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Data Collection Methods



ualitative researchers typically rely on four methods for gathering information: (a) participating in the setting, (b) observing directly, (c) interviewing in depth, and (d) analyzing documents and material culture. These form the core of their inquiry—the staples of the diet. Several secondary and specialized methods of data collection supplement them. This chapter provides a brief discussion of the primary and the secondary methods to be considered in designing a qualitative study. This discussion does not replace the many excellent, detailed references on data collection (we refer to several at the end of this chapter). Its purpose is to guide the proposal writer in stipulating the methods of choice for his study and in describing for the reader how the data will inform his research questions. How the researcher plans to use these methods, however, depends on several considerations.

Chapter 1 presents an introductory discussion of qualitative methodological assumptions. As the grounding for a selection of methods, we extend that discussion here, using Brantlinger's (1997) useful summary of seven categories of crucial assumptions for qualitative inquiry. The first concerns the researcher's views of the *nature of the research*: Is the inquiry technical and neutral, intending to conform to traditional research within her discipline, or is it controversial and critical, with an

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explicit political agenda? Second, How does she construe her location, her positioning relative to the participants: Does she view herself as distant and objective or intimately involved in their lives? Third, what is the "direction of her 'gaze'": Is it outward, toward others—externalizing the research problem—or does it include explicit inner contemplation? Fourth, what is the *purpose of the research*: Does she assume that the primary purpose of the study is professional and essentially private (e.g., promoting her career), or is it intended to be useful and informative to the participants or the site? Related to the fourth category is the fifth: Who is the *intended audience* of the study—the scholarly community or the participants themselves? Sixth, what is the researcher's political positioning: Does she view the research as neutral or does she claim a politically explicit agenda? Finally, the seventh assumption has to do with how she views the *exercise of agency:* Does she see herself and the participants as essentially passive or as "engaged in local praxis"? (Brantlinger, p. 4). Assumptions made in these seven categories shape how the specific research methods are conceived and implemented throughout a study. Explicit discussion of assumptions strengthens the overall logic and integrity of the proposal.

❖ PRIMARY METHODS

Observation

Observation entails the systematic noting and recording of events, behaviors, and artifacts (objects) in the social setting chosen for study. The observational record is frequently referred to as *field notes*—detailed, nonjudgmental, concrete descriptions of what has been observed. For studies relying exclusively on observation, the researcher makes no special effort to have a particular role in the setting; to be tolerated as an unobtrusive observer is enough. Classroom studies are one example of observation, often found in education, in which the researcher documents and describes actions and interactions that are complex: what they mean can only be inferred without other sources of information. This method assumes that behavior is purposeful and expressive of deeper values and beliefs. Observation can range from a highly structured, detailed notation of behavior structured by checklists to a more holistic description of events and behavior.

In the early stages of qualitative inquiry, the researcher typically enters the setting with broad areas of interest but without predetermined categories or strict observational checklists. In this way, the researcher is able to discover the recurring patterns of behavior and relationships. After these patterns are identified and described through early analysis of field notes, checklists become more appropriate and context-sensitive. Focused observation then is used at later stages of the study, usually to see, for example, if analytic themes explain behavior and relationships over a long time or in a variety of settings.

Observation is a fundamental and highly important method in all qualitative inquiry. It is used to discover complex interactions in natural social settings. Even in studies using in-depth interviews, observation plays an important role as the researcher notes the interviewee's body language and affect in addition to her words. It is, however, a method that requires a great deal of the researcher. Discomfort, uncomfortable ethical dilemmas and even danger, the difficulty of managing a relatively unobtrusive role, and the challenge of identifying the big picture while finely observing huge amounts of fast-moving and complex behavior are just a few of the challenges.

Whether a researcher is simply observing from afar or finding a participant-observer role in the setting, some contexts may present dangers. *Street ethnography* is a term that describes research settings which can be dangerous, either physically or emotionally, such as working with the police (as Manning did, described in Chapter 3), drug users, cults, and situations in which political or social tensions may erupt into violence (Weppner, 1977).

Observations involve more than just "hanging out." Planful and self-aware observers use observation systematically (DeWalt & DeWalt, 2001). At the proposal stage, the researcher should describe the purpose of the observing, the phase of the study in which it is likely to be most fruitful, and the use of field notes to respond to the research questions.

Field notes are not scribbles. The proposal writer should have explicit note-organizing and note-management strategies. Figure 4.1 provides an example of edited and "cleaned-up" field notes for a study of kindergarten teachers. O'Hearn-Curran (1997) has formatted descriptive notes in a column on the left while reserving a second column on the right for her comments. These include her emerging analytic insights about the behavior. Observers' comments are often a quite fruitful source of analytic insights and clues that focus data collection more tightly (more on this in Chapter 5). They may also provide important questions for subsequent interviews.

Figure 4.1 Sample Field Notes

Tuesday, November 13, 1997 12:40 p.m. Observation

Observer's comments

There are 17 children in the room. There are 3 adults: 1 teacher, 1 classroom assistant, and 1 student teacher (the student teacher is an older woman).

The room is in the basement of the school. The school is a brick building approximately 90 to 100 years old. The room is about 40 feet by 30 feet. The room is carpeted and is sectioned off by furniture. There is an area with big books and a chart in the left-hand back corner of the room. Next to that is a shelf with a mixture of small books, tapes, and big books in baskets. Next to that is a small area with tov kitchen furniture and dolls. There is an area with several tables in front of the kitchen area. There are many small chairs pulled up to the table. In the front of the room is an area with a sand table. There is a semicircle table in the left-hand front corner of the room. The walls are colorful with papers that have been made by the children. One wall has papers with apples on them. Another wall has pictures of children with their names on the front of the papers. There are several small windows in the room and the florescent lighting seems to be the major source of light.

The teacher seems to have done a great job of making the room seem very inviting. The space itself is not optimal

The children have just come into the room. They have put their coats and backpacks onto their hooks in the hall outside.

Most of the children appear to know the routine

Participant Observation

Developed primarily from cultural anthropology and qualitative sociology, participant observation (as this method is typically called) is both an overall approach to inquiry and a data-gathering method. To some degree, it is an essential element of all qualitative studies. As its name suggests, participant observation demands firsthand involvement in the social world chosen for study. Immersion in the setting permits the researcher to hear, to see, and to begin to experience reality as the participants do. Ideally, the researcher spends a considerable amount of time in the setting, learning about daily life there. This immersion offers the researcher the opportunity to learn directly from his own experience. Personal reflections are integral to the emerging analysis of a cultural group, because they provide the researcher with new vantage points and with opportunities to make the strange familiar and the familiar strange (Glesne, 1999).

This method for gathering data is basic to all qualitative studies and forces a consideration of the role or stance of the researcher as a participant observer—her positionality. We have explored issues of her role more fully in Chapter 3. We reiterate that, at the proposal stage, it is helpful to elaborate on the planned extent of participation: what the nature of that involvement is likely to be, how much will be revealed about the study's purpose to the people in the setting, how intensively the researcher will be present, how focused the participation will be, and how ethical dilemmas will be managed. The researcher should be specific as to how his participation will inform the research questions.

In-Depth Interviewing

Qualitative researchers rely quite extensively on in-depth interviewing. Kahn and Cannell (1957) describe interviewing as "a conversation with a purpose" (p. 149). It may be the overall strategy or only one of several methods employed. To distinguish the qualitative interview from, for example, a journalist's or television talk-show interview, we might speak of its width instead of its depth (Wengraf, 2001). Interviewing varies in terms of a priori structure and in the latitude the interviewee has in responding to questions. Patton (2002, pp. 341–347) puts interviews into three general categories: the informal, conversational interview; the general interview guide approach; and the standardized, open-ended interview.

Qualitative, in-depth interviews typically are much more like conversations than formal events with predetermined response categories. The researcher explores a few general topics to help uncover the participant's views but otherwise respects how the participant frames and structures the responses. This method, in fact, is based on an assumption fundamental to qualitative research: The participant's perspective on the phenomenon of interest should unfold as the participant views it (the emic perspective), not as the researcher views it (the etic perspective). A degree of systematization in questioning may be necessary in, for example, a multisite case study or when many participants are interviewed, or at the analysis and interpretation stage when the researcher is testing findings in more focused and structured questioning.

The most important aspect of the interviewer's approach is conveying the attitude that the participant's views are valuable and useful. The interviewer's success will depend on how well he has anticipated and practiced his role in ethical issues, as discussed in Chapter 3.

Interviews have particular strengths. An interview yields data in quantity quickly. When more than one person participates (e.g., focus

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group interviews, discussed later), the process takes in a wider variety of information than if there were fewer participants—the familiar trade-off between breadth and depth. Immediate follow-up and clarification are

possible. Combined with observation, interviews allow the researcher to understand the meanings that everyday activities hold for people.

Interviewing has limitations and weaknesses, however. Interviews involve personal interaction; cooperation is essential. Interviewees may be unwilling or may be uncomfortable sharing all that the interviewer hopes to explore, or they may be unaware of recurring patterns in their lives. The interviewer may not ask questions that evoke long narratives from participants because of a lack of expertise or familiarity with the local language or because of a lack of skill. By the same token, she may not properly comprehend responses to the questions or various elements of the conversation. And at times, interviewees may have good reason not to be truthful (see Douglas, 1976, for a discussion).

Interviewers should have superb listening skills and be skillful at personal interaction, question framing, and gentle probing for elaboration. Volumes of data can be obtained through interviewing but are time-consuming to analyze. Finally, there is the issue of the quality of the data. When the researcher is using in-depth interviews as the sole way of gathering data, she should have demonstrated through the conceptual framework that the purpose of the study is to uncover and describe the participants' perspectives on events—that is, that the subjective view is what matters. Studies making more objectivist assumptions would triangulate interview data with data gathered through other methods. Finally, because interviews, at first glance, seem so much like natural conversations, researchers sometimes use them thoughtlessly, in an undertheorized manner, as if the respondent is surely providing "an unproblematic window on psychological or social realities" (Wengraf, 2001, p. 1).

Figure 4.2 provides elaborated notes from an interview conducted for a study of students of color in a community college. Koski (1997) was particularly interested in how these students identified and defined effective teachers. She was intrigued with the notion of culturally relevant pedagogy and conducted several in-depth interviews with teachers identified by students as especially effective. She has formatted the notes from the interview to provide space for her comments, as did O'Hearn-Curran in the field notes presented in Figure 4.1.

