

# The SAGE Handbook of Qualitative Data Analysis



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# Mapping the Field

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Data analysis is the central step in qualitative research. Whatever the data are, it is their analysis that, in a decisive way, forms the outcomes of the research. Sometimes, data collection is limited to recording and documenting naturally occurring phenomena, for example by recording interactions. Then qualitative research is concentrated on analysing such recordings. Given the centrality of the analysis in qualitative research, in general, a kind of stocktaking of the various approaches to qualitative analysis and of the challenges it faces seems necessary. Anyone interested in the current state and development of qualitative data analysis will find a field which is constantly growing and becoming less structured. There are many changes which have evolved in parallel, making the field even more complex than it used to be. This introductory chapter aims to map the field of qualitative data analysis by discussing its extension and by drawing a number of axes through the field that the handbook will cover in its chapters. We will look at the current variety of traditional and new methods

for analysing qualitative data before we consider the expansion of the phenomena and data available for analysis. The dimensions demarcating the proliferation of qualitative research and, especially, qualitative data analysis will be discussed here and unfolded in more detail in the individual chapters. After a definition of qualitative data analysis the major aims of qualitative data analysis will be outlined – such as reducing big data sets to core elements or expanding small pieces of data by adding extensive interpretations. Discussing some theoretical backgrounds and basic methodological approaches will complement this sketch of the field.

As the first axis, a historical line will be drawn, which intersects a second axis concerning geographical diversity, which is sometimes ignored. In the next step, we will look at the role of data analysis in the research process. Another axis is linked to the difference between producing new data and taking existing, naturally occurring data for a research project. A further distinction is related to the major approaches to analysing data – either

to reduce the volume or the complexity of the data, or to expand the existing material by writing new texts consisting of interpretations about it. The rather simple relation of one kind of data to be analysed with one methodological approach has become more complex at both ends when triangulation is part of the methodology of a project. What are the consequences for the analysis if multiple types of data are employed? What becomes 'visible' if several forms of analysis are applied to the same set of data? Another axis through the field is linked to the tension between formalization and intuition in the analysis. At the end of this chapter, some new trends and developments in the field will be outlined. Here, new types of data, a trend to visualization and developments on the level of technological support for doing the analysis will be discussed. Qualitative research is more and more confronted with some new challenges – how to make data available for re- and meta-analysis; what do the calls for relevance and implementation mean in this context; and what are the ethical issues around qualitative data analysis? After briefly discussing these issues, an overview of the handbook and its parts and chapters will complete this introduction.

## PROLIFERATION OF QUALITATIVE RESEARCH

Over the past few decades, qualitative research has undergone a proliferation on at least three levels. First, it has established itself in a wide range of disciplines beyond such disciplines as sociology, anthropology and education. We find qualitative research now in such varied fields as nursing, medicine, social work, psychology, information science, political science, and the like. Even if in many of these disciplines qualitative research is not in the mainstream of research and not at the core of methods training or teaching in general, ongoing research increasingly includes qualitative studies.

These developments have led to an interesting gap, which forms a second level of proliferation: a variety of methods and approaches for data analysis have been developed and spelled out in the methodology literature mainly in the original disciplines. The range stretches from content analysis to conversation analysis, from grounded theory to phenomenological analysis, from narrative to film analysis, from visual data analysis to electronic data analysis, etc. (see the respective chapters in this volume). However, experience with reviewing articles and PhD and other theses from different disciplines shows how often the *analysis* of qualitative data is done in more or less a 'hands-on' way in both the original and the other disciplines. Researchers sometimes 'just do it' (to use a phrase of Barney Glaser, 1998) or they look for certain topics in their materials and construct an account of their findings by illustrating these topics with 'interesting' quotations from interviews, for example. These quotes are often not really analysed in the article (or PhD dissertation) but treated as illustrations. Another way of describing (and doing) qualitative data analysis is to mix up tools with methods. Articles in which the method of data analysis is described by only referring to the Qualitative Data Analysis (QDA) program (see Gibbs, Chapter 19, this volume) that was applied are still quite common. All in all, this means that there is a gap between methodological developments on one side and research practice on the other. This gap results from the lack of a systematic and comparative overview and stocktaking of the variety of analytic procedures that are available for doing qualitative data analysis. This handbook intends to bridge this gap by giving an overview of methodological approaches with a strong focus on research practice in applying them to data and emphasizes the practical application of methods rather than their conceptual development.

Qualitative research has undergone a third major proliferation over the past few decades, which concerns the types of

data that are used. Interviews, focus group transcripts and observation protocols are traditional types of data, which are now complemented with visual, virtual, textual, acoustic and other data. These forms of data represent the diversification of ways of communication and documentation of individual and social experiences. At the same time, methods for *producing* these data have proliferated as well and new devices for recording activities and processes in their complexity have been developed. Videotaping, acoustic recording devices, Internet formats like Facebook, etc., are adopted to catch relevant aspects of the life worlds in the twenty-first century. However, this proliferation of issues to be analysed and of data produced and available has not always been accompanied by a systematic and adequate proliferation of approaches for *analysing* such qualitative data. The methods that are used are often traditional ones (e.g. grounded theory, coding, content analysis) or are developed but mostly applied hands-on for the single

project. The handbook intends to cover the variety of approaches starting from the diversity of types of data that are used in qualitative research.

