

recruitment and teacher preparation are inextricable from induction, professional development, and teacher retention (Olsen and Anderson 2007; Sykes 1999).

3. I use these two broader conceptions of personality because they downplay strict demarcations between heredity and environment and therefore encourage ecological treatments of self. Bourdieu's (1991) sociological "habitus" is also a helpful formulation as it links status, sociohistory, and self-formation.

4. I know I am on shaky ground here for several reasons. One is that I am no expert in Eastern thought. A second is that the essence of Zen is that what is most important is ungraspable: that truth is an unknowable essence rather than some two-dimensional set of premises and conclusions; that the more you talk the less you know, the more you know the less you understand; that any attempt to explain truth necessarily sends it running. Zen thrives on paradoxes, and so any explanation of it is self-defeating.



Appendix

Studying Teacher Development

Research Methods and Methodology

Theory is a process, an ever-developing entity, not a perfected product.

—Glaser and Strauss

Research Design

This qualitative research project created and intertwined several empirically developed case studies to analyze the iterative processes of knowledge construction by which eight teacher candidates became beginning teachers. Data were collected over a two-year period, while data analysis required another two years. The approach was decidedly inductive—the shape of my thinking changing as I became more familiar with the unfolding experiences of the study participants. I chose an inductive approach for two related reasons: because keeping my mind open at the beginning would limit the data-collection-as-self-fulfilling-prophecy bias, and because the analytical approach I ultimately adopted was allowed to emerge organically from the empirical data. It seems to me that the best qualitative research—participating in grounded theory, made of iterative explorations back and forth into data and explanation-building—is both inductive and deductive. Inductively, the researcher begins with empirical specifics and moves outward toward larger patterns and themes. Deductively, the researcher first learns the existing research landscape and considers, rejects, confirms, and adjusts it in relation to new data in order to extend the research conversation. That these two

complementary procedures join up while the analysis is being conducted offers an elegant symmetry.

During the summer of 1998, I purposefully selected four northern California secondary education teacher credentialing programs that in the aggregate loosely resembled the local sample of Bay Area university teacher preparation options:

- Two large, public, nonselective, inexpensive programs
- One mid-sized, private, highly selective, expensive program
- One small, public, highly selective, medium expensive program

All four placed their student teachers in predominantly urban and urban fringe settings. Through stratified random selection, I chose two teacher candidates (English concentration) from each program. One candidate from each program was intended to resemble the “typical” teacher candidate (Lanier and Little 1986; Lortie 1975; NCES n.d.; Wideen, Mayer-Smith, and Moon 1998). This typical teacher candidate was—according to demographic research—a white, young twenties, middle-class woman from a suburban or rural location who speaks only English. There were other, less observable characteristics identified in the available research, but I was not able to make use of them. They included having chosen their profession before age eighteen (Lortie 1975; NCES n.d.), tending to like children, skewing Judeo-Christian in their upbringing (if not in beliefs), tending to teach within one hundred miles of their birthplace (Wideen, Mayer-Smith, and Moon 1998), tending to have been moderately successful in school (Wideen, Mayer-Smith, and Moon 1998), tending to be humanistic and generally conformist (Wideen, Mayer-Smith, and Moon 1998), and tending to score in the lowest quartile of the SAT and the National Teachers Exam (Lanier and Little 1986).

The other candidate from each program was intended to resemble the farthest deviation from the “typical” teacher candidate that population constraints would allow. I was interested in including this category of teacher candidate because it would allow for the opportunity to contrast demographic aspects as influences on learning to teach, and carried the potential to generate additional culture-related themes affecting the professional development of beginning teachers. The characteristics I chose to consider were the following (in no particular order):

- Age
- Race and/or ethnicity

- Gender
- Native language
- Birthplace
- Educational background
- Previous employment experience
- Prior experience working with kids

This distance between typical candidate and farthest deviation differed according to the population constraints of each program. I was limited by the fact that most English teacher candidates in all four programs were white young women. In these four programs, there were only three candidates of color; I chose one of them. At each site, then, this “farthest deviation” reflected the greatest distance allowable. At one site this meant a young woman born in Iran who speaks Farsi first and English second (my one candidate of color). At another site this meant a forty-nine-year-old man changing careers. At a third site this meant a thirty-eight-year-old man in a wheelchair. At the fourth site this meant simply a male from outside California.

