



INTRODUCTION

CHAPTER SUMMARY

This chapter introduces the reader to the coauthors' perspectives about the nature of qualitative data and the interrelated components of qualitative data analysis. We offer recommended guidance for the various audiences of this book and establish the parameters of what we cover in the text.

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THE PURPOSE OF THIS BOOK

We wrote this book to address a need faced by researchers in all disciplines and fields of human inquiry: The need to construct credible and trustworthy meaning from qualitative data through analytic methods that are practical and will generate knowledge that we and others can rely on.

Qualitative data are a source of well-grounded, rich descriptions of social processes. With qualitative data, one can preserve chronological flow to derive plausible explanations for outcomes. Good qualitative data also lead to serendipitous findings and interrelationships. They help researchers get beyond initial conceptions and generate new understandings. Finally, the findings from well-analyzed qualitative studies have a quality of “undeniability.” Words and images, especially organized

into vignettes, stories, and evocative visual representations, have a concrete, vivid, and meaningful flavor that often proves far more persuasive to a reader than pages of summary statistics.

The expansion of qualitative inquiry from the 1970s onward has been phenomenal. There are now numerous handbooks (e.g., Denzin & Lincoln's *The SAGE Handbook of Qualitative Research* [2018] and Gubrium, Holstein, Marvasti, & McKinney's *The SAGE Handbook of Interview Research* [2012]); introductory textbooks (e.g., Charmaz's *Constructing Grounded Theory* [2014] and Saldaña & Omasta's *Qualitative Research: Analyzing Life* [2018]); prestigious peer-reviewed journals (*Qualitative Inquiry*, *Qualitative Health Research*); online newsletters and forums (SAGE Publications' Methodspace, *The Qualitative Report*); annual conferences (International Congress of Qualitative Inquiry, International Institute for Qualitative Methodology); and qualitative special-interest groups in several major professional associations (American Educational Research Association, National Communication Association).

Although many researchers, from graduate students writing their theses and dissertations to experienced researchers, work alone on their projects and often focus on single cases, qualitative work is becoming more complex. Increasingly, we see mixed methods studies that combine qualitative and quantitative inquiry, carried out by research teams working collaboratively through specialized analytic software. And exciting new approaches to qualitative inquiry draw their inspiration from poetry, dramatic literature, visual art, dance, film, and other creative genres to present and represent social life in fresh, evocative ways.

Yet, in the flurry of this activity, we should be mindful of some pervasive issues that have not gone away. These issues include the labor intensiveness (and extensiveness over months or years) of data collection; frequent data overload; the time demands of processing and analyzing data; the adequacy of sampling when only a few cases can be managed; the generalizability and transferability of findings; the credibility, trustworthiness, and quality of conclusions; and their utility in the world of policy and action.

This book is written in the belief that, as qualitative researchers, we need to keep sharing our *craft and art*—that is, the explicit, systematic, and sometimes creative methods we use to analyze data. This is the need our book addresses. We hope that our experiences will be helpful to our colleagues, as theirs have been to us.

THE NATURE OF THIS BOOK

This is a practical methods sourcebook for all researchers who make use of qualitative data. But it is not intended as a comprehensive text; we do not address matters such as how to gain entry into a field site or how to facilitate participant interviews. Others have dealt with these issues elsewhere and well; we cite their work along the way and refer you to the appendix's annotated bibliography for more information.

For each of the methods outlined, we give specific examples with enough detail so that the reader can see how things work; try the method; and, most important, revise the method in future work. These analytic approaches are manageable and straightforward, though some displays may, at first, appear daunting. Don't let them intimidate you; they are *examples*, not exemplars or standards of practice. Each method of data analysis and display offers practical suggestions for the researcher's use and adaptation with accessible software and basic programs.

Audiences

This book is for practicing researchers in all fields whose work involves actual qualitative data analysis issues. An important subset of that audience is the *beginning researcher*—a graduate student or

early-career faculty member—working with qualitative data. We have encountered many students who launch into qualitative theses, dissertations, or research projects who sometimes feel overwhelmed and undertrained. With them in mind, we keep the language accessible and supportive, and we offer suggestions for using the book in qualitative research methods courses.

