

influence is increased if the researcher is present in the research situation for technical reasons. The greater the effort in videotaping and the more comprehensive the insight it permits into the everyday life under study, the greater may be the possible scepticism and reservations on the part of participants in the study. This makes the integration of the recording procedure in the daily life under study more complicated.

Scepticism about the naturalness of recordings

Correspondingly, thoughtful reflections on the use of recording technology in qualitative research can be found. These forms of recording have replaced the interviewers' or observers' notes – which were the dominant medium in earlier times. For Hopf they provide 'increased options for an intersubjective assessment of interpretations . . . for taking into account interviewer and observer effects in the interpretation . . . and for theoretical flexibility' compared with 'the necessarily more selective memory protocols' (Hopf 1985, pp. 93–4). This new flexibility leads 'to a new type of "qualitative data hoarding" owing to the delays in decisions about research questions and theoretical assumptions which are now possible'.

New questions concerning research ethics, changes in the studied situations caused by the form of recording¹ and a loss of anonymity for the interviewees (see Bergold and Flick 1987, pp. 13–15) are linked to this. The ambivalence Hopf (1985) expresses against the new options for recording qualitative data suggests that it is important to treat this point not as a problem of technical detail but rather in the sense of a detailed 'qualitative technology assessment'; and also, in the considerations about the appropriate method for documentation, to include 'out-of-date' alternatives which were displaced by the new technologies.

FIELD NOTES

The classic medium for documentation in qualitative research has been the researcher's notes (Lofland and Lofland 1984; Sanjek 1990). The notes taken in interviews should contain the essentials of the interviewee's answers and information about the proceeding of the interview. The participant observer repeatedly interrupts his or her participation to note important observations, as the description in Box 14.1 of the classic documentation technique, its problems and the chosen solutions to them makes clear.

Lofland and Lofland (1984) formulate as a general rule that such notes should be made as immediately as possible. The withdrawal necessary for this may introduce a certain artificiality in the relation to interaction partners in the field. Especially in action research, when the researcher takes part in the events in the field and does not merely observe them, it is

Box 14.1 Field notes in practice

Our usual practice was to spend limited periods of time in the field, perhaps two or three hours. When we could appropriately leave the field, we headed immediately for a typewriter or Dictaphone. If leaving was impossible, we took brief memory-refreshing notes whenever lulls occurred and recorded them fully as soon thereafter as possible. The recording of field notes presented a number of problems involving discrimination among events seen and heard, as well as an interviewer's impressions or interpretations. As professionals, all of us were mindful of the pitfalls attending recall and the all-too-easy blurring of fact and fancy. We attempted therefore to make these discriminations clearly, either by stating them unmistakably or by developing a notational system for ensuring them. Verbal material recorded within quotations signified exact recall; verbal material within apostrophes indicated a lesser degree of certainty or paraphrasing; and verbal material with no markings meant reasonable recall but not quotation. Finally, the interviewer's impressions or inferences could be separated from actual observations by the use of single or double parentheses. Although this notational system was much used, none of us was constrained always to use it.

Source: Strauss et al. 1964, pp. 28–9

additionally difficult to maintain this freedom for the researcher (see Decker 1979). An alternative is to note impressions after ending the individual field contact. Lofland and Lofland (1984, p. 64) recommend that researchers use a 'cloistered rigor' in following the commandment to make notes immediately after the field contact, and furthermore that researchers estimate the same amount of time for carefully noting the observations as for spending on the observation itself. It should be ensured that (maybe much) later a distinction can still be made between what has been observed and what has been condensed by the observer in his or her interpretation or summary of events (see Chapter 18 on procedural reliability of protocols). On the other hand, researchers may develop a personal style of writing notes after a while and with increasing experience.

All in all, the production of reality in texts starts with the taking of field notes. This production is essentially marked by the researcher's selective perception and presentation. This selectivity concerns not only the aspects that are left out but above all those which find their way into the notes. It is only the notation that raises an occurrence out of its everyday course and transitoriness and makes it into an event to which the researcher, interpreter and reader can turn their attention repeatedly. One way of reducing or at least qualifying this selectivity of the documentation is to complement

the notes by diaries or day protocols written by the subjects under study in parallel with the researcher's note taking. Thus, their subjective views may be included in the data and become accessible to analysis. Such documents from the subject's point of view can be analysed and contrasted with the researcher's notes. Another way is to add photos, drawings, maps and other visual material to the notes. A third possibility is to use an electronic notebook, a dictating machine or similar for recording the notes.