## WHAT IS QUALITATIVE DATA ANALYSIS?

The central focus of this book is the variety and diversity of the ways of doing qualitative data analysis. Therefore it might be helpful first to outline the common core of this practice by (1) giving a working definition, followed by (2) discussing the aims of qualitative data analysis and finally by (3) looking at theoretical backgrounds and basic methodological approaches.

### Definition

In Box 1.1 a rather general definition of qualitative data analysis is outlined which emphasizes the move from data to meanings or representations.

### Box 1.1 What Is Qualitative Data Analysis?

Qualitative data analysis is the classification and interpretation of linguistic (or visual) material to make statements about implicit and explicit dimensions and structures of meaning-making in the material and what is represented in it. Meaning-making can refer to subjective or social meanings. Qualitative data analysis also is applied to discover and describe issues in the field or structures and processes in routines and practices. Often, qualitative data analysis combines approaches of a rough analysis of the material (overviews, condensation, summaries) with approaches of a detailed analysis (elaboration of categories, hermeneutic interpretations or identified structures). The final aim is often to arrive at generalizable statements by comparing various materials or various texts or several cases.

### Aims of Qualitative Data Analysis

The analysis of qualitative data can have several aims. The first aim may be to *describe* a phenomenon in some or greater detail. The phenomenon can be the subjective experiences of a specific individual or group (e.g. the way people continue to live after a fatal

diagnosis). This can focus on the case (individual or group) and its special features and the links between them. The analysis can also focus on *comparing* several cases (individuals or groups) and on what they have in common or on the differences between them. The second aim may be to identify the conditions on which such differences are based. This

means to look for *explanations* for such differences (e.g. circumstances which make it more likely that the coping with a specific illness situation is more successful than in other cases). The third aim may be to *develop a theory* of the phenomenon under study from the analysis of empirical material (e.g. a theory of illness trajectories).

The aims above are three general aims of qualitative data analysis. In addition we can distinguish the analysis of (1) *content* from that of (2) *formal aspects* and from approaches that (3) *combine both*. For example, we can look at what participants report about their illness experiences and compare the contents of such reports with statements made by other participants. Or we can look at formal aspects of an interaction about these experiences (with a family member or a professional), when the language becomes unclear, pauses become longer, and the like. Or we can look at the content *and* formal aspects in a public discourse about chronic illness. The handbook provides chapters on methods for pursuing each of these aims in qualitative analysis.

### ***Theoretical Backgrounds and Basic Methodological Approaches***

Qualitative data analysis – as qualitative research in general – can take three approaches to analysing social phenomena. A first approach puts subjective experiences as the focus: what are patients' experiences of being chronically ill from a specific disease; how do they describe living with it; what are their explanations for being in this situation? For this approach data often come from interviews with the patients – or from documents such as the diaries that patients have written. A second approach focuses on describing the making of a social situation: how does the family of the patient interact about the illness and its consequences for their family and public life? For this approach, data, for example, result from participant observation or from recording family interactions with or about the patient and the illness. A third approach is to go beyond the first two approaches and into spheres of

implicit and even unconscious aspects of a social phenomenon. Data again come from recording interactions but also from analysing phenomena beyond individual awareness. Here the interpretation of phenomena, interaction and discourses comes to the fore. The backgrounds of these approaches are in the first case knowledge and meaning that can be reported by the participants. This can be linked back theoretically to social theories such as symbolic interactionism (Blumer, 1969). In the second approach, the practices and routines that make everyday life possible and work are in the background of the concrete methodological procedures. The theoretical roots of this approach are ethnomethodology (e.g. Garfinkel, 1967). Participants are not necessarily aware of these routines or reflecting on them. In the third approach, knowledge beyond the individuals' accessibility is to the fore. The theoretical roots are structuralist models and psychoanalysis and its concept of the unconscious. Although the focus of the handbook is on research practice rather than on theories, it covers methods that make all of these approaches work in qualitative data analysis.

### **HISTORICAL DEVELOPMENTS**

When the history of qualitative research is considered, reference is often made to Denzin and Lincoln's (2005: 14–20; 2011: 3) stage model (see also Flick, 2014: ch. 2, for the following discussion). They present 'eight moments of qualitative research'. These stages can also be taken as a starting point for a developmental perspective on qualitative data analysis. The *traditional period* is located between the early twentieth century and the Second World War. The Chicago School in sociology or the research of Malinowski in ethnography are used as examples. During this period, qualitative data analysis aimed at a more or less objective description of social phenomena in society or in other cultures. The second stage is called the *modernist phase*, which extends from the 1950s to the 1970s. It is marked by

publications such as Glaser and Strauss's (1967) textbook on how to do qualitative analysis with the aim of theory development. In that period, data analysis was driven by various ways of coding for materials often obtained from participant observation. Ethnomethodology (Garfinkel, 1967) at the same time turned the focus on more and more formal analysis of everyday practices and mainly of conversations. The attitudes of both kinds of research are still alive in current qualitative research (see Thornberg and Charmaz, Chapter 11, Eberle, Chapter 13, and Toerien, Chapter 22, this volume).

