is unlikely, for example, that Calvey (2000) could take copious notes while acting as a 'bouncer' on the door of a club.

In a few contexts, of course, writing may be such an unremarkable activity that covert note-taking *is* possible. Rather surprisingly, Graham (1995) was able to take fieldnotes while working on a car assembly line. She writes:

Luckily, the station that I worked during my last few months required that I carry a clipboard for noting damage to the car bodies as they entered our area; hence it was not unusual to see me jotting down notes. However, even before I was assigned to that particular station, I was able to stand next to one of my parts racks and take down notes. Each team member had paper and pencil for noting

parts shortages and for keeping daily records on car numbers and various other assigned duties. It was not out of the ordinary to observe people writing.

(Graham 1995: 16–17)

And observers in a covert study of patient life in mental hospitals found that they could take notes, since staff simply took this as a further sign of their mental illness (Rosenhahn 1973)!

Of course, note-taking is not always possible or easy even in overt research. To some extent our comments concerning covert participation apply here as well. The conduct of note-taking must be broadly congruent with the social setting under scrutiny. In some contexts, however ‘well socialized’ the hosts, open and continuous note-taking will be perceived as inappropriate or threatening, and will prove disruptive. In other contexts fairly extensive notes can be recorded without undue disruption. A classic example is Whyte (1981), who took on the role of secretary to the Italian Community Club because it enabled him to take notes unobtrusively in their meetings.

However, even in situations where note-taking is a ‘normal’ kind of activity, such as educational settings, care must be exercised if disruption is to be avoided. Olesen and Whittaker’s (1968) research on student nurses is a case in point:

I feel it much easier to write when the students write, and listen when they do; I have noticed that when I attempt to write when the students are not, I attract [the tutor’s] attention and on a few occasions she seems to falter in what she is saying. . . . Similarly when all the students are writing and I am not, but rather looking at her, I again seem to ‘put her off’. And so it is that I’ve become a student, sometimes slightly at the loss of my self-esteem when I find myself lazily inserting a pencil in my mouth. (Fieldnotes: February, third year.)

(Olesen and Whittaker 1968: 28)

For a variety of reasons, many of the initial fieldnotes that ethnographers take are jottings, snatched in the course of observed action. A common joke about ethnographers relates to their frequent trips to the lavatory where such hasty notes can be scribbled in private. Even the briefest of notes can be valuable aids in the construction of a more detailed account. As Schatzman and Strauss suggest: ‘A single word, even one merely descriptive of the dress of a person, or a particular word uttered by someone usually is enough to “trip off” a string of images that afford substantial reconstruction of the observed scene’ (Schatzman and Strauss 1973: 95). Moreover, it is important to record even things that one does not immediately understand, because these may turn out to be important later.

Even if it proves possible to make fairly extensive notes in the field, they – like brief jottings – will need to be worked up, expanded on, and developed. Many social activities have a timetable of their own, and it may prove possible within these to match phases of observation with periods of writing up fieldnotes. For instance, Atkinson’s work on haematologists in American and British hospitals was structured by regular schedules of clinical ‘rounds’, ‘grand rounds’, ‘conferences’, ‘mortality and morbidity reviews’, and similar occasions for medical talk. The pattern of data collection was fitted into the rhythm of the hospital, which allowed for periods of time in the canteen or the library, or back at the university, or at home, when detailed notes could be constructed (Atkinson 1992a, 1995).

In other settings, the phasing of observation and writing will be much less straightforward to organize, but there are usually times when participants are engaged in activities that are not relevant to the research. At the very least they will usually sleep at regular times and, at the risk of fatigue, notes can be written up then. Carey (1972) reports a rare exception: that of 'speed freaks' (amphetamine users) who, under heavy doses, stay awake for several days in a hyperactive state:

The peculiar round of life wherein people stay up for three, four or five days at a time and then sleep for several days posed enormous practical difficulties for the research. Our conventional commitments (family, friends, teaching responsibilities) had to be put aside for a time so that we could adapt ourselves more realistically to this youthful scene. As we became more familiar with this particular universe, we developed a crude sampling plan that called for observations at a number of different gathering spots, and this relieved us somewhat from a very exacting round of life. If we were interested, however, in what happened during the course of a run when a small group of people started shooting speed intravenously, it meant that one or two fieldworkers had to be present at the beginning and be relieved periodically by other members of the team until the run was over. Fatigue was a constant problem and suggests that more than one fieldworker is required in this type of research.