In order to protect against self-selection bias, I did not seek volunteers but rather introduced my project to each program cohort, addressing each group on their first day of class and requesting that anyone uninterested in participating put their name on a piece of paper and place it inside an envelope I left in each room (only one did). From the remaining pool, I looked at whatever biographical information was available (undergraduate education information, previous work experience, matriculation materials), talked with program directors (to learn more about individual candidates), considered observable characteristics (race, gender, approximate age), and invited my choices to participate. All agreed, though one candidate exited during the second year. I was not affiliated with any of the teacher education programs and did not previously know any of the candidates I selected; I consciously chose to place myself as close to the observer pole of the observer/participant continuum because I wanted the data collected to be as objective a portrait of the eight candidates as was possible.¹

Data Collection (1998–2000)

Data collection during the first year consisted of eight open-ended, tape-recorded, sixty- to ninety-minute conversations with each of the

candidates; shadowing candidates in their teacher education classes and meetings and writing “thick description” (Ryle, quoted in Geertz 1973) field notes; observing candidates in their student teacher classrooms (again, producing field notes); and collecting official and unofficial documents and artifacts from programs and candidates. I also rigorously kept a research journal. I was interested in knowing the candidates as people, as teachers, as students of teaching; capturing their conceptions of teaching, learning, and schooling; and collecting interpretations of their teacher education program, their learning-to-teach experiences, and their (continually changing) identities. I was also interested in monitoring my own reflexive roles and emerging understandings of the topic. Some interviews were completely open-ended: a conversation initiated with the question “So, what’s new?” and interrupted only to probe for further information, clarification, or concrete examples. Other interviews followed loosely constructed protocols, asking interviewees to tell life stories, conduct think-alouds, define and describe concepts, talk through card sorts, or respond to specific questions. To capture conceptions and approaches of the program and program staff, I collected data from the programs themselves: faculty and administrator interviews, class meeting observations, official and unofficial documents and artifacts. Because I sought natural data, I rarely asked respondents directly to discuss their knowledge sources: I wanted answers to emerge indirectly in context and in conjunction with observations of practice. This aided me in avoiding scripted responses or speakers offering the responses they thought I wanted to hear.

During the second semester of their first year, I concentrated primarily on the student teaching experience, because that was each program’s focus. Observing and writing about the candidates in their classrooms; collecting their various teaching artifacts, journals, and lesson plans; and allowing them to direct the tape-recorded conversations all allowed me to capture student teaching and learning-to-teach *emically*, as they were experiencing it. At the end of the school year, I conducted a last round of interviews, this time asking informants to recount biographies and life stories.

During the second year, I continued to observe the candidates teaching, conducted tape-recorded conversations with them, and collected official and unofficial documents. In the late spring, I shadowed each candidate through two consecutive workdays and then conducted a final debriefing interview at the end of our second full day together.

All interviews were transcribed. I maintained my research journal. My database is represented in Table A.1.

Analysis (1999–2002)

Because I adopted a multidisciplinary research approach, my analytical methods vary. Embedded in my approach to studying the data are perspectives and procedures from three analytical paradigms: *epistemology* (which itself sits inside traditions of psychology, anthropology, and philosophy), *critical theory* (a sometimes Marxian and sometimes postmodern blend of sociology, anthropology, literary analysis, and philosophy), and *sociolinguistics* (introduced in what follows). The analytical process was continuous, consisting of several overlapping, sequenced phases, each of which used various perspectives, theories, and procedures from the traditions presented above to understand the data. By “understand the data,” I mean the ability to (1) extract

Table A.1 Study Database

Interview transcripts from conversations	“Thick description” field notes from observations	Official documents	Other artifacts
• with eight candidates	• of program classes	• program materials (handbooks, descriptions, handouts)	• notes and e-mails from candidates
• with six program coordinators	• of program meetings		• card sorts
• with five program instructors and supervisors	• of candidate teaching classes • of school site meetings	• course materials (syllabi, handouts, guides) • candidates’ coursework • candidates’ unit and lesson plans, teaching artifacts	• pre-study and post-study surveys • Internet data on participating schools and university programs

from the data thematic patterns that were in some bounded way generalizable to the sample; (2) depict each of these teachers as holistic learners in case studies and cross-case portraits; and (3) build a richly theorized, empirically built account of beginning teacher knowledge development.

Because my intent was to understand how beginning teachers construct their professional knowledge, I was interested primarily in *process*. I put my faith in the process narrative because it highlights the occurrence of events in actual contexts under conditions that, in the aggregate, compose the logic—or story—in which the phenomena exist (Becker 1998; Gardner 1993). This means that I do not seek direct causality: As Becker writes, “[P]rocess narratives don’t have predestined goals” (Becker 1998, 62).

Analytical Phases

Phase one of data analysis was a preliminary content analysis of the collected data—reviewing approximately two thousand pages of interview transcripts, one hundred pages of field notes, and three boxes of documents and artifacts. This review process allowed me to recognize and catalog topics, and begin systematizing those key words, patterns, and personal understandings that were emerging, and that would later become helpful analytical entryways into the data (Becker 1998; Linde 1993; Miles and Huberman 1984; Woods 1996). It was during this analytical phase that I created a preliminary theoretical model of teacher knowledge construction. This model changed and deepened during subsequent phases of analysis; it ultimately became the theoretical model of teacher learning I present near the end of chapter one.

Phase two focused on drawing from that content analysis to generate preliminary coding categories and data sampling strategies in preparation for finer-grained analysis. Those initial categories and subcategories are shown in Table A.2.