Many examples used in the book are drawn from educational research, both ours and others'. But we also include relevant discussion for other disciplines—nursing, anthropology, sociology, psychology, business, the arts, organization studies, sports, social media, political science, criminology, tourism, ethnic studies, communication, family studies, program evaluation, and policy research—to underline that the methods are generic, not field limited.

Some of the methods reported here grew out of multiple case studies of organizations carried out by a research team. But do not despair if you are working alone, if your study has just one case, or if you are focusing at the small-group level. There are many relevant examples for you, along with targeted advice.

OUR ORIENTATION

It is worthwhile, we think, for researchers to make their positionality and standpoint clear. To know how a researcher construes the shape of the social world and aims to give us a credible account of it is to know our conversational partner.

We label ourselves *pragmatic realists*. We believe that social phenomena exist not only in the mind but also in the world—and that some reasonably stable relationships can be found among the idiosyncratic messiness of life. There are regularities and sequences that link together phenomena. From these patterns, we can derive the concepts that underlie individual and social life. The fact that most of those concepts—such as *negotiating*, *possible selves*, *emotional labor*, and so on—are invisible to the human eye does not make them invalid.

Human relationships and societies have unique peculiarities and inconsistencies that make a realist approach to understanding them more complex—but not impossible. We must contend with the institutions, structures, practices, and conventions that people produce, reproduce, and transform. Human meanings and intentions are worked out within the frameworks of these social structures—structures that are invisible but nonetheless real. In other words, social phenomena such as language, culture, and power exist in the world and exert strong influences over human activities because most people construe them in common ways. Things that are believed become real and can be inquired into.

We agree with interpretivists who point out that knowledge is socially constructed. We affirm the existence and importance of the subjective, the phenomenological, and the meaning making at the center of social life. Our goal is to register and transcend these processes by making assertions and building theories to account for a real world that is both bounded and perceptually laden—and to test these assertions and theories in our various disciplines.

Our tests do not use the deductive logic of classical positivism. Rather, our explanations flow from an account of how human actions produced the events we observed. We want to account for events rather than simply document their sequence. We look for an individual or a social process at the core of events that can be captured to provide a causal description of the most likely forces at work.

The paradigms for conducting social research are always shifting beneath our feet. Our view is that it is possible to develop practical methods for judging the goodness of our findings, discoveries, and conclusions. To us, research is actually more a creative craft than a slavish adherence to

methodological rules. No study conforms exactly to a standard methodology; each one calls for the researcher to adapt the methodology and methods to the uniqueness of the setting or case.

Readers looking at the methods in this sourcebook will find them to be orderly ones with some degree of formalization. Many colleagues prefer more relaxed and open-ended voyages through their data, and we wish them well. We have opted for thoroughness and explicitness in this book, not just because it suits us but because vague descriptions are of little practical use to others. The overall structure of this text allows for some techniques to be used and others to be left aside. We advise you to look behind any apparent formalism and seek out what will be *useful* in your own work.

AN APPROACH TO QUALITATIVE DATA ANALYSIS

When you've been doing qualitative research as long as we have, the methodologies or genres start to blur. As pragmatic realists, we no longer adhere slavishly to one school of thought, or practice solely within the boundaries of one particular methodological approach. The data-analytic methods and techniques we've employed over the past few decades have been "a little bit of this and a little bit of that," used on an "as needed" basis. This is not to suggest that we were being improvisationally foolhardy as we figured out what to do next. On the contrary, we have been quite deliberate and diligent in our analytic methodologies and work. We resonate with ethnographer Amanda Coffey's (2018) insight that analysis "involves an ongoing dialogue with and between data and ideas" (p. 25).

Over time, the methods included in this book have become almost signature works—the "Miles and Huberman" way of analyzing qualitative data. But if you ask established qualitative researchers to describe Miles and Huberman's methods, you'll hear diverse opinions ranging from positive descriptors such as "systematic," "rigorous," and "authoritative," to negative descriptors such as "old fashioned," "confusing," and (a personal favorite) "positivists in sheep's clothing." Add Saldaña as a coauthor to the third and fourth editions of this text, and the evolution of these methods continues.