(Carey 1972: 82)

Clearly, in such cases, finding time to write up fieldnotes poses particularly severe problems. The problem remains serious, however, even with less exhausting schedules. But some time for writing up fieldnotes must always be set aside, especially where this is the main means of data recording. There is no advantage in observing social action over extended periods if inadequate time is allowed for the preparation of notes. The information will quickly trickle away, and the effort will be wasted. There is always the temptation to try to observe everything, and the consequent fear that in withdrawing from the field one will miss some vital incident. Understandable though such feelings are, they must, in most circumstances, be suppressed in the interests of producing good-quality notes. Nevertheless, the trade-off between data collection and data recording must be recognized and resolved, in accordance with the overall research strategy and purpose. Thus, for example, the organization of periods of observation, with alternating periods of writing and other work, must be done with a view to the systematic sampling of action and actors (see Chapter 2).

It is difficult to overemphasize the importance of meticulous note-taking where this is the main means of data recording. The memory should never be relied on entirely, and a good maxim is 'if in doubt, write it down'. Furthermore, it is absolutely essential that one keep up to date in processing notes. Without the discipline of daily writing, the observations will fade from memory, and the ethnography will all too easily become incoherent and muddled.

What of the form and content of fieldnotes? As noted earlier, one can never record everything; social scenes are truly inexhaustible in this sense. Some selection has to be made. However, the nature of this is likely to change over time. During the early days of a research project, the scope of the notes is likely to be fairly wide, and one will probably be reluctant to emphasize any particular aspects. Indeed, one will probably not be in a position to make such a selection of topics. As the research progresses,



and emergent issues are identified, the notes will become more restricted and more focused in subject matter. Moreover, features that previously seemed insignificant may come to take on new meaning, a point that Johnson (1975) illustrates from his research on social workers:

Gradually I began to ‘hear different things said’ in the setting. This happened through a shift in attention from *what* was said or done to *how* it was said or done. The following excerpts from the fieldnotes illustrate several instances of my changing awareness. From the notes near the end of the sixth month of the observations:

Another thing that happened today. I was standing by Bill’s desk when Art passed by and asked Bill to cover the phone for a couple of minutes while he walked through a request for County Supp over to Bess Lanston, an EW supervisor. Now I don’t know how many times I’ve heard a comment like that; so many times that it’s not even problematic any more. In fact, it’s so routine that I’m surprised that I even made a note to remember it. The striking feature about this is that in my first days at Metro [the social work agency] I would have wanted to know all about what kind of form he was taking over there, what County Supp was, why and how one used it, got it, didn’t get it, or whatever, who and where Bess Lanston was, what she did and so on. But all the time I’ve missed what was crucial about such a comment, the fact that he was walking it through. Before I would have only heard what he was doing or why, but today, instead, I began to hear the how.

(Johnson 1975: 197)

So, as analytical ideas develop and change, what is ‘significant’ and what must be included in the fieldnotes change. Over time, notes can also change in *character*, in particular becoming more concrete and detailed. Indeed, the preservation of concreteness is an important consideration in fieldnote writing. For most analytic purposes, compressed summary accounts will prove inadequate for the detailed and systematic comparison or aggregation of information across contexts or across occasions. As far as possible, therefore, speech should be rendered in a manner that approximates to a verbatim report and represents nonverbal behaviour in relatively concrete terms; this minimizes the level of inference and thus facilitates the construction and reconstruction of the analysis.

The actual words people use can be of considerable analytic importance. The ‘situated vocabularies’ employed provide us with valuable information about the ways in which members of a particular culture organize their perceptions of the world, and so engage in the ‘social construction of reality’. Situated vocabularies and folk taxonomies incorporate the typifications and recipes for action that constitute the stock-of-knowledge and practical reasoning of the members. Arensberg and Kimball (1968) provide an example from their study of interpersonal relations among family members in rural Ireland around the turn of the twentieth century. They note how the terms ‘boy’ and ‘girl’ are used by parents to refer to their children irrespective of age, indicating the sharply hierarchical character of parent–child relations: ‘Sociological adulthood has little to do with physiological adulthood. Age brings little change of modes of address

and ways of treating and regarding one another in the relationships within the farm family' (Arensberg and Kimball 1968: 59).

The potential significance and detail of the connotations of such members' terms apply equally to the use of argot. American hospital speech includes the term 'gomer', which is part of the rich and colourful vocabulary characteristic of most medical settings. George and Dundes (1978) summarize its use:

What precisely is a 'gomer'? He is typically an older man who is both dirty and debilitated. He has extremely poor personal hygiene and he is often a chronic alcoholic. A derelict or down-and-outer, the gomer is normally on welfare. He has an extensive listing of multiple admissions to the hospital. From the gomer's standpoint, life inside the hospital is so much better than the miserable existence he endures outside that he exerts every effort to gain admission, or rather readmission, to the hospital. Moreover, once admitted, the gomer attempts to remain there as long as possible. Because of the gomer's desire to stay in the hospital he frequently pretends to be ill or he lacks interest in getting well on those occasions when he is really sick.

(George and Dundes 1978: 570)

Of course, this brief account glosses over a wide range of uses and connotations associated with this one folk term. In practice, the research worker will not be content to generate such a composite or summary definition. The important task is to be able to document and retrieve the actual contexts of use for such folk terms.