My goal for data sampling was twofold: I wanted to reduce the amount of raw data to analyze, and I wanted to generate a useful, yet representative, subset with which I could investigate my research questions. Ultimately, I selected four teachers whose experiences I write about in this book: one teacher from each of the four programs. These cases were selected because, in the aggregate, they reflect the broadest range of possible experience with programs. Kim wholly rejected her program;

Table A.2 Preliminary Coding Categories

-
- I. Influences coming from the self
 - a. Self-perceptions from candidates
 - b. My perceptions of their personality traits
 - c. Informant conceptions of the personal nature of teaching
 - II. Influences coming from cultural positionings
 - a. Gender
 - b. Sexual orientation
 - c. Socioeconomic status
 - d. Ethnicity and race
 - e. Epistemes (Foucault 1970, 1972)
 - f. Home/family
 - III. Influences coming from previous experiences
 - a. In home/family
 - b. As kindergarten through grade eight student
 - c. As high school student
 - d. As college student
 - e. Observing teachers
 - f. Working with young people
 - g. Miscellaneous
 - IV. Influences coming from teacher education program
 - a. Program faculty/coursework
 - b. Mentor teachers
 - c. Program culture/ethos
 - d. Student teaching experience
 - e. Seminar meetings
 - f. Peers/collegiality
 - V. Informants' conceptions
 - a. of subject of English
 - b. of teaching
 - c. of program
 - d. of teaching practicum
 - e. of students
 - f. of learning and knowledge
 - g. of schooling and society
 - h. of first-year teaching
 - i. of own self/identity (and changes)
 - j. of colleagues and collegial nature of learning/schooling
 - k. of reasons for entry into profession
-

¹I use “self” and “personality” interchangeably, linking them using Hamachek’s (1999) notion of personality as the collection of given-off personal characteristics presented to others as a “self.” Another useful term is Gardner’s (1993) “personality configuration.”

William fully embraced his; and Azar and Liz both appropriated program knowledges to fit their own goals and conceptions, but they did so in different ways. I make no claims for typicality; certainly different pre-service teachers will have different professional development experiences (that is the point of this study!). Instead, my research design was about investigating ways in which different candidate characteristics interrelated with different programmatic characteristics, and what those ultimate learning processes looked like in practice.

I chose to include transcripts from all program faculty interviews as supplementary data, not as material for fine-grained analysis, because the programs and instructors themselves were not the primary focus of this study. Likewise, I chose to closely analyze all documents from the teacher candidates but to treat documents and artifacts from the programs as supplementary. Finally, I included all field notes from all my observations and drew from the research journal in which I had been regularly writing.

Phase three was a fine-grained analysis of the remaining data. Following advice from Peter Woods (1996) and Barney Glaser and Anselm Strauss (1967, cited in Woods 1996), I considered "theory" as a process, not a perfected product, and approached this phase as essentially a never-ending work in progress (cut off, finally, by the pragmatic need to finish the dissertation and graduate). This phase included two years of recursive analyses of field notes, interview transcripts, and collected documents in order to generate the findings reported in this book. To conduct these two years of data study, I relied primarily on sociolinguistics as analytic method.

Using Sociolinguistic Methods to Uncover Speaker Meaning in Teacher Interview Transcripts²

To understand the collected interview data, I relied on an extended analysis of language use and the conceptions, representations, and perspectives language use reveals. Specifically, I employed text analysis, conversation analysis, and discourse analysis methods to build portraits of the teachers as learners. The decision to rely primarily on sociolinguistic forms of analysis resulted from my conviction that it is primarily through language that individuals enact and present themselves and their (often socially constructed) knowledge to each other (Cazden 1988; Fairclough 1989; Gee 1999; Goffman 1959; Gumperz 1982). As Hans-Georg Gadamer

writes, "Being, that can be understood, is language" (in Grondin 1994, xiv). Humans rely on language—spoken, written, enacted, or even, in the case of semiotics, symbolized—to interpret the world, navigate the world, reveal and construct themselves inside the world, and position themselves (or get positioned) in the world. Language both shapes people and is shaped by them. Language exists *inside* the social world: In other words, diction, meanings, and ways in which language is used are not independent, autonomous processes but social activities imbued with the multiple social influences that mark all human contexts and histories (Bourdieu 1991; Fairclough 1989; Foucault 1970; Freire 1987; Gee 1992; Luke 1995). Thus, language is social practice. It bridges the cognitive with the social, the individual with the cultural (Barnes, in Cazden 1988). As Courtney Cazden (1988) explains, language exists to communicate information (propositional function), establish and maintain social relationships (social function), and express a speaker's identity and attitudes (expressive function). Additionally, Norman Fairclough's (1989) notion of "subject positions" holds that over time individuals, through language use, embody the various ways the world positions them even as they, in part, inscribe those same positionings. From early thinkers of linguistics and sociology like Ferdinand de Saussure and Roland Barthes to literary deconstructionists like Umberto Eco and Jacques Derrida comes emphasis on "the linguistic turn" in postmodern history—the point when the social foundation of words and meanings was formally recognized (Derrida 1971; Lemert 1997; Lyotard 1984/1979; Natoli and Hutcheon 1993).