Denzin and Lincoln use a term introduced by Geertz (1983) to characterize the developments up to the mid-1980s: *blurred genres*. Various theoretical models and understandings of the objects and methods stand side by side, from which researchers can choose and compare 'alternative paradigms', such as symbolic interactionism, ethnomethodology, phenomenology, and others. Data analysis turned more to interpretation of phenomena (narratives, ethnographic descriptions) and writing essays rather than coding and categorizing (which continued to be used, however). In this period, the first software programs and packages for computer-supported data analysis were developed (see Gibbs, Chapter 19, this volume).

In the mid-1980s, the *crisis of representation*, the presentation and, in particular, the process of writing in research became central topics. The focus on analysing data was much more on interpretation than on identifying linear models. For example, the paradigm model suggested by Strauss and Corbin (1990) as an orientation for coding data assumes that causes lead to phenomena and they, in turn, lead to consequences, and proposes to look for such chains of concepts. In this period, qualitative research and data analysis are understood as a continuous process of constructing versions of reality. After all, the version of themselves that people present in an interview does not necessarily correspond to the version they would have given to a different researcher with a different

research question. Researchers, who interpret the interview and present it as part of their findings, produce a new version of the whole. In this context, the evaluation of research and findings becomes a central topic in methodological discussions. This raises the question as to whether traditional criteria are still valid and, if not, which other standards should be applied in assessing qualitative research (see Barbour, Chapter 34, this volume). At the same time, the technical devices for analysing data proliferated and all sorts of programs were developed that could be selected if they matched the questions and type of research at stake.

For the *fifth moment* (in the 1990s) Denzin and Lincoln mention that narratives have replaced theories, or theories are read as narratives. Here (as in postmodernism, in general) the end of grand narratives is proclaimed; the accent is shifted towards (local) theories and narratives that fit specific, delimited, local, historical situations, and problems. Data analysis adapted to this turn. In the next stage (*sixth moment*) post-experimental writing, linking issues of qualitative research to democratic policies, became more prominent. The *seventh moment* is characterized by further establishing qualitative research through various new journals. Denzin and Lincoln's *eighth moment* in the development of qualitative research focused on the rise of evidence-based practice as the new criterion of relevance for social science and to the new conservatism in the United States.

Denzin and Lincoln's outline of its history is often taken as a general reference for the development of qualitative research. However, as authors like Alasuutari (2004) suggest, this general 'progress narrative' (2004: 599) is mainly focused on the development in the Anglo-Saxon area. Instead, he proposes a spatial, rather than a temporal, view of the development of qualitative research. In this way Denzin and Lincoln's history of qualitative research can be complemented with the various ways qualitative research has developed in other regions.

### German-Speaking Areas

Qualitative research in German-speaking areas can be traced back to the works of Max Weber and Alfred Schütz, for example, but had become less influential after the Second World War here as well. They were rediscovered in the 1960s, when a series of anthologies imported and translated relevant articles from the American literature. Thus the basic texts on ethnomethodology or symbolic interactionism became available for German discussion. The model of the research process created by Glaser and Strauss (1967) attracted much attention and promoted the idea that it could do more justice to the objects of research than was possible in quantitative research.

At the end of the 1970s, a broader and more original discussion began in Germany, which no longer relied exclusively on the translation of American literature. This discussion dealt with interviews, how to apply and how to analyse them, and with methodological questions that have stimulated extensive research (see Flick et al., 2004, for an overview).

In the 1980s, two original methods were developed that became crucial to the establishment of qualitative research in Germany: the narrative interview by Schütze (1977; see Esin et al., Chapter 14, this volume) and objective hermeneutics (see Reichertz, 2004, and Wernet, Chapter 16, this volume). Both

methods no longer were imports of American developments and stimulated extensive research practice, mainly in biographical research. Most important was their influence on the general discussion of qualitative methods in German-speaking areas.

In the mid-1980s, questions about the validity and the generalizability of findings obtained with qualitative methods attracted broader attention. Related questions of presentation and the transparency of results were also discussed. The quantity and, above all, the unstructured nature of the data also promoted the use of computers in qualitative research. One result was the development of software programs in Germany such as ATLAS.ti and MAXQDA (see Gibbs, Chapter 19, this volume). Finally, the first original textbooks or introductions on the background of the discussions in the German-speaking area were published (see Table 1.1).

This juxtaposition of American and German developments is relevant here for two reasons. First, the latter German developments – the theoretical and methodological discussions, the methods resulting from them and the research practice with them – are almost not represented in Denzin and Lincoln's stage model or in the methodological discussions around it – except for the two software programs. Thus, this development can be seen as an example of spatial differentiation

**Table 1.1 Phases in the history of qualitative research**

United States	Germany
Traditional period (1900 to 1945)	Early studies (end of nineteenth and early twentieth centuries)
Modernist phase (1945 to the 1970s)	Phase of import (early 1970s)
Blurred genres (until the mid-1980s)	Beginning of original discussions (late 1970s)
Crisis of representation (since the mid-1980s)	Developing original methods (1970s and 1980s)
Fifth moment (the 1990s)	Consolidation and procedural questions (late 1980s and 1990s)
Sixth moment (post-experimental writing)	Research practice (since the 1980s)
Seventh moment (establishing qualitative research through successful journals, 2000 to 2004)	Methodological proliferation and technological developments (since the 1990s)
Eighth moment (the future and new challenges – since 2005)	Establishing qualitative research (journals, book series, scientific societies – since the 1990s)

(Alasuutari, 2004) that is neglected in the general progress narrative recognized in the Anglo-Saxon literature.

