

TRANSCRIPTION QUALITY

◆ Blake D. Poland

The transcription of audiotaped interviews as a method for making data available in textual form for subsequent coding and analysis is widespread in qualitative research. Yet, until relatively recently, little attention had been paid to methodological aspects of transcription, despite the theoretical and interpretive consequences of various approaches to defining and attending to transcription quality.

In this chapter, I explore the issue of transcription quality from a number of vantage points. I take the emerging literature on this topic as my point of departure, noting that the researcher is frequently exhorted to be ever more vigilant in the application of a growing number of possible conventions and measures to ensure that transcripts are verbatim facsimiles of what

was said in interviews (Edwards and Lampert 1993; Du Bois et al. 1993; Psathas and Anderson 1990). In the opening sections, I review several potential challenges to transcription quality, together with a number of suggested notational conventions that have been devised to assist transcribers in catching features of interest in the translation from spoken to written word.

A second vantage point from which to examine these issues takes inspiration from the postmodern turn in the social sciences. A growing number of voices in the emerging methodological literature on transcription call for a more explicitly reflexive stance vis-à-vis the inherently representational and interpretive nature of transcription (Mishler 1991; Lapadat and Lindsay 1999; Kvale 1996). These authors question

AUTHOR'S NOTE: The views expressed here do not necessarily represent those of the University of Toronto and remain the sole responsibility of the author. I am grateful to Norman Denzin, Joan Eakin, and two anonymous reviewers for comments on earlier drafts of this chapter.

not only the possibility of the verbatim transcript, but the implicit ontological and epistemological baggage that this kind of method talk conceals. Thus in subsequent sections of the chapter, I will problematize and deconstruct the notion of "verbatim" to reveal the nature of the transformations it frequently imposes on the data. In other words, data are (re)constructed in the process of transcription as a result of multiple decisions that reflect both theoretical and ostensibly pragmatic considerations. These vital insights, however, are typically accompanied by few suggestions for rigor in this aspect of qualitative research other than the general call to reflexivity. Thus I conclude the chapter by considering what the reflexive qualitative researcher might do to enhance the quality of transcription as a vital aspect of rigor in qualitative research.

My focus in this chapter is on the issues involved in the production of transcripts that are meant to be analyzed primarily for *what* is said, rather than *how* it is said. At several points I will make reference to the unique notational conventions and transcription requirements of conversation analysis, the preoccupation of which is the sequential development of talk. However, the latter is not my primary focus.

♦ Getting It Right

Many qualitative researchers, it would appear, do not give transcription quality a second thought. If they do, their concern is most often with ensuring the accuracy of verbatim accounts by minimizing sources of error in the transcription process. Insofar as these preoccupations are embedded in what Jaber Gubrium and James Holstein (1997) refer to as the "idiom" of "naturalistic method talk," it reflects a bias toward a realist ontology that is particularly evident, for example, in qualitative research in the health sciences. That is to say, from a naturalistic idiom, it is typically (if tacitly) assumed not only that the research interview

adequately captures social reality as it is experienced and expressed by respondents, but that the translation to audiotape and then text is not inherently problematic, so long as careful attention is given to ensuring accuracy of transcription.

Although the importance of ensuring that interview or focus group transcripts are verbatim accounts of what transpired is widely acknowledged (e.g., McCracken 1988; Patton 1990), it does not yet appear to be standard practice for qualitative researchers to consider transcription quality prior to their undertaking the analysis of textual data. A literature review conducted in 1995 of more than a decade of *Qualitative Sociology*, back issues of *Qualitative Health Research*, and more than a dozen frequently cited qualitative research textbooks and sourcebooks revealed very little substantive discussion of strategies for monitoring and improving transcription quality.¹

Several resources have become available since 1995 (see Kvale 1996; Lapadat and Lindsay 1999; Seale 1999), but this literature is still relatively new. I would argue that, with the possible exception of the literature on transcription notation in conversation analysis, systematic and comprehensive attention to issues of transcription quality has yet to become routine practice in qualitative research. Of particular note is the absence of discussion of these issues in much of the literature on the rigor of qualitative research.²

CHALLENGES TO TRANSCRIPTION QUALITY

In this subsection I consider several challenges to transcription quality and their possible origins. This is not intended as an exhaustive treatment of the subject; rather, I offer this discussion to stimulate reflection on and examination of these issues as they affect the quality of qualitative research.

Table 30.1 EXAMPLES OF TRANSCRIPTION "ERRORS"

As Recorded on Transcript	As Recorded on Audiotape
... it's kind of been a tough function but we, you would go with whatever the problems with health policies are ...	it's been kind of a tacit assumption that we would go with whatever the province's health policies are ...
... the government is almost saying to non-smokers well, you know, you were taught, like you either—	the government is almost saying to non-smokers "Well, you know, here its law. Its OK to stand up and give smokers hell"
... a broken cigarette is an (awful?) game. Now that's a proactive message	"A broken cigarette is a little freedom gained": now that's a proactive message.
You got to inhale all the diesel fumes. And that's worse, the way I see it anyway.	You've got to inhale all the diesel fumes. And that's worse than any cigarette ever will be.
I have no doubt that communities are the way to God!	I have no doubt that communities are the way to go.
... I think we we're a blast with a really good investigative team I think we were blessed with a really good investigative team ...
... a more direct interactive community confrontation model ... and intimate health promotion projects don't recognize that need, that we've got to build in a consultation more process more	... a more direct interactive community consultation model ... and community health promotion projects have recognized that need and have tried to build in a consultation process
I think unless we want to become like other countries, where people have, you know, democratic freedoms ...	I think unless we want to become like other countries, where people have no democratic freedom ...

SOURCE: Poland (1993).

My observations regarding challenges to transcription quality and strategies for addressing them arose initially from my dissertation research (Poland 1993; Poland et al. 1994).³ As part of that research, the Brantford study, I reviewed interview transcripts on a computer screen while the interview or focus group tapes were running so as to identify and correct what I perceived as discrepancies between what was recorded in writing and what I felt fairly certain had actually been said during the interviews, as well as to refamiliarize myself with the material prior to coding. (I had been the interviewer/facilitator for all of the interviews and focus group discus-

sions.) At first, I kept a running tally of the number of discrepancies and maintained a cut-and-paste file of them that contained both versions of each—the excerpt as it appeared in the transcript and as I felt it should have appeared. Table 30.1 displays some examples from the entries in this file. I reviewed every transcript in my collection, and although the process of maintaining such a file became overly time-consuming and I eventually discontinued it, the information that I compiled helped me to generate the typology of challenges to transcription quality discussed below.

Even when a transcriber attempts to produce a verbatim account by remaining

faithful to the original language and flow of the discussion, and even when the transcriber has a suggested syntax to follow in transcription (more on this later), there are a number of logistical and interpretive challenges to the translation of audiotape conversation into textual form. Drawing on my review of transcription quality in the aforementioned Brantford study, I have identified transcribers' problems with sentence structure, the use of quotation marks, omissions, and mistaking words or phrases for others. Each of these challenges is briefly discussed below.

Because people often talk in run-on sentences (actually, the concept of "sentence" does not translate well into oral tradition, or vice versa), transcribers must make judgment calls during the course of their work about where to begin and end sentences. The insertion of a period or a comma can sometimes alter the interpretation of the text. For example, "I hate it, you know. I do" carries a different meaning from "I hate it. You know I do." Although the original meaning and intent may be clear from the intonation and pacing of speech in the audiotape, it may be much less so in the transcript, unless these features are meticulously cataloged as well (see the discussion of notation systems to follow).

