In qualitative research, one can often hear the statement that research results are just (social) constructions. In criminal cases and in court hearings, we tend to expect that the true sequence of events has to be found rather than just any story. Here, the author shows that qualitative social research can be conducted in the manner of police work or court proceedings. He does so by exhibiting how short pieces of transcriptions can be approached to uncover who, when, where, and how participated, what kind of social situation produced the transcription, and so on without any background knowledge other than that talk itself. Commenting on transcriptions of a researcher in the course of doing rigorous data analysis, readers learn doing ethnographically adequate accounts and critical institutional ethnography “at the elbow” of an experienced practitioner. Further topics include the role of turn sequences, the ethnomethods of knowledge-power and institutional relations, the documentary method of interpretation, and time-sensitive social analysis.
Rigorous Data Analysis
Scope

Research methods and research methodology are at the heart of the human endeavors that produce knowledge. Research methods and research methodology are central aspects of the distinction between folk knowledge and the disciplined way in which disciplinary forms of knowledge are produced. However, in the teaching of research methods and methodology, there traditionally has been an abyss between descriptions of how to do research, descriptions of research practices, and the actual lived research praxis.

The purpose of this series is to encourage the publication of books that take a very practical and pragmatic approach to research methods. For any action in research, there are potentially many different alternative ways of how to go about enacting it. Experienced practitioners bring to these decisions a sort of scientific feel for the game that allows them to do what they do all the while expressing expertise. To transmit such a feel for the game requires teaching methods that are more like those in highlevel sports or the arts. Teaching occurs not through first principles and general precepts but by means of practical suggestions in actual cases. The teacher of method thereby looks more like a coach. This series aims at publishing contributions that teach methods much in the way a coach would tell an athlete what to do next. That is, the books in this series aim at praxis of method, that is, teaching the feel of the game of social science research.
Rigorous Data Analysis

Beyond “Anything Goes”

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SENSE PUBLISHERS
ROTTERDAM / BOSTON / TAIPEI
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Preface

In 1988, just after the completion of my PhD and while still pursuing the idea of a second PhD in physical chemistry, I interviewed for a position as a post-doctoral fellow with Jere Confrey, who, at the time, was at Cornell University. My own research had largely been quantitative and I had done a minor in quantitative approaches in social science research so that I could teach statistical methods. As part of the visit and without prior notification, Jere handed me a transcription and gave me an hour to produce a written analysis. I was stunned. I looked at the transcription and, as the allotted time was passing, I was unable to produce much of what I thought to be useful. When I was not offered the job, I was not surprised, attributing the outcome in part to the impromptu analysis of verbal data (though insiders later told me that there were other reasons, including possible conflicts between quantitative and qualitative methods that the two co-investigators of the project appeared to anticipate). I asked myself at the time, “How could anyone produce an appropriate reading of a transcript without knowing the particular context that had led to its production?” Although the data sessions in part B have precisely this dimension, where an expert analyst is shown in the process of reconstructing the type of events that might have produced the particular transcriptions read, the purpose of this book is not to show how this can be done. Instead, the purpose is to show that qualitative data analysis can be done rigorously and how this possibility of rigorous data analysis is enacted in particular cases. One of the important things in rigorous data analysis is to be reflective about importing into the analysis presuppositions and familiarity with aspects of events that the participants themselves have not had. That is, for example, in this book I abstain from the common practice of doing the equivalent to Monday morning quarterbacking, where games are described and explained with 20/20 hindsight, using what was known and available only after an event to read the event. Instead, I show how we can approach data in a rigorous way, showing how societal relations produce social phenomena (e.g., power/knowledge) endogenously, from the inside, rather than the latter determining the former. It is not that teachers and students or managers and employees have different power—somehow in the way we have money in our pockets—which then
determines their relations, but rather, as Foucault (1975) suggests, the relations produce (reproduce, transform) relevant and salient differences in knowledge-power. This becomes very clear when we try to make sense of transcriptions of which we do not know the origin. Therefore, we cannot use institutional differences—teacher–student, manager–employee, or coach–athlete—to explain the relation of people in particular societal activities but we have to take the route Foucault proposes to getting at the social: by analyzing transcriptions taken as protocols of the relations that produce and (in part) are produced by the ongoing talk.

For a long time, I have found courses in methods or methodology to be inherently contradictory because these assume that one can first learn the abstract principles of a practice prior to actually perform it. Whereas this may be the case when we already know a related practice that bears family resemblance with what we want / are supposed to learn, it is in general impossible when we have not yet introduced to such a related practice. Take the learning of language as an analogy. Once we already know a language, we may engage in learning another based on the first language that we know. It makes especially sense to have grammar lessons when we have already learned about the grammar of our first language. But this first language we acquire by participating in using it; and only when we are already familiar with the language do we learn about its grammatical features. Without knowing a language, there is nothing that we can grammaticalize, and there would not even be the means (tool) to grammaticalize whatsoever. Similarly, without having done research we do not have anything that we could learn in terms of methods—it is all words and no bodily and embodied practice of actually doing research generally and doing data analysis more specifically.

This book is written in a way that takes its readers into the midst of rigorous data analysis. It does so by actually featuring chapters in which an experienced instructor-analyst has taken on the task to figure out what the nature of this event is given only the (mystery) transcriptions of some event. Rather then making up some interpretation, he follows, like a detective and using the metaphor of the sleuth, what participants in the transcription make available to each other. He listens to how the participants themselves take up what someone else has said, investigates the kinds of social relations that are exhibited in the back-and-forth or give-and-take of the verbal exchanges; and, with this, he hypothesizes what the nature of the social event might have been so that in the concrete event that had been transcribed the particular talk was produced. He tests the emerging hypotheses, rejects some and retains others until he states the most likely hypothesis as to the nature of the event, which constitutes the end of the analysis. The participant in the graduate seminar who had produced the mystery transcription at hand then judges / evaluates what the instructor-analyst has derived, sometimes by simply describing the contents of the video or its source—e.g. a talk show, teacher training video, a documentary, or daily news feature—or shows the actual video clip.

These sessions—featured in part B—are interesting because the instructor-analyst cannot fake competent and rigorous analysis. He cannot pretend knowing rigorous data analysis just because he masters it symbolically, in and through the mastery of a form of discourse. Instead, in real time and without time out, he engages in the analysis knowing that someone in the audience will judge the outcome
of the performance. We therefore can observe in the transcriptions of these data analysis sessions the scientific *modus operandi* as it performs. We can observe the feel for the game of data analysis that is expressed in what the instructor-analyst does and how he does it. Because it is a seminar on qualitative research, he also makes thematic what he is doing, or rather, what he has done after doing something in a particular way. To increase the potential benefits to the reader, I produced a running commentary on these performances, placed where ordinarily we would find the footnotes and indexed to the particular place commented upon in the transcribed analysis session by means of numbers (the text is in italics).