Second, some of the methodological outcomes of this development will be taken up in this handbook in extra chapters on such topics as phenomenology (see Eberle, Chapter 13), (objective) hermeneutics (see Wernet, Chapter 16) and the further elaborations of content analysis (see Schreier, Chapter 12).

Several authors now argue for more openness to local and cultural diversity regarding the development and progress of qualitative research. In this context, several overviews of the internationalization of qualitative research, in particular in Europe and across the cultural, linguistic, and methodological diversities, can widen the perspective on what qualitative research in various geographical areas is like in times of globalization (see Knoblauch et al., 2005; Ryan and Gobo, 2011; Schnettler and Rebstien 2012; and Flick, forthcoming). Hsiung (2012), for example, discusses a core-periphery divide in this context. Anglo-American (core) methods and texts are translated and exported to Asian countries currently and define what qualitative research is about and push local methodologies aside. Alasuutari (2004) discusses this problem by juxtaposing a temporal development approach (the eight phases of qualitative research) with a spatial approach that focuses more on local traditions of qualitative research, in general.

At the same time, discussions started and are recognized as necessary about the Western-culture-based tacit assumptions of some of the major qualitative methods. This can only be illustrated here briefly for interview and observational methods. In Western European societies it is quite normal for people to be interviewed and it is also normal to talk about one's own personal history and individual experiences to a professional stranger. It is not uncommon to have such a conversation recorded if some rules are defined (anonymization, data protection, etc.). It may be an irritating idea, but it is still quite normal

for your statements to be later analysed and interpreted. Gobo (2012) discusses a number of necessary and taken-for-granted preconditions of using this approach in qualitative research. These include the ability on the part of the interviewee to speak for him or herself, and an awareness of him or herself as an autonomous and independent individual; an extended concept of public opinion, necessary for communicating opinions and attitudes and describing behaviours considered private in a pre-industrial society, etc. As we experience in our own research with migrants from Russian-speaking countries, being interviewed (and recorded) has different connotations and is much less a normal routine (Flick and Röhnsch, forthcoming). Instead, we found that many interviews are connected with being investigated by the state and the expected self-disclosure is anything but normal, but conflicting with some cultural values. The same criticism applies to research involving observation where a researcher takes notes about everyday routines and interaction and writes reports about field contacts. Again this is linked to practices of control by the state and of breaching privacy. These cultural differences in the meanings linked to practices that are basic for prominent qualitative methods become relevant in applying these methods in intercultural contexts, in recruiting participants and in negotiating informed consent with them (see Mertens, Chapter 35, this volume), and has an impact on what we can analyse as data in the process. These issues cannot be discussed here extensively but illustrate the need for reflecting on our research approaches for their underlying and sometimes implicit cultural assumptions.

## THE ROLE OF DATA ANALYSIS IN THE RESEARCH PROCESS

The analysis of qualitative data is often one step in a series of steps throughout the research process. It comes after field access has been found, sampling decisions have been taken, data have been collected, recorded



and elaborated (e.g. transcribed). In such a model of the research process, an intensive data analysis only starts when all data have been collected and prepared. In other cases, the analysis begins with the collection of the data and both steps are applied in a parallel, sometimes entangled way. Qualitative data analysis can also be the central step in qualitative research to which all other steps are subordinated. Data collection then is only a means for advancing the analysis of the phenomenon and what is available so far as empirical material referring to it. Other decisions in the research process are driven by the state of the data analysis and the questions still unanswered. A prominent example for this approach to data analysis is grounded theory, where sampling decisions, sometimes the decisions about which methods to use for further collection of data etc., are driven by the state of the data analysis. Most prominent is the concept of 'theoretical sampling' (see Rapley, Chapter 4, and Thornberg and Charmaz, Chapter 11, this volume), which means that sampling decisions are taken with the focus on further elaborating or substantiating the categories developed in the analysis so far. The linear model of the research process then is replaced by a more modular model, in which the analysis of data has become the central node in the organization of the other elements of the researchers' work. This means it is not so much the specific features of the data that drives the analysis, but the analysis drives the search for data in different formats. A similar centrality of the analysis of phenomena and the search for appropriate types of data can be found in ethnographic research (see Gubrium and Holstein, Chapter 3, this volume), although here the writing about the phenomenon and the field becomes a major element in the data analysis (see Denzin, Chapter 39, this volume). These brief examples show that there are different approaches to the role of data analysis in the qualitative research process.