In addition to generic in-depth interviewing, there are several more specialized forms, including ethnographic interviewing, phenomenological interviewing, elite interviewing, focus-group interviewing, and interviewing children. We now describe each of these methods briefly.

Figure 4.2 Sample Field Notes

Interview with DC October 15, 1997 1:30-3:40

DC is an adviser with an academic department. The interview was set up by the dean.

Setting: DC's office in the academic department. It's bright and lively—colorful tapestry on one wall, posters on the other walls. A giant poster about "I am okay." Books and papers are everywhere. On the corner of the desk are some wood games: tic-tac-toe, pyramid, and others.

DC is a small, dark-colored woman with her hair in small but longish braids all over her head. She wears large glasses and a pinkish shade of lipstick that complements her coloring. She is lively, with a ready smile and a quick laugh. She comments on her height: "I'm smaller than all my advisees, so I'm not a threat to anyone."

I explain what I'm interested in and what my project is about. I tell her that I would like three things from her: One is an idea of what she as an adviser thinks are the attributes of a good teacher and what her students of color say, which teachers might possess those attributes, and which students I might talk to for the project.

DC: "OK. Good. Well, ask me a question."
KK: "Tell me a little bit about what you do."
DC: "I'm an adviser here. We get them in fresh off the street. I sit down with them and make out an educational plan. I like it when

DC: "The educational plan lists not only courses to be taken but clubs and other student activities. It lists the advising events the student will attend."

they know what's expected of them."

DC returns. KK: "How many students do you have?"

DC: "About 100."

KK: "100! Are you able to have a relationship with so many?"

DC: "I feel I'm an advocate for students. I do whatever needs to be done to get them through this. I tell them not to overload, to relax about this. . . . I think being honest with students is important. If I don't know, I tell them. But we can always look it up on the Net!"

DC listens very intently here.

This is an awkward moment for me and for her. I wasn't sure what to do. This general question seems to surprise her.

She hands me a form that she has worked on with a student. Just then someone comes in and tells her she has an important phone call that they can't transfer. She leaves for about 10 minutes. I am able to look around.

I don't remember her exact answer here. Something about keeping in touch.

Ethnographic Interviewing

Based on cognitive anthropology, ethnographic interviewing elicits the cognitive structures guiding participants' worldviews. Described as "a particular kind of speech event" (Spradley, 1979, p. 18), ethnographic questions are used by the researcher to gather cultural data. Ethnographic interviewing is not simply doing an interview. Instead, it is an elaborate system of a series of interviews structured to elicit insiders' cultural knowledge. Spradley identifies three main types of questions: descriptive, structural, and contrast. Descriptive questions allow the researcher to collect a sample of participants' language. Structural questions discover the basic units in the participants' cultural knowledge, and contrast questions provide the ethnographer with the meaning of various terms.

The value of the ethnographic interview lies in its focus on culture through the participant's perspective and through firsthand encounter. This approach is especially useful for eliciting participants' meanings for events and behaviors and for generating a typology of cultural classification schemes. It also highlights the nuances of the culture. The method is flexible in formulating working hypotheses and avoids oversimplification in description and analysis because of its rich narrative descriptions.

There are weaknesses in this method, however. The ethnographer can impose her values through the phrasing of questions or the interpretation of data (a concern with all forms of research but perhaps especially salient with qualitative methods). If the member of the cultural group chosen to participate does not represent that culture, the subsequent analysis will be impoverished. The success of this method, as in all interviewing, is highly dependent on the researcher's interpersonal skills.

Phenomenological Interviewing

Phenomenological interviewing is a specific type of in-depth interviewing grounded in a philosophical tradition. Phenomenology is the study of lived experiences and the ways we understand those experiences to develop a worldview. It rests on the assumption that there is a structure and essence to shared experiences that can be narrated. The purpose of this type of interviewing is to describe the meaning of a concept or phenomenon that several individuals share.

As developed by Seidman (1998), three in-depth interviews compose phenomenological inquiry. The first focuses on past experience with the phenomenon of interest; the second focuses on present experience; and the third joins these two narratives to describe the individual's essential experience with the phenomenon. Prior to interviewing,

however, the researcher using this technique has written a full description of her own experience, thereby bracketing off her experiences from those of the interviewees. This phase of the inquiry is referred to as *epoche*. The purpose of this self-examination is to permit the researcher to gain clarity from her own preconceptions, and it is part of the "ongoing process rather than a single fixed event" (Patton, 1990, p. 408).

The next phase is called *phenomenological reduction*; here, the researcher identifies the essence of the phenomenon (Patton, 1990). The researcher then clusters the data around themes that describe the "textures of the experience" (Creswell, 1998, p. 150). The final stage, *structural synthesis*, involves the imaginative exploration of "all possible meanings and divergent perspectives" (Creswell, 1998, p. 150) and culminates in a description of the essence of the phenomenon and its deep structure.

The primary advantage of phenomenological interviewing is that it permits an explicit focus on the researcher's personal experience combined with those of the interviewees. It focuses on the deep, lived meanings that events have for individuals, assuming that these meanings guide actions and interactions. It is, however, quite labor-intensive and requires a reflective turn of mind on the part of the researcher.

Interviewing of Elites

An interview with an "elite" person is a specialized case of interviewing that focuses on a particular type of interviewee. Elite individuals are considered to be influential, prominent, and/or well-informed in an organization or community; they are selected for interviews on the basis of their expertise in areas relevant to the research.

Elite interviewing has many advantages. Valuable information can be gained from these participants because of the positions they hold in social, political, financial, or administrative realms. Elites can provide an overall view of an organization or its relationship to other organizations, albeit from their own limited and bounded perspectives. They may be quite familiar with the legal and financial structures of the organization. Elites are also able to report on an organization's policies, histories, and plans, again from a particular perspective. Interviewing religious or political leaders would be obvious examples, as is Bennis and Nanus's (2003) study of 90 corporate executives. Less obvious examples include interviews with gang leaders, union bosses, or tribal chiefs.

Elite interviewing also presents disadvantages. It is often difficult to gain access to elites because they are usually busy people operating under demanding time constraints; they are also often difficult to contact initially. (This is also a consideration when requesting interviews with, for example, rural village women who have substantial work

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responsibilities.) The interviewer may have to rely on sponsorship, recommendations, and introductions for assistance in making appointments with elite individuals.

Another disadvantage in interviewing elites is that the interviewer may have to adapt the planned structure of the interview, based on the wishes and predilections of the person interviewed. Although this is true with all in-depth interviewing, elite individuals who are used to being interviewed by the press and other media may well be quite sophisticated in managing the interview process. (Sophistication and political astuteness are not exclusively the domain of elites, and we do not mean to suggest that they are.) They may want an active interplay with the interviewer. Well practiced at meeting the public and being in control, an elite person may turn the interview around, thereby taking charge of it. Elites often respond well to inquiries about broad areas of content and to open-ended questions that allow them the freedom to use their knowledge and imagination.

Working with elites often places great demands on the ability of the interviewer to establish competence and credibility by displaying knowledge of the topic or, lacking such knowledge, by projecting an accurate conceptualization of the problem through thoughtful questioning. The interviewer's hard work usually pays off, however, in the quality of information obtained. Elites may contribute insight and meaning to the interview through their specific perspectives. On the other hand, elites (just like other interviewees) may well have only vague understandings of a setting that is limited by a narrow viewpoint.

Interviewing Children

Children may be the primary focus of a study or one of many groups the researcher wants to interview. Increasingly, there are calls for including children's perspectives as relevant and insightful in learning more about aspects of their worlds. This is especially true in education where all too often those most affected by educational policy and programmatic decisions—the students—are absent from inquiry. There are special considerations, however, when the qualitative researcher proposes a study that involves children.

First are age considerations. Interviewing preschoolers, for example, is quite different from interviewing early adolescents. Young children are often active; early adolescents are frequently very self-conscious. Three-year-olds, exploring their emerging language skills, can drive one to distraction with their incessant questions (often quite sophisticated ones!), whereas early adolescents may be tacitum. It is

unrealistic to expect young children to sit still for long, but joining them in some activity can create a climate for focused talk. Some adolescents may feel more comfortable with their peers in a focus-group interview, whereas others may prefer the intimacy of one-to-one interviews. Decisions about how to gather data with various age groups requires sensitivity to their needs, their developmental issues, and flexibility.

Second are role considerations. Fine and Sandstrom (1988) note that the roles an adult researcher assumes when studying children vary along two dimensions: "(1) the extent of positive contact between adult and child, and (2) the extent to which the adult has direct authority over the child" (p. 14). They offer the roles of supervisor, leader, observer, and friend as appropriate. Of these, they find the role of friend the most fruitful, noting that the researcher then interacts with the children "in the most trusted way possible—without any explicit authority role" (p. 17). They caution, however, that age and power differences between adults and children are always salient.

Background and Context and Review of Documents

For every qualitative study, data on the background and historical context are gathered. This may not be a major part of data collection but at least, in proposing a particular setting, the researcher gathers demographic data and describes geographic and historical particulars. When she reviews old property transactions, skims recent newspaper editorials, or obtains information from a Web site, she is collecting data. Whether or not she counts this as data collection, she must proceed with caution.

Knowledge of the history and context surrounding a specific setting comes, in part, from reviewing documents. Researchers supplement participant observation, interviewing, and observation with gathering and analyzing documents produced in the course of everyday events or constructed specifically for the research at hand. As such, the review of documents is an unobtrusive method, rich in portraying the values and beliefs of participants in the setting. Minutes of meetings, logs, announcements, formal policy statements, letters, and so on are all useful in developing an understanding of the setting or group studied. Research journals and samples of free writing about the topic can also be quite informative.

Archival data are the routinely gathered records of a society, community, or organization and may further supplement other qualitative methods. For example, marital patterns among a group of Mexicans,

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discovered through fieldwork in a community, could be tested through marriage records found in the offices of the county seat or state capitol. Descriptions of articulated funding priorities by policymakers could be corroborated (or not) through an analysis of budgetary allocations. As with other methodological decisions, the decision to gather and analyze documents or archival records should be linked to the research questions developed in the conceptual framework for the study. Furthermore, documents must be viewed with the skepticism that historians apply as they search for truth in old texts.