The three of us do not subscribe to any one particular genre of qualitative research—we are "shamelessly eclectic," as the popular saying goes. But our analytic sequence depicted throughout the book is probably a hybrid blend of ethnographic methods and grounded theory. It moves from one inductive inference to another by selectively collecting data, comparing and contrasting this material in the quest for patterns or regularities, seeking out more data to support or qualify these emerging clusters, and then gradually drawing inferences from the links between other new data segments and the cumulative set of conceptualizations. In the past few decades, we've found that refining and developing analysis methods on new projects had a clear payoff. Our confidence in our findings was greater, and credibility for our research, practice, and policy audiences was enhanced.

Analytic Methods: Some Common Features

We've observed features that recur in many established approaches to qualitative analysis. Here is a fairly classic set of analytic moves arranged in sequence:

1. Assigning codes or themes to a set of field notes, interview transcripts, documents, and/or visual data
2. Sorting and sifting through these coded materials to identify similar phrases, relationships between variables, patterns, categories, themes, distinct differences between subgroups, and common sequences

3. Isolating these patterns and processes, and commonalities and differences, and taking them out to the field in the next wave of data collection
4. Noting reflections or other remarks in jottings, analytic memos, and/or journals
5. Gradually elaborating a refined set of assertions, propositions, categories, themes, concepts, and generalizations that cover the consistencies discerned in the database
6. Comparing those generalizations with a formalized body of knowledge in the form of concepts or theories

The analytic challenge for all qualitative researchers is finding coherent descriptions and explanations that still include all of the gaps, inconsistencies, and contradictions inherent in personal and social life. The risk is in forcing the logic, the order, and the plausibility that constitute theory-making on the uneven, sometimes random, nature of social life.

We'll return to recurring features such as these, while acknowledging the diversity of analytic approaches now in use. Next, however, we need to take a step back to ask, what kind of data are we actually faced with in qualitative studies?

THE NATURE OF QUALITATIVE DATA

General Nature

In this book, we focus primarily on data in the form of words—that is, language in the form of extended text. Qualitative data also can appear as still or moving images, and we address these when necessary to the analytic task at hand (see the appendix for recommended titles and guidance for visual data).

The words we collect and analyze are based on *observations, interviews, documents, media, and artifacts*. These data collection activities typically are carried out in close proximity to a local setting for a sustained period of time. Such data are not usually immediately accessible for analysis but require some type of processing: Raw field notes need to be expanded and typed up, audio recordings need to be transcribed and corrected, and photographs need to be documented and analyzed.

The words we choose to document what we see and hear in the field can never truly be “objective”; they can only be our *interpretations* of what we experience. Similarly, transcription of audio recordings can be done in many ways that will produce rather different texts. And the influence of the researcher’s personal *values, attitudes, and beliefs* from and toward fieldwork cannot be avoided.

To put it another way, qualitative data are not so much about behavior as they are about *actions* (which carry with them intentions and meanings and lead to outcomes or consequences). Some actions are relatively straightforward; others involve “impression management”—how people want others, including the researcher, to see them. Furthermore, those actions always occur in specific situations within a social and historical context, which deeply influence how they are interpreted by both insiders and the researcher as outsider. Thus, the apparent simplicity of qualitative data masks a good deal of complexity, requiring plenty of care, self-awareness, and reflection on the part of the researcher.

Strengths of Qualitative Data

One major feature of well-collected qualitative data is that they focus on *naturally occurring, ordinary events in natural settings*, so that we have a strong handle on what “real life” is like. Qualitative data,

with their emphasis on people's *lived experiences*, are fundamentally well suited to locating the *meanings* people place on the events, processes, and structures of their lives and for connecting these meanings to the *social world* around them. There is *local groundedness*—that is, data that were collected in close proximity to a specific situation. The emphasis is on a specific *case*, a focused and bounded phenomenon embedded in its context. The influences of the *local context* are not stripped away but are taken into account. The possibility for understanding latent, underlying, or nonobvious issues is strong.

