

## Interviewing in Educational Research

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This chapter is concerned with introducing open-ended interviews, in other words, interviews in which the intent is to understand informants on their own terms and how they make meaning of their own lives, experiences, and cognitive processes. The interviews discussed here contrast with surveys and tests, both of which can be administered in oral form but are usually highly structured both in content and method by the researcher. The survey is typically used to find particular pieces of information or to determine the frequency of different responses in preset categories. The test is designed to see whether a respondent has knowledge of particular facts or procedures. Similarly, participant observation and collection of naturally occurring conversation can entail collection of verbal data but the researcher must infer the participants' meaning less directly than is possible through in-depth interviewing. The open-ended interview, often also called a qualitative interview, gives an informant the space to express meaning in his or her own words and to give direction to the interview process.

Because the interview is an interactional relationship, both informant and interviewer are engaged in an ongoing process of making meaning (Kvale, 1996). Different interviewing strategies facilitate this process. The goals of this chapter are to give a novice interviewer an overview of the kinds of meaning that researchers from different disciplinary perspectives hope to gain from the interview process, the interviewing strategies that elicit different kinds of meaning, and an introduction to the issues that are typically addressed in designing a high-quality interview project. The chapter begins with a discussion of the relation between theory and method using selected examples from cultural anthropology, cognitive anthropology, cognitive science, and developmental psychology. I then describe the differences between inductive and deductive approaches to interviewing. Next I outline the considerations in designing an interview project that optimize a researcher's chances for conducting productive, ethical interviews with a variety of different informants. The chapter concludes with a brief overview of options for analyzing interview data and ways in which the interviewer can enhance the trustworthiness of an interview study

### INTERVIEWING: THEORY OR METHOD?

Although some people approach interviewing simply as a conversation with a purpose (Kvale, 1996), in fact there are interview techniques with different theoretical assumptions that derive from a variety of disciplines. Each of these disciplines makes different assumptions about the

nature of knowledge and therefore what can be learned through the interview process. Parameters for good interviewing can vary greatly depending on the disciplinary frame adopted by the interviewer. The following examples were chosen to highlight differences in methodology and do not necessarily represent the diverse assumptions or all of the approaches used by any of the example disciplines.

### Cultural Anthropology

In education, one of the most commonly applied disciplinary frames is that of cultural anthropology and its ethnographic tradition. Interviewing has been a staple of ethnographic research throughout most of the history of cultural anthropology, often used in conjunction with participant observation to "grasp the native's point of view, his relation to life, to realize *his* vision of *his* world" (Malinowski, 1922, p. 25). At the heart of ethnographic research is the concept of culture, which has been defined in many ways, perhaps earliest by Tylor (1891) as "Culture ... is that complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by man as a member of society" (p. 1). In line with this broad definition, ethnographers have seen interviewing as just one source of information about the multitudinous aspects of life in society including behavior, attitudes, belief, and material culture. Correspondingly, the guidelines for ethnographic interviewing have been broadly defined with an emphasis on using the language of the culture in conversations that range from informal to formal (Bernard, 1988), often with key informants. Virtually any aspect of cultural life can be explored through ethnographic interviews, including reconstruction of practices and beliefs that no longer exist at the time of the interview (Pelto & Pelto, 1978) such as traditional rituals or childrearing beliefs. The goal of an ethnographic interview is to understand the shared experiences, practices, and beliefs that arise from shared cultural perspectives. Ethnography is also used in sociology, but with less of an emphasis on description of cultural meaning (Bogdan & Biklen, 1998, pp. 29-30).

### Cognitive Anthropology

Several detailed guides for ethnographic interviewing (e.g., Spradley, 1979; Werner & Schoepfle, 1987) have been published with origins in cognitive anthropology. Cognitive anthropology posits that culture is a cognitive system shared by a group of people. This system has a structure that can be understood through systematic elicitation of the natural language used by people to describe domains of knowledge. Cognitive anthropologists have a long tradition of studying the structure of kinship systems, color terminology, and folk knowledge about illness (D'Andrade, 1990). This approach to culture contrasts with the more broadly descriptive approach to culture previously described.