The use of documents often entails a specialized analytic approach called content analysis. The raw material for content analysis may be any form of communication, usually written materials (textbooks, novels, newspapers, e-mail messages); other forms of communication—music, pictures, or political speeches—may also be included. Historically, content analysis was viewed as an objective and neutral way of obtaining a quantitative description of the content of various forms of communication; thus, counting the mention of specific items was important (Berelson, 1952). As it has evolved, however, it is viewed more generously as a method for describing and interpreting the artifacts of a society or social group.

Probably the greatest strength of content analysis is that it is unobtrusive and nonreactive: It can be conducted without disturbing the setting in any way. The researcher determines where the emphasis lies after the data have been gathered. Also, the procedure is relatively clear to the reader. Information can therefore be checked, as can the care with which the analysis has been applied. A potential weakness, however, is the span of inferential reasoning. That is, the analysis of the content of written materials or film, for example, entails interpretation by the researcher, just as in the analysis of interactively gathered data: Numbers do not speak for themselves. Care should be taken, therefore, in displaying the logic of interpretation used in inferring meaning from the artifacts. Later in the chapter, we provide more details on historical methods and on content analysis.

Some combination of these primary research methods is typical for in-depth qualitative inquiry. In Vignette 16, Shadduck-Hernandez (1997) articulates a complex design that incorporates several. The vignette is adapted from her proposal for research about CIRCLE (Center for Immigrant and Refugee Leadership and Empowerment), a participatory project involving newcomer undergraduate students, graduate students, and members from refugee and immigrant communities.

VIGNETTE 16

Using Multiple Methods

Imagine 12 university students, on a chilly Saturday morning, sprawled out on a classroom floor formulating their thoughts for a proposal on scattered sheets of newsprint. Laughter, silence, and intense discussion highlight the writing process of these authors who are first-generation refugee and immigrant (newcomer) students from China, Cambodia, Vietnam, Laos, and Korea participating in an undergraduate seminar on cross-cultural experiences in community development.

This dissertation research acknowledges the real tensions that exist in any qualitative research endeavor. Certain models can be rigid, one-way streets if they seduce participants into a process of inquiry in which the researcher alone is the analyzer and interpreter of data. This study consciously tried to counter such situations by applying participatory research as the guide of the inquiry (Maguire, 2000; Reardon, Welsh, Kreiswirth, & Forester, 1993). Study participants have been involved in this inquiry as researchers and valued members of a learning team in order to produce knowledge that may help stimulate social change.

Stemming from my commitment to participatory processes, the research I am conducting is collaborative in nature, emerging from the students and the communities I work with. Collaboration and participation in developing critical learning environments produce pooled resources and shared expertise leading to integrated and collective activities. Collaboration, action, and reflection enhance the legitimacy of each participant's knowledge (Brice Heath & McLaughlin, 1993) and set the stage for the sources of multilevel data collection employed in this study. These six sources of data have evolved as a complement to the development of CIRCLE courses and community outreach activities and support the concept of a pedagogy for affirmation, advocacy, and action. They include the following: (a) journal entries and self-reflection papers; (b) focus group interviews with eight undergraduate students; (c) in-depth interviews with 10 students; (d) video and photography documentation; (e) oral history interviews conducted by students and youth with each other; and (f) research field notes, reflections, and academic papers for courses and conferences over the 4 years of my involvement with and participation in the project. These latter data provide critical insights into my own theoretical development in relation to this research and my role as researcher in this study.



Shadduck-Hernandez's (1997) discussion of the various sources of qualitative data—some generated as part of the CIRCLE project, others

to be generated specifically for the dissertation—is eloquently congruent with her assumptions about the nature of this work, its purpose and audience, and her political stance. Note that she plans to rely on several methods: documents in the form of journals, self-reflective writing, and papers written for courses or conferences (both her own and those of the student participants); a focus-group interview; in-depth interviews; and video and photography. Videotaping and photography are what we describe as secondary data collection methods.

With many of the primary methods, transcription and translation challenges must be addressed. Even in his own culture, a white, middle-class sociology scholar will encounter challenges in transcribing and translating, for example, in-depth interviews of adolescents' attitudes toward religion (Smith & Faris, 2002).

Issues With Transcribing and Translating

Especially in the use of interviews, transcribing and translating text have become increasingly salient issues in the discourse on qualitative research. Neither is a *merely technical task;* both entail judgment and interpretation. In some way, when data have been translated and/or transcribed, they are not raw data any more—they are "processed data" (Wengraf, 2001, p. 7). Only recently has the methodological literature offered discussions about the issues in transposing the spoken word (from a tape-recording) into a text (a transcription), or in transposing the spoken word in one language (from a tape-recording) into another language (a translation) and then into a text (a transcription). Unfortunately, the literature has not problematized the challenges in these apparently transparent acts until very recently. Moreover, our review of the literature suggests that only issues with translation are currently being addressed.

Transcribing. If the researcher is fortunate enough to have interview partners who are comfortable with tape-recordings, she leaves the research encounter with spoken words, dutifully and seemingly unproblematically recorded on tape. Those who have then sat down to transcribe the tapes, however, know well the pitfalls of assuming that the spoken word closely parallels the written one. We do not speak in paragraphs, nor do we signal punctuation as we speak. The judgments involved in placing something as simple as a period or a semicolon are complex and shape the meaning of the written word and, hence, of the interview itself. Similarly, the visual cues that we rely on to interpret another's meaning are lost when we listen to a tape; the transcriber no longer has access to those important paralinguistic clues about meaning. (See Tilley, 2003, for further discussion.)

For example, Rossman (1994) conducted interviews for an evaluation of a systemic school reform initiative. One interviewee used a discursive style that could charitably be described as complex and dense. The interviewee would begin one topic, then loop to another midsentence, then on to another, finally saying, "Where was I?" and returning to the original topic after a prompt from the interviewer. While fascinating, this style was extremely difficult to transcribe—sentences were interrupted by the speaker herself, topics were left unfinished, and overall clarity was difficult to ascertain. Rossman struggled with this transcription, finally sharing it with the interviewee to be sure that the meaning was accurately rendered in the transcribed account of her words. In Chase's (1995) study of women school superintendents, responses to questions were replete with long pauses, in which the subject was changed. These gaps were, in the end, interpreted as indicators of a strong pattern of avoiding talking about and even denying experiences of sex discrimination—a major finding in her study. What if this researcher had made the mistake of simplistic transcription? But there is a cautionary note here: The meaning of pauses in conversation is not transparent; the researcher should use caution, as did Chase, in drawing inferences and offering interpretations of these linguistic patterns.

Experiences such as this are common. The implication is that the researcher needs to discuss the problematic nature of transcribing in the proposal and provide strategies for handling the judgments and interpretations inherent in such work.

Translating. Clearly, the issues associated with translating from one language into another are much more complex than transcribing because they involve more subtle issues of connotation and meaning. As noted above, the methodological literature has recently grown to include essays discussing the difficult issues with translating (Esposito, 2001; Temple & Young, 2004). Writing in the context of the need for more sophistication in cross-language health research with refugee and immigrant populations, Esposito (2001) notes that translation is "the transfer of meaning from a source language . . . to a target language" and that the translator is "actually an interpreter who . . . processes the vocabulary and grammatical structure of the words while considering the individual situation and the overall cultural context" (p. 570). Thus the focus on generating accurate and meaningful data through translation processes is paramount.

In another article on translating, Temple and Young (2004) address three primary issues: (a) whether to identify the translation act in the research report; (b) whether it matters if the researcher is also the translator; and (c) whether to involve the translator in analysis. These topics

help move the field forward, but Rossman's experience in her graduate teaching, working intensively with students whose first language (or even second or third) is not English, critiques their discussion as naïve. Addressing each of the issues in turn, she takes the position that none is problematic. First, she says that there is an ethical imperative to inform the reader that translation has occurred and to address how this will be (in the case of a proposal) or has been (in the case of a final research report) managed. Second, more issues of meaning and interpretation arise when *someone other than* the researcher translates spoken or written words. Third, since translation entails the construction of meaning, she believes that analysis is happening whether or not it is acknowledged.

So what are the important issues with translating the spoken or written word? Most important are the processes and procedures that the researcher/translator has used (or will use) to construct meaning through multiple transpositions of the spoken or written word from one language into another. Rossman and Rallis (2003, p. 260) identify three others:

- If you have translated from one language to another, which language constitutes the direct quotes?
- Can you use translated words as a direct quote?
- How do you signal that a translation is accurate and captures the subtle meanings of the original language?

There are no simple strategies or blueprints for addressing these and other issues associated with translation. What is simple and clear, however, is that the reader of the proposal must know that the researcher understands the issues, will take an ethical stance on translating, and will make clear in the final report just what she has done. For example, Rossman insists that her students discuss the language for interviewing (and/or document review) in the proposal, indicating whether or not the student is fluent in the language. If she is not, what strategies will she use to ensure accuracy and subtlety in translation? She also recommends that students include phrases and key words from the original language from time to time in their final narratives. Translations or interpretations of those phrases can be put into parentheses with the caveat that there is no direct translation of the phrase's meaning into English. Including phrases or words in the original language (often italicized) also serves as a reminder to the reader that the interviews were originally conducted in a language other than English. This subtle reminder helps to decenter the hegemony of an Englishcentered world.

For example, the doctoral student who proposed a mixed-methods study of a complex policy domain in Malawi (MacJessie-Mbewe, 2004) described how he would use the local language, Chichewa, for his interviews. Since he was fluent in this language, this posed no real problem for his dissertation committee. In his dissertation, he included several words and phrases that had evocative meaning in Chichewa but did not translate easily into English. Cohen-Mitchell (2005) studied the literacy and numeracy practices of market women in Quetzaltenango, Guatemala, for her dissertation. She was fluent in Spanish but not in Quiche, the local language of the women in her study. She had to convince her dissertation committee that she would work closely with Rosa, an educated literacy practitioner fluent in Quiche and Spanish, as a coresearcher and translator to obtain strong data from the women. Cohen-Mitchell proposed, moreover, that she would take Quiche lessons during her fieldwork to improve her limited understanding of that language. She used both Quiche and Spanish phrases and words in her dissertation.