Kondo's (1990) ethnography of the production of identities in Japan provides an exemplary documentation of the terms and idioms of identity in various social contexts. She examines, for instance, the idiomatic use of *Shitamachi* and *Yamanote*: literally, different parts of Tokyo, used to convey different orientations, lifestyles and identities. Likewise, she explores the subtle usages and connotations of 'ie' and 'uchi'. Both terms have flexible, context-dependent meanings. The former refers to the inter-generational continuity of the group, the latter to the 'ingroup' as defined on any particular occasion, whether 'company, school, club, or nation' (Kondo 1990: 141). The ability to trace the social contexts of such idioms is dependent on the delicacy of one's ethnographic data: usage and social context must be identified with precision.

Making fieldnotes as concrete and descriptive as possible is not without its cost, however. Generally, the more closely this ideal is approximated, the more restricted the *scope* of the notes. Unless the focus of the research is extremely narrow, some concreteness and detail will have to be sacrificed for increased scope. Whatever the level of concreteness of fieldnotes, however, it is essential that direct quotations are clearly distinguished from summaries in the researcher's words, and that gaps and uncertainties in the record are clearly indicated. If speakers' original words cannot be reconstructed adequately, then indirect speech may be used to indicate the style and content. When we refer back to the notes there should be no ambiguity concerning the 'voices' that are represented there. One should not have to puzzle over 'Is that what they themselves said?' The observer's own descriptive glosses should be kept clearly distinct.

It is equally important that records of speech and action should be located in relation to who was present, where, at what time, and under what circumstances. When it comes to the analysis stage, when one will be gathering together, categorizing, comparing,

and contrasting instances, it may be crucial that 'context' (participants, audience, setting, etc.) can be identified.

Fieldnotes cannot possibly provide a comprehensive record of the research setting. The ethnographer acquires a great deal more tacit knowledge than is ever contained in the written record. He or she necessarily uses 'head notes' or memory to fill in and recontextualize recorded events and utterances. One should not become totally wedded to the fieldnotes, as if they were the sum total of available information. Despite the scepticism of some commentators (for example, Agar 1980), however, the collection and maintenance of fieldnotes remain a major method of ethnographic recording.

Up to now, we have discussed fieldnotes in relation to observation, but they may also be used to record data from interviews. Sometimes, interviewees will refuse to allow the discussion to be audio-recorded; sometimes the ethnographer may judge that such recording will dissuade frankness or increase nervousness to an unacceptable level. Where fieldnotes are relied on in interviews, much the same considerations apply as in observation: decisions must be made about when they are to be written, what is to be noted, and how. It is important, incidentally, to have some record of the interviewer's questions, as well as of the answers. Once again, reliance will most likely have to be placed on jotted notes, and the dilemma of summarizing versus verbatim reporting is just as acute. Similarly, note-taking in interviews can prove disruptive, much as in the tutorial cited by Olesen and Whittaker (1968), with the interviewee becoming self-conscious about what is being written down. Furthermore, the need to take notes makes very difficult the kind of interviewing we advocated in Chapter 5. Much of the interviewer's attention will be taken up with recording what has been said rather than thinking about it. Nevertheless, combining interviewing and note-taking is a skill that can be learned with practice.

In light of the problems associated with writing fieldnotes, particularly in the context of interviews, the advantages of audio-recording, and perhaps even video-recording, are obvious. However, valuable though these are, they too involve difficulties and limitations.

## **Digitally recording observations and interviews**

It is very easy to demonstrate the major differences – in volume and detail – between a permanent recording and an observer's reconstruction of a strip of spoken action in fieldnotes. Since the technology of permanent recording is now readily available, in small and reliable formats, there are many possibilities for better quality data in key respects. The uses of video or film, still photography, and audio-recording offer various options for data collection and storage. At the same time, their use is not always possible, may sometimes have unwelcome disadvantages, and can shape the process of ethnographic work in ways that are undesirable. No means of data recording should be simply adopted as a matter of routine: reflexive awareness is required here as much as anywhere else.

### ***Audio-recording***

For the reasons we have suggested, if possible the ethnographer will usually wish to audio-record interviews rather than to rely on fieldnotes. And, occasionally, the use of video-recording may even be necessary for this purpose. There are also often

considerable advantages in using these methods in recording observational data; though the practicalities and reactive effects must be remembered.

We should also note that, despite its advantages over fieldnotes, the use of audio-recording does not provide a perfect and comprehensive record; and audio-recording processes of social interaction that are 'on the move' can be challenging, to say the least. In some cases background noise may make the recording virtually unintelligible. Also, any recording will be highly selective. Decisions have to be made about whether to use a single microphone or more than one, and where to place them; and these decisions are likely to determine what talk is and is not recorded. Furthermore, not only is non-verbal behaviour not captured in audio-recordings, but even such matters as who is being addressed, or how the talk relates to any material objects being used, are often not preserved. So, as we have already noted, the availability of audio-recording does not remove the necessity for the writing of fieldnotes. Indeed, an overemphasis on audio-recording can distort one's sense of 'the field', by focusing data collection on places where social processes can be recorded by this means, and concentrating attention on the analysis of spoken action. It may be possible to overcome some of these limitations by using visual recording devices, but these too have limitations and drawbacks.