The grand tour question is the best known of the question types used by cognitive anthropologists and is widely used by educational researchers. A grand tour question is typically an opening question that asks the informant to give a broad description about a particular topic. For instance, an interview with a high school student might begin with a question such as, "Tell me about a typical school day, from when you first reach the campus, until the end of your last class." But from the point of view of a cognitive ethnographer, the grand tour is just the beginning of the interview journey and is followed by a variety of questions that probe deeper into the domains uncovered through the grand tour initiation. The grand tour question starts to give the researcher the "native" language of the informant and the identification of significant topics within the cultural framework of the informants. Grand tour questions are followed by minitour questions that probe each of the topics that have been identified. A minitour question for a high school student.

who has just described a typical school day could be, "You said that your algebra class is really boring. What are the things that happen each day in algebra?" The ethnographer then strives to understand the internal structure of each of these topics through structural and contrast questions that go into increasing detail about the terms informants use to describe their perception of reality. A high school student could be asked the difference between a "solid" class and an elective, and which courses fit into these categories. Throughout the ethnographic interview process, the researcher maintains the stance of a cultural outsider who is striving to understand the cultural systems of others in the informants' own terms. The skill of the ethnographic interviewer is seen in the ability to "build" the interview as it proceeds. Although cognitive anthropologists share many of the goals of other ethnographers, Spradley (1979) and Werner and Schoepfle (1987) described specialized interview techniques such as card sorts and triads tests that help a researcher understand the internal structure of specific domains of cultural knowledge.

### Cognitive Science

Some of the interview techniques developed by cognitive scientists contrast with the ethnographic approach in that they try to gather information about the processes of thinking rather than the knowledge base that is used in thinking. The think-aloud method, a method derived from information processing theories and described in depth by Ericsson and Simon (1993), is one example of a tightly scripted interview technique that looks at how people use their knowledge while doing a cognitive task such as solving a mathematics problem or interpreting a primary source for historical purposes. Ethnographers and cognitive scientists would concur that the knowledge base is important, but a cognitive scientist using the think-aloud method is much more concerned with the more ephemeral ways in which people apply different parts of the knowledge base to achieve particular goals (Payne, 1994). The verbal data that the think-aloud method collects are the passing thoughts that the informants have as they grapple with a challenging task. The skill of the interviewer is in choosing appropriate tasks for the informants and encouraging the informants to continuously verbalize what they are doing as they carry out the tasks. Typically, informants are not asked why they have done something while they are still engaged in the task because such ad hoc questions are considered to tap into the permanent knowledge base instead of the working memory that actually reflects which knowledge was used at a particular point in the process. In a mathematics class, the knowledge base might be the domain of rational numbers and the types of questions described previously for cognitive anthropology could be used to determine that sixth-grade students know a lot about fractions, decimals, and ratios. In contrast, the cognitive scientist would pose a problem to a student to ascertain the process by which a student converts a decimal to a fraction.

### Developmental Psychology

The clinical<sup>1</sup> interview stands somewhere between the ethnographic and think-aloud cognitive science interview in that it might be conceived of as an exploration of the interplay between what a person knows and how he or she uses that knowledge (Ginsburg, 1997). This interview technique is widely used in developmental psychology, often with children. A clinical interview can be very informal (e.g., Ginsburg, 1996) in that it takes its direction from the child's responses to

<sup>1</sup>The use of the word *clinical* in describing interviews as done by developmental psychologists is not related to the word as it would be used by psychologists working with clients and does not carry the same connotation of therapy or diagnosis of disorder.

understand the child's understanding of a cognitive domain such as counting. Other clinical interviews are very structured with a predetermined series of tasks, questions, and probes that are applied in standard ways across child informants. However, the method is still open ended because the children are asked why they have carried out a certain action while doing a task. In contrast to the think-aloud technique, these explanations are considered a critical part of the data collected.