A second challenge identified in the Brantford study involved the failure of transcripts to indicate when people are paraphrasing or mimicking others, or when respondents quote things they told themselves or others told them. In these cases, the intonation and context of the testimony help, but transcribers who do not have a stake in the content of the material and are struggling word for word to get the material committed to paper may not catch what is going on, or may not judge the distinctions to be significant. The danger in a transcriber's failing to include quotation marks and/or annotations such as "(mimicking voice)" is that what a respondent was trying to convey as being someone else's thinking or reaction appears in the written text as if it were the respondent's own.

A third challenge revealed by the Brantford study involved omissions that occur when transcribers go forward and backward in the tape when they need to listen to a passage more than once, with the danger that they do not pick up exactly where they left off and pieces are lost. For example, in one case "I lost a very close friend to cancer" should have read "I lost a very close friend to lung cancer." The omission of the word "lung" was significant given the focus of the study on smoking cessation.

A fourth challenge for transcribers is the mistaking of words for other similar words that may or may not make sense in the context of what is being said. This is particularly apt to happen in passages that are difficult to discern due to problems of poor tape quality (more on this later). But it was not limited to those occasions alone in the Brantford study. On a number of occasions, transcribers' misinterpretations reversed the meaning of what was said. For example, in one case "consultation" was substituted for "confrontation," and "an evaluation model" became "and violation of the model" (see Table 30.1).

In some cases the mistaken wording made some sense (was plausible, although perhaps unlikely) in the immediate context of the sentence in which it was located, but not in the wider context of the interview. In other cases what was written in the transcript seemed bizarre and nonsensical even within the particular sentence or paragraph in which it appeared. In the most ambiguous places, researchers interpolate what makes sense to them as being what was likely uttered during the course of an interview.⁴

To discern the more plausible of several possible readings of an audio passage, then, the transcriber and/or researcher draws on powerful, if implicit, social conventions about the organization of speech and communicative competence to interpolate or adjudicate such apparent anomalies, under the assumption (when passages are unclear) that alternate bizarre phrasings would not

have been intended and were therefore not uttered. In essence, confirmation is sought in terms of the coherence (see Hodder 1994) of the utterance with the phrases immediately preceding and following it, as well as with the rest of the respondent's testimony and whatever other knowledge the researcher has about the respondent and his or her social location and biography. The trustworthiness of such corroborating evidence, in turn, is ascertained in terms of prolonged engagement and other aspects of credibility, as described by Egon Guba and Yvonna Lincoln (1989) and others. A transcriber struggling to decipher what is being said from one utterance to the next cannot generally be expected to keep track of the larger context of what is being said as a basis for assessing the plausibility of alternate assessments of what is being said. Furthermore, when the substantive focus is quite outside the experience and/or expertise of the transcriber, such interpolation becomes less likely.

Many challenges associated with transcription quality can be attributed to the poor quality of some tape recordings (more on this later). Transcriber fatigue and lack of familiarity with the topic area can also contribute to the number of errors that creep into the transcription. Less controllable, but sometimes also a factor, is the clarity, speed, and accent of speech used by interviewees. With increasing ethnic and racial diversity in our populations and mounting pressure on researchers to include (and researchers' interest in including) diverse cultural perspectives in research studies, a number of challenges associated with cross-cultural research will also need to be addressed. For example, in cases where minority community members or translators are hired to interview (or assist in the interviewing of) respondents in languages other than those spoken by the principal investigator or the majority of the research team, the translation of audiotaped information or of interview transcripts must be considered. This introduces

yet another layer of interpretation in the interview-tape-transcript interface.

ETHICAL CONSIDERATIONS

One of the most disconcerting moments in my dissertation research came when I reviewed several of the transcripts that had been completed by someone the project's primary transcriber had enlisted to assist her. This person (a legal secretary) took it upon herself to tidy up the discussion so that it would *read* better, just as she would have been expected to do with dictated correspondence at work. Michael Patton (1990) tells a similar story about an experience of one of his graduate students. And a colleague of mine recently discovered that her transcribers found the interview material they were working on so depressing and traumatic that they were altering the testimonies of respondents to make them sound more upbeat.⁵ Such deliberate attempts to manipulate the data generally reflect transcribers' honest desires to be helpful, based on their own notions of what the transcripts should look like.

Verbal interactions follow a logic that is different from that for written prose, and therefore tend to look remarkably disjointed, inarticulate, and even incoherent when committed to the printed page. Inherent differences between the spoken tongue and the written word mean that transcripts of verbal conversations do not measure up well to the standards we hold for well-crafted prose (or even formal speeches), with the result that participants often come across as incoherent and inarticulate (Kvale 1988).

Ironically, this impression may be reinforced by an insistence on verbatim transcription in which all pauses, broken sentences, interruptions, and other aspects of the messiness of casual conversation are faithfully reproduced, despite what this messiness might lead one to presume about the participants. Some transcribers (partic-

ularly those accustomed to preparing correspondence based on dictated notes) find it difficult to resist the impulse to tidy up their transcriptions so that the participants do not appear so thoroughly inarticulate. The disjuncture between what coheres in natural talk and what demonstrates communicative competence in written prose comes as a shock to many respondents when they are asked or are offered the opportunity to review the transcripts of their interviews. Speaking from experience, I should add that interviewers themselves can find their own contributions, committed to paper, a rude awakening.

The potential for respondents (or classes of respondents) to be made to appear inarticulate as a result of the liberal use of verbatim quotes in the published results of a study has important ethical implications. In addition, verbatim quotes often make for difficult reading. The impact of quotes from respondents can often be greater if the researcher subjects them to a little skillful editing, without substantially altering the gist of what was said. Frequently, colleagues and I have been asked by editorial reviewers to tidy up quotes used in our publications. Usually, we consent in the interest of providing a more readable text. However, it is my opinion that although the tidying of quotations may be appropriate when an author is writing up qualitative research for publication, this should occur after the analysis has taken place and should be done by the researcher (not the transcriber), who should take care that what is removed does not appreciably alter the meaning of what was said (see Morse 1994:232). The author may wish to note in the text that "some transcription details have been omitted in the interest of readability" as a way of indicating to colleagues that the original transcripts paid closer attention to detail.

On the other hand, in cases where transcripts will be examined by a number of investigators and students who are part of a research team (which is increasingly the case in multidisciplinary research), ethical considerations might call for identifying in-

formation to be removed from transcripts prior to analysis. This is particularly the case when transcripts are made available for secondary analysis at a later date—for example, as part of a student dissertation after project funding has expired. The removal of identifying information becomes potentially problematic when this includes not simply the elimination of names but also the removal of other information that might allow analysts to identify individual respondents by virtue of their locations, social networks, job titles, organizations of employment, or other distinguishing features. The risk here is that removing too much identifying information could compromise future researchers' ability to contextualize the testimony of the respondents adequately as a basis for analysis, even though this practice may be defensible on ethical grounds.

Ethical issues also attend the unintentional misrepresentation of respondents, as when, for example, testimony is misunderstood or errors in transcription substantially alter the gist of what was intended, as is the case in several of the examples in Table 30.1. Giving study participants the opportunity to verify the transcripts or initial analyses may be one way for researchers to address this possibility. However, it is preferable that researchers forewarn respondents in these cases about how they are likely to appear on paper, for reasons that are elaborated above. (I discuss some other complications that may arise during member checking in a subsequent section of this chapter.)