*Victoria, BC*
*December 2014*
Glossary

Accountable. People act in ways that they concurrently or subsequently describe and explain when they are held to account for their actions. That is, they can provide reasons for what they have done. For example, one person may note that she is insulted by what her counterpart said, who, in saying “I was only joking” provides an explanation of what he was really doing. This latter form of accounting also falls under the practice of *formulating.*

Bracketing. This term denotes the act of a social scientist who puts at bay his/her own preconceptions that might come into play trying to understand a phenomenon. Thus, rather than accepting “power” as a social construct, the brackets in the expression “{power}” indicate that the investigation concerns the very production of conduct that leads social scientists to use the term “power.” That is, bracketing orients the social scientist to study the work that makes “power” an observable social fact.

Conversation analysis. The name for a particular analytic *method* that H. Sacks (1995) originated and developed. It is *not* simply the analysis of conversations, as novices in the field of social research often assume. That is, conversation analysis always is the analysis of conversation, but not all analyses of conversations *de facto* do conversation analysis. Conversation analysis takes the turn pair as its minimum unit. This decenters the analysis from the psychological to the *social* level.

Documentary method of interpretation. The documentary method was introduced by the sociologist K. Mannheim (Eng. 1952, Ger. 2004); it was subsequently used, in somewhat modified form, by H. Garfinkel (1967) to explain how, based on concrete examples from our lifeworld, we get a sense of something like a “worldview” or a “queue.” Concrete incidences are taken to be documents of something, like a “worldview” or “queue,” which, though general, only exists in and through the manifold concrete experiences that we have with events that de-

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1 Bold-faced and italicized words in the text of an entry refer to another entry.
serve these names. Neither addition nor synthesis nor abstraction can explain the relation between the concrete document and the whole of which it is a document. This is similar to the description Merleau-Ponty (1945) provides—now confirmed in the neurosciences—that we never perceive or know a cube as a whole but only in the way it gives itself to our current position relative to it. What we do know, because of many experiences with cubes, is what happens when we change our position with respect to the object or turn the object in our hand. We know the cube in and through the ensemble of concrete manifestations of the object we name cube.

**Dope (cultural, psychological).** The term is used to denote the human being in the way it appears in the psychological and sociological literature, “who produces the stable features of society by acting in compliance with pre-established and legitimate alternatives of action that the common culture provides” (Garfinkel 1967, p. 68). In sociology, school performance, for example, is explained by socio-economic status; and in (Piagetian) psychology, schemas explain what a person sees and does. Thus, peoples’ reasoned and justified/justifiable evaluations, judgments, and decision-making are treated as epiphenomena when their actions are explained by means of causal factors that determine (cause) their actions as if from the outside.

**Durkheim’s aphorism.** The founder of sociology, É. Durkheim (1919), established what we now know as sociology in stating that the first rule, which is also the most fundamental one, is to consider social facts as things. As things, social facts are observable and to be treated as anything investigated by the natural sciences. Ethnomethodology is concerned with the work involved in making social facts observable and accountable to every member to the setting rather than with identifying, classifying, and explaining these things themselves, which it leaves to formal analytic studies (e.g. Garfinkel 1996).

**Endogenous.** From the inside. The term is used in ethnomethodology to insist on the fact that actors themselves conduct themselves in such ways that these not only produce social facts and social conditions that in turn determine what they do but also exhibit the accountably rational ways in which the facts are produced. The social facts are not abstract schemas, rules, or practices. They are the results of performances that the actors hold each other accountable for. Researcher-produced and –owned categories are exogenous: these do not matter to the societal relations, such as, for example, the conceptions or schemas that some social researchers invoke to explain why people do what they do.

**Ethnomethodology (EM).** Literally the science of the methods everyday folk use to produce social facts and situations in accountably rational ways. This social science is concerned with exhibiting the ordered and orderly ways in which we produce society and societal relations as ordered and orderly phenomena. This is distinguished from formal analytic studies, which use special methods to describe (abstract) patterns said to underlie what people do. In this, researchers constitute forms of knowing generally invisible and inaccessible to those who actually produce the orderly ways in which society and its social relations appear. That the methods are special can be taken from the fact that scientific articles require meth-
ods sections in which they describe what they have done and how they have done it. If the methods merely were the common ways in which we do things in social situations, the methods sections would be superfluous.

**First-time-through.** The adjective “first-time-through” is used to characterize a form of analysis where the researcher takes the perspective of the social actors (or cohort, staff of the phenomenon) studied. That is, researchers then have no way to use future states, the outcomes of actions, to analyze earlier happenings in a teleological fashion. This changes the way in which researchers can work, for it is no longer possible, for example, to say what a statement does, because what it will have done is apparent only through its effects available in and from subsequent talk and actions.

**Formal analysis (FA).** All forms of social research that have to specify the special (scientific) methods of how they identified the reported social facts fall under this category (Garfinkel 1996). Studies using formal analytic methods differ from ethnomethodological studies in the sense that the latter employ and demonstrate competence of precisely the same methods that are used to produce social facts. Formal analysis and ethnomethodology therefore are asymmetrical alternates with respect to the study of social facts. The former focus on facts, using special research methods to extract them from data, whereas the latter study the actual work that produces what formal analysis identifies. The research methods of formal analysis are so special that they need to be specified for each research project, in part because the very object under study, its identification, depends on the method. Knowing the ethnomethods always will allow us to get at the social facts, whereas formal analytically identified social facts do not get us to the ethnomethods that produced them.

**Formulating.** Speakers of natural language frequently formulate what they are doing with language. It is one of the methods we use to bring order to and account for order in everyday societal relations and, therefore, is something that is a form of praxis considered by ethnomethodology. For example, a speaker might say “Let me ask you this, ‘How much have you written today?’” Here, the actually intended question is prefaced by the note that a question (rather than a statement, invitation, or order) is forthcoming. The speaker has formulated an aspect of the ongoing conversational work.

**Glossing, glossing practices.** In the ethnomethodological literature, this term is used to refer to the fact that speakers always “mean differently” than they can say in so many words. After many years of absence from Hattiesburg, MS, where my alma mater is located, I was invited there to give a talk at the 100th anniversary of the university. While driving through the center of town, I said to my host “It certainly has changed since I was here,” and my host responds, “Yes, they revitalized the entire city center to bring people back here.” In this situation, the first sentence is treated as a gloss and in the second sentence my host elaborated what I was really saying without actually having said so with the words I used.