Issues of transcribing and translating are subtle and complex; they are not merely technical tasks. The writer of a qualitative research proposal has an ethical obligation to discuss these issues and how she will approach them, especially since qualitative research generates words—the primary symbol system through which meaning is conveyed and constructed. Not all of the issues can be solved at the proposal stage; in fact, we are quite skeptical of those who write that they have them all wrapped up. Instead, the proposal should have a thoughtful discussion of the more generic issues of transcribing and translating, as well as the ones specific to the research site and participants.

❖ SECONDARY AND SPECIALIZED METHODS

In addition to the primary data-gathering methods outlined above, the researcher can choose to incorporate several secondary and supplemental methods in the design of a study, as appropriate. Each of those described below is a full and complete method in and of itself and has a methodological literature explicating its nuances and subtleties. In some instances, the same terminology is used for data collection methods and for modes of reporting or presentation. For example, some speak of "doing case studies" as a way of collecting data, but, more often, an entire report, even a book, is a case study. Ethnographers talk of "doing an ethnography" to describe their approach to data collection when, in fact, an ethnography is a written product—ethno = culture; graphy = writing or

an inscription. *Nisa: The Life and Words of a !Kung Woman* (Shostak, 1983) is a book that is a life history of one African woman, and the data collection method is called life history, consisting of long-term participant observation and in-depth and ethnographic interviewing. Yes, this *is* confusing!

The discussions that follow are necessarily simplified and brief, as was the preceding, and the list is not exhaustive. The methods discussed below, if used, should always be used with the understanding that observation and interviewing are the primary data collection methods for discovering context-laden patterns and understandings.

Focus Groups

The method of interviewing participants in focus groups comes largely from marketing research but has been widely adapted to include social science and applied research. The groups are generally composed of 7 to 10 people (although groups range from as small as 4 to as large as 12) who are unfamiliar with one another and have been selected because they share certain characteristics relevant to the study's questions. The interviewer creates a supportive environment, asking focused questions to encourage discussion and the expression of differing opinions and points of view. These interviews may be conducted several times with different individuals so that the researcher can identify trends in the perceptions and opinions expressed, which are revealed through careful, systematic analysis (Krueger, 1988).

This method assumes that an individual's attitudes and beliefs do not form in a vacuum: People often need to listen to others' opinions and understandings to form their own. One-to-one interviews may be impoverished because the participant had not reflected on the topic and feels unprepared to respond. Often, the questions in a focus-group setting are deceptively simple; the trick is to promote the participants' expression of their views through the creation of a supportive environment.

The advantages of focus-group interviews are that this method is socially oriented, studying participants in an atmosphere more natural than artificial experimental circumstances and more relaxed than a one-to-one interview. When combined with participant observation, focus groups are especially useful for gaining access, focusing site selection and sampling, and even for checking tentative conclusions (Morgan, 1997). The format allows the facilitator the flexibility to explore unanticipated issues as they arise in the discussion. The results have high "face validity": Because the method is readily understood, the findings appear believable. Furthermore, the cost of focus groups is relatively low, they provide quick results, and they can increase the

sample size of qualitative studies by permitting more people to be interviewed at one time (Krueger, 1988). In action research and in program design and evaluation, focus groups are especially useful. They were useful tools, for example, in data gathering to design a program for working on the employment issues of persons with HIV/AIDS, based on their answers to questions about specifics needs ranging from stress and availability of health care to family, spirituality, and hopes for the future (O'Neill, Small, & Strachan, 1999).

There are, however, certain disadvantages to this method as well: First and foremost is the issue of power dynamics in the focus-group setting. Should the researcher choose to use this method she should be exquisitely aware of power dynamics and be able to facilitate well—these are crucial skills. In addition, the interviewer often has less control over a group interview than an individual one. Time can be lost while dead-end or irrelevant issues are discussed; the data are difficult to analyze because context is essential to understanding the participants' comments; the method requires the use of special room arrangements and highly trained observer moderators; the groups can vary a great deal and can be hard to assemble; and logistical problems may arise from the need to manage a conversation while getting good quality data.

Life Histories and Narrative Inquiry

Life histories and narrative inquiry are methods that gather, analyze, and interpret the stories people tell about their lives. They assume that people live "storied" lives and that telling and retelling one's story helps one understand and create a sense of self. The story is important but so is how the story is told (Hatch & Wisniewski, 1995). The researcher, working closely with the participant, explores a story and records it. Life histories and narrative analysis are used across the social science disciplines and are particularly useful for giving the reader an insider's view of a culture or era in history (Edgerton & Langness, 1974).

Life Histories

Life histories seek to "examine and analyze the subjective experience of individuals and their constructions of the social world" (Jones, 1983, p. 147). They assume a complex interaction between the individual's understanding of his or her world and that world itself. They are, therefore, uniquely suited to depicting and making theoretical sense of the socialization of a person into a cultural milieu (Dollard, 1935). Thus, one understands a culture through the history of one person's

development or life within it, a history told in ways that capture the person's feelings, views, and perspectives. The life history is often an account of how an individual enters a group and becomes socialized into it. That history includes the learning to meet the normative expectations of that society by gender, social class, or age peers. Life histories emphasize the experience of the individual—how the person copes with society rather than how society copes with the stream of individuals (Mandelbaum, 1973).

Life histories can focus on critical or fateful moments. Indecision, confusion, contradiction, and irony are captured as nuanced processes in a life (Sparks, 1994). These histories are particularly helpful in defining socialization and in studying aspects of acculturation and socialization in institutions and professions. Their value goes beyond providing specific information about events and customs of the past—as a historical account might—by showing how the individual creates meaning within the culture. Life histories are valuable in studying cultural changes that have occurred over time, in learning about cultural norms and transgressions of those norms, and in gaining an inside view of a culture. They also help capture how cultural patterns evolve and how they are linked to the life of an individual. Often, this point of view is missing from standard ethnographies (Atkinson, 1998; Edgerton & Langness, 1974).

The term *life history* is sometimes used when, in fact, in-depth interviews are more focused on respondents' evolution or development over time. These parts of larger studies are particularly useful for identifying patterns in health (e.g., Goldman, Hunt, Allen, Hauser, Emmons, & Maeda et al., 2003), in the acculturation of immigrants, and the like. Scholars may also research family histories using parallel logics and methods (Miller, 1999).

The first strength of life history methodology is that, because it pictures a substantial portion of a person's life, the reader can enter into those experiences. The second is that it provides a fertile source of testable hypotheses, useful for focusing subsequent studies. The third strength is that it depicts actions and perspectives across a social group that may be analyzed for comparative study. Life history as a methodology emphasizes the value of a person's story and provides pieces for a mosaic depicting an era or social group. This kind of research requires sensitivity, caring, and empathy by the researcher for the researched (Cole & Knowles, 2001). Life histories are often used in feminist research as a way of understanding, relatively free of androcentric bias, how women's lives and careers evolve (Lawless, 1991).

Jones (1983) offers five criteria for life histories. First, the individual should be viewed as a member of a culture; the life history "describe[s] and interpret[s] the actor's account of his or her development in the common-sense world." Second, the method should capture the significant role that others play in "transmitting socially defined stocks of knowledge." Third, the assumptions of the cultural world under study should be described and analyzed as they are revealed in rules and codes for conduct as well as in myths and rituals. Fourth, life histories should focus on the experience of an individual over time so that the "processual development of the person" can be captured (pp. 153–154). And fifth, the cultural world under study should be continuously related to the individual's unfolding life story.

The major criticisms of the life history are that it makes generalizing difficult, offers only limited principles for selecting participants, and is guided by few accepted concepts of analysis. Once the researcher acknowledges the possible weaknesses in the method, however, he can circumvent them. Official records may provide corroborating information or may illuminate aspects of a culture absent from an individual's account. The researcher can substantiate meanings presented in a history by interviewing others in a participant's life. Before publishing *The Professional Thief*, for example, Sutherland and Conwell (1983) submitted the manuscript to four professional thieves and to two police detectives to assess possible bias and to ensure that their interpretations resonated with the understandings of other professional thieves and those who come in contact with them.

A life history account can add depth and evocative illustration to any qualitative study. As with any qualitative genre, however, the abundance of data collected in a life history should be managed and reduced so that analytic headway can be made. Instead of using chronological order, the researcher can focus on (a) critical dimensions or aspects of the person's life, (b) principal turning points and the life conditions between them, and (c) the person's characteristic means of adaptation (Mandelbaum, 1973).

Narrative Inquiry

Closely related to life history is narrative inquiry, an interdisciplinary method that views lives holistically and draws from traditions in literary theory, oral history, drama, psychology, folklore, and film philosophy (Connelly & Clandinin, 1990). The method assumes that people construct their realities through narrating their stories. The researcher explores a story told by a participant and records that story.

Narrative analysis can be applied to any spoken or written account—for example, to an in-depth interview.

Narrative inquiry requires a great deal of openness and trust between participant and researcher: The inquiry should involve a mutual and sincere collaboration, a caring relationship akin to friendship that is established over time for full participation in the storytelling, retelling, and reliving of personal experiences. It demands intense and active listening and giving the narrator full voice. Because it is a collaboration, however, it permits both voices to be heard.

This method is criticized for its focus on the individual rather than on the social context. Like life histories, however, it seeks to understand sociological questions about groups, communities, and contexts through individuals' lived experiences. Like any method that relies on participants' accounts, narrative may suffer from recalling selectively, focusing on subsets of experience, filling in memory gaps through inference, and reinterpreting the past (Ross & Conway, 1986). Crites (1986) cautions against "the illusion of causality" (p. 168)—the inference that the narrator's sequencing of the story uses cause and effect accurately. Narrative inquiry is also time-consuming and laborious and requires some specialized training (Viney & Bousefield, 1991). In the past decade, researchers have articulated criteria for good narrative inquiry (see Connelly & Clandinin, 1990; Jones, 1983; Riessman, 1993).

As a qualitative research method for the social sciences and applied fields it is relatively new, but narrative inquiry has a long tradition in the humanities because of its power to elicit voice. Narrative analysis values the signs, the symbols, and the expression of feelings in language, validating how the narrator constructs meaning. It has been particularly useful in developing feminist and critical theory (Eisner, 1988; Grumet, 1988; Riessman, 1993). Narrative inquiry is especially useful when exploring issues of social change, causality, and social identity (Elliott, 2005).