The four disciplinary frames briefly described earlier vary along several dimensions. They have differing levels of emphasis on elucidating knowledge and process, and different degrees of interest in individual variation and collective perspectives. Other specialized interviewing traditions, which are beyond the scope of this brief chapter, provide many more choices to the researcher. Concept maps (Novak & Gowin, 1984) and task-based interviews (Goldin, 2000) are examples of ways to look at knowledge and how it is used. The life history interview (Atkinson, 2002; Tagg, 1985) is used to look at the "subjective essence of one person's entire life that is transferable across disciplines" (Atkinson, 2002, p. 123). Group interviews such as the focus group (Morgan, 1988) offer a way to move beyond the personal interaction of an interviewer and informant through "the explicit use of the group interaction to produce data and insights that would be less accessible without the interaction found in a group" (p. 12).

### Inductive and Deductive Approaches

Because the purpose of open-ended interviewing is to capture information from and about the informant's reality, new interviewers are often confused about the role of theory in this kind of research. At one extreme are the researchers who state that their sole purpose is representing the authentic voice of the informant(s). But even researchers who do life history research that results in written documents entirely in the informant's words acknowledge the influence of the researcher in terms of asking the questions, motivating the narration, influencing the narrative process by how they are perceived as audience, and editing the final product (Tagg, 1985). This section of the chapter discusses two distinct approaches to designing and analyzing open-ended interviews. Indeed the open-ended interview is guided by theoretical constructs, although these constructs may have different relationships to extant research and theories. Another way of framing this distinction is in the contrast between inductive and deductive approaches to constructing and analyzing an interview. In the inductive approach, a researcher attempts to describe the categories that emerge from the data during the analytical process. In the deductive approach, a researcher brings theoretical constructs to the research project. Questions are framed using these constructs and the analysis can be done by examining how the informants address these constructs during an interview.

*Inductive Approaches: The Example of Grounded Theory.* The inductive approach of grounded theory "focuses on the process of generating theory rather than a particular theoretical content" (Patton, 2002, p. 125). The subjective world of informants is analyzed to produce conceptual understanding specific to the data collected (Glaser & Strauss, 1967) through systematic methods and procedures. Although some researchers presume that grounded theory is not influenced by prior theories or constructs of the analyst, others have written about the use of sensitizing constructs that the researcher brings with him or her to the study (van den Hoonaard, 1997) and the ways in which emerging constructs are tested through more focused interview questions as a grounded theory project evolves (Charmaz, 2002). As described by Charmaz (2002), grounded theory is a set of methods through which

The founders of grounded theory, Barney G. Glaser and Anselm L. Strauss (1967), aimed to develop middle-range theories from qualitative data. Hence they not only intended to conceptualize qualitative data, but planned to demonstrate relationships between conceptual categories and to specify the conditions under which theoretical relationships emerge, change, or are maintained. (p. 657)

Grounded theory as a method is similar to Spradley's Developmental Research Sequence (1979) in that both offer a clear series of steps for analysis that derive from the authors' theoretical purposes.

*Deductive Approaches: The Example of Critical Theory.* Other researchers are more explicit about the theoretical frameworks that guide their interviews, and even seek to test various theories through their open-ended interview questions. For example, critical theorists will purposefully set out to explore how an informant's position in society, whether defined in terms of class, race, gender, or in other frames, has shaped the individual experience (Wink, 2000). Although an interviewer working from a particular theoretical perspective may choose to begin an interview with a grand tour question that suggests the interview is relatively unstructured, in fact it is appropriate to follow certain lines of questioning if they allow the interviewer to explore the topics that motivate the research. The researcher is still sensitive to how the informants frame their own experience, but will choose to explore the constructs of a theory within the interview through focused questions. Thus the deductive approach may include a more structured interview protocol that is systematically used across informants.