Another feature of qualitative data is their *richness and holism*, with strong potential for revealing complexity. Such data provide “thick descriptions” (Geertz, 1973) that are vivid, are nested in a real context, and have a ring of truth that has a strong impact on the reader. Furthermore, the fact that such data are typically collected over a *sustained period* makes them powerful for studying any process (including history). We can go far beyond snapshots of “what?” or “how many?” to just *how* and *why* things happen as they do—and even *assess causation* as it actually plays out in a particular setting.

We make three other claims for the power of qualitative data, to which we will return in later chapters: as *a strategy for discovery*, for *exploring new ideas*, and for *developing hypotheses*. In addition, we underline their potential for *testing hypotheses*, seeing whether specific predictions hold up. Finally, qualitative data are useful when one needs to supplement, validate, or illuminate *quantitative* data gathered from the same setting for mixed methods studies.

OUR VIEW OF QUALITATIVE DATA ANALYSIS

We see analysis as three concurrent flows of activity: data condensation, data display, and conclusion drawing/verification. We will explore each of these components in more depth as we proceed through the book. For now, we make only some overall comments.

Data Condensation

Data condensation refers to the process of selecting, focusing, simplifying, abstracting, and/or transforming the data that appear in the full corpus (body) of written-up field notes, interview transcripts, documents, and other empirical materials. By condensing, we're making data *stronger*. (We stay away from data “reduction” as a term because that implies we're weakening or losing something in the process.)

As we see it, data condensation occurs continuously throughout the life of any qualitatively oriented project. Even before the data are actually collected, anticipatory data condensation is occurring as the researcher decides which conceptual framework, which research questions, which cases, and which data collection methods to choose. As data collection proceeds, further episodes of data condensation occur: writing summaries, coding, generating categories, developing themes, and writing analytic memos. The data condensing/transforming process continues after the fieldwork is over, until a final report is completed.

Data condensation is not something separate from analysis. It is a *part* of analysis. The researcher's decisions—which data units to code and which to pull out, which category labels best summarize a number of codes, which evolving story to tell—are *all analytic choices*. Data condensation is a form of analysis that sharpens, sorts, focuses, discards, and organizes data in such a way that “final” conclusions can be drawn and verified.

By data condensation, we do not necessarily mean quantification. Yet occasionally, it may be helpful to convert the data into *magnitudes* (e.g., the analyst decides that the program being looked at has a “high” or “low” degree of effectiveness), but this is not always necessary.

Data Display

The second major flow of analysis activity is data display. Generically, a *display* is an organized, condensed assembly of information that allows analytic reflection and action. In daily life, displays vary from smartphone apps to newspaper advertisements to Facebook status updates. Looking at displays helps us understand what is happening and to do something—either analyze further or take action—based on that understanding.

The most frequent form of display for qualitative data in the past has been *extended text*. As we will note later, text (in the form of, say, 1,000 pages of field notes) is terribly cumbersome. It is dispersed, sequential rather than simultaneous, poorly structured, and extremely bulky. Using only extended text, a researcher may find it easy to jump to hasty, partial, and unfounded conclusions. Human beings are not very powerful as processors of large amounts of information or big data, as it's currently termed. Extended text overloads our information-processing capabilities and preys on our tendencies to find simplifying patterns. Or we drastically overweight vivid information, such as the exciting event that jumps out of page 124 of the field notes after a long, “boring” passage.

In the course of our work, we have become convinced that good displays are a major avenue to robust qualitative analysis. The displays discussed and illustrated in this book include many types of matrices, networks, and graphics. All are designed to assemble organized information into an immediately accessible, compact form so that the analyst can see what is happening and either draw justified conclusions or move on to the next step of analysis that the display suggests may be useful.