Narrative inquiry may rely on journal records, photographs, letters, autobiographical writing, e-mail messages, and other data. Typically, field notes are shared with the narrator, and the written record may be constructed collaboratively. In the conduct of narrative inquiry, there is open recognition that the researcher is not just passively recording and reporting the narrator's reality. Connelly and Clandinin (1990) assert that researchers need to "be prepared to follow their nose and, after the fact, reconstruct their narrative of inquiry" (p. 7). This becomes, in effect, the recounting of methodology.

Historical Analysis

A history is an account of some event or combination of events. Historical analysis is a method of discovering what has happened using records and accounts. It is particularly useful in qualitative studies for establishing a baseline or background prior to participant observation or interviewing. Sources of historical data are classified as either primary or secondary. Oral testimony of eyewitnesses, documents, records, and relics are primary. Reports of persons who relate the accounts of eyewitnesses and summaries, as in history books and encyclopedias, are secondary.

The researcher should consider the following sources of historical data: (a) contemporary records, including instructions, stenographic records, business and legal papers, and personal notes and memos; (b) confidential reports, including military records, journals and diaries, and personal letters; (c) public reports, including newspaper reports and memoirs or autobiographies; (d) questionnaires; (e) government documents, including archives and regulations; (f) opinions, including editorials, speeches, pamphlets, letters to the editor, and public opinion polls; (g) fiction, songs, and poetry; and (h) folklore.

Historical analysis is particularly useful in obtaining knowledge of unexamined areas and in reexamining questions for which answers are not as definite as desired. It allows for systematic and direct classification of data. Historical research traditions demand procedures to verify the accuracy of statements about the past, to establish relationships, and to determine the direction of cause-and-effect relationships. Many research studies have a historical base or context, so systematic historical analysis enhances the trustworthiness and credibility of a study.

There is a dialectical tension in this kind of analysis between contemporary and historical interpretations of events, even though texts representing either perspective are influenced by the social contexts in which they are produced. Historical analysis cannot use direct observation, and there is no way to test a historical hypothesis. There are also weaknesses in the classification of historical data. One must remember that documents may be falsified deliberately or may have been interpreted incorrectly by the recorder. Words and phrases used in old records may now have different meanings. The meanings of artifacts are perceived and interpreted by the investigator. Errors in recording, as well as frauds, hoaxes, and forgeries, pose problems in dealing with the past. The researcher should retain a modest skepticism about such data.

Films, Videos, and Photography

Films and photography have a long history in anthropology. Called visual anthropology or film ethnography, this tradition relies on visual representations of the daily life of the group under study. Films are records of natural events and may be used as permanent resources. The concept and method of the research film have emerged and are now compatible with a variety of research methods to describe how people navigate in public places (Ryave & Schenkein, 1974) and how they use space (Whyte, 1980), to present findings (Jackson, 1978), and to empower participants (Ziller & Lewis, 1981). The various forms of photography can be used for data collection and for organizing, interpreting, and validating qualitative inquiry (Szto, Furman, & Langer, 2005). As Banks (2001) illustrates, films of marriage ceremonies in different social strata in contemporary India, coupled with historical photos and documents, raised key questions in his search for cultural understanding of the interconnections between economics and tradition in handicrafts, dowries, and trousseaux.

Film has the unique ability to capture visible phenomena seemingly objectively—yet always from the perspective of the filmmaker, just as with other forms of observation. The filmmaker, the observer, must decide what to focus on while recording and then how to interpret the data in that recording (whether on film or in field notes). Research film methodology requires the documentation of the time, place, and subject of the filming, as well as the photographer's intent and interests. There is a great wealth of visual information in all natural events: To attempt a complete record of even a small event would be fruitless.

There are three kinds of sampling in films: opportunity, programmed, and digressive (Sorenson, 1968). Opportunity sampling documents unanticipated or poorly understood phenomena as they occur. Programmed sampling involves filming according to a predetermined plan—deciding in advance what, where, and when to film. Grounded in the research proposal's conceptual framework, programmed sampling stipulates which events are likely to be significant. It is guided by the research design rather than by intuition, as in opportunity sampling. Digressive sampling is deliberate searching beyond the obvious to the novel, to the places and events beyond typical public recognition.

Researchers choose to use ethnographic film for its obvious strengths. Visual samples enhance the value of any record. Film documents life crises and ceremonies, transmits cultural events to successive generations, and documents social conflicts (court proceedings, public speakers, Senate sessions, and so on). The film researcher is

limited by what the mind can imagine and the camera can record—significant limitations because they involve ideology and other forms of cultural bias. But, of course, events can be documented in their natural setting.

Film is especially valuable for discovery and validation. It documents nonverbal behavior and communication such as facial expressions, gestures, and emotions. Film preserves activity and change in its original form. It can be used in the future to take advantage of new methods of seeing, analyzing, and understanding the process of change. Film is an aid to the researcher when the nature of what is sought is known but the elements of it cannot be discovered because of the limitations of the human eye. It allows for the preservation and study of data from nonrecurring, disappearing, or rare events. Interpretation of information can be validated by another researcher or by participants. The researcher can obtain feedback on the authenticity of interpretation, and the film can be reshot to be more authentic. Two excellent examples of ethnographic film are *Educating Peter* (Home Box Office Project Knowledge, 1992), the story of the experiences of a boy with severe cognitive challenges in a regular classroom, and High School, a depiction of life in a comprehensive high school in the early 1970s (Wiseman, 1969).

Film has certain weaknesses and limitations. There are always fundamental questions—What is the nature of truth? Does the film manipulate reality?—and concerns about professional bias and the interests of the filmmaker. Film is expensive, and most research budgets are minimal. Production can be problematic. The researcher needs technical expertise. And filming can be very intrusive, affecting settings and events. Film cannot be included in a book, journal, or dissertation. Finally, serious consideration must be given to the ethics of ethnographic filming.

Interaction Analysis

There are times when—since much is already known either because of much participant observation or good previous research—very focused data collection techniques can be deployed. At those times, researchers wanting finely focused data on verbal and nonverbal communication can use forms of interaction analysis to quantify patterns of interaction. An observer uses a predetermined coding scheme, often called a protocol, to produce a listing of the likely interactions. Then she samples duration at predetermined intervals. For

example, the observer might sample blind-date eye contact for 5 seconds every 5 minutes or teachers' responses to student questions in a 30-minute lesson. First used as a method for studying small groups in organizations in the 1920s, interaction analysis gained prominence as a method for observing classrooms and for aiding teacher training (Flanders, 1970; Freiberg, 1981). Now it is being used in research on couples to develop coding systems that can powerfully analyze an ongoing stream of dyadic behaviors (Baucom & Kerig, 2004).

One strength of this approach is that systematic, quantified data are obtained. It is particularly useful for verifying patterns that emerged in early observations and interviews. Systems for assessing inter-rater reliability can also be constructed. Large amounts of focused data can be collected in a variety of settings, making statistical analyses useful.

Clearly, interaction analysis is only as good as the categories used to focus observations. When they are culturally biased, too reflective of the researcher's prejudgments, or not well designed for the setting, these categories are not particularly fruitful. Two well-developed types of this method—kinesics and proxemics—offer examples of finely focused analyses.

Kinesics. Learning about society can be enhanced if we study not only what people say but also what their body movements reveal. Kinesics is the study of body motion and its communicative messages. Motion is analyzed systematically so that researchers can see and measure significant patterns in the communications process.

Birdwhistell (1970) asserts that nonverbal body behaviors function like significant sounds that combine like words into single or relatively complex units. Body movements ranging from a single nod of the head to a series of hand and leg gestures can attach additional meaning to spoken words. (Remember these gestures when transcribing an interview, as discussed above.) All kinesics research rests on the assumption that individuals are unaware of being engaged constantly in adjustments to the presence and activities of other persons. People modify their behavior and react verbally and nonverbally. Their nonverbal behavior is influenced by culture, gender, age, and other factors associated with psychological and social development.

Birdwhistell labels four channels in the communicative process: vocal, visual, olfactory, and tactile. It is important that the researcher be aware of these channels because the verbal interaction between researcher and subject consists of a steady flow of nonverbal clues. Behind the words are messages both parties are communicating. Educated by this knowledge of nonverbal clues, the researcher can

monitor subjects' behaviors, discovering their attitudes and giving their actions additional meaning. Body language can express unconscious thoughts that may be essential for observers to decode if they are to analyze situations accurately.

In the interpretation of body language lies one of the weaknesses of kinesics. Novice body readers who have a "pop-psych" understanding of the science of kinesics may make incorrect, perhaps damaging, interpretations of behavior. Related closely to this possibility of misinterpretation is that body language as an analytic tool can be trivialized. For example, many studies focus on frequency counts of isolated units of behavior that convey little meaning by themselves. The fact that a person blinked 100 times during a 15-minute interview is not significant unless the context of the situation is also apparent.

The strengths of kinesic analysis are that it provides a view into unconscious thoughts and a means for the triangulation of verbal data. A researcher can be more confident about the accuracy of information provided by a participant if the speaker's body language is congruent with his words. Also, the researcher can monitor her own nonverbal behavior to clarify messages sent to the subject and to stay in touch with her own feelings during data collection.

Kinesic analysis is limited because body language is not universal; researchers must be aware of cultural differences. Many gestures signal different meanings in different cultures. In some countries, moving the head up and down signifies no and moving it from side to side means yes. Body movements must be interpreted in context, and only experts can make fine-tuned kinesic interpretations. Pupil dilation or movements of tiny jaw or neck muscles should be interpreted cautiously.

Proxemics. This is the study of people's use of space in relation to culture. The term was coined by Hall (1966), although he did not perform the original work in this area. Many studies have been conducted on human activities in bars, airports, subways, and other public places where individuals have to deal with one another in a limited space. Using proxemics, the researcher focuses on space, from interpersonal distance to the arrangement of furniture and architecture. Anthropologists, for example, have used proxemics to determine the territorial customs of cultures. Proxemics has been useful in the study of the behavior of students in the classroom and of marital partners undergoing counseling.

There are several advantages to the use of proxemics. It is unobtrusive, and usually it is difficult for a subject to mislead the observer deliberately. Because it is concerned with nonverbal behavior, subjects would have to be skillful to "lie" about their feelings. Proxemics is

useful for studying the way individuals react to the invasion of their territory. Likewise, proxemics can be used in cross-cultural studies because people's use of personal space varies greatly from one culture to the next. Finally, proxemic analysis is useful for studies in areas such as the effect of seating arrangements on student behavior or the effect of crowding on workplace productivity.