### ***Photography and video-recording***

Photography has long been used in anthropology; by contrast, it has only been employed more recently, for the most part, in sociology and some other disciplines (Collier and Collier 1986; Ball and Smith 1992, 2001; Harper 1993, 2000, 2006). Ethnographic film also has a long history (see Marks 1995). Video-recording is more recent but is now widely used. Despite this, there is still a tendency to think of written language as the privileged medium of scholarly communication, and there are some tensions in the use of visual materials in 'a discipline of words' (Ball and Smith 1992: 5).

The collection and use of visual materials has gained particular currency from the increasing influence of cultural analysis in the social sciences. Visual materials, and representations of material culture, are key aspects of such research. This includes the semiotic analysis of photographs, films, and television programmes; the analysis of architectural space; the ethnography of design, and the analysis of domestic goods and spaces (see Pink 2004a). There is clearly opportunity for more traditional ethnographic research to draw on and incorporate such analytic strategies. At the same time, decisions have to be taken about whether visual data and the analytic strategies they make possible are appropriate for the purposes of a particular inquiry, and whether use of the recording devices concerned is viable in the field being investigated.

We are used to thinking of photography, film, and video-recording as producing faithful, realistic images of the world about us; but such habits of our own culture should not blind us to the fact that these forms of representation are partial and conventional. Decisions have to be made about from where shots are to be taken, whether the camera should be fixed or mobile, whether a single focus is to be adopted or whether the focus should vary; and if so when and how. Where the position and focus are not fixed, operation of the camera is likely to be full-time, so that it will be difficult if not impossible to observe and take notes simultaneously. Yet complementary observation and note-taking will almost certainly be necessary. Here, as elsewhere,

contextual features will need to be documented, since by no means everything will be 'in shot', and some of what *is* in shot will be obscured. A team approach may well be required, then.

Of course, 'visual data' do not have to be created *ex nihilo* by ethnographers. As we noted in Chapter 6, there are many situations where visual materials are integral to social action and social organization. Furthermore, reflexivity in the visual domain can also be extended to providing one's research hosts and informants with the means to record their own visual materials. They can thus become co-producers of 'data'. The availability of cheap and easy-to-use cameras not only means that ethnographers can use them extensively, but also means that participants can be encouraged to use them as well.<sup>2</sup> This may be a useful means for understanding how participants – literally and figuratively – view their world (see, for example, Allan 2005; Darbyshire *et al.* 2005). Such data can also be highly illuminating in making sense of how participants consume spaces and objects, or how they move in given environments. Participant-produced images can also be used as stimuli in the conduct of interviews.

Recent decades have transformed the use of visual materials: the advent of newer digital technologies have created the opportunity for ethnographic work that genuinely incorporates visual materials into an integrated ethnographic enterprise. In particular, digital cameras and digital camcorders, together with the opportunity to scan visual and documentary sources into digital databases, have transformed the opportunities available to ethnographers, both 'in the field' and beyond. While we do not wish to imply that 'anyone can do it' without training, or without an understanding of what they are undertaking, it is clearly possible for visual materials to be gathered and analysed in a way that was rarely possible for earlier generations.

Despite these developments in digital technology, transcription is still usually required for the purposes of analysis where audio- or video-recording is employed; even though the development of this technology now means that sounds and images from digital audio-recorders, cameras, and camcorders can be incorporated directly into fieldnotes, or even into research reports (see Chapter 9).

### *Transcription*

Transcription is a time-consuming business, and this must be allowed for in planning research. There are no hard-and-fast rules, but the ratio of transcribing time to recorded time is always high: at least five to one. If the talk is multi-party, if there is background noise, and if video-recordings are being transcribed, then it may take a great deal longer. Also relevant is the *kind* of transcription required: the detailed formats often used by discourse analysts are a great deal more time-consuming to produce than those which are more common in ethnographic work.

We do not intend to provide detailed instructions as to the preparation of transcripts, but a number of general precepts can be noted. In the first place, a decision needs to be made about whether full transcription is necessary. An alternative is to treat the audio- or video-recording as a document, indexing and summarizing much of it, transcribing only what seems essential. This may save considerable time, but it risks relevant material being overlooked – especially since what will be judged relevant will

2 Disposable film cameras are a good means for generating images here, though what they produce is less easy to store and manage than digital photographs.

change over time, and what is on the recordings that has not been transcribed will probably be forgotten.