I have noticed that a number of researchers today are including in the research proposals they submit for ethical review the stipulation that interview audiotapes will be erased as soon as transcripts are completed. This reflects a laudable concern for respondent confidentiality, but I am concerned that the erasure of audiotapes at an early stage in a research project will ensure that many decision points—regarding how difficult passages were transcribed and the application of the anointed syntax in prac-

tice, for example—will become irretrievable.

♦ Problematising "Verbatim"

As previously noted, the transcript, as text, is frequently seen as unproblematic and given a privileged status in which its authority goes unquestioned (see Denzin 1994). This position may even be enhanced by an emphasis on accuracy of transcription. The conventional understanding of transcription error is in terms of the discrepancy between the written record (transcript) and the audiotape recording of the research interview upon which it is based. The notion of a verbatim transcript, therefore, is limited to a faithful reproduction of the oral record, the latter being taken as the indisputable record of the interview (problems with tape quality excepted).

However, many aspects of interpersonal interaction and nonverbal communication are not captured in audiotape records, so that the audiotape itself is not strictly a verbatim record of the interview. In other words, concern with ensuring that transcripts are accurate may unreflexively conflate lived experience of the one-on-one conversation with recorded speech (tapes), and this speech with the written word (transcript). In the words of Ann Oakley (1981), "Interviewing is rather like a marriage: everybody knows what it is, an awful lot of people do it, and yet behind each closed door there is a world of secrets" (p. 41). Those "secrets" include many nonverbal aspects of the interview context that are often not recorded on tape: body language, facial expressions, eye gazes (Bloom and Lahey 1978, cited in Lapadat and Lindsay 1999), nods, smiles or frowns (Kvale 1996), the physical setting, the ways participants are dressed, and other factors affecting the tone of the interview (Fontana and Frey 1994). Raymond Gorden (1980) identifies four types of nonverbal communication that are salient in this context:

Proxemic communication is the use of interpersonal space to communicate attitudes; *chronemic* communication is the use of pacing of speech and length of silence in conversation; *kinesic* communication includes any body movements or postures; and *paralinguistic* communication includes all the variations in volume, pitch and quality of voice. (P. 335)

Even when aspects of emotional context are expressed with an oral component, such as intonation of voice, pauses, sighs, and laughter, these are not easily or straightforwardly translated into the written record. There may also be considerable variability in the extent to which verbal cues such as abandoned utterances, garbles, and verbal disruptions (Hughes, McGillivray, and Schmidek 1997, cited in Lapadat and Lindsay 1999) are adequately captured in transcription. These may require a standardized syntax for reliable encoding in the transcript, as well as a fuller accounting of the interview context that draws on field notes.⁶

Further, the dialogue that is captured on tape is framed not only by the immediate microcontext of the research interview (a stilted environment itself), but by a broader macrocontext of historically and socially located events. Because context is both "infinitely delicate and infinitely expandable" (Cook 1990, cited in Lapadat and Lindsay 1999:72), its apprehension is inherently incomplete and selective (on the importance of context, see also Kvale 1996).

We might do well then to ask, echoing Steinar Kvale (1995), "What is a valid translation from oral to written language?" (p. 27). The socially constructed nature of the research interview as a coauthored conversation-in-context must be acknowledged, instead of a quasi-positivist reification of the transcript as data about the interviewee, frozen in time (and space) (Kvale 1988; Richardson 1993). As text, the transcript is also open to multiple alter-

native readings, as well as reinterpretation, with every fresh reading (Denzin 1995; Kvale 1995).

The central issue, then, is what kind of text we envisage a transcript to be. How do we construct the transcript as an object of research? As recorded conversation? Phenomenological experience? Literary text? Linguistic data set? Dialogue? Narrative? (See Kvale 1988.) The reification of the transcript as synonymous with the interview, but also as a privileged text revealing the truth about the researched, glosses over these important distinctions (Kvale 1995). A modernist obsession with transcription accuracy, which problematizes transgressions in the privileged written text while simultaneously concealing the author in the writing up of interviews in conventional scientific prose, constructs issues of validity and reliability in terms of findings rather than tellings (Richardson 1993; see also Denzin 1994; Kvale 1995; Richardson, Chapter 42, this volume).

A number of authors have articulated and advanced alternative criteria for evaluating the quality of qualitative research (Lincoln and Guba 1985; Guba and Lincoln 1989; Corbin and Strauss 1990; Altheide and Johnson 1994; Hall and Stevens 1991), although none has addressed specifically the issue of transcription quality. Taken together, however, these authors raise issues of voice, representation, authenticity, audience, positionality, and reflexivity. This raises the possibility that our fixation on the depth interview and its textual representation in the form of transcripts is blinding us to the possibility and value of other ways of capturing voice, such as through self-stories and personal experience stories (Denzin 1995; see also Ellis and Berger, Chapter 41, this volume). In this context, theatrical and poetic (see Richardson, Chapter 42, this volume) representations of research data and/or findings are particularly well suited to convey the emotional content of the material.

I would therefore suggest that we can usefully focus our attention on the trust-

worthiness of transcripts as research data by examining how faithfully they reproduce the oral (tape) record, while also being mindful of the limitations of these media to portray the full flavor of the interview. We must also take into account the potential for contested meanings and divergent interpretations of the gist and significance of what is being said, particularly when speech is garbled or poorly captured on tape. This may encourage us to examine reflexively our assumptions about transcription (and transcription quality) and its role in the research process, as well as to take the steps necessary to ascertain and document the trustworthiness of transcription as an aspect of rigor in qualitative research.

No doubt there are readers who will see these perspectives (error as real and yet also individually and socially constructed and contestable) as fundamentally contradictory. I think it is possible, indeed reasonable and defensible, to attend to many straightforward determinants of transcription quality (e.g., quality of audiotape recording, use of notational syntax to capture aspects of interaction more consistently, training of transcribers) while simultaneously maintaining a reflexive skepticism regarding the multiple interpretive acts that constitute the transcription process and their impact on the process of translating (re-presenting) the interview as audio recording and then as textual data. Putting it differently, I might say that such a position approximates that described by Martin Hammersley (1992) as subtle realism, or by David Altheide and John Johnson (1994) as analytic realism, in which it is assumed that knowable phenomena can be known only in cultural, social, politically situated ways (as situated human construction). Thus, by implication, researchers must consider the relationships among substance, observer, interpretation, audience, and style. This is broadly consistent with a critical realist stance. Indeed, this observation underscores the indivisibility of methodological issues (namely, transcription) from theoretical and epistemological ones.

♦ *Strategies for Maximizing Transcription Quality*

As with other aspects of qualitative research, there may be no singular approved approach to transcription divorced from the context and aims of the research project. However, several strategies are available for qualitative researchers to consider employing or adapting to their situations for the purpose of enhancing transcription quality. These include strategies for maximizing the audio quality of tape recordings, for using notation systems, for working with transcribers, for reviewing the quality of transcription, for using member checks, for flagging ambiguity in the interview, for using field notes or other sources as corroborating evidence in the interpolation of difficult passages, and for reporting on transcription quality in published research findings. Each of these is discussed below.

TAPE QUALITY

Much aggravation (for both researcher and transcriber) can be prevented by the interviewer's ensuring the quality of the original tape recording. Excessive background noise, weak batteries, a dirty recording head, placement of the recording device or microphone too far away from the respondent, the use of low-quality cassettes, and people speaking too softly to be heard well are all factors in the quality of the audio recording. Several suggestions for ensuring the audio quality of tape recordings are outlined in Table 30.2.