## PLANNING AND CONDUCTING AN INTERVIEW PROJECT

### Working With Informants: Ethics, Informed Consent

As in all research involving humans, protection of the people involved in an interview study is a paramount responsibility of the researcher. Professional research associations recognize the rights of informants to make an informed decision about whether to participate in a particular project, to receive considerate treatment during the research process, and to have their personal responses and identity kept confidential throughout (e.g., American Educational Research Association, 1992). The qualitative interview involves special considerations because of the personal relationship it often establishes with an informant and the sometimes unpredictable direction that conversations can take as a project evolves (Howe & Dougherty, 1993). Kvale (1996) suggested preparing an "ethical protocol" that will guide consideration through the different phases of a research project from planning through reporting. Ongoing consultation with both the research community (e.g., more experienced researchers) and the community of the informants can support researchers in making ethical and moral decisions through the course of a project. The ethical issues that might arise in a particular project are influenced by the role of the interviewer vis-à-vis informants as well as consideration of the potential power relations between researchers and informants, topics that are discussed later in this chapter. The choice of methods for recording interview data (written notes, audio recording, video recording) also has an ethical dimension because the more complete mechanical recording of responses also makes it easier to identify individuals. When confidentiality is of great importance, as when interviewers address sensitive topics or incriminating behaviors, the risk to informants should be minimized despite the potential loss of some data.

All interviews conducted as part of potentially publishable research (including master's and doctoral research) must be approved by an institutional review board (IRB), often called the

Human Subjects Committee, prior to beginning data collection. Each university, as well as some other institutional sites such as school districts, will have its own set of procedures. These IRBs will also have their own set of requirements about what constitutes informed consent and how it is to be documented. Typically informed consent is obtained through the use of a letter or form that specifies (a) the nature of the research, (b) the procedures in which participants can expect to participate, (c) a description of the means by which confidentiality will be protected, (d) a list of contact people to whom questions and complaints about the research can be directed, and (e) a description of the risks and benefits of the research. These forms are signed by the research participants (including parents for minors as well as sometimes the minors themselves). When an informant's name on a consent form places the informant at risk, as when a sensitive topic is the subject of the interview, oral consent (sometimes recorded) may be preferable. Certain data collection methods such as videotaping may require special procedures because the data make it harder to maintain confidentiality. In addition to approving the procedures for informed consent and the actual research process, IRBs now typically require that researchers, including graduate students and research assistants, undergo training in the protection of human participants.

### Interview Structure

The construction of the interview involves numerous decisions, beginning with the structure of the interview, the types of questions, the range of topics, and techniques for obtaining the depth of response that is available during an open-ended interview. Interview formats can range from casual conversations to highly structured interview protocols.

Except for the most seasoned interviewer immersed in an ongoing project, it can be helpful to work from a written sequence of interview questions. For purposes of comparability across informants and across interviewers, some interviewers choose to develop a structured interview protocol (i.e., a list of carefully worded questions with preplanned probes) that is used throughout the research project. Although many new researchers prefer the security of a carefully planned set of questions, this approach does not allow an interviewer to follow up on unexpected topics or individual differences that emerge during the interview. A semistructured protocol has the advantage of asking all informants the same core questions with the freedom to ask follow-up questions that build on the responses received. My personal favorite is the interview guide that divides the interview into topics that will be covered, with some initial wording of questions and a list of areas to be explored with each informant. This type of protocol often fits onto one page and allows an interviewer to capitalize on the ethnographic questioning cycle described by Spradley (1979) in which the informant's cultural and personal vocabulary and framework are incorporated into the questions.

### Framing Rich Questions

Perhaps the biggest challenge in developing an open-ended interview lies at the level of asking questions that encourage the informants to talk expansively on the interviewer's topics. Unlike everyday conversation, the open-ended interview often begins with a big question and proceeds in what some have called the funnel shape—beginning with large questions working down to details. The grand tour question format from Spradley (1979) is an all-purpose starter although it is not appropriate for many situations. A new informant typically seeks cues from the interviewer about what is expected during the interview—not just the content of the discussion, but also the length of response, depth of detail, and formality of language. Although a researcher's explanations can set some of the frame, the first few questions are powerful tools for helping the informants construct their responses. Patton (2002) suggested that interviews begin with descriptive

questions that are close to the informant's current experience and expertise. Once a clear description is obtained, often with the help of interviewer probes and prompts, opinions and interpretations can be solicited based on the mutually understood content that has been discussed.