Even where full transcription is to be carried out, as already indicated a decision must be made about how detailed this should be. There are well-established conventions for the preparation of transcripts. Some of these have been developed for the purposes of conversation or discourse analysis. They use the typographical characters of the standard keyboard and printer to represent some basic features of speech – such as pauses, overlaps, and interruptions – as well as how words are pronounced, when the speaker speeds up or slows down, where emphasis is placed, and so on. These will be essential for some research purposes, less important for others. Decisions must be made about what is to be represented in the transcription. Obviously, the more detailed the transcription, the more time it will take to produce; furthermore, very detailed transcriptions are by no means easy to read. At the same time, it is important that relevant features of the talk are included; and even then recourse may well sometimes need to be made to the original recording for purposes of analysis. The planning and conduct of research using audio- and video-recorded data must therefore involve strategic decisions about the kind of data to be collected, and the degree of detail to be preserved in the transcription.<sup>3</sup> Of course, fixed decisions do not have to be made at the start, and initial judgements may need to be reviewed.

Transcribing the video part of video-records is even more challenging, and time-consuming than dealing with audio-recordings. Here, conventions have been developed for indicating direction of gaze, so as to coordinate this with the pattern of talk. Sketches and screenshots of physical actions taking place alongside talk have also been used. Other researchers have provided written commentaries on what is happening instead of, or in addition to, these devices. Once again, including information of this kind multiplies the time required to transcribe data. However, it allows non-verbal aspects of social interaction and situations to be taken into account in a way that would otherwise be difficult. Here, as elsewhere, what kind of transcription is required depends upon the phenomena being studied and the purposes of inquiry. At the same time, the costs in terms of time and resources must be taken into account.<sup>4</sup>

### **Analytic notes, memos, and fieldwork journals**

While one is reading documents, writing up fieldnotes, or transcribing audiovisual materials, promising analytic ideas often arise. It is important to make note of these, as they may prove useful later when analysing the data. It is essential, though, to do this in a way that retains a clear distinction between analytic notes, on the one hand, and both the accounts provided by participants and the researcher's own descriptions of actions and situations, on the other. For example, analytic notes may be placed in square brackets or double parentheses; or, as we shall see, they may be put in a fieldwork journal.

It is also important to engage in the regular review and development of analytic ideas through writing analytic memos. These are not fully developed working papers

3 For further discussion of transcription, see Mishler (1991); Atkinson (1992b); West (1996); Lapadat (1999); Poland (2002).

4 For discussions of transcription issues relating to video data, see Goodwin (1981, 2001); Heath (1997, 2004) and Heath and Hindmarsh (2002).

but occasional written notes whereby progress is assessed, emergent ideas are identified, research strategy is sketched out, and so on. We quoted extracts from an analytic memo in Chapter 2 (pp. 27–8). It is all too easy simply to allow one's fieldnotes and other types of data to pile up day-by-day and week-by-week. The very accumulation of material usually imparts a satisfying sense of progress, which can be measured in physical terms as notebooks are filled, interviews completed, periods of observation ticked off, or different research settings investigated. But it is a grave error to let this work build up without regular reflection and review. Under such circumstances the sense of progress may prove illusory, and a good deal of the data collection could be unnecessarily aimless.

As we have emphasized, the formulation of precise problems, hypotheses, and an appropriate research strategy is an emergent feature of ethnography. This process of progressive focusing means that the collection of data must be guided by the developing clarification of topics for inquiry. The regular production of analytic memoranda will force the ethnographer to go through such a process of explication. Ideally, every period of observation should result in processed notes and the reflexive monitoring of the research process. As the memoranda accumulate, they will constitute preliminary analyses, providing the researcher with guidance through the corpus of data. If this is done there is no danger of being confronted at the end of the fieldwork with an undifferentiated collection of material, with only one's memory to guide analysis.

The construction of analytic notes and memos therefore constitutes precisely the sort of internal dialogue, or thinking aloud, that is the essence of reflexive ethnography. Such activity should help one avoid lapsing into the 'natural attitude' and 'thinking as usual' in the field. Rather than coming to take one's understanding on trust, one is forced to question what one knows, how such knowledge has been acquired, the degree of certainty of such knowledge, and what further lines of inquiry are implied.

As already noted, analytic notes and memoranda may be appended to the daily fieldnotes, or they can be incorporated into yet another form of written account, the fieldwork journal. Such a journal or diary provides a running account of the conduct of the research. This includes a record not only of the fieldwork, but also of the ethnographer's own personal feelings and involvement (Coffey 1999). The latter are not simply the basis for gratuitous introspection or narcissistic self-absorption. As we point out elsewhere in this book, feelings of personal comfort, anxiety, surprise, shock, or revulsion are of analytic significance. In the first place, our feelings enter into and colour the social relationships we engage in during fieldwork. Second, such personal and subjective responses will inevitably influence one's choice of what is noteworthy, what is regarded as strange and problematic, and what appears to be mundane and obvious. One often relies implicitly on such feelings; therefore, their existence and possible influence must be acknowledged and, if possible, explicated in written form. Similarly, feelings of anxiety can pose limitations on data collection, leading to a restricting tunnel vision. One of us (Atkinson 1992a) has reflected on how his personal feelings about general medicine and surgery clearly influenced the nature and balance of his published research on medical education.