NOTATION SYSTEMS AND CONVENTIONS FOR TRANSCRIPTION

By failing to establish a priori a clear and consistent syntax for transcribers to use in recording pauses, laughter, interruptions, intonations, and so forth in the written

text, the researcher does little to encourage consistency in the way these are handled within and between transcripts. Several notation systems have been developed and proposed over the years (Edwards and Lampert 1993; Psathas and Anderson 1990; Silverman 1993). Which one a researcher selects (or whether and how a researcher adapts an existing system or develops one for his or her own use) depends on which features the researcher considers important to capture, given the inevitable trade-off between level of detail and the resources required to achieve it. Thus it is neither appropriate nor possible to specify a priori what constitutes the most appropriate (or rigorous, or highest-quality) universal notation system. The researcher's decisions about what to include and how to do so must be informed by the theoretical stance and empirical focus of the study, as well as by such pragmatic considerations as the availability of sufficient resources.

Those researchers who are interested in detailed, turn-by-turn conversation analysis (CA) are especially concerned with pauses, overlaps, stretched sounds, intonations, partial words, and expressions of agreement, acknowledgment, surprise, and so on (see Atkinson and Heritage 1984). Such details of talk assume great significance because they reveal *how* things are said (and not only *what* is said). In these cases, even more careful precision in transcription is required, including the insertion of special codes to convey details that normally do not get committed to paper during the transcription process.

CA is concerned with the methods by which people produce orderly social interaction. This includes the ways in which conversation is structured, not only by implicit cultural norms (regarding appropriate turn taking and the like), but by the institutional and/or situational context of interaction, which may invoke competing discourses and opportunities for the display of social competence (see Silverman 1993). David Silverman and his colleagues provide a convincing demonstration of the

Table 30.2 STRATEGIES FOR ENSURING HIGH-QUALITY TAPE RECORDING

- I. Equipment
 - a. Use electrical outlet and outside mike whenever possible.
 - b. If you use batteries, check them.
 - c. Clean tape recorder heads regularly.
 - d. Take along extra tape cassettes (and batteries).
- II. Before interview
 - a. Choose a place that's quiet and free from interruptions.
 - b. Place microphone close to respondent, then speak loud enough so we hear what you're saying; most important, we want to hear the answer.
 - c. Set recorder on stable surface.
 - d. Test the recording system.
- III. During interview
 - a. Speak clearly and not too fast—respondent is likely to do the same.
 - b. Ask respondent to speak clearly.
 - c. Make test with respondent, then rewind and listen so respondent can hear whether she/he is speaking distinctly; if not, say, "The recorder does not seem to be picking up well. Could you speak up a little?" Whether the problem is mechanical or personal, correct it before continuing.
 - d. Avoid using voice activation feature (if available), as it may fail to record the first few words spoken after each pause (also, lengths of pauses cannot be judged).
 - e. Don't rustle papers, cups, bottles, and so on near the microphone.
 - f. Watch for tape breakage and tangling.
 - g. Repeat test if tape change is necessary.
 - h. At end of interview, say, "This is the end of interview with . . ."
- IV. After interview
 - a. Listen to tape—make notes, list proper names (or pseudonyms) and unfamiliar terminology.
 - b. Label tapes and return them to appropriate containers.
 - c. Keep tapes and recorder in good condition—do not touch tape or expose it to extreme temperatures.
 - d. Consider making backup copies of tapes before turning them over to the transcriber.

SOURCE: Adapted from Patton (1990).

potential benefits of going beyond verbatim transcription to the use of the syntax of conversation analysis in terms of the sometimes profound effects this had on the way the transcripts were coded by the research project team (see Clavarino, Najman, and Silverman 1995; Silverman 1993). Similarly, Elliot Mishler (1991) compares the yield and impact of the use of several different approaches to notation and representation (poetic, narrative, discursive). And, taking the discussion in a different direction, Candace West (1996) points out the need to fit both transcription conventions

and analytic questions to the level of detail that can possibly be recorded.

Detailed CA notation systems can help resolve some ambiguities in interpretation. To illustrate, the careful inclusion of pregnant pauses and interjections such as "yes-mm" and "uh-huh" could indicate receipt or assent (or resistance, in the case of refusals to provide the usual affirming responses to the speech of another). These subtleties (which can be significant) tend to be missed in less stringent transcription practices, particularly when they are overlaid with the speech of another. Without

Table 30.3 SAMPLE TRANSCRIPTION NOTATION SYSTEM ORIENTED TO CONVERSATION ANALYSIS REQUIREMENTS

[Mo:	C2: quite a [while [yea	Left brackets indicate the point at which a current speaker's talk is overlapped by another's talk.
=	W: that I'm aware of= C: =Yes. Would you confirm that?	Equal signs, one at the end of a line and one at the beginning of the next, indicate no gap between the two lines.
(.4)	Yes (.2) yeah	Numbers in parentheses indicate elapsed time in silence in tenths of a second.
(.)	to get (.) treatment	A dot in parentheses indicates a tiny gap, probably no more than one-tenth of a second.
::	O:kay?	Colons indicate prolongation of the immediately prior sound. The length of the row of colons indicates the length of the prolongation.
WORD	I've got ENOUGH TO WORRY ABOUT	Capitals, except at the beginnings of lines, indicate especially loud sounds relative to the surrounding talk.
.hhhhh	I feel that (.2) .hh	A row of h's prefixed by a dot indicates an inbreath; without a dot, an outbreath. The length of the row of h's indicates the length of the in- or outbreath.
()	future risks and () and life ()	Empty parentheses indicate the transcriber's inability to hear what was said.
(word)	Would you see (there) anything positive	Parenthesized words are possible hearings.
(())	confirms that ((continues))	Double parentheses contain author's descriptions rather than transcriptions.
.,?	What do you think?	Punctuation indicates speaker's intonation.

SOURCE: Adapted from Silverman (1993).

clear direction from the research team on how to handle these situations, transcribers are faced with determining on a case-by-case basis which interjections are consequential enough to be included—a situation that can be fraught with uncertainty (yielding inconsistent results).

Gail Jefferson is generally credited with developing the core features of CA transcription conventions (see Jefferson 1984; see also Sacks, Schegloff, and Jefferson 1974; Atkinson and Heritage 1984; Psathas 1995). Drawing on these and other sources, Silverman (1993) has produced a more concise rendition that remains true to

the original objectives; Silverman's recommendations are displayed in Table 30.3.

On the other hand, this level of attention to detail can prove exhausting for transcribers and researchers alike. There is a limit to the degree of painstaking attention to detail that can be demanded of a transcriber in applying an elaborated system of codes. Whether or not this is warranted depends entirely on what the researchers wish to get out of the transcription. In studies with large sample sizes (60-100+ interviews), when analysis may be more superficial and limited to the cataloging of opinions or experiences, close attention to

conversational dynamics may be unnecessary. On the other hand, in studies where sample sizes are smaller and where the features of interaction will be scrutinized (especially in naturally occurring talk such as the analysis of doctor-patient communication), it may be vitally important to employ notational systems of the type described in Table 30.3.

In Table 30.4, I offer an abbreviated set of instructions for transcribers that might be an alternative to Silverman's syntax of conversation analysis. Again, which of these, or which of several other conventions, a researcher uses will depend on the hypotheses, theoretical orientation, and nature of the data at hand. The schema in Table 30.4 calls for less detail in some areas than is stipulated in CA transcription. For example, short pauses are indicated by a series of dots (. . .) and longer ones by the word *pause* in parentheses; in CA, pauses are timed to tenths of a second. In addition to a formalized notation system for capturing these elements, Lori d'Agincourt-Canning and Susan Cox (2000) recommend that researchers give transcribers lists of jargon or special terms, with correct and phonetic spellings, to help them handle any terminology with which they may be unfamiliar.