The words of the teachers I interviewed interested me not as ends in themselves, but as the means through which they revealed their knowledge, their meaning-perspectives, and their interpretations of their own developing teacher identities. I presumed that there exist several dimensions of relationship among their knowledge, the ways they talk about their practice, and how they enact teaching and learning in context. I further presumed that an investigator can isolate and uncover many of those features of any teacher's meaning system by studying how teachers talk about themselves, talk about teaching, and talk about their experiences.³

There are multiple methodological traditions of examining language in use—the loose cluster known as sociolinguistics—and they derive from diverse disciplines, including anthropology, rhetoric, literary criticism, philosophy, psychology, and sociology. The treatment I adopted

for my study comes primarily from discourse analysis—itsself a cluster of related sociolinguistic analyses that share the common presumption that speakers and hearers typically cooperate in unspoken ways in order to maintain conversation. This means there is an order, or an internal logic, to conversants' language use that can be identified and examined. Other treatments (for example, intercultural communication theory [e.g., Gudykunst et al. 1996; Scollon and Scollon 2001] and interactional models of communication [e.g., Gumperz 1982]) focus on the *unshared* cultural-linguistic assumptions often characterizing cross-cultural miscommunication, because these treatments focus on groups from different speech communities attempting to converse together. Because each of my informants was participating, more or less, in the same cultural community as I was, I decided I could employ discourse analysis. Though I will return to this point later, it should be remembered that most discourse analysis methods require that investigators first consider and establish ways speakers are or are not operating from the same assumptions about culture and language. To presume conversants across speech communities rely on similar assumptions is to misunderstand the situated nature of sociolinguistics.

My discourse analysis procedures were varied as, I believe, first, that different kinds of text require different methods of analysis, and second, that the choice of analytical method depends on what questions one intends to ask of the data.⁴ This first point is a structural one. It means that, for example, a long monologue might be examined through the lens of a code systems approach that allows us to presume that, accounting for context and purpose, a speaker's words more or less directly reflect his or her thoughts on the subject (Schiffrin 1994). The second point is functional, and means that different research purposes necessitate different analytical methods. For example, because I was interested in examining sources of professional knowledge for the teachers I studied, I asked informants to describe their pasts and tell stories from their present. The contents of these stories I could examine through the lens of a life story approach to creating coherence through narrative. Charlotte Linde (1993) reports on the various coherence systems her interviewees employed (those of psychology, behaviorism, feminism, the Catholic confessional) as they offered explanations, told stories, and chronicled personal events. I, too, extracted embedded coherence systems teachers relied on to explain and tell their stories and, in so doing, was provided a glimpse into the interpretive (and simultaneously epistemological and

ontological) frames through which these beginning teachers were constructing and revealing their professional knowledge, their conceptions of self, and their interpretations of context.

Positionality and Interpretive Research

If adult learning is indeed a process of assembling knowledge using interpretive constructs deriving from prior experience inside social positionings, then I, too, must be at least partly under the spell of my past. This means that my study was a conscious exercise in self-analysis, as well. I was obliged to identify and consider embedded ways in which I conceived of learning, teaching, knowledge, and interpretive research. I needed to examine ways in which my own power as a researcher or positioning vis-à-vis interviewees shaped the teachers' talk. I tried to be reflexive and careful to delimit the amount of my bias that seeped into the analysis. I had colleagues discuss my coding categories and approaches with me. Whenever possible, I had them critically deconstruct my emerging procedures, findings, and paths of inference. I employed member checks, going over parts of prior transcripts with interviewees to discuss their responses and my interpretations with them. During my analysis of interviews, I critiqued my findings to test for alternative explanations.

I had no prior contact with any of the informants of this study. I was not involved in any of their preparation programs. I was an outside researcher who negotiated access to four university teacher education programs and used stratified random sampling to select informants. Of course, the teachers and I developed personal relationships that included power dynamics, various assumptions, and multiple subject positions. These needed to be consciously considered. I was an education researcher who had also been a high school English teacher. This meant that I was reasonably facile with the jargon of the academy within education and that I had practical experience in the very domain for which these teachers were preparing themselves. I also made sure to recognize and attend to influences from gender, personality, and culture.

To expose and make all of these variables part of the study, I discussed these issues with interviewees and compared these conversations with others we had. During interviews, I frequently asked the teachers what they actually meant by terms they used (like *constructivism* or *knowing*), trying to encourage them to unpack the lexicon of teaching into

personalized explanations of meaning. And I always probed for concrete examples or connections to what I had observed so I could better learn how and where they located their explanations. I approached topics from multiple angles, using different phrasings over the two years. My intent with these procedures was to never assume I knew precisely how they were using terms; this stance created additional opportunities for them to reveal knowledge as they discussed what they meant by terms such as *theory*, *curriculum*, or *political*, or told a story about two students and a newspaper article to illustrate what was meant by “doing a fishbowl.” Finally, I employed a separate analysis of the interviews solely to examine ways that my role as researcher affected the conversations and subsequent analyses. Despite these efforts, some bias no doubt seeped in: This is one limitation of the research approach. As with most interpretive work, the findings are open, in part, to interpretation. I discuss other limitations at the end of this appendix.