As with data condensation, the creation and use of displays is not separate from analysis—it is a *part* of analysis. Designing a display—deciding on the rows and columns of a matrix for qualitative data and deciding which data, in which form, should be entered in the cells—are analytic activities. In this book, we advocate more systematic, powerful displays and urge a more inventive, self-conscious, and iterative stance toward their generation and use. As we've said in our previous writings, “You know what you display.”

Drawing and Verifying Conclusions

The third stream of analysis activity is conclusion drawing and verification. From the start of data collection, the qualitative analyst interprets what things mean by noting patterns, assertions, propositions, explanations, and causal flows. The competent researcher holds these conclusions lightly, maintaining openness and skepticism, but the conclusions are still there, vague at first, then increasingly explicit and grounded. “Final” conclusions may not appear until data collection is over, depending on the size of the corpus of field notes; the coding, storage, and retrieval methods used; the analytic prowess of the researcher; and any necessary deadlines to be met.

Conclusion drawing, in our view, is only half of the picture. Conclusions are also *verified* as the analyst proceeds. Verification may be as brief as a fleeting second thought crossing the analyst's mind during writing, with a short excursion back to the field notes, or it may be thorough and elaborate, with lengthy argumentation and review among colleagues to develop “intersubjective consensus,” or with extensive efforts to replicate a finding in another data set. The meanings emerging from the data have to be tested for their plausibility, sturdiness, and confirmability—that is, their validity. Otherwise, we are left with interesting stories about what happened but of unknown truth and utility.

Some researchers take issue with the term “conclusions” because the nature of contemporary social life, they believe, is too uncertain, tenuous, and fluid for any notion of finality. Other preferred terms such as “findings,” “discoveries,” and “closure” smooth the presumptive edge of authoritative certainty. Admittedly, we too subscribe to this open-ended perspective, yet we use “conclusions”

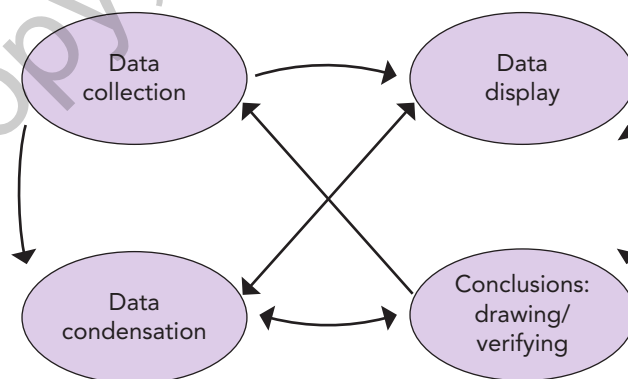
simply because it is a well-established term (and expectation) of research methodology. Also, a report that does not provide readers with *some* form of take-aways at the end serves little value to its audiences and suggests that the researcher has not fulfilled his or her analytic responsibilities.

We have presented these three streams—data condensation, data display, and conclusion drawing/verification—as interwoven before, during, and after data collection in parallel form, to make up the general activity called “analysis.” The three streams can also be represented as shown in Display 1.1—our first network display. In this view, the three types of analysis activity and the activity of data collection itself form an interactive, cyclical process. The researcher steadily moves among these nodes during data collection and then shuttles among condensing, displaying, and conclusion drawing/verifying for the remainder of the study.

The coding of data, for example (*data condensation*), leads to new ideas on what should go into a matrix (*data display*). Entering the data requires further data condensation. As the matrix fills up, preliminary *conclusions* are drawn, but they lead to the decision, for example, to add another column to the matrix to test and *verify* the conclusion.

In this view, qualitative data analysis is a continuous, iterative enterprise. Issues of data condensation, display, and conclusion drawing/verification come into play successively as analysis episodes follow each other. Such a process is actually no more complex, conceptually speaking, than the analysis modes quantitative researchers use. Like their qualitative colleagues, they must be preoccupied with data condensation (calculating means, standard deviations); display (correlation tables, regression printouts); and conclusion drawing/verification (significance levels, experimental/control group differences). But their activities are carried out through well-defined, familiar methods; are guided by canons; and are usually more sequential than iterative or cyclical. Qualitative researchers are in a more fluid and more humanistic position of meaning making.