SELECTING TRANSCRIBERS

The discussion in this chapter assumes that transcription is being done by individuals hired specifically for that purpose, rather than by the interviewers or researchers themselves. This practice is increasingly common in naturalistic qualitative inquiry, particularly in the health sciences, in contrast to conversation analysis, where the painstaking work of transcription is invariably undertaken by the researcher. The contracting out of transcription to paid employees presents a number of unique challenges with respect to transcription quality, although many of the issues raised in this

chapter also pertain to transcription undertaken by interviewers and researchers.

Given the interpretive work involved in transcription, researchers need to consider carefully who might be the most appropriate persons to undertake this task. This is particularly so when the roles of interviewer, transcriber, analyst, and primary author of publications arising from a research study are embodied by different people. One might well ask whether persons with secretarial training and experience but little prior involvement in, or understanding of, qualitative research are appropriate candidates for making the myriad interpretive decisions involved in the transcription process, despite these persons' considerable technical skills.

It has been my observation that such divisions of labor (paid interviewer, transcriber, student/staff analyst, and principal investigator or coinvestigator) are increasingly common in large, externally funded research projects in the health sciences. The disruption of the continuity that might previously have been expected as a result of the same individual's embodying these roles has the potential for ruptures in understanding to occur in the process of translating data across media. I would suggest that such ruptures also attend the loss of intimacy with the fullness of the context of the data that occurs when investigators (or students or others undertaking secondary analysis) work directly from the transcripts without prior involvement in the interview or transcription phases, and often without having listened to any of the interview audiotapes.

WORKING WITH TRANSCRIBERS

Transcriber training should probably include at least one session in which the researcher introduces the syntax to be used and goes over a section of tape with the transcriber(s), answering questions that may arise in the course of applying the guidelines to an actual study interview.⁷

Table 30.4 ALTERNATIVE ABBREVIATED INSTRUCTIONS FOR TRANSCRIBERS

It is important for qualitative research that transcripts be verbatim accounts of what transpired in the interview; that is, they should not be edited or otherwise "tidied up" to make them "sound better."

Pauses	Denote short pauses during talking by a series of dots (. . .), the length of which depends on the amount of time elapsed (e.g., two dots for less than half a second, three dots for one second, four dots for one and a half seconds). Denote longer pauses with the word <i>pause</i> in parentheses. Use "(pause)" for two- to three-second breaks and "(long pause)" to indicate pauses of four or more seconds.
Laughing, coughing, etc.	Indicate in parentheses; for example, "(coughs)," "(sigh)," "(sneeze)." Use "(laughing)" to denote one person, "(laughter)" to denote several laughing.
Interruptions	Indicate when someone's speech is broken off midsentence by including a hyphen (-) at the point where the interruption occurs (e.g., "What do you-").
Overlapping speech	Use a hyphen to indicate when one speaker interjects into the speech of another, include the speech of the other with "(overlapping)," then return to where the original speaker was interrupted (if he or she continues). For example: R: He said that was impos- I: (overlapping) Who, Bob? R: No, Larry.
Garbled speech	Flag words that are not clear with square brackets and question mark, if guessing what was said (e.g., "At that, Harry just [doubled? glossed?] over"). Use x's to denote passages that cannot be deciphered at all (number of x's should denote approximate number of words that cannot be deciphered). For example, "Gina went xxxxx xxxxx xxxxx, and then [came? went?] home."
Emphasis	Use caps to denote strong emphasis; for example, "He did WHAT?" (Do not use boldface or underlining because such formatting is often lost when text files are imported into qualitative analysis software programs.)
Held sounds	Repeat the sounds that are held, separated by hyphens. If they are emphasized, capitalize them as well. For example, "No-o-o-o, not exactly" or "I was VER-r-r-y-y-y happy."
Paraphrasing others	When an interviewee assumes a voice that indicates he or she is parodying what someone else said or is expressing an inner voice in the interviewee's head, use quotation marks and/or indicate with "(mimicking voice)." For example: R: Then you know what he came out with? He said (mimicking voice) "I'll be damned if I'm going to let YOU push ME around." And I thought to myself: "I'll show you!" But then a little voice inside said "Better watch out for Linda." Sure enough, in she came with that "I'm in control now" air of hers.

The researcher should also make an attempt to review several of the initial transcripts, so that misunderstandings can be cleared up early in the process. I would recommend that researchers meet at regular intervals with all transcribers, in addition to reviewing their work early on in the process to ensure comparability (if there is more than one transcriber) and dependability.

In my experience, I have found that it helps if transcribers are informed about the nature and purpose of the research. It is even better if those doing the transcription have themselves undertaken social science research (perhaps as students), so that they are generally knowledgeable about the process. The tenets of hermeneutic science are often difficult to identify and convey adequately to transcribers without postsecondary education in the relatively short orientation periods available. Transcribers with primarily secretarial backgrounds have the technical skills required but find it harder to understand the research enterprise and topics under investigation than do transcribers with more education. In my experience this is reflected in the nature of the interpretive decisions such transcribers make in the course of transcription. On the other hand, they may have insights into the life worlds of the researched that are unavailable to the study investigators by virtue of their class location, race, and/or gender.

Indeed, researchers should not overlook the opportunity to involve transcribers in the study beyond their function as recorders. After all, other than the interviewers and one or two study investigators, transcribers are the only people to be exposed to the interviews in their entirety. In the Brantford study, the transcriber was encouraged to provide feedback (typically in writing at the end of the interview file) about her reactions to the interview—not only its content, but also her perceptions of the nature and quality of interaction between interviewer and interviewee (the time she took to provide her reactions was

included as paid time). The quality of the transcriber's contributions in this vein was variable, but I frequently found her input to be worthwhile.⁸ It may also be useful for researchers to contact transcribers for regular debriefings, by phone or in person, particularly when the material being transcribed is emotionally charged (d'Agincourt-Canning and Cox 2000). If the project employs more than one transcriber, and resources allow for it, the researcher may have the opportunity to engineer some overlap in the transcribers' workloads so as to identify and explore some of the differences that may arise in transcription of the same interview tape(s). There may be yet other ways in which researchers may engage the transcriber-as-hired-hand in making suggestions and modifications to the transcription syntax, the coding of data, the data entry of codes (when using computer analysis software), and so forth. In other words, researchers should not overlook opportunities to engage transcribers more fully in their research projects. Of course, in these cases it is important for researchers to remember to acknowledge the contributions of the transcribers in conference presentations and publications (d'Agincourt-Canning and Cox 2000).

REVIEWING TRANSCRIPTION QUALITY

It is unlikely that all discrepancies in interpretation between transcriber and interviewer/investigator regarding the translation of data from audiotape to written text can be prevented, even with well-trained transcribers working from high-quality recordings and supported by clear guidelines for transcription. On the other hand, reviewing all transcripts is time-consuming and expensive, and may not be justified. Transcription costs alone average \$100 (for four to six hours) per interview (more for focus group discussions), depending on length and complexity, to which one would have to add at least another \$50 of paid re-

search staff time for reviewing transcription quality (unless this is done by the study investigators, for whom time is also at a premium).