Two Models of Viewing Communication

To study the interview transcripts, I relied primarily on analyses existing within two basic treatments of communication—what Deborah Schiffrin (1994) calls the *code model* and the *inferential model*. (There is a third model, the *interactional model*, which I did not employ but which I will discuss later.) The code model presumes that a speaker possesses an “internally represented proposition (a thought) that he or she intends to make accessible to another person” and, by transforming the thought into mutually understood signals (the sounds or marks we know as words), communicates the thought to someone who—relying upon the same understanding of those mutually understood signals—retrieves and decodes the message and therefore receives the intended thought (Schiffrin 1994, 391). This more or less direct interpretation of communication, simply put, takes a person’s words as *prima facie* representations of his or her intended propositions. Used carefully, this model has value. I used this approach to look at relatively unproblematic monologues spoken by informants within a tape-recorded conversation.⁵ The following sample from my first interview with Liz is one example:

BRAD: Assuming you could have gone into a classroom as a teacher through an emergency certification or as a substitute, why did you choose to go through a [university credentialing] program?

LIZ: I don’t want to hate something. I’m excited about it. I want to do it, and I want to do it well, and I don’t want to be so frightened and intimidated by it that I don’t like it. I know that one year is not going to prepare you for what it’s really like when you walk into a classroom, but I want the illusion of confidence of a foundation, and that that will be enough to make me feel like I know that I’m doing enough. It’s probably just a facade or something that I would convince myself of. I think that in most respects performance is based on confidence. If you’re a singer in a band, it doesn’t matter if you’re good or not. It’s what you bring to that, and I think that’s true of teaching. If you inspire that trust and respect because it’s something you think that you’re good at, then that will be enough to stand on.

Although a bit of inferential analysis is required (How did the phrasing of my question perhaps shape her answer? What assumptions does she take as shared between us? What aspects of our relationship might she be appealing to?), much of her response can be interpreted as her beliefs and thoughts directly communicated. This means that I can use the passage to posit the following preliminary propositions Liz believes true:

1. That without the teacher education experience, she would be so frightened and intimidated by teaching that she would hate it;⁶
2. That one year of preparation is insufficient for the demands of actual teaching, but that it is sufficient for providing the *illusion* of confidence, and that is enough to get started;
3. That, in most respects, performance is based on confidence, and in this regard teaching is like singing in a band;
4. That confidence inspires trust and respect from others and allows others to believe (legitimately or not) that one is a good teacher or singer.

I used these tentative conclusions and others like them to begin creating my understanding of Liz as a teacher. Alone, they do not carry the full evidentiary warrant. The code model is an approach best used in conjunction with the inferential model, described below, and a rigorous reflexivity. However, these preliminary assertions contribute to the findings. Using various coding categories (in this case, reasons for entry, initial expectations for her teacher preparation experience, thoughts about the relationship between confidence and teaching, teaching as performance), I cataloged the information about Liz for later analysis. My

developing portrait was being adjusted, confirmed, reconstructed—and over time assembled into a set of conclusive findings about Liz and her experience.

The second model of communication I relied on as I analyzed discourse is the inferential model. This model more strongly highlights shared subjectivity within communication; in other words, it places in the foreground the fact that speaker and hearer rely on shared understandings as they maintain meaningful conversation. The code model, of course, also relies on shared subjectivity—accurately encoding and decoding language requires implicit agreement of code meanings—yet, the inferential model places its focus squarely on the notion of shared intentions structuring meaningful conversation. It focuses on *intentionality* as the basis of language use, presuming we communicate our intentions (not only our attitudes and beliefs) through our words and our interpretations of the words of others.

However, just because the inferential model presupposes shared subjectivity does not mean it always expects it. Several discourse analytic techniques are as interested in when and why conversations break down as they are in why they are sustained. Discourse analysts posit that maintaining conversational involvement “requires that certain linguistic and sociocultural knowledge needs to be shared” (Schiffrin 1994, 103). When communication is successful, it is because knowledge is shared and (often implicitly) understood by participants. When communication fails, it is due to a breach in the unspoken assumptions. Accepting this set of premises allows investigators to look at the language use—the linguistic patterns—in order to uncover and examine both the shared assumptions and the unshared ones, and the meaning systems underneath. Yet, this also means that a language researcher must identify the various interpretive frames within which speakers are located and make analytical decisions accordingly. One’s choice of analytical approach should be aligned with the features of the research context, the speech communities of the participants, and the particular questions one wishes to ask of the data.