**IRE.** This acronym stands for “initiation, reply, evaluation,” a sequence of speaking turns frequently observed in classroom talk. In this sequence, teachers tend to
take the first and third position (initiation, evaluation) and students tend to take the second, middle position. In the middle position, students produce what the initiation turn invited them to and what the third turn will be evaluating. It is an everyday practice in some societal activities in which those present take particular slots in a turn-taking routine that has three parts.

Lebenswelt (lifeworld). This term denotes the world as it appears to us and that we inhabit (Husserl 2008). It is the familiar, self-evident, inherently shared world given to us in our experience. It is not a world that we have to interpret and construct, because construction (e.g., using language) is possible only as the result of inhabiting and evolving in with a Lebenswelt. Much of the initial research concerning the Lebenswelt was done by the German philosopher E. Husserl during the 1920s and 1930s. A. Schütz extended this work into the field of sociology. H. Garfinkel, the founder of ethnomethodology, recognizes the contributions of both to his own work.

Members (to the setting). Ethnomethodological investigations concern the endogenous work by means of which social structures are observably and accountably produced. Because the phenomena are social, they are independent of the particular individuals (or cohort) that staff the phenomenon in any particular case. Thus, although a researcher may use the queue in front of a movie theater as an example, the phenomenon denoted by the gloss {queue} is independent of the particular cohort presently observed.

Method. The way in which something is actually done, as distinct from methodology, which is the science or study (-logy) of methods. In research reports, we describe the methods on which our qualitative and quantitative analyses are based rather than engaging in methodology.

Methodology. This term often is used inappropriately in the sense of method, even though, in structural equivalence with all other sciences that include the word ending -logy, methodology is the science of method. Ethnomethodology is such a science, because it is concerned with the different methods people (ethno-) use in everyday situations to produce the order of things. The term methodology is misused in scientific journal articles, which state methods rather than engage in “doing {methodology}.” Ethnomethodology truly is a methodology, because it aims at understanding the different methods people employ to make the structures of the social world visible to one another.

Phenomenology. Literally the science of phenomena, phenomenology focuses on the work that makes the phenomena appear in the ways they do, that is, the work by means of which things and events phenomenalize themselves. The term comes from the Greek verb φαίνεσθαι [phainesthai], to show itself. It has the same stem as the Greek word φῶς [phos], light, so that the word phenomenon literally has the sense of “something that has come to light.” The term phenomenology, mistakenly, is frequently used to refer to the study of personal (psychological) experiences, feelings, rather than to the fundamental processes of phenomenalization that lead to this or that experience. Thus, we might see this or that cube looking at a flat drawing (experience). Phenomenology is not interested whether we see one or the
other cube or something else altogether. It leaves this to phenomenography. Rather, it is interested in the underlying processes—a matter of eye movement in individuals or a matter of complex social representation practices in the case of science—that lead to one or the other experience.

**Relational thinking.** Much of research takes as its starting point the kinds of realities that can be touched in the way we touch objects, such as social groups, social class, and antagonisms between these. However, in some research, these objects are recognized to be the product of societal relations—ruling relations as the critical feminist sociologist D. E. Smith (1990a) calls them. Bourdieu’s (1992) recommendation to study spaces of relation therefore resonates with the *ethnomethodological* concern for identifying the work that makes and exhibits the ordered and orderly world; and it resonates with Foucault’s (1975) recommendation to look at knowledge-power relations that produce institutional distinctions rather than accepting the latter as self-same facts.

**Sheffer stroke.** The Sheffer stroke “|” is used to express that the two terms that come to be paired through its use form an irreducible whole. For example, when we write {question | reply}, this means that question and reply are parts, manifestations, of some whole. Like a handclap requires both hands, this unit requires both of its part to be what it is. A statement is a question only because there will have been a reply; and a statement is a reply only because there has been a question. Such an approach is consistent with the call for *relational thinking* (Bourdieu 1992) as opposed to thinking in terms of “realities that can be ‘touched with the finger’” (p. 228). The two turns specify each other. A turn on its own means nothing—as a famous baseball umpire aptly said, “It’s [a throw] nothing until I call it,” that is, until the umpire says that a throw was a ball or a strike. There is no question on its own, or a reply on its own, in the way there is no one-handed clap. This whole in fact turns out to be a joint, social act.

**Staff.** *Ethnomethodological* investigations concern the *endogenous* work that accountably produces, for participants themselves, the surrounding social situation and its facts. Because such phenomena are widespread, those who figure in a particular example are but the staff that in any *this* case brings the phenomenon to life. Any other situation would involve different staff but the same *social* phenomenon. A good everyday example is a queue. We *find* queues “everywhere.” Science lessons, independently of who teacher and students are, constitute another case. We can walk into a classroom and *know/see* that there is a science lesson independent of its current staff. Studies in ethnmethodology ask, “What is the *endogenous* work that makes a lesson recognizably a science [rather than mathematics, reading, social studies] lesson?”
Exergue

One of the functions of a seminar such as this one is to give you an opportunity to see how research work is actually carried out. You will not get a complete recording of all the mishaps and misfirings, of all the repetitions that proved necessary to produce the final transcript which annuls them. But the high-speed picture that will be shown to you should allow you to acquire an idea of what goes on in the privacy of the workshop of the artisan or of the Quattrocento painter—i.e., it will include all the false starts, the wavering, the impasses, the renunciations, and so on.

(Bourdieu 1992, p. 220)

We must learn how to translate highly abstract problems into thoroughly practical scientific operations, which presupposes, as we will see, a very peculiar relation to what is ordinarily called “theory” and “research” (empirie). In such an enterprise, abstract precepts such as the ones enunciated in *Le métier de sociologue* (Bourdieu, Chambredon, and Passeron 1973; English translation 1991), if they have the virtue of arousing attention and putting us on notice, are not of much help. No doubt because there is no manner of mastering the fundamental principles of a practice—the practice of scientific research is no exception here—than by practicing it alongside a kind of guide or coach who provides assurance and reassurance, who sets an example and who corrects you by putting forth, in situation, precepts applied directly to the particular case at hand.

(Bourdieu 1992, p. 221)
PART A

Introduction
Social research is something much too serious and too difficult for us to allow ourselves to mistake scientific rigidity, which is the nemesis of intelligence and invention, for scientific rigor, and thus to deprive ourselves of this or that resource available in the full panoply of intellectual traditions of our discipline and of the sister disciplines of anthropology, economics, history, etc. In such matters, I would be tempted to say that only one rule applies: “it is forbidden to forbid,” or, watch out for methodological watchdogs! Needless to say, the extreme liberty I advocate here (which seems to me to make obvious sense and which, let me hasten to add, has nothing to do with the sort of relativistic epistemological laissez faire which seems so much in vogue in some quarters) has its counterpart in the extreme vigilance that we must apply to the conditions of use of analytical techniques and to ensuring that they fit the question at hand. I often find myself thinking that our methodological “police” (pères-la-rigueur) prove to be rather unrigorous, even lax, in their use of the very methods of which they are zealots.