## USING ELICITED DATA OR ANALYSING EXISTING PHENOMENA

Another axis through the field of qualitative data analysis is linked to the question of where the data come from or, in other words, what is used or accepted as data. On one side of this axis, we find data that result from employing specific methods to produce them for the purpose of the actual research: interviews (see Roulston, Chapter 20, this volume) are a prominent way of producing such data as are focus groups (see Barbour, Chapter 21, this volume). Data coming from participant observation (see Marvasti, Chapter 24, this volume) or ethnography (see Gubrium and Holstein, Chapter 3, this volume) and the field notes written for the research also fall into this category. On the other side of this divide, we find approaches based on the idea of using naturally occurring data instead of producing them specifically for the research. The act of data collection in such cases is limited to recording, for example, everyday interactions or routine practices in professional work. The analytic approaches such as conversation analysis (see Toerien, Chapter 22, this volume) and discourse analysis (see Wiliig, Chapter 23, this volume) but also hermeneutics (see Wernet, Chapter 16, this volume) not only use naturally occurring data, but also link their analyses closely to the data and their (temporal) structure. Researchers do not navigate through the data every which way in looking for excerpts for filling categories, but apply the principle of sequentiality (see Wernet, Chapter 16, but also Toerien, Chapter 22, this volume). This means the material is analysed from beginning to end and following its temporal development. Coming back to the line between produced and naturally occurring data, we again find approaches in which both forms are used. The analysis of documents (see Coffey, Chapter 25, this volume) is based either on existing documents (e.g. diaries written in everyday life) or on documents which are produced for the purpose of the research

(diaries written as part of a project and stimulated by the researchers). In discourse analysis, interviews are frequently used (see the examples in Willig, Chapter 23, this volume) and the strong rejections of such data, which could be found in the beginning, have become less dominant. As recent developments demonstrate, conversation analysis (see Toerien, Chapter 22, this volume) is now also used for analysing the interaction and dynamics in focus groups (see Barbour, Chapter 21, this volume). Ethnography also makes the distinction between analysing ‘natural’ data – like observing everyday routines – instead of asking participants to talk about these routines in extra research situations like interviews, although much of the data in ethnography also come from talking with members in the field (‘ethnographic interviews’). Again, the handbook will cover both alternatives discussed in this paragraph.

## MAJOR APPROACHES TO ANALYSING DATA

In the range of approaches to analysing qualitative data, we can find two major strategies. The first one is oriented to reducing big sets of data or the complexity in the data. The major methodological step is to code the data. This basically means to find a label that allows the grouping of several elements (statements or observation) under one concept, so that we have a more or less limited number of codes (or categories) rather than a large variety of diverse phenomena. The most prominent way of pursuing this aim is qualitative content analysis (see Schreier, Chapter 12, this volume). However, grounded theory coding, also, in the end aims at reducing the diversity in the field and in the data by identifying a core category or a basic social process (see Thornberg and Charmaz, Chapter 11, this volume). The second strategy aims rather at expanding the material by producing one or more interpretations (see Willig, Chapter 10, this volume). Here, a second level of

text is written in addition to or about the original material. This second level describes, analyses and explains the meaning of the original text (e.g. interview statements, focus group discussions, documents or images). Such interpretations often are longer and more substantial than the original text. Examples of making this strategy work in a methodological procedure are the phenomenological approaches (see Eberle, Chapter 13, this volume), the documentary method (see Bohnsack, Chapter 15, this volume) or hermeneutic approaches (see Wernet, Chapter 16, this volume). Maybe this juxtaposition of two alternative approaches overemphasizes the differences, as any process of coding includes interpretation at one point or another – for example, in the step of memo writing in grounded theory (see Thornberg and Charmaz, Chapter 11, this volume). At the same time, any sort of interpretation at some point turns to identifying some kind of structure – like types or patterns – for organizing the diversity in the material in a clear and orienting way. Thus, we often find combinations of both strategies when it comes to analysing specific types of data. The handbook is not confined to one sort of analysis, but intends to cover the range of the major approaches.

## TRIANGULATION OF PERSPECTIVES

### *Multiple Types of Data*

As the number of research projects which apply triangulation (see Flick, 2007) or mixed methods approaches (see Morse and Maddox, Chapter 36, this volume) has grown, there are also more and more projects that involve the analysis of multiple types of data. In our own research, we often have interviews and observations or interviews and routine statistical data (see Flick et al., 2012) in a single project. We also have various types of interviews applied in one study – for example, episodic interviews (Flick, 2007) with homeless adolescents and expert interviews with service

providers. In all of these examples and in such multiple methods projects in general, the question arises as to whether we can use one and the same analytic method for all the types of data, or should we use different approaches to the data of each type? On a closer look, these multiple types of data not only vary in the way they were collected (which method was applied), but also vary in the form of sampling (see Rapley, Chapter 4, this volume) that was applied and this may have implications for any attempts at generalizing the findings (see Maxwell and Chmiel, Chapter 37, this volume). Finally, they vary in the degree of exactness in their documentation. Interviews, for example, are mostly available on two levels of documentation: the acoustic or audio-visual recording and the transcription (see Kowal and O'Connell, Chapter 5, this volume). Observations and ethnographic data, in general, are in most cases only documented on the level of the researcher's field notes.