There is a constant interplay between the personal and emotional on the one hand, and the intellectual on the other. Private response should be transformed, by reflection and analysis, into potential public knowledge. The fieldwork journal is the vehicle for this kind of transformation. At a more mundane level, perhaps, the carefully made fieldwork journal will enable the conscientious ethnographer painstakingly to retrace

and explicate the development of the research design, the emergence of analytic themes, and the systematic collection of data. The provision of such a 'natural history' of the research can be a crucial component of the complete ethnography.

Up to now, we have focused on data processing, emphasizing the decisions involved, and how this should be integrally related to the process of data analysis. In the remainder of the chapter we will examine the means that can be employed for the storage, indexing, and retrieval of ethnographic data.

### **Data storage, indexing and retrieval**

Ethnographers usually store observational data records chronologically. Likewise, interview transcripts and the like are normally kept as complete records of the individual interview, and stored in order. However, the process of analysis will often require active reorganization of the data into themes and categories – often breaking the texts up into discrete chunks or segments and identifying them in accordance with an indexing or 'coding' system. (This is less common in conversation and discourse analysis, where the focus is often on local patterns.)

The coding of the data in terms of categories provides an important infrastructure for later searching and retrieval. It can also play an active role in the process of discovery, as the Webbs noted in one of the earliest methodological texts:

It enables the scientific worker to break up his subject-matter, so as to isolate and examine at his leisure its various component parts, and to recombine the facts when they have been thus released from all accustomed categories, in new and experimental groupings.

(Webb and Webb 1932: 83)

Moreover, the selection of categories as a basis for organizing the data can be of some significance, as a later sociologist notes, referring to what became a classic ethnographic study:

As I gathered my early research data, I had to decide how I was to organize the written notes. In the very early stage of exploration, I simply put all the notes, in chronological order, in a single folder. As I was to go on to study a number of different groups and problems, it was obvious that this was no solution at all.

I had to subdivide the notes. There seemed to be two main possibilities. I could organize the notes topically, with folders for politics, rackets, the church, the family, and so on. Or I could organize the notes in terms of the groups on which they were based, which would mean having folders on the Nortons, the Italian Community Club, and so on. Without really thinking the problem through, I began filing material on the group basis, reasoning that I could later redivide it on a topical basis when I had a better knowledge of what the relevant topics should be.

As the material in the folders piled up, I came to realize that the organization of notes by social groups fitted in with the way in which my study was developing. For example, we have a college-boy member of the Italian Community Club saying: 'These racketeers give our district a bad name. They should really be cleaned out of here.' And we have a member of the Nortons saying: 'These racketeers are



really all right. When you need help, they'll give it to you. The legitimate businessman – he won't even give you the time of day.' Should these notes be filed under 'Racketeers, attitudes toward'? If so, they would only show that there are conflicting attitudes toward racketeers in Cornerville. Only a questionnaire (which is hardly feasible for such a topic) would show the distribution of attitudes in the district. Furthermore, how important would it be to know how many people felt one way or another on this topic? It seemed to me of much greater scientific interest to be able to relate the attitude to the group in which the individual participated. This shows why two individuals could be expected to have quite different attitudes on a given topic.

(Whyte 1981: 309)

Whyte's comments here emphasize the importance of anticipating how the data might be used. Equally important, no system of filing or coding and retrieval can ever remove the necessity to remain sensitive to the immediate social context of speech and action.

The allocation of data to categories in ethnography has usually differed from the kind of coding typical in quantitative research, including content analysis (Krippendorff 1980; however see also Franzosi 2004). In ethnographic coding, there is no requirement that items of data be assigned to one and only one category, or that there be explicit rules for assigning them:

We code [the fieldnotes] inclusively, that is to say if we have any reason to think that anything might go under the heading, we will put it in. We do not lose anything. We also code them in multiple categories, under anything that might be felt to be cogent. As a general rule, we want to get back anything that could conceivably bear on a given interest. . . . It is a search procedure for getting all of the material that is pertinent.

(Becker 1968: 245)

Indeed, Lofland (1971) argues that in the case of analytic categories it pays to be 'wild', to include anything, however long a shot.

The identification of categories is central to the process of analysis (although it should not be confused with analysis *per se*). As a result, the list of categories in terms of which the data are organized generally undergoes considerable change over the course of the research. In particular, there is typically a shift towards more abstract categories as the work develops (see Chapter 8).