For many studies, the addition of an extra step of this nature would represent a significant increase in costs and a setback in time. Given these limitations, two alternatives seem appropriate in this context, and these are not mutually exclusive. One option is for the researchers to consider not having all of the interviews transcribed in their entirety. Investigators (or research staff) could listen to the interview tapes and identify sections (using tape counter numbers) for subsequent transcription, for example. This would have the added benefit of ensuring that research staff/investigators involved in analysis (but who did not complete some or all of the interviews themselves) will have listened to the audiotapes of all the interviews. Alternatively, the researchers could review a subset of transcripts (selected purposefully or randomly) to highlight themes and phenomena around which subsequent (selective) transcription efforts (and analysis) would be focused. This would also help the researchers avoid the possibility (in larger studies) of their being overwhelmed by the volume of material to be analyzed.⁹

A second option (which may be exercised in concert with the first) is for the researchers to be selective in their review of transcript quality. They could review a small proportion of the transcripts, randomly or purposively selected, to gauge the quality of transcription overall. They should bear in mind, however, that transcription quality can be highly variable, as I found it to be in the Brantford study. Some transcripts (notably where the quality of the tape recording was poor) had errors affecting up to 60 percent of passages, whereas I judged many others to be virtually error-free. Such variability calls into question the viability of the practice of selecting a small (e.g., 10 percent) random sample of transcripts for closer scrutiny on the assumption that what holds for those

will generally hold for the others. On the other hand, the effort required to assess transcription quality and effect remedial action will usually preclude an exhaustive review of all transcripts. One strategy a researcher might use would be to gravitate toward examining those texts that transcribers themselves identify as having been particularly difficult to produce. The researcher could select these plus a small sample of other transcripts for review onscreen while the interview tape is rolling. Keeping a tally of the number of minor (semantic) and major (meaning-reversing) errors will help the researcher to determine the extent of the problem and to decide whether a full review of the remainder of the transcripts is called for. In many cases, a researcher's documenting the quality of transcription in a sample of transcripts will itself be a marked improvement over conventional practice.

MEMBER CHECKING

The nature of transcription as an interpretive activity surfaces the possibility that multiple interpretations will not be easily resolved and that different people checking transcription quality may generate different versions of the interview transcript. Although the documentation of these differences may be instructive, the argument might be made that the interviewer (using his or her field notes and other recollections of the interview experience) should be the one to review the transcript, rather than a relative newcomer to the study hired for this purpose. In some cases, respondents themselves may also be of assistance in sorting out particularly ambiguous passages, as Guba and Lincoln (1989) advocate under the rubric of member checks for establishing the credibility of research (see also Bloor 1983).

This strategy presents other challenges, however. Despite the many merits of checking back with respondents, either on a routine or an ad hoc basis, the use of this

strategy for the validation of the trustworthiness of transcription is potentially problematic. When a researcher presents a transcript to a respondent for review, what he or she typically gets back are not only corrections to (perceived) errors in transcribing, depending on the person's recollections of what was said, but also attempts to clarify, justify, or perhaps even revoke or alter aspects of what was said (Hoffart 1991). Such member checking may be an important and valued addition or component of the research process. It allows for the gathering of additional information, permits respondents to validate or clarify the intended meaning behind certain statements, or comment on the overall adequacy of the interview (Lincoln and Guba 1985). This highlights the ways in which respondents may reinterpret or try to alter their testimonies upon further reflection or later in time.

Some researchers also value an ethical stance in which respondents retain ultimate control over how their stories are reported and interpreted, regardless of the number of changes they request or the nature of those requests. Although giving respondents the power to revoke or alter their testimony is laudable, researchers need to be aware of the anxiety they may help to create in respondents when they give those who have been interviewed the opportunity to see their words in print. In my experience, no matter how many times promises of confidentiality and anonymity are repeated, when respondents see their own words in print, the possibility of sensitive material being made available to others seems to be highlighted. This appears to be particularly so for professionals who may have made comments about their colleagues or employers that could be damaging if revealed. I suspect that this is partly because we typically associate print material with dissemination and communication (i.e., text is printed for the purpose of sharing with others), and because most professionals in North America are acutely aware of the dangers of particular materials falling into the wrong hands. Stories of

leaked confidential memos pepper the popular press, and this does little to reassure respondents when they see their own testimony in print.

Nevertheless, the distinction between what was originally intended and what was actually said (let alone what the respondent wishes to change or retract) is not addressed by a focus on transcription quality per se (i.e., ensuring that what was said—and how it was said—is accurately committed to paper). But the clarification of intended meaning may be as important as (or more important than) the establishment of the accuracy of transcripts as privileged texts. These observations reinforce a point made earlier—that transcripts are, at best, partial accounts of the encounters between researcher and researched, rather than simply windows into the lives of the researched (Kirk and Miller 1986; Kvale 1988).

FLAGGING AMBIGUOUS MATERIAL IN THE INTERVIEW

Ideally, some of the ambiguities that are most salient to the research study will be flagged during the interview. The interviewer can create opportunities within the interview for the respondent to clarify earlier statements or to validate the initial interpretations of the interviewer, rather than wait until after the interview is complete and the transcript in hand.

USE OF FIELD NOTES AND OBSERVATIONAL DATA

As noted above (in the context of the interpolation of meaning in difficult passages), field notes may also help researchers to clarify some aspects of the interview context (see Atkinson and Coffey, Chapter 38, this volume). Details pertinent to the setting or other aspects of the respondent's life, the researcher's relationship with the researched, and so forth may have a bearing

on how statements in the interviews are heard or interpreted. Of course, this assumes that field notes are not a gold standard against which to assess transcription, but are themselves necessarily partial interpretive accounts. Indeed, researchers must pay attention to what conventions will guide what is transcribed "in the field," including how to represent conversation (see West 1996).

REPORTING ON TRANSCRIPTION QUALITY

The suggestions contained in this chapter have a number of implications for how research might be carried out as well as how it might be reported and written up. One could envisage a "methods" section of a research paper or report containing a description of the steps taken to ensure audiotape quality, the directions provided to transcribers, and an assessment of the trustworthiness of the transcription based on a review of selected transcripts, in the context of an explicit acknowledgment of the interpretive nature of the transcription process. As with other aspects of the qualitative research process, researchers should ideally provide sufficient information to allow others to assess the trustworthiness of the data and subsequent interpretations, although there will typically be limited space in peer-review journal articles in which to do so.

♦ *The Future of Transcription*

New technologies may eclipse or transform the transcription process as we know it. It is possible, for example, that voice-recognition software will improve sufficiently in accuracy to permit the automation of transcription. This could represent a considerable savings in both time and money, and would remove some of the drudgery (albeit drudgery that earns many

people a living) associated with preparing interview data for analysis. However, because this software is not designed to represent many aspects of the verbal record that might be of interest to researchers (e.g., pauses, sighs, intonations, laughter), programs would have to be adapted for use in qualitative research (perhaps to suit particular notational conventions, such as a particular program for conversation analysis). In any case, it is noteworthy that automation cannot do away with the many interpretive issues that normally arise in the course of transcription; however, it may make them more arbitrary and less visible or available for scrutiny.