The greatest disadvantage of proxemics as a data collection method is that the researcher must be skilled in the interpretation of the observed behaviors. If the researcher is observing a conference or a business meeting, the manner in which the subjects take their seats can be of vital importance, but the data must be interpreted carefully. Exclusive reliance on proxemics could be misleading because relationships that do not exist might be suggested. Because proxemics is relatively new as a data collection method, few instruments to measure space in research are available, further limiting its diverse use. The use of proxemics is increasing throughout research arenas, however. It provides a revealing and interesting method of gathering information about individual social behavior.

Unobtrusive Measures

Unobtrusive measures are ways of collecting data that do not require the cooperation of the subjects and, in fact, may be invisible to them. Webb, Campbell, Schwartz, and Sechrest (1966) describe these measures as "nonreactive research" because the researcher is expected to observe or gather data without interfering in the ongoing flow of everyday events. Data collected in this manner are categorized as documents, archival records, and physical evidence. Of these three, documents and archival records are the most frequently used in qualitative studies and were discussed earlier.

Physical evidence not produced specifically for the purpose of research often constitutes data. During the 1960s, the floor tile around the chick-hatching exhibit at the Museum of Science and Industry in Chicago had to be replaced every 6 weeks. Tile in other parts of the museum did not require replacement for years. The selective erosion of the tiles, indexed by the replacement rate, provided a measure of the relative popularity of exhibits (Webb et al., 1966).

Unobtrusive measures are particularly useful for triangulation. As a supplement to interviews, nonreactive research provides another perspective on a phenomenon, elaborating its complexity. These methods can be used without arousing subjects' notice and data collection is relatively easy because it often involves using data already collected by someone else (e.g., bills, archival records, sales records).

When used in isolation, however, unobtrusive measures may distort the picture. Erosion and survival may be affected by activities unknown to the researcher. For example, tiles near the chick-hatching exhibit may have worn out because it is close to the candy machine, not because of the exhibit's popularity. Some researchers consider the use of unobtrusive methods (e.g., monitoring exchanges on newsgroups or searching through garbage) to be unethical: They feel that those studied should be informed of the nature of the research.

When the researcher needs information for measures of frequency or attendance or when direct observation would be impossible or would bias the data, however, this method permits her to be quite creative. Unobtrusive data collection is often aided by hardware, such as audiotapes, hidden cameras, one-way mirrors, gauges, and infrared photos. Clearly, though, ethical issues abound in surreptitious observation.

Questionnaires and Surveys

Researchers administer questionnaires to some samples of a population to learn about the distribution of characteristics, attitudes, or beliefs. In deciding to survey a group of people, researchers make one critical assumption—that a characteristic or belief can be described or measured accurately through self-reporting. In using questionnaires, researchers rely totally on the honesty and accuracy of participants' responses. Although this limits the usefulness of questionnaires for delving into tacit beliefs and deeply held values, there are still many occasions when surveying can be useful.

Questionnaires typically entail several questions that have structured response categories; some open-ended questions may also be included. The questions are examined (sometimes quite vigorously) for bias, sequence, clarity, and face-validity. Questionnaires are usually tested on small groups to determine their usefulness and, perhaps, reliability.

In sample surveys, data are collected in a standardized format, usually from a probability sample of the population. The survey is the preferred method if the researcher wishes to obtain a small amount of information from a large number of subjects.

Survey research is the appropriate mode of inquiry for making inferences about a large group of people based on data drawn from a relatively small number of individuals in that group. Its basic aim is to describe and explain statistically the variability of certain features in a population. The general logic of survey research gives a distinctive style to the research process; the type of survey instrument is determined

by the information needed. Surveys are conducted in three ways: by mail, telephone, and personal interview. Any method of data collection, however, from observation to content analysis, can be and has been used in survey research.

Most survey studies involve cross-sectional measurements made at a single point in time or longitudinal measurements taken at several different times. Other forms of survey research include trend studies that examine a population by studying separate samples at different points in time, cohort studies of a bounded population, and panel studies of a single sample of individuals at several points in time. Analysis of survey data takes the form of quantitative analysis that relies mainly on either descriptive or inferential statistics.

The relative advantages and disadvantages of survey research are weighed according to the following criteria: (a) appropriateness of the method to the problem studied, (b) accuracy of measurement, (c) generalizability of the findings, (d) administrative convenience, and (e) avoidance of ethical or political difficulties in the research process.

Surveys have definite advantages when the goals of research require obtaining quantitative data on a certain problem or population. They facilitate research in politically or ethically sensitive areas. They are used in programs for public welfare or economic development. Large surveys often focus on sensitive or controversial topics within the public domain.

The strengths of surveys include their accuracy, generalizability, and convenience. Accuracy in measurement is enhanced by quantification, replicability, and control over observer effects. Results can be generalized to a larger population within known limits of error. Surveys are amenable to rapid statistical analysis and are comparatively easy to administer and manage.

Surveys have weaknesses, however. They are of little value for examining complex social relationships or intricate patterns of interaction. Their strengths can also be weaknesses. Although controlling accuracy, a survey cannot assure without further evidence that the sample represents a broader universe. Thus, the method of drawing the sample and the sample size are critical to the accuracy of the study and its potential for generalizability. Also, even though surveys are convenient, they are generally a relatively expensive method of data collection. Finally, surveys may result in an invasion of privacy or produce questionable effects in the respondent or the community. Some research projects relying on these methods may enhance the position or resources of a particular group, and conflicts may arise between sponsors and research teams concerning how problems are

defined. This problem is not specific to surveys and questionnaires, however.

Projective Techniques and Psychological Testing

Some types of interpretive psychological strategies were developed many years ago by clinical psychologists to obtain personality data. These strategies have been used fairly extensively in comparative studies about culture and for analysis of personality dynamics. Based on an internal, perceptual frame of reference, the techniques assume that one can get a valid picture of a person by assessing the way the individual projects his personality onto some standard, ambiguous stimuli.

Standardization and ambiguity are common elements in tests of this nature, although so-called clinical judgments form the primary interpretation bases of responses to these stimuli. Results are typically expressed in the form of a verbal report assessing the subject's dominant needs and ambitions, tolerance of frustrations, attitudes toward authority, major internal conflicts, and so on. The reputation and qualifications of the tester sometimes play a role in how the report is received and how much credibility is attached to the interpretation.

Two of the most well-known and frequently used psychological strategies of this notion are the Rorschach inkblot test and the Thematic Apperception Test (TAT). The original idea behind both includes the assumption that the stimuli are ambiguous so the subject has to be imaginative and projective in response. The Rorschach test uses pictures (symmetrical inkblots), usually presented in a predetermined order; the subject reports what each picture resembles or suggests. The number, quality, and variety of the subject's responses are compared with specific personality types and with the responses of other people to the same stimuli. In the TAT, the subject is asked to tell stories about a set of picture scenes. Test results are used to assess personality traits such as aggressiveness, dependence, and sexual conflicts.

Although projective instruments have been the object of considerable criticism for many years, they are still commonly employed in clinical contexts by psychologists. Questions remain as to their validity and reliability; environmental and cultural factors may also affect results. Today, concern focuses on the more concrete aspects of personality traits, such as self-esteem and styles of interpersonal behavior, rather than on the vague generalizations that characterized earlier interpretive schemes.

A number of other psychological tests and measurements have been developed for use in qualitative and anthropological research.

Examples include the study of (a) the perception of illusions, in which optical and auditory illusions are examined for differences in perception related to differences in types of environments; (b) judgments of aesthetic qualities, in which pictures of art objects or musical stimuli are used to elicit opinions concerning aesthetic excellence; (c) psychomotor skills, in which physical activity measures indicate personality qualities, such as introversion and extroversion; (d) games people engage in, to provide significant information about community and social behavior; and (e) games as a laboratory device, in which a specific game involving family members is used to determine a relationship between communication patterns and socioeconomic differences. Attitude scales can be used in qualitative inquiry, as supplementary measures, and for triangulation (see more on triangulation in Chapter 5). Other qualitative methods have been devised for studying entire communities, group living patterns, and the social integration of individuals in different residential contexts; these are referenced at the end of this chapter.

Dilemma Analysis

Dilemma analysis brings into focus respondents' reactions to situations that have no right answers: that is, dilemmas. The approach can be used as a focused part of interviewing, particularly to get at the core of the respondent's processes of thinking, assessing, valuing, and judging. It has been developed primarily in developmental psychology. However, it can be adapted wherever the research probes at moral issues and practical decision-making processes. We describe two common types.

The first, the *hypothetical*, *researcher-generated dilemma*, is the most common. Many respondents are given a standardized dilemma and asked about what they would do and what would guide their decision making. The famous example devised by Kohlberg elicits respondents' moral reasoning about the so-called Heinz dilemma. Heinz's wife has a terminal illness and the only way to obtain a life-saving drug is to break a Biblical commandment: violate someone's property, commit a crime, or steal it. Kohlberg used this method to generate theory on moral development. Later, Carol Gilligan (1982) critiqued Kohlberg's theory and methodology, arguing that the theory was gender-biased because his samples were college-aged men. She devised data collection strategies that were more contextualized and more attuned to real lives, as well as ones which focused on women. As a result, she developed very different conclusions about moral development. The real-life, researcher-generated dilemma uses a real crisis—from history,

from typical workplace or family life situations—and asks for respondents' choices and the thoughts and feelings surrounding those choices.

The second, the real-life, respondent-generated dilemma, encourages respondents to describe the most difficult or heart-wrenching choices they have made, for example, while growing up, at work or in their families. Thus, the situations are generated in a more naturalistic fashion. While focused, they are closer to a straightforward interview, allowing respondents, at least to some extent, to choose what to focus on. For example, Marshall (1992, 1993, 1996) asked assistant principals to describe a situation that, in the last two years, had created ethical dilemmas for them in their workplaces. She guided them through standard questions to probe the parameters affecting the choices they made. In the interviews, telling the stories, in depth, to a sympathetic, nonjudgmental ear seemed cathartic. The rich data included stories of denying services to students because of policy, firing teachers, turning down promotions to avoid upsetting their family stability, and so on. While the interviews were wonderfully rich with personal context, pulling them together in data analysis and reporting was no easy task.