The notion of communication across speech communities raises a third treatment of language, called the interactional model of communication. This treatment deemphasizes intersubjectivity, instead highlighting ways in which a hearer’s interpretation of language might not align with the speaker’s intentions. This is a treatment that reveals ways in which speakers, to use Erving Goffman’s words, “give off” as much

(or more) information as they “give” during conversations (Goffman 1959). It is a model that examines the often *unintended communication* speakers reveal as they engage in social situations: Examples include body language, what is not said, the direction of one’s gaze, pitch changes, and so on. John Gumperz’s (1982) work on speech communities investigated places in which conversation broke down when intercultural assumptions were unshared. Stanley Fish (1986) coined the term *interpretive communities* to illuminate how speakers, readers, and hearers rely on interpretive boundaries linked to cultural-linguistic assumptions that account for understandings and misunderstandings when using language. Interactional sociolinguistics—as some of these analyses are labeled—presumes communication is not always shared and places its analytical emphasis on context and culture (e.g., Goffman 1959, 1981; Gumperz 1982). I want to return, however, to the inferential model in order to use a discussion of one of its examples—pragmatics—to illustrate my primary approach to analyzing interview transcripts.

Using Pragmatics to Infer Meaning from Interview Transcripts

Philosopher H. P. Grice (1968, 1975) developed ideas about how conversants cooperate in patterned ways in order to sustain conversation. His ideas shaped an approach to discourse called *pragmatics*. The nonnatural meaning component of Gricean pragmatics allows that we can assume intentionality on the part of the speaker—that a comment is “intended to be recognized in a particular way by a recipient” (Schiffrin 1994, 193). However, Gricean pragmatics postulates a second intention, too: that the recipient also recognizes the speaker’s intention (Grice 1975). Speaker and hearer cooperate in unspoken ways in order to maintain coherence within conversation. Grice named this cooperative principle “implicature.” Grice’s notion of implicature allows that a speaker’s meaning comes partly out of examining how the subsequent hearer reacted to the comment. This continues as the hearer then becomes next speaker and the initial speaker becomes a hearer reacting to the comment. These back-and-forth occurrences of mutually understood intentions sustain meaningful conversation and, as a consequence, allow a researcher to presume comments can be accepted as reflections of conversants’ intentions. For example, imagine I am a stranger who approaches you on a street with a gas can in hand and asks, “Do you know where the nearest gas station is?” You reply, “I’m not from here. But I’ve got a siphon, and

my car is nearby.” From this short exchange, a researcher can infer that you understood my question (even though you did not literally “answer” it) and that you do not know where any nearby gas station is (because if you did, you would have answered differently), and you feel the need (politeness? to compensate for not knowing?) to offer an explanation for why you do not know where the nearest gas station is (if you were responding rudely with a sarcastic cue, you would probably not have followed with an offer of help). Further, the researcher can presume that you have understood why I desire a gas station and that you believe it accurate and acceptable to offer your car and siphon (which is no gas station at all). Understanding the intentions embedded in what you have said, I then answer, “Great. Thanks.” This is implicature. It allows us to understand how conversation is not always—or not merely—about the exchange of literal meanings of words.

Let me present an example from the data. During an interview I told Liz that, because I was once an English teacher, I have files of lesson plan ideas I would be willing to loan her sometime. Her reply was a sudden “Do you have grammar stuff?” which got us talking about the teaching of grammar. At one point, the following exchange occurred:

BRAD: And, with students, there’s so much baggage that comes with the word *grammar* that when that *Warriner’s* comes out, immediately people are ready to hate whatever you’re going to do.

LIZ: I think the biggest problem is that it’s never taught in context. You never see why it’s of value to know how this thing [a sentence] is built. Somehow, I think I could make it interesting.

In this short exchange, I make a claim that students rarely enjoy being taught grammar, especially by way of the traditional *Warriner’s* grammar series. Hearing my comment, and interpreting the pause at its end as an entreaty for her to speak, Liz was suddenly faced with a broad range of possible responses. She could talk about students or teachers or herself; she could break “grammar” up into constituent parts by talking about one example or piece of grammar; she could address my reference to *Warriner’s*; she could disregard the importance of grammar altogether; she could go off on an unrelated tangent; she could take exception to all or part of what I have said. This list of possible replies is nearly inexhaustible. When, however, she chooses one response, Liz reveals valuable clues about herself. She reveals how she interprets my comments and she

reveals embedded conceptions and intentions of her own about aspects of teaching, learning, and grammar instruction.

By examining the cultural and contextual cues present, the referents used, the way her words relate to mine, and the lexical and syntactic choices she makes, I can hypothesize various attitudes, conceptions, orientations, and beliefs that Liz appears to hold about teaching grammar. When tested against other passages within and across the interviews, my field notes, and collected teaching artifacts, these hypotheses become stronger or weaker, confirmed or discounted, adjusted and refined. As more and more of the interviews are analyzed, this collection of hypotheses becomes larger in quantity and stronger in assertion and, ultimately, becomes the findings I further analyzed and finally reported. As example, we can look closely at Liz’s language use in this passage just presented. Here it is again:

BRAD: And, with students, there’s so much baggage that comes with the word *grammar* that when that *Warriner’s* comes out, immediately people are ready to hate whatever you’re going to do.