(Bourdieu 1992, p. 227)
Rigor in Qualitative Data Analysis

We ask what it is about natural language that permits speakers and auditors to hear, and in other ways to witness, the objective production and objective display of commonsense knowledge, and of practical circumstances, practical actions, and practical sociological reasoning as well? What is it about natural language that makes these phenomena observable–reportable, i.e., accountable phenomena? For speakers and auditors the practices of natural language somehow exhibit these phenomena in the particulars of speaking, and that these phenomena are exhibited is itself, and thereby, made exhibitable in further description, remark, questions, and in other ways for the telling.

The interests of ethnomethodological research are directed to provide, through detailed analyses, that accountable phenomena are through and through practical accomplishments.

(Garfinkel and Sacks 1986, p. 163)

“It’s just your construction.” This is a comment I have frequently heard among researchers with (radical, social) constructivist bent, as if social science research was not a serious attempt to produce results that can be reproduced by others in the way that is the case for natural sciences. At the heart of it, constructivist ideas about method are connected with a dictum in the philosophy of science according to which “the only principle that does not inhibit progress is: anything goes” (Feyerabend 1993, p. 14). Anything goes because human beings interpret and construct, in their individual mind, a conceptual framework that can be tested, at best, for its viability in the world. This is so both for the natural world and the social world, where we have to engage in the construction of intersubjectivity. But anything goes does not mean n’importe quoi, simply anything. Human beings do, in accountably rational ways, whatever is required to make an endeavor successful. Interestingly, Feyerabend points out that “there is not a single rule, however plausible, and firmly grounded in epistemology, that is not violated at some time or another” (p. 14). Method, in fact, requires adaptation to the situation—to the object of inquiry that has to be constructed in the process of inquiry (Bourdieu 1992). This means that there cannot be a method that can be specified a priori for investigating some phenomenon. Again, this does not imply that anything goes. Instead,
CHAPTER 1

the social scientist as much as the natural scientist is held to undertake research in rigorous but not rigid ways. But rigidity is precisely what classical courses on method generally and the adherence to one or the method specifically advocate, as can be observed in so many instances of (junior) researchers who know only one way of doing research. Thus, it has been noted that

[i]t is revealing that entire “schools” or research traditions should develop around one technique of data collection and analysis. For example, today some ethnographers want to acknowledge nothing but conversation analysis reduced to the exegesis of a text, completely ignoring the data on the immediate context that may be called ethnographic . . . not to mention the data that would allow them to situate this situation within social structure. . . . Thus, we will find monomaniacs of log-linear modeling, of discourse analysis, of participant observation, of open-ended or in-depth interviewing, or of ethnographic description. Rigid adherence to this or that one method of data collection will define membership in a “school,” the symbolic interactionists being recognizable for instance by the cult of participant observation, ethnographers by their passion for conversation analysis, status attainment researchers by their systematic use of path analysis. (Bourdieu 1992, p. 226, emphasis added)

Rigorous data analysis does not arise when one method is applied indiscriminately to all situations of interest. If researchers have but one method at their disposition, then they are acting like the craftsperson who has only a hammer and to whom the whole world looks like a nail or like a place where nails are driven in. Of course, we may always argue to be interested in what a research method allows us to discover. But this appears to be putting the cart before the horse, because the problems of the social-psychological sciences tend to be found or identified in and by the various societal arenas. A case in point is that of a junior colleague, who, as a mother-to-be, was interested in finding out about that phase in a woman’s life by researching the conversations in an online forum that she would create. She wanted to collect data as the forum was growing, and new mothers-to-be would be joining and others would be leaving. There was a problem, however, because the only research methods that she was familiar with were of quantitative nature, which, inherently, required that the information from the informants—mothers-to-be—be collected under the same conditions at a particular point in time to guarantee comparability. That is, in the discussions with methodologists, she came to realize that her research question could not be answered by the only method she knew, statistical comparisons on the basis of questionnaires and measures of social-psychological characteristics. She abandoned the research project despite the tremendous (vested) interest she had in the problem. Because of her self-declared membership in a particular school—i.e., circumscribed by the use of “quantitative research methods”—she could not investigate what she was really interested in understanding. What a pity!

It has become a truism that theoretical and methodological choices are interdependent and therefore cannot be disentangled; and these define what comes to be accepted and admissible as data. What is more important than methodological ri-
RIGOR IN QUALITATIVE DATA ANALYSIS

Rigor is methodological rigor, for, as found in the quotation that opens this part A of the book,

social research is something much too serious and too difficult for us to allow ourselves to mistake scientific rigidity, which is the nemesis of intelligence and invention, for scientific rigor, and thus to deprive ourselves of this or that resource available in the full panoply of intellectual traditions of our discipline and of the sister disciplines of anthropology, economics, history, etc. (p. 227).

Bourdieu calls on social science researchers to watch out for the methodological police (watchdogs) that tend to foster a climate of rigidity rather than rigor. At the same time, we need to listen to his warning that the “extreme liberty,” which mirrors Feyerabend’s anything goes, should not be taken as the “relativistic laissez faire” that is “so much in vogue in some quarters” (p. 227). In the hey-days of (radical) constructivism of the 1980s and 1990s, its fervent advocates were often accused of (methodological) relativism. This may not come as a surprise given what could be observed with respect to method captured by Bourdieu as laissez faire. The opposite of laissez faire, however, is not rigidity, methodological or theoretical. Instead, we need to do research in rigorous ways, which in fact requires us to do it in the same accountable rational ways that ethnomethodologists have observed ordinary people to employ in the course of accomplishing their mundane, everyday affairs.

Criminal and Legal Affairs as Metaphor for Social Research

Constructivist epistemologies often lead their advocates to suggest that what we make of a situation, some phenomenon, is the result of our individual and social constructions. Explicit or implicit in such statements is the presupposition that the constructions could be otherwise. In the more extreme versions, this leads to the anything goes and laissez faire approaches that other researchers have come to decry. The methodological debate is interesting in the face of criminal and legal investigations that very much employ interpretive methods and yet are expected to reveal “the truth.” When “truth” is not revealed—which sometimes comes to be known during subsequent trials or retrials where the innocence of a (wrongly) accused person comes to be established—then this frequently is attributed to errors of omission or commission. Trust in the criminal and judicial systems is equivalent to trust in the interpretive methods that are expected to lead to the truth about events, who did what, when, where, and how. We know that the consequences of error are serious: those guilty of a crime remain free, are acquitted because judged innocent, and those innocent may come to be arrested and subsequently tried as perpetrators. In the more serious instances where jurisdictions have retained the death penalty, the guilty verdict may lead to death row or immediate execution.