In the past, ethnographers manipulated their data by means of the physical indexing and sorting of precious manuscript and typescript texts. Nowadays, many ethnographers use personal computers to facilitate the storage, indexing and retrieval of textual data for analytic purposes. To a considerable extent, the computer software for ethnographic data storage and retrieval recapitulates the procedures associated with earlier, manual approaches. We shall comment on manual techniques before going on to discuss computer-based applications. It is important not to assume that all ethnographic data must now be stored and searched on computer. For many researchers there will still be a place for simple manual procedures.

Organizing and reorganizing the data in terms of categories can be done in a number of ways. The simplest is 'coding the record'. Here data are coded, that is, assigned to categories, on the running record itself (or, better, a copy of it). Comments relating

the data to descriptive or analytic categories are written in the margin, on the reverse, or on interleaved pages, depending on the format of the data themselves. This is quick, and preserves the sense of 'reading' the data. It is not, however, well adapted to subsequent procedures of searching and retrieving data segments. In a more sophisticated version of this strategy, an analytic index is produced. Here each data segment is indexed under a developing set of headings, stored on index cards or in a simple database program. Identically or similarly coded segments can thus be found in the original hard copy of the data when required. However, this does not make their comparison very easy.

An alternative method of data organization, used by many ethnographers in the past, is physical sorting. Multiple copies of the data are made, and each segment of the data is stored in folders representing all the categories to which it is deemed relevant. With this approach, ethnographers can find all the data collected together when they come to analyse and write up a particular theme. At the same time, the physical storage of multiple copies has limitations: not least the time taken to produce copies and the sheer space requirements of a large and complex data set.

There is little doubt that when handling small data sets, such simple procedures can serve users just as well as more complex data-handling software. However, the capacities of word-processing have become so commonplace that most of us now take for granted the remarkable flexibility that it provides in storing, manipulating, sharing and searching textual materials. We can input and store vast amounts of written and visual materials. Moreover, it is possible to use wordprocessing programs to copy segments of data and paste them into folders relevant to different analytic themes. However, ethnographers now have available to them specialized software for the management of texts and pictures. Initially, this was restricted to following more or less the same pattern as the coding and retrieval involved in physical sorting. In other words, it relied on the procedure of marking segments of data with codes, and then using the capacity of the software rapidly to search the data set(s) for all segments tagged with the same code. In this way, instances in the data can be collated and aggregated under thematic, analytic headings.

However, over the course of recent years, the software has evolved to develop functions that reflect more fully the array of opportunities that are presented by digital technology. Over the same period, digital technologies themselves have become more widespread, more affordable, and better adapted to the needs of field researchers. There is now a specialist literature that deals directly with the use of CAQDAS (Computer Aided Qualitative Data Analysis Software), and that provides practical advice on how to use it. In the course of this chapter, we shall discuss the use of such analytic software in general terms, rather than attempting to offer the kind of user's guide that other publications readily provide (see, for instance, Lee and Fielding 2004).

One advantage of coding software over manual methods was the capacity to search the data comprehensively, avoiding partial or improperly selective sampling of events and examples. The fact that such searches were virtually instantaneous, encouraged more thorough examination of the data. The advantages of CAQDAS coding were more far-reaching, however. Manual searching is not an effective way of combining multiple codes. The great virtue of code-and-retrieve software capabilities lay in the fact that one could attach several codes to particular stretches of data, with segments overlapping one another, and codes nesting within one another. This facilitates more complex forms of analysis.

In this way, the complexity of coding could reflect the sort of complexity that one would hope to find in qualitative data. After all, interview informants do not talk about just one topic at a time. Equally, observed social action does not present itself to the ethnographer one theme at a time. The social world – and therefore our data – is complex in its enactments. Data, therefore, need to be coded densely, and to be faithful to the many possible topics and themes that are discoverable. It has been the great strength of CAQDAS not only that data can be coded in complex ways, but also that the data can then be searched and retrieved in ways that respect that complexity. Even elementary Boolean logic ( $X$  and  $Y$ ,  $X$  not  $Y$ , etc.) can permit the analyst to conduct sophisticated searches. Equally, the capacity to treat code words as synonyms, and hence to combine codings, can help the analyst build up from detailed, concrete codings to more generic, analytically productive concepts.