LIZ: I think the biggest problem is that it’s never taught in context. You never see why it’s of value to know how this thing [a sentence] is built. Somehow, I think I could make it interesting.

In response to my assertion, Liz chooses to announce that she believes the primary “problem” (the reason why students do not like the study of grammar) is that “it’s never taught in context.” Because she has not asked me about *Warriner’s* (I know from other interviews that she typically interrupts me to ask for clarification when she does not understand a word or concept I use; further, she has referenced *Warriner’s* before) we can presume she knows what *Warriner’s* is. Because her comment built off of mine, rather than contradicting or disagreeing with mine, we can presume she accepts that students often “hate” being taught grammar. From her particular phrasing (“the biggest problem is”), we can infer that Liz believes there’s an identifiable primary reason—out of several “less big” ones—why students hate the study of grammar and that the reason corresponds to the notion of teaching grammar out of context. And she reveals something about her conception of context and teaching grammar immediately after, when she directly follows her comment about context by saying, “You never see why it’s of value to know how this thing is built. Somehow, I think I could make it interesting.” By analyzing her use of

“you,” the uses of “it,” the verb “see,” the noun phrase “this thing,” and by applying the notion of implicature to her comments, we can deduce several general assertions Liz intends to make. Her comment in these lines reveals that she believes *teaching grammar in context* entails (1) communicating to students how sentences are formed in order to (2) demonstrate the value of knowing how sentences are formed. And it reveals, (3) that to do so would make the study of grammar “interesting” to students (and therefore not hated by them) and, finally, (4) that she believes she can do such a thing, but—look at her use of “somehow”—she is not yet sure how to do it. Such an analysis, then, allows me to tentatively posit several specific, related premises Liz must presume as true in order to say what she said and expect it to be understood by me (more or less) as she intended it. The premises are these:

1. That there is more than one reason why students hate learning grammar, but the articulated one is the primary one;
2. If it is demonstrated to a student how a sentence is built, the student will see the value of learning grammar;
3. If the student understands the value of grammar (as conceived of in previous premise), he or she will no longer hate the study of grammar;
4. That demonstration (e.g., showing how a sentence is built) is a kind of teaching because it leads to appreciation, which, Liz believes, is linked to understanding;
5. That understanding (or learning) is related to noticing or “seeing”; in other words, that noticing a thing leads to understanding or appreciating the thing;
6. That Liz believes she will be able to demonstrate the value of learning grammar by demonstrating how sentences are built and, in so doing, make the study of grammar interesting;
7. That, though she is confident about achieving this kind of teaching just articulated in premise 6, she does not yet know how she will achieve it.

Also interesting is that each of us uses the second-person pronoun “you” to position the hearer in a particular, but different, way. When I say, “whatever you’re going to do,” I frame her as a hypothetical teacher teaching grammar. She automatically picks this up and also uses the

second-person “you,” which could suggest that the hearer—me—is a student learning grammar but, because I know she knows I am not such a student, it must more accurately reveal that she believes I am familiar enough with secondary school students to be able to put myself in the place of a student—to pretend for the moment that I am such a student. As my words made us pretend she is a teacher (which, at this point in her preparation program, she was not), her words pretended I was a student. This complementary pair of mutually understood, implied statements underscores the implicature that occurs as we speak. It also acts as analytic lever, because it offers one place where each of us is required to make assumptions about what a student is, and, in fact, Liz’s conceptual picture of a student might not resemble my picture at all. This makes it a good location for scrutiny and comparison to other places where Liz talks of students and/or grammar.

*Iterative Passes Through the Transcripts
Produced Analytical Portraits*

Using these methods to illuminate speaker meaning and speakers’ reliance on embedded meaning systems allowed me to build portraits of each teacher’s process of knowledge construction. It proved time-consuming but productive: Over two years’ time (after two years of data collection), I built understandings of each teacher as a three-dimensional learner who relied on prior understandings (coming from life histories, social contexts, and cultural constructions) to interpret and organize teacher preparation experiences into professional knowledge. This is how I came to view the teachers as negotiating their own learning-to-teach processes, which were at once holistic, continuous, and situated. The analytical method I have described here allowed me to examine the speakers’ own perspectives and meanings, rather than impose my own. The method pushed me to explore microscopic details of their (and my own) language use to consider how language revealed each of our constructed views of self, world, teaching, and the process of becoming a teacher. And, finally, the method kept me honest by requiring that I continually shift back and forth between the words used in interviews and the meaning I was attaching to those words. This methodological dialectic—made possible by sociolinguistics—was invaluable in uncovering speaker meaning from interview transcripts.

Limitations of This Methodology

Reasons inside primarily three categories shaped the accuracy of this analytical approach. One category is my own bias; I discussed that earlier. The second category is that, because I relied heavily on interview data, there were issues around self-reported data and scripted responses. I had to contend with the worry that interviewees told me what they thought I wanted to hear or presented idealized versions of themselves. Goffman's (1959) "impression management" is relevant here: Individuals sometimes manage the impressions others have of them so as to present themselves in an idealized form. I attempted to protect against this hazard in several ways. Because the data were collected over two years' time, because I approached the same topics from multiple (often indirect) angles, and because I looked for consistency during analysis, I was able on some level to isolate self-serving or scripted responses without neglecting their disconfirmatory potential. But surely I was unable to fully discard or neutralize all of it; this should be kept in mind.