Part of the art of interviewing is encouraging the informant to open up and expand on his or her responses in a way that is distinctive from normal conversations. As several authors have noted (e.g., Kvale, 1996; Spradley, 1979), the everyday conversation is often characterized by balanced turn taking by participants. In contrast, one characteristic of a good interview is that the informant is encouraged to speak more than the interviewer. However, short questions by the interviewer can suggest to the informant that short responses are expected. It can therefore be more productive to pose somewhat longer questions to mark the special nature of the interview situation. Although each interview will have its own internal logic, there are various frameworks that the interviewer can use to provide depth to the exploration of a topic with an informant. Werner and Schoepfle (1987) suggested that ethnographic interviews for exploring an informant's social world begin with the topics of space and territory, actors, management of time, job descriptions and actors' expressions of feelings, judgments, and evaluations. Each of these corresponds to a general descriptive question (grand tour question) that leads to natural and emerging minitour questions. Patton (2002) offered an alternative Matrix of Questions Options in the domains of behavior and experience, opinion and values, feelings, knowledge, and sensory and demographic background, each of which can be explored in the past, present, and future time frame. Although these or similar frameworks offer options to the interviewer, repeated probing questions can challenge the patience of the most enthusiastic informant, whereas a repetitive structure cycling through each topic can produce boredom.

Interviewers usually attempt to use truly open-ended questions. The opening stance of an interview signals the state of knowledge of the interviewer and sets the tone for the subsequent interview. In all cases, interviewers want to convey their interest in what a particular informant has to contribute, and encourage him or her to speak expansively on a topic. An ethnographer may begin with a position of cultural ignorance and operate as a professed outsider. However, within educational interviewing, a professed ignorance can be counterproductive when an interviewer would be expected to have shared cultural knowledge or even expertise that is known to the informant. Thus, the interviewer can start with a broad ("What are your responsibilities as principal of this school?") or narrow question ("Where did you get your administrative training?") at the beginning of an interview, depending on what will set the particular informant at ease. In some cases, the opening question can establish a possible commonality between interviewer and informant, such as prior education that both may have experienced. Or the interviewer may ask about the special experience that warranted including the informant in the study, such as a leadership role or winning a prize. Except in the case of a highly structured interview protocol, the beginning of each interview can be somewhat individualized to develop rapport between the interviewer and informant.

The most common mistake made by new interviewers is to open each topic in an interview with a simple yes—no question such as "Can you tell me about ...?" or "Do you like to ...?" or dichotomous questions such as "Do you prefer x or y?" Presumably the researcher has already chosen informants because they have something say about the interview topic. Additionally, to a taciturn or shy informant such questions signal the expectation that only a brief answer is expected. An open-ended interview takes advantage of the format by asking informants *how* and *what* questions that cue informants to give their perspective in their own words. Each question should be posed clearly so that its purpose is clear. Another common mistake is for an interviewer to ask multiple questions at one time, such as "What do you do in English class and what do you really like about it?" Not only can an informant become confused about the real purpose

of the question, but the response is likely to cover only one of the two different questions posed in the example. Although questions should be clear, they need not be extremely short. Spradley (1979) advocated giving ethnographic explanations that frame the interview purpose, and Patton (2002) provided examples of prefatory statements that involve "alerting the interviewee to what is about to be asked before it is asked" (p. 370). Longer questions signal that an interviewer expects longer answers and give informants time to collect their thoughts.

There are a number of other question types that can be profitably used as an interview progresses or in the later stages of a project when an interviewer wants to elucidate information that has come up earlier in the interview or with other informants. Patton (2002) noted that the interviewer must establish rapport with an informant while maintaining neutrality in questions. He suggested that prefacing a question with an example can help an informant describe his or her own experience. Such illustrative example questions can include a range of behaviors or experiences that others have had to imply that a judgment is not being made about any specific response. Another example of an elaborated question is a role-playing or simulation question, which provides a context for the informant such as, "If I were a new kid in your class, what rules would you tell me about to get along with the teacher?" Sometimes an interviewer wants to address a sensitive topic without putting an informant on the spot. A presupposition question can raise the topic and "presupposes" that the informant has something to say. For instance, "White lies are common in everyday life and help us to get along with our friends. What are some white lies that you've used with your friends?" It is easier for the truly honest to deny the behavior (e.g., lying) than it is for the somewhat guilty to answer "Have you ever told a lie to your friends?"