Factual or fictional police and detective work, and the associated interpretive work in courts of law, serve me as useful metaphors for orienting the ways in which I engage in social research independently of the nature of the methods—i.e.,
the formal analytic (qualitative or quantitative) approaches or ethnomethodology. Even if none of my participants or the social groups under investigation is going to die or going to be affected in any direct way because the research results are published in different communities, I approach research in the spirit of criminal and legal investigations. There are deontological consequences to what I do, because I am aware that—however minimal—the very discourses of society change with my publications. There is a responsibility to society at large, the people that come to be affected through the employment of theories and concepts developed in social research, and the available discourses for describing and intelligibly accounting for real-life phenomena. That is, the argument that “it is only your construction” no longer holds. An anything-goes attitude and the methodological laissez faire that accompanies it put researchers in ethically untenable positions. The research we do needs to be conducted in accountably rigorous ways, aiming towards an ideal—though practically never achievable certainty about concrete social phenomena, in the way we experience these in clearly recognizable ways, and the manner these are described and theorized on the ideal plane.

What researchers publish enters and changes the discourses we have for describing and theorizing social/psychological phenomena. This became apparent to me during one of my first courses on research method that I taught. In this course, a graduate student talked about her research interest in adult children of alcoholics driven by her experience of being a child of alcoholics. Nobody else in the class, including me, had heard of such a phenomenon before, and we all listened to the graduate student report on existing research findings and describe the phenomenon. By the next meeting, one quarter of the students had begun to tell their own biographies in a new way, having recognized that they, too, are examples of adult children of alcoholics. I was able to trace the concept to Woititz (1976), whose doctoral dissertation concerned “self-esteem problems” in children of alcoholics. In creating the concept, the author thereby provided a discourse for describing and understanding a range of manifestations that appear to be frequent among those whose parents drank a lot. We see that the associated discourse may change not only the ways in which people understand their past lives but also the ways in which they orient towards the future conduct of their lives and, therefore, in the concrete ways in which they act. Research has changed available universe of discourse and the actual lives of people. Today organizations have formed, such as the Association for Adult Children of Alcoholics, with chapters in different cities and regions in North America.

Concepts are pervasive, and those familiar with them may be able to identify in consistent and reliable ways, other individuals falling into the same categories. A researcher interested in doing some related project today may likely find it unproblematical to name the topic and phenomenon and proceed to identify participants with specific characteristics consistent with the phenomenon. Precisely here lies one of the dangers, which Bourdieu (1992) describes as the pervasive presence of

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1 When the researcher intends to investigate a phenomenon in which she is interested in by definition, “it becomes all the more difficult to avoid falling into the trap of the preconstructed object” (Bourdieu 1992, p. 231). This interest itself falls on the blind spot of the investigation because the veritable principle of this interest remains unknown.
the preconstructed. As Marx showed in his critique of political economy, terms such as wages, commodities, capital, profit, and the likes were around before political economists came along—such as Ricardo, who was one of the targets of the critique (Marx/Engels 1962). The latter than took up these terms and imported them into the theory to be built without further analysis. That is, the phenomenon did not exist as such prior to its first articulation and prior to the associated discourse that named it and its characteristic particulars. It was the result of a scientific research project. It eventually entered society, becoming a recognized social fact to which patients and clinicians orient in active ways. Yet, qua research result, it is the outcome of a constructive effort. When researchers use the discourse today as if it were an indisputable fact, then they are therefore subjecting themselves to the preconstructed. As a result, social scientists working in the field therefore literally do not know what they are doing because they operate with preconstructed concepts: they find what members of their community have put in place. They reify rather than critically interrogate the phenomenon.

The dangers in such reification were exhibited by the feminist sociologist D. E. Smith (1990), who not only raised a child on her own but also understood her family in terms of the sociological concept of single-parent family that is contrasted to the standard North American family. Not only was her understanding affected by the discourse but also her relations with the school when her child was in trouble. School officials and Smith, as parent, understood the “problems” in terms of the characteristics ascribed to single-parent families and their children. As a result, the suggested actions and consequences were framed within this discourse without questioning that the concept itself was the result of earlier sociological research. Doing research in a rigorous manner means not only focusing on the research object and the consequences of the research in its characterizations but also critically investigating the very means (tools, instruments, methods) by which the object and its discourse come to be produced.

Returning to the criminal and judicial metaphor, this means that researchers need to be concerned not only in the what of their studies but also in the means (tools, instruments, methods) of conducting them. That is, “the first and most pressing scientific priority, in all such cases, would be to take as one’s object the social work of construction of the pre-constructed object” (Bourdieu 1992, p. 229, original emphasis). It may come as little surprise to hear the analyst in part B of this book repeatedly question why he has this or that sense or why he comes to hear people say some rather than another thing. This (historical) investigation into the origins of the pre-constructed object or research “is where the point of genuine rupture is situated” (p. 229).

The criminal and judicial metaphor is interesting from another important aspect in the praxis and theory of method. In many scholarly communities and the associated research journals, researchers are exhorted to provide multiple examples and proof of the pervasiveness of some phenomenon. A single case or a small number of cases treated analogically frequently are treated in the peer review process as insufficient evidence. In the criminal and judicial situation, each case has to be treated as such. Not only does a single case have to suffice in the criminal and judicial situation but also in research, where a single case, perhaps accompanied by one or two analogical cases, may suffice to identify invariants. The analogical ca-
CHAPTER 1

es would serve as test cases where the system of relations established on the basis of the original case come to be validated. This poses a challenge, which consists in “systematically interrogating the particular case by situating it as a ‘particular instance of the possible’ . . . to extract general or invariant properties that can be uncovered only by such interrogation” (Bourdieu 1992, p. 233). It is in precisely this manner that the laws of psychology of art was derived on the basis of the analysis of one fable, one drama, and one short story (Vygotskij 2005). The author emphasizes that he was creating a psychology of all art, including music, painting, and other art forms rather than a psychology of writing or a psychology of the short story. He emphasizes that the most developed forms of art, the most difficult examples of a genre, the “monsters,” point to the most general principles, the essence of art. These general principles work themselves out in very different, often contradictory ways in the concrete cases considered. The relationship between any set or all possible cases is that of a family. In the same way that parents and their children may share few, if any, behavioral and bodily characteristics common to all members, the analogical cases considered in research may differ as much as do the siblings in a family. But in the way all siblings derive from the same common ancestors, the abstract less developed properties underlying the phenomenon of interest manifest themselves differently in the concrete cases at hand. The underlying logic is represented in Fig. 1.1. Thus, all eight cases can be led back to one underlying (genetic) principle, which works itself out (concretizes, specializes) differently in the concrete cases. Case 1 and case 2 share more observable characteristics than do case 1 and case 8, for example. In fact, case 1 or case 2 and case 8 may not appear to share any characteristic with each other and yet are particulars of the same principle. Thus, the fable, drama, and short story in the study of the psychology of art may be case 2, case 3, and case 4, all falling under the instances of written art forms. Case 5 and case 6 might be different European musical forms and case 7 some African music. Case 8 might represent painting. Vygotsky derived a psychology of art, which, therefore, would be represented by the line on the very left of the Fig. 1.1.