I chose not to reveal my exact hypotheses or specific ways in which I was considering the learning-to-teach process when I spoke with teacher candidates. This is because my work was meant to be inductive (I did not have any formalized hypotheses) and because I did not want to tacitly encourage interviewees to "help me out" by predicting what I wanted to know and providing it. Instead, I told them I was doing inductive, qualitative work to "explore how some pre-service teachers think about, talk about, and do teaching," and described my research questions in general terms, telling them I wanted to "explore how teachers learned to teach." I thought this would be fair both to them (to give them a sense of my study) and to the collection process (lessening their pressure to supply particular kinds of response). Interestingly, none of the candidates seemed to care much about what I was studying; they were more interested in ensuring I understood their responses in the ways they intended. I realize that this methodological stance—carrying with it a degree of secrecy—might strike some as disingenuous, but I believe there is value in maintaining this kind of informant open-endedness in which to elucidate people's perspectives and meaning systems. There are always parts of each of us we cannot see. As Michael Holquist wrote about Mikhail Bakhtin's dialogism: "The very immediacy which defines my being as a self is the same condition that insures I cannot *perceive* my self" (original italics; Holquist 1990, 26).

Finally, the third category is less a methodological limitation than a clarification: Studies like these capture one static snapshot of teachers learning and practicing in a scene that is in fact forever in progress. These teachers were at one particular point in the development of their knowledge. Like Heraclitus's line about never stepping in the same river twice, teacher knowledge construction is a dynamic, continuous process and, already, the conceptions of the eight teachers I studied have surely changed. Because knowledge is not static, there is important potential for teachers to change and grow in the ways they think about and do teaching. As William Faulkner has observed, the past might never in fact be past, but it is also true that no teacher's future is predestined. Sociolinguistics as an analytical tool helped me to uncover and explore this. And it reminded me again and again that the situated meanings teachers construct are complex, multifaceted, and forever in motion.

Notes

1. I realize, of course, that there is no such thing as pure—or "natural"—collected data (see Erickson 1986; Geertz 1973; Hymes 1972). It is my belief that in every nook and cranny of information retrieval and analysis lie multiple places where one's own subjective position colors the data in question. (In fact, in many ways this is the fundamental premise of the study!) But I do believe there are conscious ways one can greatly limit the infusion of researcher bias into the data being collected and analyzed: Separating data collector from data being collected is, for me, one of them. Reflexive analysis is another. Member checks and critical friends are a third. I also realize that there are trade-offs inherent in placing myself close to the observer side rather than the participant side: Intimacy with informants (and therefore a different proximity to data) can be sacrificed in pursuit of less biased data collection.

2. The remainder of this appendix was first published in 2006, as "Using Sociolinguistic Methods to Uncover Speaker Meaning in Teacher Interview Transcripts," *The International Journal of Qualitative Studies in Education* 19(2): 147–161. Permission to reprint this was generously provided.

3. However, I want to be clear that, because I believe teacher knowledge is mostly enacted in actual practice (not in teachers talking about teaching), I triangulated interview findings with two years of observations and collected documents. Because this discussion focuses solely on analyzing interview transcripts, I have left out any discussion of this part of my methods. But, methodologically, I advocate that teacher knowledge is best studied using some

combination of procedures: interviews, observations of practice, analysis of teaching artifacts. For fuller discussions, see Florio-Ruane (2002), Lampert and Ball (1998), and Woods (1996).

4. There are many ways to define *text*; I borrow from Fairclough (1989, 4) the definition he, in turn, borrows from Halliday to define text as simply “a piece of discourse, spoken or written.”

5. And I realize that identifying what constitutes “unproblematic” is itself problematic. I considered passages that ran at least ten lines without interruption and that consisted of either direct responses to my prompts or unprompted monologues as unproblematic. I also consciously considered (by memoing and discussing with interviewees and my colleagues) what kinds of cultural and linguistic assumptions were being shared or were opposing each other. Only those passages in which I could confidently presume mostly shared assumptions were employed were categorized as unproblematic.

6. It is interesting that Liz makes the implicit link between competence and satisfaction; these words of hers suggest that, at this point in her development, she is less interested in *being good* at teaching and more interested in *enjoying* it—students as primary beneficiaries of the teacher’s competence is absent. This proved a theme of hers (received from her father) and links to Fuller and Bown’s (1975) four stages of teaching concern.

7. I offered to share my views of these beginning professionals as teachers and learners, give them copies of whatever I wrote, and tell them everything about the research, but asked that this occur after data collection had been completed. Subsequently, one of the eight teachers asked for the written research findings; one of the teachers asked me to sit down and share my impressions of her teaching practices; and none asked me to tell them more about the project or my research methods.

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