DISPLAY 1.1 Components of Qualitative Data Analysis: Interactive Model



Source: Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage Publications.

SUGGESTIONS FOR READERS

Recommendations for what a reader should do with any particular book are often presumptuous, mistaken, or both. Authors have no control over who reads their books or what readers may find useful. Nevertheless, we offer a few suggestions for different types of users.

Students and Other Novice Researchers

We give some direct advice here, keeping in mind that you will often be working alone, usually on a single case, and may be feeling worried about the quality of your study—thesis/dissertation or not. We emphasize that this book is not written for newcomers to qualitative inquiry; readers should have some introductory background knowledge of fundamentals such as basic fieldwork research terminology, conducting a literature review, participant observation, and interviewing participants.

1. This book focuses on *data analysis*. Use other, introductory books to help with the basics of fieldwork (see the appendix for recommended titles and resources).
2. Learn by doing. Use your own study (whether it is in the planning stage or under way) as a vehicle and apply it to relevant methods in each chapter.
3. Compensate for the problem of having to work alone by finding someone to be a critical friend or mentor to respond to your work as you proceed.
4. Keep an informal journal or analytic memo set of what you are running up against. This tactic will help your learning and will be useful when you write up your study.
5. Don't worry about the jargon-like names of particular displays; the issue is what a display can do for you.
6. The biggest enemy of your learning is the gnawing worry that you're not "doing it right." Thesis and dissertation work tends to encourage that. But any given analytic problem can be approached in many useful ways. Creative heuristics—that is, inventing your way out of a problem—is definitely the better stance.

Experienced Researchers

This is a sourcebook. Colleagues have told us that they have used it in several ways:

1. *Browsing*: The book contains a wide range of material, so simply exploring it in an unstructured way can be fruitful.
2. *Problem solving*: Anyone opening the book comes to it with more or less specifically defined problems in doing qualitative data analysis. The index has been designed to be "problem sensitive" to permit easy access to appropriate sections of the book. The table of contents can also be used in this way.
3. *"A to Z"*: Some readers prefer to go through a book sequentially, from start to finish. We have organized the book so that it makes sense that way.
4. *Operational use*: For readers conducting an ongoing qualitative research project, either alone or with colleagues, it's useful to read particular sections focusing on upcoming analysis tasks (e.g., coding, time-ordered displays); then discuss them with available colleagues; and finally plan the next steps in the project, revising the methods outlined here or developing new ones.
5. *Research consulting*: The book can be used by people with an advisory or consulting role in the start-up and ongoing life of research projects. Assuming good problem identification, a research consultant can work with the client in either a problem-solving or a direct-training capacity to aid in thoughtful project design and coping with early problems.

Teachers of Qualitative Research Methods Courses

Some colleagues have used this book as a primary text, others as a supplementary one. In either case, our advice is to engage students in active data collection and analysis. For each topic, we have used a learning approach like this, carried out by individuals or working pairs, who stay together throughout an extended workshop:

1. Introductory lecture and/or reading to clarify the main conceptual points of the section
2. A brief learning task (e.g., coding a data excerpt, designing a matrix template, drawing a network or graphic, interpreting a filled-out matrix, or writing an initial analysis)
3. Comparing the products of individuals or pairs, drawing generalizations, and discussing future applications of the method

The same general principles apply when the book is used in a semester-long course, although the coverage will be deeper. Interim exercises focusing on actual research tasks, critiqued in class, are particularly productive. Active, reflective self-documentation through personal journals or analytic memos is also beneficial.

CLOSURE AND TRANSITION

This introduction provided some brief groundwork and foundations for the rest of the book. Analysis is doing, so let's proceed to the next chapter of Part One to review research design decisions that will later play important roles in qualitative data analysis. Following that chapter is a brief discussion on ethics, then an expanded chapter on analysis fundamentals.

Part Two's chapters are the heart of this book—methods of displaying data for exploring, describing, ordering, explaining, and predicting about the social worlds we study. Part Three's chapters examine how we verify and document the conclusions we draw through systematic thinking and good writing.