Fig. 1.1 The logic relating the general principle, on the left, and the (eight) specific cases, on the right. Although all eight cases are different, they share properties when considered at different levels of abstraction.
Police work requires understanding the kind of situations that might possibly have led to the case in hand as well as the contextual particulars that make this case different from every other case. Approaching data analysis in this manner allows us to establish invariants as much as those particulars that make this case indistinguishable from every other case. We may consider the example of voices, for the moment. Using voice analysis software, we may identify particular pitch levels, speech intensities, pitch contours, and speech rates. However, all of these characteristics do not distinguish one voice from another. For example, in one research project I was able to show that two individuals teaching together for several months came to speak in similar ways such that there was little difference between how they used and articulated the word “right” in very different situations (Roth and Tobin 2010). Moreover, when they were speaking, their speech rates and pitch levels were adjusted to those of the others, so that one person always took up with values of those parameters where the other had left off. And yet: on the telephone, I could easily distinguish with whom I was talking. That is, there was something very particular about the voice of each of the two individuals that still allows me to distinguish one voice from another without trouble. The particulars that allow us to do so are known as *timbre*, and timbre is precisely what cannot be captured and extracted by voice analysis.

Criminal and judicial work require a good understanding of the invariant properties any this case has in common with other cases and the particular properties of this case that allow the process to narrow the possibilities to the real perpetrator. In social analysis, we are also interested to understand invariants and particulars associated with a case. Comparative analysis, both between analogical phenomena and within a phenomenon, is a way of articulating invariants and particulars. This may be done in the form of tables, where we list, for example, the different cases or different instances within a case in a vertical manner (giving rise to different rows in our table) and each identified characteristic in a horizontal manner (yielding the different columns of our table). Whenever we identify a new characteristic in a case or instance, then not only do we add the column and make a check mark for the case but also we return and consider all the other cases or instances as to the presence or absence of this characteristic. In the simplest of cases nevertheless of considerable value is a 2-by-2 table. Consider the example I produced during a research project on students’ epistemological discourse concerning science and religion (Roth and Alexander 1997).

In the students’ interview texts or in their interview talk—both understood to be the results of specific societal activities and associated forms of language (i.e. language games—there are stretches where the discourse concerns science whereas other stretches concern religion (Fig. 1.2). These are the two domains of interest. In each domain, knowledge was designated to be subjective or rational. Depending on the context, in each of the four quadrants formed (Fig. 1.2), the knowledge was declared to be a social construction or absolute. But this classification was not sufficient. Thus, a student may have stated the claim that there are subjective elements in science, making it irrational and unreliable to a certain extent, and that science was rational. My analysis reveals that in these instances, there was something like a *truth-will-out* device, which made it possible for individual scientists to be subjective and science as a whole to eventually yield the truth. I also identified con-
flicts between ways of talking about science and religion. Thus, some students stated the claims that both science and religion produce truth and then found themselves confronted and conflicted by incompatible talk about the origin of the world as it is today. The students often said that science and religion were incompatible.

To test the theoretical model derived in the database covering high school students I used it to analyze texts published in the journal *Zygon*, a forum for bridging science and religion. It turned out that the model required further adaptation, as there was a feature that did not become apparent in the analysis of student discourse: the discourse of incommensurability (Fig. 1.2) was mobilized to account for the differences between scientific and religious ways of articulating issues, those in the deontological realm particularly. Had I followed the advice to study the most developed or hardest situation (Vygotskij 2005), the discourse of scientists and theologians, I might have immediately identified all the dimensions that the model ultimately contained.

The point then is to think the case relationally, as a particular instance of the generalized possible. Thus, when the general model for theorizing epistemological discourse concerning science and religion is used in particular cases, then it works itself out differently. A student, whom we may classify as a social constructivist, considered science as a language game so that knowledge both on the individual subjective and public-shared levels is constructed (Fig. 1.3a). Not only individuals but also social groups—or scientific disciplines—exhibit subjectivity, which expresses itself, for example, in the forms of cultural, subcultural, or national biases. Similarly, there is a rational side to religious experience in the shared public realm, but the personal experience of revelation and the sense of spirituality is absolute. As a result, the epistemological discourse of the person concerning science and as a whole is represented in Fig. 1.3a. In contrast, a student talking about the subjective elements of doing science and about the objective nature of science makes contradictory statements, which were resolved by means of a discursive device called *truth-will-out* device (Fig. 1.3b). Because in the particular discourse config-

![Fig. 1.2 A 2-by-2 table that allows classification of the different discursive patterns that high school physics students used when talking about epistemological issues.](image-url)
The student talked about science and religion as representing absolute forms of knowledge, he found himself conflicted between the discourse of science and the discourse of his church with respect to issues such as the origin of the human species, abortion, cloning, and other social issues with different ethico-moral discourses of science writ large and religion.

It is precisely the familiarity with or the working out of the invariants (invariant laws) that prevent analysts to drown in the particulars of the case, a situation that frequently arises when novice researchers delve into the specifics of the data they have or are in the process of collecting data. The questions that I often hear is something like “Where do I start?” and “How do I make sense of this all?” Generalization, used here, does not arise from “extraneous and artificial application of formal and empty conceptual constructions, but through this particular manner of thinking the particular case which consists of actually thinking it as such” (Bourdieu 1992, p. 233).

Towards an Ethnographically Adequate Account

There is a close similarity in the primary problem facing ethnographers and other persons engaged in everyday life. This problem, common to both, is the necessity of achieving a working consensus with others about what is going on in any scene available to their senses. (McDermott et al. 1978, p. 246)

In the preceding section I suggest taking the metaphor of the detective trying to find the criminal for thinking about doing data analysis. Using this metaphor orients us to rigorous ways of going about our work as researchers. But much of re-
search is not about finding out “who done it” but in describing some aspect of the social world. One way of thinking about rigor in data analysis then is in terms of the production of an ethographically adequate account of events. In fact, the two ways of thinking about doing data analysis go together because the ethnographer, as the criminologist, is concerned with the adequacy of an account. In the introductory quotation to this section, the authors point out that the ethnographer’s problem is not unlike that of the participants in the situations observed: what is going on in the scene that presents itself to the senses. In other words, the ethnographer’s task is that of the person having stepped out of the house and onto the street rather than observing street life from above and through a window, separate from the pulsing stream of life.