It is possible that new information technologies will allow researchers to skip transcription altogether. As storage media increasingly permit the collection of larger sound files (spurred by developments of MP3 and other resources on the World Wide Web), it may be possible to develop qualitative analysis software that will work directly with audio material. Audio passages (and perhaps even video passages) could be coded and retrieved for analysis in presumably much the same manner that sections of transcript text currently are, with much more of the interaction preserved for analysis. A combination of voice-recognition software and audiovisual storage capabilities might even allow for streaming video images alongside the automatically generated transcript text (simultaneous code and retrieve). Indeed, such capabilities are already to be found in the KIT program (see Tesch 1990; Kvale 1996). To quote Kvale (1996), in the KIT program,

the tape recording is transferred to a compact disk, converted into digital form, and stored in the computer. During replay the speech can be coded on the monitor, comments on the passages can be written down, and central passages for later reporting can be transcribed. The coded passages can be retrieved for relistening, or recoding and

other functions of the analysis program can be conducted—in this case, by working directly with the recorded interview instead of with the transcripts. (Pp. 174-75)

Although Kvale is optimistic that “many methodological and theoretical problems of transforming oral speech into written texts are simply bypassed when the analyst works directly on recordings of the live conversations” (p. 175), Judith Lapadat and Anne Lindsay (1999) remain skeptical of this claim. As long as scientific results are disseminated in written form (which continues to be the primary, although no longer the only, medium), transcription of at least some material is virtually inevitable, although at least with systems like KIT, more of the data in their raw form are available in the analysis phase. Nevertheless, audio passages (and even streaming video) do not capture all elements of the interview experience. Rather than being embedded in transcription notation conventions, many of the decisions regarding what to capture and how to do so would conceivably simply be deferred to the coding phase, with potentially unsatisfactory results (less predictable or uniform, for example). In other words, it is unlikely that technology will enable researchers to bypass the thorny issues of interpretation involved in the preparation of data for analysis. Would we really want it any other way?

■ Notes

1. The qualitative research sourcebooks examined in this review included *Analyzing Everyday Explanation* (Antaki 1988), *In the Field* (Burgess 1984), *Doing Qualitative Research* (Crabtree and Miller 1992), *Interpretive Interactionism* (Denzin 1989), *Handbook of Qualitative Research* (Denzin and Lincoln 1994), *Ethnography: Step by Step* (Fetterman 1989), *The Interpretation of Cultures* (Geertz 1973), *Using Computers in Qualitative Research* (Fielding and Lee 1991), *The Long Interview* (McCracken

1988), *Qualitative Data Analysis* (Miles and Huberman 1984), *Successful Focus Groups* (Morgan 1993), *Qualitative Evaluation and Research Methods* (Patton 1990), *Everyday Understanding* (Semin and Gergen 1990), *Qualitative Methodology and Sociology* (Silverman 1985), *Interpreting Qualitative Data* (Silverman 1993), *Qualitative Analysis for Social Scientists* (Strauss 1987), and *An Introduction to Qualitative Research Methods* (Taylor and Bogdan 1984). Of these, only David Morgan's (1993) edited collection and Michael Patton's (1990) volume make more than passing reference to the issue of transcription quality, and both are cursory and selective in their treatment of the topic.

2. I have consulted the following sources on rigor in qualitative research: Cobb and Hagemaster (1987), Strauss and Corbin (1990), Daly and McDonald (1992), Engel and Kuzel (1992), Guba and Lincoln (1989:chap. 8), Hall and Stevens (1991), Hammersley (1992:chap. 4), Italy and McDonald (1992), Kuzel and Like (1991), LeCompte and Goetz (1982), Lincoln and Guba (1985:chap. 11), Morse (1991a, 1991b), Silverman (1993:chap. 7), and West (1990).

3. An earlier paper on the issue of transcription quality was published in *Qualitative Inquiry* (Poland 1995) and was subsequently revised and updated for inclusion in this volume.

4. Such interpolations should probably be identified as such in transcripts through the use of square brackets ([. . .]) and/or question marks, or some other consistent syntax (see Table 30.3).

5. Exposing transcribers to potentially traumatic testimonies also raises ethical considerations, insofar as the provision of emotional supports should be considered.

6. Others argue that researchers must entertain entirely different approaches to data representation if they are to convey adequately the emotional content of the lived experience of study participants (regarding poetic representations, for example, see Richardson, Chapter 42, this volume).

7. Ideally, there might be more than one such session and more than one tape used (pulling, for example, from a recording judged to be difficult to understand or from different types of interviews or topic areas), particularly where a fairly detailed syntax is to be used.

8. This was so even, or perhaps especially, when her assessment of an interview was at odds

with mine, forcing me to reexamine my assumptions or conclusions about the interview.

9. Kvale (1988) discusses the ways in which the combination of large (excessive?) data sets and computer analysis software may compromise the research by seducing the researcher into

substituting the search and retrieval of character strings for a more carefully thought-out analysis plan (when plans for the analysis of interview material are formulated after a large number of transcripts have been amassed).

■ References

- Altheide, D. L. and J. M. Johnson. 1994. “Criteria for Assessing Interpretive Validity in Qualitative Research.” Pp. 485-99 in *Handbook of Qualitative Research*, edited by N. K. Denzin and Y. S. Lincoln. Thousand Oaks, CA: Sage.
- Antaki, C., ed. 1988. *Analyzing Everyday Explanation: A Casebook of Methods*. Newbury Park, CA: Sage.
- Atkinson, J. M. and J. Heritage, eds. 1984. *Structures of Social Action: Studies in Conversation Analysis*. Cambridge: Cambridge University Press.
- Bloom, L. and M. Lahey. 1978. *Language Development and Disorders*. New York: John Wiley.
- Bloor, M. J. 1983. “Notes on Member Validation.” Pp. 156-72 in *Contemporary Field Research: A Collection of Readings*, edited by R. M. Emerson. Boston: Little, Brown.
- Burgess, R. G. 1984. *In the Field: An Introduction to Field Research*. London: George Allen & Unwin.
- Clavarino, A. M., J. M. Najman, and D. Silverman. 1995. “The Quality of Qualitative Data: Two Strategies for Analyzing Medical Interviews.” *Qualitative Inquiry* 1:223-42.
- Cobb, A. K. and J. N. Hagemaster. 1987. “Ten Criteria for Evaluating Qualitative Research Proposals.” *Journal of Nursing Education* 26(4):138-43.
- Cook, G. 1990. “Transcribing Infinity: Problems of Context Representation.” *Journal of Pragmatics* 14:1-24.
- Corbin, J. and A. L. Strauss. 1990. “Grounded Theory Research: Procedures, Canons, and Evaluative Criteria.” *Qualitative Sociology* 13:3-21.
- Crabtree, B. F. and W. L. Miller. 1992. *Doing Qualitative Research*. Newbury Park, CA: Sage.
- d'Agincourt-Canning, L. and S. M. Cox. 2000. *Mere Words on a Page? Transcription as Embodied Labor*. Presented at the Sixth Annual Qualitative Health Research Conference, Banff, Alberta.
- Daly, J. and I. McDonald. 1992. “Covering Your Back: Strategies for Qualitative Research in Clinical Settings.” *Qualitative Health Research* 2:416-38.
- Denzin, N. K. 1989. *Interpretive Interactionism*. Newbury Park, CA: Sage.
- . 1994. “The Art and Politics of Interpretation.” Pp. 500-515 in *Handbook of Qualitative Research*, edited by N. K. Denzin and Y. S. Lincoln. Newbury Park, CA: Sage.
- . 1995. “On Hearing the Voices of Educational Research.” *Curriculum Inquiry* 25:313-30.
- Denzin, N. K. and Y. S. Lincoln, eds. 1994. *Handbook of Qualitative Research*. Newbury Park, CA: Sage.
- Du Bois, J. W., S. Schuetze-Coburn, S. Cumming, and D. Paolino. 1993. “Outline of Discourse Transcription.” Pp. 45-87 in *Talking Data: Transcription and Coding in Discourse Research*, edited by J. A. Edwards and M. D. Lampert. Hillsdale, NJ: Lawrence Erlbaum.
- Edwards, J. A. and M. D. Lampert, eds. 1993. *Talking Data: Transcription and Coding in Discourse Research*. Hillsdale, NJ: Lawrence Erlbaum.
- Engel, J. and A. Kuzel. 1992. “On the Idea of What Constitutes Good Qualitative Inquiry.” *Qualitative Health Research* 2:504-10.
- Fetterman, D. M. 1989. *Ethnography: Step by Step*. Newbury Park, CA: Sage.
- Fielding, N. G. and R. M. Lee, eds. 1991. *Using Computers in Qualitative Research*. Newbury Park, CA: Sage.
- Fontana, A. and J. H. Frey. 1994. “Interviewing: The Art of Science.” Pp. 361-76 in *Handbook of Qualitative Research*, edited by N. K. Denzin and Y. S. Lincoln. Newbury Park, CA: Sage.
- Geertz, C. 1973. *The Interpretation of Cultures: Selected Essays*. New York: Basic Books.