An open-ended interview's strength may be in the opportunity it gives to an interviewer to extend and clarify an informant's responses through probing. A practiced interviewer routinely uses detail probes such as *who*, *when*, *where*, and *how* during the course of the interview conversation. Encouragement probes (e.g., "uh-huh," "interesting," "tell me more") and silent probes (leaving a pause after an informant speaks) give informants the feedback that the interviewer is still listening and provide them with the temporal space to finish their line of thought. Interviewers use clarification probes to check their understanding about what they have been told. Clarification probes can restate what an informant has said (e.g., "Did you say that all grades below a C are considered a failing grade?"), thereby offering an opportunity for correction or elaboration. They are also a chance for an interviewer to use an informant's terminology and to get feedback from an informant. Although probing is used judiciously and spontaneously as needed in the context of an evolving interview, some interviewers find it helpful to include potential probes in the interview guide. This serves as a reminder to elicit in-depth information from each informant. Sometimes a particularly effective follow-up probe emerges in the context of one interview, and it can be added to the list of potential probes for subsequent interviews. Although probing is an intrinsic part of the open-ended interview, it must be used judiciously. To control the subjective perspective of an interviewer, it is important not to praise particular responses and thereby direct an informant in directions favored by the interviewer.

Although most interviews proceed fairly smoothly and most informants are cooperative, sometimes the interviewer is not eliciting the information needed with the prepared protocol. Murphy (1980) suggested challenging questions that can be more confrontational or pointed but at times particularly productive. For instance, the interviewer may want to explore an informant's opinion by having him or her compare it to an opposing opinion. This can be done in several ways. The interviewer can attribute a particular opinion to another group or type of individual, for example, "Some of the teachers in the district have opposed this new policy because they feel it discriminates. What do you think about it?" Or the interviewer can say, "Mr. Johnson, I really think that's a helpful answer, but let me play devil's advocate for just a moment. The practices



that you described as impossible seem to be in operation in five districts in this state. Can you say more about why the state cannot expand these practices?" (Murphy, 1980, p. 102). Challenging questions must be used with caution, of course, so that they are not leading the informants or forcing them to answer a question they would rather avoid.

### Recording an Interview

An audiotape recording allows an interviewer to focus on the conversation with an informant and carries a more complete record of the informant's actual words. Videotaping further enables an interviewer to capture an informant's expressions, actions, and body language, although it may also be intimidating or inhibiting. Regardless of the availability of recording technology, note taking is a skill that a beginning researcher should develop for many reasons. Not all informants are comfortable with the audio or video recorder and not all interview opportunities occur when a recorder is handy. It is also typical for technology to fail a certain percentage of the time. There are other clear advantages to developing one's note-taking skills as well. It allows an interviewer to record details about the context, body language, and affect that might not be apparent on the audio record. Judicious note taking also gives time for informants to think more deeply without a potentially awkward silence. Similarly it allows the interviewer an opportunity to note directions that emerge in the interview that warrant further questions. Some informants, in fact, expect there to be written notes—they feel the interviewer is giving them more focused attention. Of course, there are times when note taking is disruptive to the flow of a conversation or distracting to an informant or interviewer. The final decision on whether to record an interview ultimately depends on the joint consideration of the interviewer and informant about what will allow the optimal and comfortable collection of pertinent data. Computer applications for use in qualitative research are increasing the range of options for interviewers, from taking notes on a laptop computer to integrating audio, visual, and textual data into one database (Seale, 2002).

### Working With Informants: Adaptation of Interview Techniques

This section about planning and conducting interviews began with ethical issues in working with informants, and I close by returning to the issue of working effectively with informants. As Werner and Schoepfle (1987) noted, asking questions actually entails negotiating questions with informants. Important aspects of the process include decreasing the power differential between the informant and interviewer, and choosing questions that are meaningful to an informant. For instance, adults have more power in society, which can pose a major challenge when interviewing children and adolescents (Eder & Fingerson, 2002). Defusing this power differential can be done through interacting with young children casually in their natural sites (Tammivaara & Enright, 1986) or using nonformal terminology when asking adolescents about sensitive topics (Weber, Miracle, & Skehan, 1994). Similarly questions need to engage children and adolescents and draw from what they know from within their frame of reference. Younger children are often more comfortable when pictures, toys, or other props are used during a discussion with an adult. Adolescents may not know their parents' job titles but can tell the researcher where their parents work and what kinds of things they do in their job. Although cautions were mentioned earlier about using dichotomous questions (e.g., those requiring a yes—no response), at times they are useful with younger informants.