The basic ideas and procedures of CAQDAS embodied the ideas about ethnographic analysis that were reflected in grounded theorizing – or at least the versions of grounded theorizing that were widely current at the time it was originally developed (Glaser and Strauss 1967; Strauss 1987).<sup>5</sup> Indeed, the authors of the software were in some cases quite explicit about the conceptual relationship between the two. Although it is always unwise to imply that any computer software exercises agency in predetermining how analysts conceptualize their work, and although senior commentators in the field stress the independence of software from any single analytic paradigm, there is little doubt that the parallel evolution of the software with other methodological writing has meant that there is a mutual influence. For many researchers and their students, the development of CAQDAS has meant the implementation of a ‘grounded theory’ strategy, where grounded theorizing itself has been largely equated to an analysis based on data-coding.<sup>6</sup>

The availability of software has also allowed the searching of large data sets for ‘indigenous’ terms in the texts of fieldnotes or transcripts. In other words, it is possible to find every example of the use of a given word by participants or informants, or the presence of such a term in one’s own (or another researcher’s) fieldnotes. Again, the use of Boolean algebra allows the grouping of terms together thereby creating complex search strategies. The use, therefore, of bulk-indexing software, that had originally been developed for tasks like indexing legal and other official documents, was a potentially useful resource for ethnographic and other qualitative analysts. While the commercial qualitative analysis software often has such a facility incorporated within it, specialized text-retrieval software – such as Wordcruncher or ZiINDEX – should remain part of the digital resource-base of the contemporary ethnographer.

One key development in CAQDAS software has been an increasing emphasis on so-called ‘theory-building’. Whereas code-and-retrieve is predicated on establishing the relationship between codes and data, theory-building goes beyond this, the software being designed to show relationships among codes. Even so, as Atkinson, among others, has pointed out, a great deal of what passes for ‘analysis’ in current ethnographic research is often based on a ‘culture of fragmentation’. That is, it is assumed that the basis of analysis rests in the work of segmenting and disaggregating data. It has been described in terms of *decontextualizing* data from its original location (e.g. in the

5 Grounded theorizing is discussed in Chapter 8.

6 This is not the place for arcane disputes, but we should note that Lee and Fielding (1996) have challenged this observation. However, their grounds for doing so are not watertight, since they rely for evidence only on explicit references to the use of grounded theorizing.

fieldnotes) and *recontextualizing* them into analytically driven categories. Now this is unexceptional in and of itself, and it would be hard to quarrel with as one productive way of managing data. But this is not the only way of thinking about data and it is certainly not the only way of thinking about analysis and the generation of theory. Approaches that are more sensitive to the immediate contexts of action, and that resist the treatment of instances as being susceptible to simple aggregation, are characteristic of many forms of discourse and narrative analysis. While code-based analyses do not necessarily violate those analytic considerations, they can readily lead to an overemphasis on decontextualized instances.

Kelle (2004: 485) has pointed out that many of the functions of contemporary CAQDAS are under-used by most researchers. 'In the ongoing discussions of the 1990s it became apparent that enhanced strategies for hypothesis testing, quantitatively oriented typology construction and "qualitative comparative analysis" were only seldom applied by CAQDAS users' (see also Dotzler 1995). Consequently, in evaluating the actual impact of CAQDAS on research practice, it is important to distinguish between the claims entered on its behalf by developers and advocates, the functional possibilities inscribed in the software, and the actual uses to which it is put. We should not be surprised to discover that, in practice, software has not led inexorably to more sophisticated and complex analytic work with ethnographic data. Our own experience suggests that many students and researchers are in practice using software still to perform the sort of sorting and retrieval tasks that were done manually in previous generations. This is not a problem in itself, but it detracts from overheated claims to the effect that the software is encouraging 'theory-building'.

It is important to realize that CAQDAS is by no means confined to the management of textual materials like transcripts and fieldnotes. It is often also possible to include and code visual and sound data. Indeed, there is no reason in principle to exclude any data that can be rendered digitally from inclusion in the standard software strategies. Furthermore, some packages also provide for combining quantitative and qualitative data.

## **Conclusion**

While it is impossible to render explicit all the data acquired in fieldwork, every effort must be made to record it. Memory is an inadequate basis for subsequent analysis. Of course, most kinds of data recording are necessarily selective and involve some interpretation, however minimal. There is no set of basic, indubitable data available from which all else may be inferred. What is collected or recorded, and how, will depend in large part on the purposes and priorities of the research, and the conditions in which it is carried out. Moreover, in using various recording techniques we must remain aware of the effects their use may be having, both on participants and on our analytic interpretations; and be prepared to modify the strategy in light of this. Similarly, there is no finally correct way to store information or to retrieve it for analysis. The various systems – including currently available software – differ in appropriateness according to one's purposes, the nature of the data collected, the facilities and finance available, the size and scope of the research project, as well as personal convenience.

As with other aspects of ethnographic research, then, recording, storing, and retrieving data must be viewed as part of the reflexive process. Decisions are to be made, monitored, and – if necessary – remade in the light of methodological, practical and ethical

considerations. At the same time, however, these techniques play an important role in promoting the quality of ethnographic research. They provide a crucial resource in assessing typicality of examples, checking construct-indicator linkages, searching for negative cases, triangulating across different data sources and stages of the fieldwork, and assessing the role of the researcher in shaping the nature of the data and the findings. In short, they facilitate – but should not determine – the process of analysis, a topic to which we turn in the next chapter.