- Gorden, R. L. 1980. *Interviewing: Strategy, Techniques, and Tactics*. 3d ed. Homewood, IL: Dorsey.
- Guba, E. G. and Y. S. Lincoln. 1989. *Fourth Generation Evaluation*. Newbury Park, CA: Sage.
- Gubrium, J. F. and J. A. Holstein. 1997. *The New Language of Qualitative Method*. New York: Oxford University Press.
- Hall, J. M. and P. E. Stevens. 1991. "Rigor in Feminist Research." *Advances in Nursing Science* 13(3):16-29.
- Hammersley, M. 1992. *What's Wrong with Ethnography? Methodological Explorations*. London: Routledge.
- Hodder, I. 1994. "The Interpretation of Documents and Material Culture." Pp. 393-402 in *Handbook of Qualitative Research*, edited by N. K. Denzin and Y. S. Lincoln. Newbury Park, CA: Sage.
- Hoffart, N. 1991. "A Member Check Procedure to Enhance Rigor in Naturalistic Research." *Western Journal of Nursing Research* 13:522-34.
- Hughes, D., L. McGillivray, and M. Schmidek. 1997. *Guide to Narrative Language: Procedures for Assessment*. Eau Claire, WI: Thinking Publications.
- Italy, J. and I. McDonald. 1992. "Covering Your Back: Strategies for Qualitative Research in Clinical Settings." *Qualitative Health Research* 2:416-38.
- Jefferson, G. 1984. "Caricature versus Detail: On Capturing the Particulars of Pronunciation in Transcripts of Conversational Data." *Tilberg Papers on Language and Literature* No. 31, University of Tilberg, Netherlands.
- Kirk, J. and M. L. Miller. 1986. *Reliability and Validity in Qualitative Research*. Newbury Park, CA: Sage.
- Kuzel, A. and R. Like. 1991. "Standards of Trustworthiness for Qualitative Studies in Primary Care." In *Primary Care Research: Traditional and Innovative Approaches*, edited by P. Norton. Newbury Park, CA: Sage.
- Kvale, S. 1988. "The 1000-Page Question." *Phenomenology + Pedagogy* 6(2):90-106.
- . 1995. "The Social Construction of Validity." *Qualitative Inquiry* 1:19-40.
- . 1996. *InterViews: An Introduction to Qualitative Research Interviewing*. Thousand Oaks, CA: Sage.
- Lapadat, J. C. and A. C. Lindsay. 1999. "Transcription in Research and Practice: From Standardization of Technique to Interpretive Positionings." *Qualitative Inquiry* 5:64-86.
- LeCompte, M. D. and J. P. Goetz. 1982. "Problems of Reliability and Validity in Ethnographic Research." *Review of Educational Research* 52(1):31-60.
- Lincoln, Y. S. and E. G. Guba. 1985. *Naturalistic Inquiry*. Beverly Hills, CA: Sage.
- McCracken, G. 1988. *The Long Interview*. Newbury Park, CA: Sage.
- Miles, M. B. and A. M. Huberman. 1984. *Qualitative Data Analysis: A Sourcebook of New Methods*. Beverly Hills, CA: Sage.
- Mishler, E. G. 1991. "Representing Discourse: The Rhetoric of Transcription." *Journal of Narrative and Life History* 1:255-80.
- Morgan, D. L., ed. 1993. *Successful Focus Groups: Advancing the State of the Art*. Newbury Park, CA: Sage.
- Morse, J. M. 1991a. "Evaluating Qualitative Research." *Qualitative Health Research* 1:283-86.
- . 1991b. "On the Evaluation of Qualitative Proposals." *Qualitative Health Research* 1:147-51.
- . 1994. "Designing Funded Qualitative Research." Pp. 220-35 in *Handbook of Qualitative Research*, edited by N. K. Denzin and Y. S. Lincoln. Newbury Park, CA: Sage.
- Oakley, A. 1981. "Interviewing Women: A Contradiction in Terms?" Pp. 30-61 in *Doing Feminist Research*, edited by H. Roberts. London: Routledge & Kegan Paul.
- Patton, M. Q. 1990. *Qualitative Evaluation and Research Methods*. 2d ed. Newbury Park, CA: Sage.
- Poland, B. D. 1993. "From Concept to Practice in Community Mobilization for Health: A Qualitative Evaluation of the Brantford COMMIT Intervention For Smoking Cessation." Ph.D. dissertation, McMaster University.
- . 1995. "Transcript Quality as an Aspect of Rigor in Qualitative Research." *Qualitative Inquiry* 1:290-310.
- Poland, B. D., S. M. Taylor, J. Eyles, and N. F. White. 1994. "Qualitative Evaluation of the Brantford COMMIT Intervention Trial: The Smokers' Perspective." *Health and Canadian Society* 2:269-316.
- Psathas, G. 1995. *Conversation Analysis: The Study of Talk-in-Interaction*. Thousand Oaks, CA: Sage.
- Psathas, G. and T. Anderson. 1990. "The 'Practices' of Transcription in Conversation Analysis." *Semiotica* 78:75-99.
- Richardson, L. 1993. "Poetics, Dramatics, and Transgressive Validity: The Case of the Skipped Line." *Sociological Quarterly* 34:695-710.
- Sacks, H., E. A. Schegloff, and G. Jefferson. 1974. "A Simplest Systematics for the Organization of Turn-Taking in Conversation." *Language* 50:696-735.
- Seale, C. 1999. *The Quality of Qualitative Research*. Thousand Oaks, CA: Sage.
- Semin, G. R. and K. J. Gergen, eds. 1990. *Everyday Understanding: Social and Scientific Implications*. Newbury Park, CA: Sage.
- Silverman, D. 1985. *Qualitative Methodology and Sociology*. Aldershot, England: Gower.
- . 1993. *Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction*. London: Sage.
- Strauss, A. L. 1987. *Qualitative Analysis for Social Scientists*. New York: Cambridge University Press.
- Strauss, A. L. and J. Corbin. 1990. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Newbury Park, CA: Sage.
- Taylor, S. J. and R. Bogdan. 1984. *An Introduction to Qualitative Research Methods*. 2d ed. New York: John Wiley.
- Tesch, R. 1990. *Qualitative Research: Analysis Types and Software Tools*. New York: Falmer.
- West, C. 1996. "Ethnography and Orthography: A Modest Proposal." *Journal of Contemporary Ethnography* 25:327-52.
- West, P. 1990. "The Status and Validity of Accounts Obtained at Interview: A Contrast between Two Studies of Families with a Disabled Child." *Social Science and Medicine* 30:1229-39.