In part B of this book I present what an expert analyst does when presented with transcriptions of which he does not know the origin of. He therefore is forced into something of a double role, the detective and the ethnographer. The analyses, provided under the real-time constraints of an ongoing graduate class, are those of a person who has stepped into some situation. In that situation, people are in the midst of the things they do. The analyst is trying to figure out what is going on without asking more background information—without being able to ask—and is therefore working with nothing other than what the people themselves make available. How is this possible? Certainly not because what we do is just a construction. It is by following what people do. It is possible because “people manage concerted activity only by constantly informing and conforming each other to whatever it is that has to happen next” (McDermott et al. 1978, p. 246). It is by closely attending to what people do and how they do it that the rigorously working expert analyst recovers the nature of an event from a piece of transcript even without having anything else at the disposal. The purpose of the analysis, therefore, lies in using “the ways members have of making clear to each other and to themselves what is going on to locate to our own satisfaction an account of what it is that they are doing with each other” (p. 247, original emphasis). There are four aspects, often of the same kind of behavior that people display to each other for the purpose of organizing the setting:

- Members usually reference or in some way formulate some of the contexts for their behavior. (p. 247)
- Members usually organize their postures to form a configuration or positioning, which signals the contexts for behavior. (p. 248)
- Members behaviorally orient to the order in their concerted behavior and accordingly constitute and signal their contexts for each other. (p. 249)
- Members usually hold each other accountable for proceeding in ways consistent with the context for their concerted activities. (p. 250)

The adequacy of an ethnographic account derives precisely from describing how members do what they do to be able to do what they do. Here, it is not anything, any just-so construction on the part of researchers, for if they were to behave in the setting in the way they describe, then others would find their behavior out of place. For me one of the telltale signs of an inadequate account is that often provided by individuals doing conceptual change or constructivist research. They describe what their participants do in ways that we do not think and act. For example, we do not
construct meaning or conceptual frameworks when we participate in a conversation. We just talk. Even though there may be fleeting thoughts in our private experience, there generally does not tend to be sufficient time to stop and hang on to an idea, for if we do, we are out of synchrony with the other participants and no longer participate in the conversation. Thus, ethnographically adequate accounts also require the researcher to focus on data in a different way. We cannot just make something up about how people go about doing what they do and make up just-so narratives about how they do it. A most striking example for me has always been that when individuals are telling the interviewer during research interviews that they had never thought about something and yet talk about the topic without much hesitation. In the conceptual change and constructivist paradigm, there should be conceptual frameworks that underlie what a person says and which are externalized in and through the saying. But never having thought about some topic means that the research participants could not have constructed a relevant conceptual framework. This, therefore, is a good example of a research account—generally about some science-related phenomenon—that is not adequate.

Ethnographically adequate description, therefore, is objective in the sense that it can “stand in” for the original for those who cannot make the observations themselves” (Smith 1981, p. 314). This account is objective not in the sense that it says everything, from a single god’s-eye perspective, but that it says what the ethnographer needs as description to understand the situation of interest. Thus, the ethnographically adequate description “must describe the observed rather than the observer,” in other words, it “does not distort the original in ways which are products of the observer’s particular perspectives or interests” (p. 314, emphasis added).

As a way of entering the problematic issues raised throughout this book, consider the following transcription that the experienced instructor-analyst featured in part B analyzes for his students in real time. The transcription begins with a statement about landforms, together with the indexical adverb “here,” which is a reference to where the speakers are (turn 01). That is, wherever they are at that instant, it is remarkable for its landforms. These landforms are remarkable because they “really look like other things.” Three speakers reply using the affirmative adverb “yea” (turns 02–04), which a closer hearing and transcription may be able to identify as an acknowledgment of the statement or an indication that they are following the speaker.

**Fragment 1.1 (From Transcript 1, Heidi, David Suzuki)**

<table>
<thead>
<tr>
<th>Turn</th>
<th>Speaker</th>
<th>Transcript</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Heidi</td>
<td>It’s amazing how the landforms here really look like other things other than rocks. Do you notice that sometimes?</td>
</tr>
<tr>
<td>02</td>
<td>Amanda</td>
<td>Yeah</td>
</tr>
<tr>
<td>03</td>
<td>Ashley</td>
<td>Yeah</td>
</tr>
<tr>
<td>04</td>
<td>Michael</td>
<td>Yeah</td>
</tr>
<tr>
<td>05</td>
<td>Heidi</td>
<td>It’s funny</td>
</tr>
<tr>
<td>06</td>
<td>David</td>
<td>As long as you’ve got a good imagination</td>
</tr>
</tbody>
</table>

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2 The transcripts analyzed in part B can be found in their entirety in appendix A. The graduate students attending a seminar course in qualitative data analysis produced these transcripts. These are reproduced here, for purposes stated in introduction to part B; and only the turn numbers have been added.
07 Heidi: Well, we’ve noticed that maybe, yeah, maybe let’s go down this way. We noticed that the longer you’re out in the badlands, and the hotter it is, the more things look like things.

At this point and without any further access to the videotape that was transcribed, we do not know the postures. But in turn 07, the phrase “maybe let’s go down this way” may in fact be an invitation produced to take one path rather than another while walking about in nature. Watching the video, we might be able to see additional aspect of the behavioral orientations of the speakers that rests upon their postural orientation and the configurations that position them towards the direction to be taken next in this walk-about. In turn 07, the speaker Heidi also uses the plural pronoun “we” together with the verb “notice.” Because that same speaker is talking about things that the other participants apparently are not familiar with, the “we” does not in fact include them. We then are introduced what might be the name or type of the place: badlands. This configuration of people are out in the badlands, and it is hot, or a place where it is often hot so that one can see things, perhaps the landforms, as (other) things.

In the pair {turn 05 | turn 06}, we find a statement coupled with an evaluation or qualification: {"It is funny" | "As long as you’ve got a good imagination"}. In fact, we can hear this turn pair as a form of holding others accountable. “It is funny” is an account of something, which we do not quite know at this time, which may be what is articulated next on the part of the same speaker, that is, the statement that the longer one is out in the badlands, the more things look like things. That is, the “it is funny” formulates what is to come in a particular way, and the speaker is held accountable for this way of framing in the evaluative turn 06: as long as one has a good imagination.