Triangulation means to take several methodological perspectives or theoretical perspectives on an issue under study (see Denzin, 1970; Flick, 2007). In general, triangulation is not really a new trend as there has been a long discussion about combining methods in qualitative research or combining qualitative and quantitative research. But, mainly, triangulation is located in the phase of data collection. Recently, such a combination of perspectives has been applied to one set of data. In their book, similar to what Heinze et al. (1980) did much earlier with a biographical interview, Wertz et al. (2011) take one interview and analyse it with five different methods, among them grounded theory (see Thornberg and Charmaz, Chapter 11, this volume), discourse analysis (see Willig, Chapter 23, this volume) and narrative research (see Esin et al., Chapter 14, this volume). The book also provides some detailed comparisons of what pairs of methods produced as differences and similarities in analysing the text. It also becomes evident that not only the way the text is analysed, but also which

aspects are put in the foreground, vary across the five approaches. Thus we find 'Constructing a grounded theory of loss and regaining a valued self' (Charmaz, 2011) as the approach and result of the grounded theory approach. The analysis of the same material focuses on 'Enhancing oneself, diminishing others' (McMullen, 2011). Thus this book provides an interesting insight into the differences and commonalities of various empirical approaches to the same transcript.

### THE TENSION BETWEEN FORMALIZATION AND INTUITION

This example raises an issue that has been an implicit topic in the history of qualitative research as well and also plays a role in some of the points we will turn to later. How far can we expect and should we wish to formalize qualitative data analysis? There are two endpoints of this dimension. One is to set up more or less exact rules for how to apply a specific method formally correct (Mayring, 2000, in his version of qualitative content analysis is an example for this – see Schreier, Chapter 12, this volume). The other one is what Glaser (1998) has formulated for his version of grounded theory (see Thornberg and Charmaz, Chapter 11, this volume) as 'just do it' – go into the data (or the field) and find out what is interesting about them. The general dimension here is how far qualitative data analysis should be formalized by (methodological) rules or by a close and exclusive link of a specific sort of data to a particular method of analysis (and vice versa). Between these two endpoints we find the more realistic stance that a good qualitative analysis finds a combination of rules that are applied and make the analysis transparent on the one hand and the necessary degree of intuition on the other (and abduction – see Reichertz, Chapter 9, and Thornberg and Charmaz, Chapter 11, this volume) that make the analysis creative and fruitful. But the tension comes from the question of the right balance between formalization and

intuition. How to avoid methods that bring too much of a formalization or are too much of an intuitive art? How to avoid certain aspects of the research process – for example, the use of software – having an unwanted impact on what counts as data and their analysis? This general tension has been relevant throughout the history of qualitative data analysis and becomes relevant again and again and is important for many of the approaches presented in the following chapters.

### **QUALITATIVE DATA ANALYSIS 2.0: NEW TRENDS AND DEVELOPMENTS**

The field of qualitative data analysis has always been in movement as new methods or new formalizations of existing methods have been developed. One challenge for a handbook trying to cover this field could be just to cover what has been established and accepted as the most relevant methods in several fields of application. However, qualitative data analysis in the twenty-first century faces new challenges on several levels. These include new types of data, which call for adequate ways for analysing them. Progress in the areas of methodology and technology comes with new possibilities and new risks. The various contexts of utilization of qualitative analysis in the field of social science and beyond extend the expected and possible activities of the researchers. All these developments raise new ethical issues or existing ethical questions in a new way. Some of these challenges might have stronger impacts on the traditions and practices of qualitative data analysis than we might expect and at the same time open new areas and potentials for our analyses, so that it might be justified to use ‘qualitative data analysis 2.0’ as a label for its future development.

#### ***New Types of Data/Phenomena as Challenges***

The range of types of data in qualitative research continues to expand. A major part of

qualitative research is still based on interviews (see Roulston, Chapter 20, this volume) or focus groups (see Barbour, Chapter 21, this volume), in particular in those disciplines now just discovering qualitative research. However, in more cutting-edge discussions and research contexts of qualitative research, we can notice a diversification of phenomena of interest and of data used for analysing them. First we find a permanently growing interest in visual data – from photos (see Banks, Chapter 27, this volume) to videos (see Knoblauch et al., Chapter 30, this volume) and films (see Mikos, Chapter 28, this volume). This is complemented by the interest in analysing acoustic data such as sounds in general or music in particular (see Maeder, Chapter 29, this volume). Another trend, sometimes overlapping with the first two, is the interest in all kinds of documents (see Coffey, Chapter 25, this volume) from routine records to diaries and the like. At the same time, conversations (see Toerien, Chapter 22, this volume) and discourses (see Willig, Chapter 23, this volume) continue to play a major role in various research contexts. The changing ways of communicating in new media and channels and through new technological devices produce new forms of data, which can be used for analysing these phenomena. Here, virtual and mobile data play a central role (see Marotzki et al., Chapter 31, this volume). The transfer of the approach of cultural studies (see Winter, Chapter 17, this volume) to analysing culture through social media (see Kozinets et al., Chapter 18, this volume) calls for adequate strategies of analysing the resulting data.

#### ***Visualization of a Textualized Field***

What is the more general result of these trends beyond the diversification in the field? In earlier days of qualitative research, texts (statements, transcripts, descriptions of fields and images) were the dominant medium for phenomena to become data in qualitative analysis. Compared with that we face a more

or less fundamental change. More and more of the participants and contexts become visible in the data, in what is processed in the analysis and what is represented in the reports and publications. Images in general provide a much fuller ‘picture’ than spoken-word transcripts did. Quotes from images or videos used as evidence in writing about qualitative analyses often not only include participants’ faces and furniture from rooms, for example, but a more or less comprehensive background information (e.g. other people in the scene, details of the setting). Virtual and mobile data provide their specific image of the participant in the study. These extensions can be described as a visualization of a field (qualitative data analysis) that was mainly built on texts (and their limits). It produces new demands for managing the richer (and bigger, more complex) data technically, but also in ethically sound ways. For the first demand, the rapid development of technologies for supporting analysis can become more and more attractive.