Questioning across cultural and language differences is often even more complex. Researchers need to negotiate their role in a different cultural context (Ryen, 2002) to even begin the interview process. Asking good questions is more than translating sentences to a new language, although it is useful to incorporate standard practices such as back translation

(Marin & Marin, 1991). Cross-cultural interviewing is a collaborative performance in which both interviewer and informant cross cultural boundaries that include definitions of physical space, negotiation of social roles, and creation of a new kind of interpersonal context.

Researchers are often seen to work from a position of power. They presumably control both the purpose and questions in an interview. However, interviews with elites, policymakers, and public figures pose added challenges, particularly to the new interviewer (Marshall, 1984). Access and time constraints often make an open-ended or ethnographic interview unproductive or infeasible compared to a more focused set of questions, which can be covered more quickly. Preparation for a public figure or member of an elite can begin with interviews of staff members or others familiar with the person. The background information thus obtained can be used to craft effective and informed questions.

The open-ended interview is an unfamiliar experience for a novice interviewer and many informants. As several authors have noted (e.g., Kvale, 1996; Spradley, 1979), the research interview violates many of the norms of everyday conversation. It sets up an intimate relationship between people who might not have any prior relationship. The intimacy and conversational demands of the interview warrant both extensive practice on the part of a novice interviewer and the use of reflection throughout the interview process. When listening to a recording of an interview, interviewers can determine how they have changed questions in the flow of an ongoing interview. Some changes are beneficial but other changes create awkward or leading questions. It is wise to carefully pilot new interviews. This enables an interviewer to become comfortable with the questions and to ascertain whether the planned questions are appropriate for the targeted informants.

## CONCLUDING THE INTERVIEW STUDY

### Analysis of Data

Although a thorough discussion about data analysis is beyond the scope of this chapter, the issue of analysis is pertinent throughout the development and implementation of a research project. Of course the choice of questions and tasks for the interview protocol should consider what kind of analysis the researcher hopes to do with the data. Less obvious is the fact that analytical decisions occur during the interview itself as the researcher decides when to probe, when to follow a general descriptive question with a more specific one, and when to modify the interview protocol to fit the needs of an individual informant. As Kvale (1996) pointed out, it is almost too late to ask what to do with the data after data collection has ended. Many authors have written about systematic processes of working with data that fit with the theoretical assumptions of their discipline (Charmaz, 2002; Glaser & Strauss, 1967; Spradley, 1979). These can be followed as a road map when appropriate. However, for many researchers it is less clear that these coherent systems fit their needs. Here I provide a general framework that identifies critical decision points or phases in the process of choosing or developing a systematic analysis framework, once the data have been collected. I call these five phases transcription, description, analysis, interpretation, and display. Although presented here as a linear progression, working with data is frequently a cyclical process of looking for coherence and meaning that requires returning to the data with a different perspective as insights are developed, or what Glaser and Strauss (1967) called the constant comparative method.

*Transcription.* The first decision an analyst makes is how to prepare the data for subsequent analysis. As Ochs (1979) eloquently argued, the act of transcription itself involves theoretical

decisions. There is no single agreed-on standard for the appropriate transcript. Because oral speech and printed text are different media, it is not possible to reproduce the full flavor of the oral experience in the written format. For purposes of discourse and narrative analysis, a transcriber may carefully include features of the speech such as pauses, repetitions, and intonation (Silverman, 2001) that are of less concern to an ethnographer. An ethnographer may be more concerned with capturing the eloquence of a speaker in a dialect or informal speech genre that does not emerge easily in the more formal conventions of written text. In addition, there is a certain level of uncertainty inherent in recorded speech because of a lack of recording clarity and the deletion of context, even with video recordings (Poland, 2002). A researcher needs to make systematic decisions about the transcription conventions that will be followed in a particular project, including decisions about whether to do global, selective, or no transcription at all.