Correspondingly, Spradley (1980, pp. 69-72) suggests four forms of field notes for documentation:

- condensed accounts in single words, sentences, quotations from conversations etc.;
- an expanded account of the impressions from interviews and field contacts;
- a fieldwork journal, which like a diary 'will contain . . . experiences, ideas, fears, mistakes, confusions, breakthroughs, and problems that arise during fieldwork' (1980, p. 71);
- notes about analyses and interpretations, which start immediately after the field contacts and extend until finishing the study.

RESEARCH DIARY

Especially if more than one researcher is involved, there is a need for documentation of and reflection on the ongoing research process in order to increase the comparability of the empirical proceedings and focuses in the individual notes. One method of documentation is to use continually updated research diaries written by all participants. These should document the process of approaching a field, and the experiences and problems in the contact with the field or with interviewees and in applying the methods. Important facts and matters of minor importance or lost facts in the interpretation, generalization, assessment or presentation of the results, seen from the perspectives of the individual researcher, should also be incorporated. Comparing such documentations and the different views expressed in them makes the research process more intersubjective and explicit. Furthermore, they may be used as 'memos' in the sense of Strauss (1987, in particular Chapter 5) for developing a grounded theory. Strauss recommends making memos during the whole research process which will contribute to the process of building a theory. Documentation of this kind is not only an end in itself or additional knowledge but also serves in the reflection on the research process.

Several methods have been outlined for 'catching' the interesting events and processes, statements and proceedings. In the noting of interventions in

the everyday life under study, the researcher should be led in his or her decisions by the following *rule of economy*: to record only as much as is definitely necessary for answering the research question. He or she should avoid any 'technical presence' in the situation of the data collection that is not absolutely necessary for his or her theoretical interests. Reducing the presence of recording equipment, and informing the research partners as much as possible about the sense and purpose of the chosen form of recording, make it more likely that the researcher will 'catch' truly everyday behaviour in natural situations. In the case of research questions where 'out-of-date' forms of documentation such as preparing a protocol of answers and observations are sufficient, it is highly recommended to use these forms. But these protocols should be made as immediate and comprehensive as possible in order mainly to record impressions of the field and resulting questions.

DOCUMENTATION SHEETS

For interviews, it has proved to be helpful to use sheets for documenting the context and the situation of data collection (for this see Flick 1996; Witzel 1985). What information they should concretely include depends on the design of the study, e.g. if several interviewees are involved or if interviews are conducted at changing locations, which supposedly might have influenced the interview. In addition, the research questions determine what should concretely be noted on these sheets. The example in Box 14.2 comes from the study of technological change in everyday life (Flick 1996), in which several interviewees conducted interviews with professionals in different work situations on the influences of technology on childhood, children's education in one's own family or in general, and so on. Therefore, the documentation sheet needed to contain explicit additional contextual information.

TRANSCRIPTION

If data have been recorded using technical media, their transcription is a necessary step on the way to their interpretation. Different transcription systems are available which vary in their degree of exactness (for overview see Ehlich and Switalla 1976; O'Connell and Kowall 1995). A standard has not yet been established. In language analyses the interest often focuses on attaining the maximum exactness in classifying and presenting statements, breaks etc. Here also the question of the appropriateness of the procedure may be asked. Not only does this contribute to the natural science ideals of

Box 14.2 Example of a documentation sheet

Information about the Interview and the Interviewee

Date of the interview:	.....
Place of the interview:	.....
Duration of the interview:	.....
Interviewer:	.....
Identifier for the interviewee:	.....
Gender of the interviewee:	.....
Age of the interviewee:	.....
Profession of the interviewee:	.....
Working in this profession since:	.....
Professional field:	.....
Raised (countryside/city):	.....
Number of children:	.....
Age of the children:	.....
Gender of the children:	.....
Peculiarities of the interview:	.....

Source: Flick 1996

exactness in measurement sneaking into interpretive social science through the back door, but also the formulation of rules for transcription tempts one into some kind of fetishism that no longer has a reasonable relation to the question and the products of the research. Where linguistic and conversational analytic studies focus on the organization of language, this kind of exactness may be justified. In more psychological or sociological questions, however, where linguistic exchange is a medium for studying certain contents, exaggerated standards of exactness in transcriptions are justified

only in exceptional cases. It seems more reasonable to transcribe only as much and only as exactly as is required by the research question (Strauss 1987). First, an over-exact transcription of data absorbs time and energy which could be invested more reasonably in their interpretation. Second, the message and the meaning of what was transcribed are sometimes concealed rather than revealed in the differentiation of the transcription and the resulting obscurity of the protocols produced. Thus Bruce (1992, p. 145; quoted in O'Connell and Kowall 1995, p. 96) holds:

The following very general criteria can be used as a starting point in the evaluation of a transcription system for spoken discourse: manageability (for the transcriber), readability, learnability, and interpretability (for the analyst and for the computer). It is reasonable to think that a transcription system should be easy to write, easy to read, easy to learn, and easy to search.