Dilemma analysis can be fun. Commonly focusing on one respondent at a time, it produces a thematic coherence that does not depend upon academic theories or hunches of the researcher (Winter, 1982). It opens doors to innermost thoughts and can be designed to collect standardized data. Real-life, researcher-generated dilemmas, if well constructed using insights from previous research, can be very useful, especially for focusing and standardizing data collection, when that is appropriate. Gathering data through real-life dilemmas is often enjoyable. People like to recount poignant, heroic, angst-provoking situations—when they are in the past and when they believe they created an adequate resolution. However, analysis of these data needs to stipulate clearly that these are recollections and, perhaps, represent the 20/20 vision of hindsight.

Dilemma analysis can be dilemma-laden, too. As in the Heinz example, people may not take the situation seriously, and the data may well reflect this. Also, the choice of a dilemma and the interview questions may be skewed to shape the choices, producing "interesting" data. In addition, the very personalized data elicited from real-life, but respondent-generated dilemmas may be difficult to interpret and to compare with other data. Finally, directing people to recall all the agonies associated with a dilemma that may still be unresolved can be problematic ethically.

Using Computer and Internet Technologies

There is no question that the Internet and its associated hardware (desktop computers, most commonly) have changed the methodologies of social science research. Searching the Internet for resources (now called Googling), using software to manage citations and some aspects of data analysis, interviewing by means of e-mail or in dedicated chat rooms, and using dialogues and interactions online as sites for study are all now part and parcel of much scholarship in the social sciences and applied fields. One way to track the changes over the past decade is to examine the chapters in the *Handbook of Qualitative Research* (Denzin & Lincoln, 2005, 2000, 1994) dedicated to some discussion of the use of computers in qualitative research. Between the second and third editions, there is a major shift.

The first edition (1994) included a chapter titled "Using computers in qualitative research" (Richards & Richards) in which the authors described various software programs designed to assist in qualitative data management and analysis. The second edition contained a similar chapter, "Software and qualitative research" (Weitzman, 2000). Shorthand in this developing field is the acronym QDA, for *qualitative data analysis*.

The software for qualitative data analysis raised both hopes and fears among qualitative researchers. In the second edition of the *Handbook*, Weitzman notes that computers can assist the analysis phase because they facilitate making and writing observational notes, editing, coding, storing, searching and retrieval, linking data, writing memos, analyzing content, displaying data, drawing and verifying conclusion, building theory, mapping graphics, and writing reports. He goes on to note, however, that "software . . . cannot do the analysis for you, not in the same sense in which a statistical package like SPRR or SAS can do, say, multiple regression" (pp. 805–806). Our experience is that novice qualitative researchers hope that software will do the hard work of analysis for them, somewhat magically. We caution that software is only a tool to help with some of the mechanical and management aspects of analysis.

The third edition of the *Handbook* (2005) includes no chapter on QDA. Instead, Markham focuses on what is called *Internet ethnography*, illustrating the growing focus on the Internet itself as a site for identity representation and construction. Scholars from communications and cultural studies have contributed fascinating studies of the Internet and its wealth of opportunities to reflect changing social identities, communities, and cultures (see, e.g., Baym, 2000; Kendall, 2002; Hine,

2001; Miller & Slater, 2000). Their fascination emerges in part from the postmodern turn that has examined and problematized the embodied construction of identity. The Internet provides a disembodied site where social identities (gender, social class, sexual orientation, and so on) are hidden. Thus emerges the possibility of studying the construction of identity solely through text. As Markham (2005) notes, "Although we recognize that reality is socially negotiated through discursive practice, the dialogic nature of identity and culture is thrown into high relief in computer-mediated environments" (p. 795). Studies of online culture include *Tune In, Log On* (Baym, 2000), *The Internet: An Ethnographic Approach* (Miller & Slater, 2000), and *Hanging Out at the Virtual Pub* (Kendall, 2002).

Using computers for data collection presents challenges and questions: Are data collected from an internet discussion board more or less authentic than data from, for example, interviews or focus groups? How can you guard the anonymity of sources if you collect data online? How do you manage the fact that your data come only from persons who are computer-savvy, comfortable with computers, and have computer access? Despite these challenges, computer-mediated data gathering may offer an alternative to face-to-face interviewing and be most appropriate for certain research projects. One major advantage is that one's sample can quite literally be a global one. Computers also provide access to populations uncomfortable with or unwilling to engage in face-to-face interactions.

❖ COMBINING DATA COLLECTION METHODS

Many qualitative studies combine several data collection methods over the course of the study, as seen in Shadduck-Hernandez's (1997) proposal discussed in Vignette 21 (see page 167). The researcher can assess the strengths and limitations of each method, then decide if that method will work with the questions and in the setting for a given study. Tables 4.1 and 4.2 display the strengths and limitations of each method, based on how it is generally used in qualitative studies. The tables should help researchers select the best combination of methods: Limitations in one method can be compensated for by the strengths of a complementary one.

In drafting a proposal, the researcher should consider whether the method will provide adequate information and be cost-effective and feasible in terms of the subtleties of the setting and the resources available for the study. The relative emphasis on participation in many qualitative studies, for example, suggests certain methods over others. Lutz

and Iannaccone (1969) provide guidelines for method selection based on role, as shown in Table 4.3. These choices should be logically linked to the conceptual framework and research questions, the overall strategy of the study, and early decisions about role.

Vignette 17 describes how a researcher selected data collection methods in a study about a long-term health care facility.

VIGNETTE 17

Choosing Data Collection Methods

How might one's view of life be shaped by residence in a long-term health care facility? A doctoral student in health care management (Kalnins, 1986) wanted to examine—in depth and in detail—the contexts, processes, and interactions that shaped patients' perspectives. She reasoned that a qualitative approach would be most fruitful in picking up everyday actions and interactions about complex social structures.

From the variety of data collection strategies, she proposed a combination of direct observation, participant observation, and semistructured interviewing. Her beginning point would be direct observation of residents and staff in various areas of the facility, "witnessing events which particularly preoccupied the hosts, or indicated special symbolic importance to them" (Schatzman & Strauss, 1973, p. 59). This would allow her to get a holistic view and to gather data that would inform the interview process.

Kalnins's plan as a participant observer would be to observe the residents and staff in the natural setting of the long-term health care facility, requiring her "commitment to adopt the perspective of those studied by sharing in their day-to-day experiences" (Denzin, 1970, p. 185). In her proposal, Kalnins anticipated that participant observation and interviewing would run concurrently, allowing data from each to be used to substantiate events, explore emerging hypotheses, and make further decisions about the conduct of the research. Her role as participant observer would mean that Kalnins would become immersed in the lives and activities of those she was studying. She understood the interactive-adaptive nature of participant observation, reflecting the complex relationship between field observation and emerging theory, and the impact of this relationship on decisions about further data collection. Her decisions about the data to be collected and methods for collecting those data would be guided by Wilson's (1977) list of five relevant types of data employed to get at meaning structures: (a) the form and content of verbal interaction between participants, (b) the form and content of their verbal interaction with researcher, (c) nonverbal behavior, (d) patterns of actions and nonaction, and (e) traces, archival records, artifacts, and documents (p. 255).

Strengths of Data Collection Methods Table 4.1

	Ю	0	1	FG	DR	Z	НА	F	X	UM	O	ΡŢ	DA	C
Fosters face-to-face interactions with participants	×		×	×		×						D		
Useful for uncovering participants' perspectives	×		×			×						Ω	Ω	
Data collected in natural setting	×	×	×	×	О	×		×	×	×				
Facilitates immediate follow-up for clarification	×		×	×		×			Ω					×
Good for documenting major events, crises, conflicts	×	×		×	×	×	×	×					×	
Collects data on unconscious thoughts and actions	×				О	Ω		×	×	×		×		
Useful for describing complex interactions	×	×	×	×		×	×	×	×			Ω		
Good for obtaining data on nonverbal behavior and communication	×	×	Ω	Ω		Ω		×	×	×		Ω		
Facilitates discovery of nuances in culture	×	×	×	×	О	×	×	×	×	×				
Provides for flexibility in formulating hypotheses	×	×	×	×	О	×	×	×	×	×				
Provides context information	×	×	×	×	×		×	×					О	
Facilitates analysis, validity checks, and triangulation	×	×	×	×	×			×	×	×	×	×	×	
Facilitates cooperation	×	Ω	Ω	×		×						×		×
Data easy to manipulate and categorize for analysis					×				×	О	×			
Obtains large amounts of data quickly		×		×			×	×				×		
Allows wide range of types of data and participants	×				Ω				Ω	×				
Easy and efficient to administer and manage					×		×		×	×	×			×
Easily quantifiable and amenable to statistical analysis					×				×	×	×	×		
Easy to establish generalizability					О		Ω		×		×	×		
May draw on established instruments					×				×	×	×	×	×	×
Expands access to distant participants					×						×			×
							,			(.

NOTE: x = strength exists; D = depends on use; PO = participant observation; O = observation; I = interview; FG = focus-group interviewing; PC = depends on use; PC = depends on use; PC = depends on use interview; PC = depends on use interviewing interviews interviewing i $Q = question naires\ and\ surveys;\ PT = psychological\ techniques;\ DA = dilemma\ analysis;\ C = internet.$

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	PO	0	_	FG	DR	Z	HA	F	X	CM	O	PT	DA	\mathcal{C}
Leads researcher to fixate on details	×	×		۵	×	×		×	×	×	×	×		×
Possible misinterpretations due	×	×	×	×	×	×	×	×	×	×	×	×	×	
to cultural differences														
Requires technical training								×	×		×	×		
Dependent on cooperation of key individuals	×		×			×						×		
Readily open to ethical dilemmas	×	×	×			×		×		Ω		×	×	×
Difficult to replicate	×	×	×	×		×	Ω	×				×		
Data more affected by research presence	×	×	×	×					Ω				×	
Expensive materials and equipment								×		×				
Can cause discomfort or even	×											×		
danger to researcher														
Too dependent on participant	×		×			×							×	×
openness/honesty														
Too artistic an interpretation	×	×	×	×		×	×	×				×		
undermines research														
Dependent on "goodness"		×		×			×	×	×	×	×		×	×
of initial research question														
Dependent on the researcher's	×	×	×	×	×	×	×					×		
interpersonal skills														

NOTE: x = weakness exists; D = depends on use; PO = participant observation; O = observation; I = interview; FG = focus-group interviewing; DR = document review; N = narratives and life histories; HA = historical analysis; F = film; IA = interaction analysis; UM = unobtrusive measures; Q = questionnaires and surveys; PT = psychological techniques; DA = dilemma analysis; C = internet. Page 135