*Description.* This includes coding, thematic analysis, identification of telling incidents, and so on. In this phase, the analyst is finding a way to identify the content of the data that have been collected. In line with the inductive—deductive distinction made earlier, analysts can use a priori or emergent methods of organizing their description of the data. Although they were writing about analysis of field notes, Emerson, Fretz, and Shaw (1995) gave a very useful description of the differences between open (emergent) and closed (predetermined) coding and guidelines for each. Content analysis (e.g., Mostyn, 1985) provides another systematic way to bring order to a rich body of data.

*Analysis.* This phase is the heart of the process in which a researcher looks for the relations in the data. This can entail comparisons across informants or across the different sections of one informant's interview. A researcher may seek to identify larger themes that tie together the particulars of individual experience. If a coding system has been used, the analysis phase considers what relations exist among the different parts of the coding system. At this point the researcher has begun to identify the abstractions or theoretical dimensions of the data.

*Interpretation.* This phase of the analysis involves a researcher in drawing the connections between his or her results and larger theoretical issues. Because the purpose of research is to contribute to a general body of knowledge, researchers need to compare their results with other studies or to make available a message that might have relevance in different contexts and to other researchers.

*Display.* The final analytical decision involves figuring out how to display the data for those who read about the research. Various displays of the data will have been employed by a researcher throughout the analytical process, but only some of these will be used in written reports. The richness of the open-ended interview is typically honored by some presentation of the individuality of the informants through verbatim quotes, in-depth examples, or mini case studies. It can also be valuable to present summaries of the data whether in narrative format, frequency tables, or other kinds of tabular displays (e.g., Miles & Huberman, 1984).

### Trustworthiness and Research Quality

The quality of research in the interpretive and qualitative tradition has been framed as an issue of establishing the trustworthiness of the research in contrast to standards from quantitative research that are often inapplicable and inappropriate (Eisner & Peshkin, 1990; LeCompte & Preissle, 1993; Moschkovich & Brenner, 2000). Strategies of particular relevance to a qualitative

interviewer are describing the role of the interviewer, member checking, and peer debriefing. These are defined later.

Because qualitative interviews are based on a personal interaction, who a researcher is and how informants view the researcher are likely to influence the kind of information received in an interview. Thus it is recommended that researchers describe not only who they are as part of a research report, but how their informants may have perceived them as well. As noted earlier, interviewers can frame themselves as cultural outsiders or they might establish themselves more as insiders to build rapport. In addition, interviewers must often bridge power differentials between themselves and informants that are based on age, race, social class, language, and gender differences. How this is accomplished should comprise part of the description of methods.

A common goal for a qualitative interview is to understand an informant's creation of meaning. It is useful to confirm the researcher's interpretation of meaning with informants' perceptions in a process called member checking. At the simplest level, the researcher can share transcripts with informants to see if the interview itself is accurately portrayed. This can provide a researcher with corrections to the transcript or even further elaborations as an informant reflects on what was said during the interview. Another choice is to present the outcomes of the analysis to some informants to see if a researcher's distillation of themes and shared meaning retain coherence with the views of informants. Toward the end of a project, a researcher can choose to give written reports to informants for feedback and reaction.

As a researcher makes analytical decisions throughout the research project, it is useful to share the process through peer debriefing. Recordings and transcripts allow other researchers to see how a researcher distills ideas from the primary data and to judge whether the patterns detected are visible to people less connected to the original data collection. Unlike the case in member checking, peers will share some of the analytical and theoretical constructs used by the researcher to communicate with the field. Although researchers commonly share their results with peers, peer debriefing engages other researchers in a more detailed examination of particular data at an earlier stage in the research project.

## CONCLUSION

In this chapter I have given an overview of the numerous considerations that go into designing an interview study, with many references in the published literature that contain more in-depth discussions of various perspectives and methods used in educational research. Although I have stressed the strengths of qualitative interviewing, it is often productively used with other methods of data collection such as participant observation (Becker & Greer, 1969). Of paramount importance is choosing the methods that match the research question. The best advice I can give to a new interviewer is that practice is essential to good interviewing. Finding one's own style as a focused conversationalist and feeling comfortable with informants is the key to a good interview study.

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