### **Technological Developments: CAQDAS**

Since the mid 1980s there has been far-reaching technological change in the analysis of data, which is linked to the use of computers in qualitative research (see also Flick, 2014: ch. 28, for the following discussion). Here, we can note the general changes in working patterns in the social sciences brought about by the personal computer, word processing, cloud computing and mobile devices. However, it is also important to see the specific developments in and for qualitative research. A wide range of computer programs is available, mostly focused on the area of qualitative data analysis. The programs are sometimes referred to as QDA (Qualitative Data Analysis) software or as CAQDAS (Computer-Aided Qualitative Data Analysis Software – see Gibbs, Chapter 19, this volume). The introduction of computer programs in the field of qualitative data analysis has produced mixed feelings. Some

researchers have high hopes about the advantages of using them, while others have concerns and fears about how the use of software will change or even distort qualitative research practice. Some of these hopes may be right, some of these fears may have a kernel of truth, but some parts of both are more fantasy than anything else. For both parts it should be emphasized that there is a crucial difference between this kind of software and programs for statistical analysis (e.g., SPSS). QDA software does not *do* qualitative analysis itself or in an *automatic* way as SPSS can do a statistical operation or a factor analysis: ‘ATLAS.ti – like any other CAQDAS program – does not actually analyze data; it is simply a tool for supporting the process of qualitative data analysis’ (Friese, 2011: 1).

The discussion about the impact of software on qualitative research began with development of the very first programs. In this discussion one finds various concerns. First of all, some of the leading programs were developed on the back of a specific approach – coding according to grounded theory – and are more difficult to apply to other approaches. Another concern is that software implicitly forces its logical and display structure upon the data and the researcher’s analysis. Finally, there is a fear that the attention attracted by the computer and the software will distract the researcher from the real analytic work – reading, understanding and contemplating the texts, and so on. In the KWALON experiment (see Evers et al., 2011, and Gibbs, Chapter 19, this volume), this impact of software on qualitative analysis was studied by giving the same material to researchers using different software programs in their analysis. But, in the end, it depends on the users and their ways of making the computer and the software useful for the ongoing research and how they reflect on what they are doing.

However, in their account of the history and future of technology in qualitative research, Davidson and di Gregorio (2011) see us ‘in the midst of a revolution’. These authors have linked developments in the field

of QDA software to developments in the field of Web 2.0 applications such as YouTube, Twitter, Facebook, etc. Their basic idea for the future of using technologies in qualitative analysis is that the software so far discussed in the field of qualitative data analysis (see Gibbs, Chapter 19, this volume) will be challenged or replaced by apps developed by interested users again. The tools developed in such contexts are focusing much on collaborative analysis (of video data, for example), collaborative writing (see Cornish et al., Chapter 6, this volume) and developments (in wikis or cloud computing, for example) on blogging with hyperlinks as ways of collaborating and the like.

### ***Reanalysis of Data and Meta-analysis of Results***

Another challenge for qualitative data analysis is the trend to reuse the data and findings of studies – to make them available for reanalysis by other researchers (see Wästersfors et al., Chapter 32, this volume) and to do meta-analyses based on several qualitative studies in a field (see Timulak, Chapter 33, this volume). These approaches are new methodological tools for answering research questions. However, the question is whether the need of producing studies ready to be re- or meta-analysed has an impact on the way original studies can or should be done in the future.

### ***The Call for Implementation and Relevance and Evidence***

The call for relevance of qualitative analyses has been expressed in different contexts: funding agencies often have the expectation that research leads to results that can be implemented in specific areas (see Murray, Chapter 40, this volume). Researchers often have the aspiration to arrive at some change for the participants in their research. As the discussion about ‘evidence’ in qualitative research shows, this whole issue can become

important for demonstrating the need for qualitative research and for facing the challenge of impact.

### ***Ethical Issues in Qualitative Analysis***

Finally, all the developments and discussions in the field of qualitative data analysis mentioned so far have implications on the level of research ethics. The new forms of data raise issues of data protection and more generally of keeping the privacy of research participants. They also raise questions of how comprehensive the knowledge about the participants and the circumstances has to be for answering the specific research question of a project. How can the analysis do justice to the participants and their perspective? How does the presentation of the research and its findings maintain their privacy as much as possible? How can feedback on insights from the analysis take the participants’ perspective into account and do justice to their expectations and feelings (see Mertens, Chapter 35, this volume)?

## **QUALITATIVE ANALYSIS BETWEEN METHODS AND DATA – OVERVIEW OF THE HANDBOOK**

The topics mentioned in this brief mapping of the field of qualitative data analysis will be addressed in the major parts and single chapters of the handbook in more detail.