Data Collection Methods Related to Observation Role Table 4.3

Method III—Observer as as observer as as observer as as observer as observer of descriptive data III—Observer as as participant nonparticipant nonparticipant Observation and recording of descriptive data of sentiment of sentiment unstructured interview + + + Structured interview - * + Structured interview - * + Structured interview - * + Suides - - * Detailed interaction guides - - + Interaction frequency tallies + + + Achievement or ability - - + Achievement or ability - - + Written records + + + Newspaper + + + Official minutes + + + Letters + + + Speeches + + +	
as observer as participant data data t quotations + + + + terview + + + + terview - + + + tion guides tronguides tronguides tronguides - + + + tests tronguides - + + + tests tronguides	III—Observer as
drecording + + + data + + + t quotations + + + terview + + + iew - - - ion guides - - - in tests - - - it or ability - - - in tor ability - + + in tor ability - + +	nonparticipant Comment
t quotations + + + + + + terview + + + + + + tiew	+ Particularly useful to Role I in areas of guarded interaction and sentiment
lerview + + /iew - * /ion guides - - Lency tallies + + I tests - - ss - - rt or ability - - tes + + tes + + + + + + + + + + + + + + + + + + + + + + +	+ Same as above
tien * tion guides - - Lency tallies + + I tests - - ss - - rt or ability - - tes + +	* If the researcher is skillful, a structure emerges
tion guides	+ Most useful in survey work
tor ability + + + + + + + + + + + + + + + + + + +	* Most useful in small-group work
tests	
es — — — — — — — — — — — — — — — — — — —	Very helpful in certain
Scales - - + Achievement or ability - - * Written records + + * Newspaper + + * Official minutes + + * Letters + + * Speeches + + *	+ circumstances for certain
Achievement or ability – – – * Written records Newspaper Official minutes + + + + Letters + + + + Speeches + + + + *	+ purposes
Written records * Newspaper + + * Official minutes + + * Letters + + * Speeches + + *	*
Newspaper + + + * Official minutes + + * Letters + + * Speeches + + *	Very important to Role I in
Official minutes + + + * Letters + + + * Speeches + + + * *	* checking reliability of
Letters + + + * Speeches + + + *	* observed data
speeches + + +	*
	*
Radio and television reports + +	Same as above

SOURCE: Lutz and Iannaccone (1969, p. 113). Reprinted with permission. NOTE: $+ = \text{likely to be used; }^* = \text{may occasionally be used; } - = \text{difficult or impossible to use.}$

To generate facts, opinions, and insights (Yin, 1984), Kalnins planned for open-ended structured interviews (using questionnaires) that would enable the exploration of many topics but that could focus on cultural nuances, first-hand encounters, and the perceptions, meanings, and interpretations of others. Information would also be gathered from various documents and archives, lending a historical perspective to the study.



Vignette 17 illustrates how a researcher chose an array of data collection methods, knowing that each method had particular strengths and that each would help elicit certain desired information. It shows that data collection strategies and methods cannot be chosen in a vacuum. Intensively examining the possible methods, trying them out, examining their potentials, and fitting them to the research question, site, and sample are important design considerations. In addition, researchers must consider their *own* personal abilities in carrying out any particular overall approach or method.

GENERAL PRINCIPLES FOR DESIGNING DATA COLLECTION STRATEGIES

In the proposal, the methods planned for data collection should be related to the type of information sought. Zelditch's (1962) chart, reproduced in Table 4.4, provides guidelines for three large categories of methods: enumerating, participant observation, and in-depth interviewing. Each broad category best yields a particular type of information. In determining which method to use, the researcher should carefully examine the questions guiding the study. Many *how* questions are really *how many* questions. For example, interviewing people in a program would not adequately answer the question of how many people drop out of the program.

The researcher should determine the most practical, efficient, feasible, and ethical methods for collecting data as the research progresses. He should also consider whether he can fashion and manage a role that works with the chosen data collection strategies. He might need to consider whether, in seeking approval or funding for the research, his chosen strategies will be seen as legitimate. He might start with participant observation as he seeks to identify questions, patterns, and domains. This strategy might change as the research becomes more focused and progresses toward more specific questions and

 Table 4.4
 Information Types and Methods of Obtaining Information

	Metho	od of obtaining infor	mation
Information type	Enumerations and samples	Participant observation	Interviewing informants
Frequency distributions	Prototype and best form	Usually inadequate and inefficient	Often, but not always, adequate; if adequate, efficient
Incidents, histories	Not adequate by itself; not efficient	Prototype and best form	Adequate, with precautions, and efficient
Institutionalized norms and statuses	Adequate but inefficient	Adequate but inefficient, except for unverbalized norms	Most efficient and hence best form

SOURCE: Zelditch (1962, p. 575). Reprinted by permission.

clearer concepts that suggest the use of representative samples. Then the researcher could develop surveys and enumerate the findings. On the other hand, the findings might be descriptions, not numbers. If the research goal is a description of processes, concepts, categories, and typologies, then sampling and counting are merely tools of analysis, not necessarily part of the research findings. The proposal should demonstrate that the researcher is capable of designing and selecting data collection methods that are appropriate, well-thought-out, and thorough. Because the research question may change as the research progresses, the methods may change and the researcher must ensure this flexibility. Vignette 18 provides an example.

VIGNETTE 18

Design Flexibility¹

A graduate student wanted to explore the implementation of a state mandate for local school councils. Rodriguez first proposed participant observation of meetings and in-depth interviews with board members. The data collection plan showed a schedule for observing the meetings, goals for interviewing,

and a time allowance for analysis of data and for follow-up data collection. But in the process of initial data collection and preliminary analysis, he discovered that teacher resentment of the councils was creating a pattern of unintended negative consequences. This discovery could have important implications for policy development. Did Rodriguez have to stay with the original question and data collection plan? Wouldn't a design alteration offer important insights?

Rodriguez reasoned that if he could describe the processes whereby well-intended policy is thwarted, policymakers could gain insight that might help them make timely alterations in policy development or implementation. Given this possible benefit to the study, he could choose to focus subsequent data collection on the conflicts between teacher needs and the mandate to school boards that they implement councils. This would require him to turn to additional literatures on, for example, teacher needs, teacher participation in decision making, or teacher unions. He might also need to employ additional data collection methods (such as surveying teacher needs, observing teacher union meetings, and doing historical research on the reactions of teacher lobbies to mandates for school councils), or he might need to sample additional settings or people. As the research question became more focused, his initial research design and data collection strategy would most likely undergo some changes.

In the example in Vignette 18, the research proposal probably did not include a plan for analysis of lobbying efforts or observation of collective bargaining sessions. It would, however, be entirely appropriate—indeed, recommended—for the researcher to modify the research proposal if an exciting and significant focus emerges from early data collection. In fact, the primary strength of the qualitative approach is this very flexibility, which allows, even encourages, exploration, discovery, and creativity.

Along with choosing appropriate strategies for data collection, the researcher must address the complex processes of managing, recording, and analyzing data. Rather than discrete, sequential events, these processes occur dialectically throughout the conduct of a qualitative study: Analysis occurs as themes are identified, as the deeper structures of the social setting become clear, and as consequent modifications are made in the initial design. At the proposal stage, however, the researcher should present some initial ideas about how the data will be managed and stored and provide some preliminary discussion of the processes for analyzing those data. We discuss these issues in the next chapter.

DIALOGUE BETWEEN LEARNERS

Melanie,

I really feel and appreciate your questions about the many selves that are infused within our research. I'm a former writing instructor so I have a tendency to believe in writing through these types of difficulties. I wonder what would happen if you did a bit of writing on the same topic from your different perspectives: your self as researcher, former instructor, and friend. Would they each look differently at the same topic? Where would they overlap? What I'm getting at is if you were to consciously take on the persona of one of your selves and then took on an issue from three perspectives you might get some wonderful insights into how your unique position creates an interpretation. Does that make any sense? My guess is that you'll find more points of overlap than not. It might, however, allow you to examine and honestly address your role in your research.

You've no doubt noted the number of different approaches in Chapter 4 of Catherine and Gretchen's book—it's a bit overwhelming to say the least! Sometimes it's a bit hard to not get caught up in the specifics of one particular approach, to not feel as though there were only one right way to complete an ethnographic interview or narrative analysis. I have a tendency to read up on different approaches and run the risk of losing sight of what I bring to the project—that there is perhaps a bit of a dialectical relationship between what I bring to the project and the effect the project has on me.

While I agree that, ultimately, our research might not be about us, I can't deny that it does, in no small way, reflect us and our experiences. We might say that our research is, in a very real sense, autobiographical. No doubt you selected your area of research because in some way you connect with it. Imagine working so hard on something that you were distinctly separate from and neutral toward!

But there is something so very disconcerting or indulgent about ongoing navel-gazing. Like you, I hedge at focusing too much on myself (or, my self). There are the voices and selves of the students you work with and study. Hmmm...I suppose this is where we look to our mentors to read our work and say,

"Hey, this is not all about you" or ask, "Where do you fall in all of this?" I suppose we can also turn to other graduate students! I get a lot out of our conversations; it's nice to have someone to chat with about these issues and writing it down in an e-mail seems to help.

Hope all is well.

Aaron

Hi Aaron,

You make some good points, especially that our research does, in some way, revolve around us; otherwise, it wouldn't be **our** research. Thanks for the suggestions, too; I like the idea of writing from my different selves. (I'm a former English teacher—bring on the pen!) I think it's quite easy to get stuck at approaching our research in one specific way; remembering the flexibility in technique and presentation really opens up our options.

I really like thinking through these topics, too. Working through the tangles with a fellow grad student gives one the license to be ignorant! Even though we know so much about so many different things, we're still making sense in personal, practical ways. Conversations among grad students are more of a meaning-making experience, working together to create an understanding that applies to our personal situations. I get a lot out of seeing other grad students tackle different techniques, too. A few of my friends here are dedicated to life history and film ethnography. I'm more of an in-depth interview, computer-interaction type of researcher. Even if I don't see myself taking on those specific types of techniques (yet!), I learn from seeing their use of different approaches. We might gain info like this faster by asking a professor or reading an article, but we don't absorb it or apply it the same way.

So, what else is on your mind?

Melanie

❖ NOTE

1. This vignette is fictitious.

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