Beyond the clear rules of how to transcribe statements, turn taking, breaks, ends of sentences etc., a second check of the transcript against the recording and the anonymization of data (names, areal and temporal references) are central features of the procedure of transcription. Transcription in conversation analysis (see Chapter 16) has often been the model for transcriptions in social science. Drew (1995, p. 78) gives a 'glossary of transcription conventions', which may be used after the criteria with regard to the research question mentioned above have been applied (Box 14.3).

Box 14.3 Transcription conventions

[	Overlapping speech: the precise point at which one person begins speaking whilst the other is still talking, or at which both begin speaking simultaneously, resulting in overlapping speech.
(0.2)	Pauses: within and between speaker turns, in seconds.
'Aw:::	Extended sounds: sound stretches shown by colons, in proportion to the length of the stretch.
<u>Word</u> :	Underlining shows stress or emphasis.
'fishi-'	A hyphen indicates that a word/sound is broken off.
'hbbh'	Audible intakes of breath are transcribed as 'hbbh' (the number of h's is proportional to the length of the breath).
WORD:	Increase in amplitude is shown by capital letters.
(words. . .):	Parentheses bound uncertain transcription, including the transcriber's 'best guess'.

Source: adapted from Drew 1995, p. 78

REALITY AS TEXT: TEXT AS NEW REALITY

Recording the data, making additional notes and the transcription of the recordings transform the interesting realities into text, and tales from the field result (van Maanen 1988). At the very least, the documentation of processes and the transcription of statements lead to a different version of events. Each form of documentation leads to a specific organization of what is documented. Every transcription of social realities is subject to technical and textual structures and limitations, which make accessible what was transcribed in a specific way. The documentation detaches the events from their transience (Bergmann 1985). The researcher's personal style of noting things makes the field a presented field; the degree of exactness of the transcription dissolves the gestalt of the events into a multitude of specific details. The consequence of the following process of interpretation is that 'Reality only presents itself to the scientist in substantiated form, as text – or in technical terms – as protocol. Beyond texts, science has lost its rights, because a scientific statement can only be formulated when and in so far as events have found a deposit or left a trace and these again have undergone an interpretation' (Garz and Kraimer 1994, p. 8).

This substantiation of reality in the form of texts is valid in two respects: as a process which opens access to a field and, as a result of this process, as a reconstruction of the reality which has been textualized. The construction of a new reality in the text has already begun at the level of the field notes and at the level of the transcript and this is the only (version of) reality available to the researcher during his or her following interpretations. This should be taken into account in the more or less meticulous handling of the text which is suggested by each method of interpretation.

The more or less comprehensive recording of the case, the documentation of the context of origination and the transcription organizes the material in a specific way. The epistemological principle of understanding may be realized by being able to analyse the presentations or the proceeding of situations from the inside as far as possible. The documentation therefore has to be exact enough to reveal structures in those materials and it has to permit approaches from different perspectives. The organization of the data has the main aim of documenting the case in its specificity and structure. This allows the researcher to reconstruct it in its gestalt and to analyse and break it down for its structure – the rules according to which it functions, the meaning underlying it, the parts that characterize it. Texts produced in this way construct the studied reality in a specific way and make it accessible as empirical material for interpretive procedures.

NOTE

- 1 According to Bergmann, 'an audiovisual recording of a social event is by no means the purely de-descriptive representation which it may seem to be at first. Owing to its time-manipulative structure it has rather a con-structive moment in

it' (1985, p. 317). Thus after recording, a conversation can be cut off from its unique, self-contained temporal course and monitored over and over again. Then it may be dissected into specific components (e.g. participants' non-verbal signals) in a way which goes beyond the everyday perceptions of the participants. But this not only allows new forms of knowledge but also constructs a new version of the events. From a certain moment, the perception of these events is no longer determined by their original or natural occurrence but by their artificially detailed display.

FURTHER READING

The second text gives an overview and some critical reflections about transcription, and the others give an orientation for how to work with field notes.

Lofland, J., Lofland, L.H. (1984), *Analyzing Social Settings* (2nd edn). Belmont, CA: Wadsworth.

O'Connell, D., Kowall, S. (1995), Basic Principles of Transcription. In: Smith, J.A., Harré, R., Langenhove, L.V. (eds), *Rethinking Methods in Psychology*, pp. 93–104. London: Sage.

Sanjek, R. (ed.) (1990), *Fieldnotes: The Making of Anthropology*. Albany, NY: State University of New York Press.