Part II takes a perspective on issues prior to the work with data in qualitative analysis and addresses *concepts, contexts and frameworks* of qualitative data analysis. The epistemological framework will be outlined in the form of a theory of qualitative data analysis (see Maxwell and Chmiel, Chapter 2). Inspiration in fieldwork is what makes methodological approaches work (see Gubrium and Holstein, Chapter 3). Sampling (see Rapley, Chapter 4) and transcription (see Kowal and O’Connell, Chapter 5) are practical steps with a strong impact on the data that

are finally available for analysis. Concepts of how to do the analysis are issues of the next three chapters: What are the benefits and challenges of working collaboratively on data (see Cornish et al., Chapter 6)? Which are the concepts of comparison (see Palmberger and Gingrich, Chapter 7) in a qualitative analysis? How to give reflexivity in the practice of qualitative analysis adequate space (see May and Perry, Chapter 8)? The remaining chapters in Part II address epistemological issues again. Inferences (see Reichertz, Chapter 9) can be drawn using induction, deduction and abduction. Interpretation is a basic operation in qualitative data analysis (see Willig, Chapter 10).

Part III takes a stronger focus on the available methods of qualitative data analysis and presents a range of *analytic strategies* on various levels and in greater detail. Variants of coding are the first strategy that is unfolded in chapters on grounded theory coding (see Thornberg and Charmaz, Chapter 11), on content analysis (see Schreier, Chapter 12) and on tools based on these methods (such as computer programs, see Gibbs, Chapter 19). These approaches can be applied to all kinds of data. Different analytic strategies are the issues of the following chapters. Phenomenology (see Eberle, Chapter 13) and narrative analysis (see Esin et al., Chapter 14) refrain from using codes and categories but emphasize the interpretation in their analysis. The same applies to the documentary method in the tradition of Karl Mannheim (see Bohnsack, Chapter 15) and hermeneutic approaches (see Wernet, Chapter 16), which both embed data analysis in an elaborated methodological framework. In the remaining chapters in this part, phenomena under study are analysed in the framework of culture. The analysis of culture as an approach to study specific issues has been pursued by cultural studies (see Winter, Chapter 17) and transferred to virtual forms of culture, mainly social media (see Kozinets et al., Chapter 18). The analytic strategies covered by the chapters in this part refer to a broad range of methods that can be applied to all sorts of data.

In Part IV, a different perspective is taken: here, specific *types of data* are the starting points for discussing the specific challenges they produce for qualitative data analysis. Distinctions made earlier in this chapter determine the structure of this part. The first three chapters address data elicited in applying specific methods of data collection: interviews (see Roulston, Chapter 20), focus groups (see Barbour, Chapter 21) and observations (see Marvasti, Chapter 24). The second group of chapters is about analysing data based on documenting existing phenomena such as specific practices. On the level of words and interactions, these phenomena include conversations (see Toerien, Chapter 22), discourses (see Willig, Chapter 23) and documents (see Coffey, Chapter 25). Visual data, for example pictures (see Banks, Chapter 27), films (see Mikos, Chapter 28) and videos (see Knoblauch et al., Chapter 30) also refer to documentations of existing phenomena on the level of still and moving images. Beyond and including these two levels, newly identified forms of data such as sounds (see Maeder, Chapter 29) and virtual and mobile data (see Marotzki et al., Chapter 31) complement the approaches to social worlds.

Part V extends the perspective beyond the actual work with data in qualitative analysis again as it focuses on *using and assessing qualitative data analysis* and its *results* on several levels. Reusing data and existing analysis for research purposes is quite common in quantitative research, but raises some new questions for qualitative research. The practical steps and problems of reanalysing qualitative data (see Wästersfors et al., Chapter 32) and the potential of qualitative meta-analysis (see Timulak, Chapter 33) are outlined. However, what will be the impact of such strategies on what counts as data and what as analysis in such contexts? Qualities of qualitative analysis are discussed in the next block of chapters: How to assess the quality of qualitative data analysis (see Barbour, Chapter 34)? What does an ethical use of qualitative data and findings (see

Mertens, Chapter 35) mean? What about integrating quantitative data (see Morse and Maddox, Chapter 36)? The final chapters go beyond the actual data analysis and discuss the transfer of its results into various contexts. Generalization (see Maxwell and Chmiel, Chapter 37) has been an unanswered question for a long time – how can findings be transferred to other situations beyond the one in which they were found? Theorization in and from qualitative analysis (see Kelle, Chapter 38) has been relevant for several approaches discussed in earlier chapters. Writing is in most cases much more than summarizing the facts and findings of the analysis but has an impact on the analysis itself and on what arrives at potential readers (see Denzin, Chapter 39). Finally, and in particular in qualitative research, the call for making our analyses relevant and for thinking about their implementation in political and social practices is becoming louder as more qualitative research is used in applied fields (see Murray, Chapter 40).

In all, this handbook is designed to provide those involved in qualitative data analysis with an awareness of many of the contemporary debates in the field. It is not designed to provide definitive answers to what is the best approach, but to introduce the variety of ways in which scholars are addressing qualitative data analysis from different disciplinary, conceptual, epistemological and methodological standpoints. It will provide practical tips on implementing the analytic methods as well as conceptual discussions of the major intellectual challenges of each method. It is designed to increase sensitiveness to the strengths and limits of the various methodological alternatives and also for the specific challenges coming from various – traditional and new – types of data for their analysis.

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