Readers observe that the analysis works without having recourse to the background of the physical and societal situation—the history that has brought these individuals together here in this place and for some reason. The analysis can do so because of the self-explicating nature of talk outlined and specified in the four criteria for ethnographically adequate description for concerted activities, which allows us to recover a lot of what is going on. We further notice that Heidi appears to be the person familiar with the setting, she and those that are included in the “we” are sufficiently often out in this part of the world to know that when it is hot, “the more things look like things.” What is said is articulated not merely for itself. Instead, it is said to the others and for their benefit in ways that are presupposed to be intelligible. This means that these people are not normally out there in the badlands: perhaps even for the first time. They may in fact be visitors to that place referred to as the badlands.

In this brief introductory analysis, I have nothing confabulated; I have not speculated about something not immediately given to all the participants, such as metaphysical “meanings,” “concepts,” or “ideas in their minds.” What has been stated about the talk in this concerted activity was not “just” my “construction.” I did not need any special methods to state what I have stated. Instead, by rigorously going about what the members to that setting make available to each other for doing whatever they do, I can recover what kind of situation it may be and where the event may be occurring even without having access to what an ethnographer nor-
mally has access to. Rigor here is another way of saying that we attend to what speakers and their recipients make available to each other and we reject speculations about what is in the minds of participants when this mental content is not made explicitly part of the exchange. Rigor does not arise from a description of whatever special method we describe but in the way we attend to what is relevant to the participants in the situation at hand. What is relevant is not just some mysterious thing but instead is highlighted by the members for the benefit of each other. The kind of rigor is different from the one that the descriptions of special methods aim at, for example, in the following quotation.

All interviews with students were transcribed, and a coding schema was developed and refined in an iterative process, in which categories emerged from the data (Lincoln & Guba, 1985). An extensive coding schema was utilised, although the current discussion focuses primarily on findings corresponding to the cognitive dimension of students’ responses. “Cognitive” codes ranged from statements about how the exhibits functioned, to descriptions of the phenomena that were observed, to their understanding of the underlying scientific principles that the exhibits demonstrated. Further sets of codes were developed in order to capture the affective dimensions of students’ interactions with exhibits and responses to the visit overall. Affective codes were generally used to categorise students’ reasons for considering exhibits as enjoyable, fun, or interesting, such as the fact that an exhibit was challenging or allowed for hands-on interaction. A list of all code definitions is available from the authors. In addition, transcripts were also coded to indicate whether students were referring to a photo or a video at any given point, so that any differences in their responses based on the type of stimulus could be noted. (DeWitt and Osborne 2010, pp. 1370–1371)

In this description, the authors no longer exhibit a concern for the ways in which the children they interviewed oriented towards the interview task and the interviewers. This would have been important because the children, in their replies, respond to that context as a whole, doing and saying what they do for the purpose of their participation in a concerted setting, which apparently was a stimulated recall interview session. Because of the nature as a concerted activity, not just any response will be appropriate, and members to the setting orient to and hold each other accountable for the underlying concerted activity that they produce in and through their mutual orientation. Instead, the authors write about using and producing a particular coding schema, that is, they describe doing something that we do not do in everyday life when interacting with the others. That is, although the participants in these situations mutually oriented toward each other, talked for the others benefit, using a language that is mutually intelligible, special methods are described here to suggest that something was extracted from the transcriptions that could not otherwise be extracted. There is therefore a problem of the relation between the researcher’s descriptive language and the original situation of which it is intended to be a description (Smith 1981). It has been suggested that “in its simplest form [this] is the problem of what enters into the work of coding or categorizing other than the properties of the event and is either a property of the observational process itself or the conditions of the setting in which the description is
done” (p. 315, emphasis added). We might ask ourselves: so what can a special
method extract from transcriptions that the interview participants do not already
understand in some intimate way?

Is the description of method intended to convey that only these special methods
will be extracting whatever the “cognitive” refers to, or all those other codes said
to “capture the affective dimensions of students’ interactions with exhibits”? If
such dimensions can be extracted from the transcriptions do these not require com-
petencies of the same kind that interviewer–interviewee already exhibit to each
other? Does the categorization of “students’ reasons for considering exhibits as
enjoyable, fun, or interesting” not require the same competencies as the display of
such reasons? Does presenting museum visits as enjoyable, fun, or interesting not
require competencies that are also required of the analyst for recognizing the de-
piction of visits as having been enjoyable, fun, or interesting?

In considerations of the relationship between how researchers describe some
social phenomenon and the reality of this social phenomenon, we might consider a
pragmatic characterization of the difference between the philosopher (theorist) and
what people do in their everyday lives:

When philosophers use a word—“knowledge,” “being,” “object,” “I,” “pro-
position,” “name”—and try to grasp the essence of the thing, one must always
ask oneself: is the word every actually used in this way in the language-game
which is its original home?—

What we do is to bring words back from their metaphysical to their every-
day use. (Wittgenstein 1997, p. 48 [§116])

In this quotation, the “we” refers to pragmatists, who locate the words in the
contexts of their everyday use. This clearly is the methodological move that we
observe in a field denoting itself as discursive psychology (Edwards and Potter
1992), where there is no longer an interest in such things as “knowledge” when
applied by a psychologist-researcher. Instead, the interest lies in how people use
some psychological concept to get their work done. Take, for example, the concept
“situation awareness,” which is frequently used by researchers to theorize perfo-
rance from a human factors perspective. When such researchers use the term, then
it is within a particular scholarly context, linked to other theoretical terms. Discu-
rersive psychology—a theoretical orientation and research method—shows little in-
terest in the theories of situation awareness and how it relates to other human fa-
cctors concepts, including management, decision-making, and factual knowledge.
Instead, it is interested in how people in the field make use of such terms to ac-
complish their work (Mavin and Roth 2014). Thus, an examiner of pilots might
say,

Situation awareness for me probably is the most important thing. Some-
body’s got to be able to show me that they’re pretty much on, got a good feel
for what’s going on in the environment around them at all times and that they
don’t lose it. So we go and watch those things, we got a form with some as-
essment markers that . . . you can refer to, which help, and ultimately you’ll
just make the assessment. The end result that comes is an element of gut feel
in it, which is difficult.
Here, the term is both used and described in terms of what the examiner does at work, which he is in the process of explaining to a researcher who also is an experienced pilot and examiner. In essence, then, research concerned with such concepts constitutes an *ethnography of the language* in play as part of a larger language-game, a form of ordered, orderly, and order producing activity.

In sum, therefore, the rigorous classification and categorization of talk itself requires competencies that remain unstated and unarticulated. Moreover, there is a problem in that analytic method, which attributes what is said during interviews to the children when in fact that talk is talk *between* participants. As one social psychologist noted, a word is impossible for one but a possibility for two (Vygotskij 2005). In the verbal exchange, language that has come *from* the other is produced *for* the other and, in this way, returning *to* the other. Reducing the talk from an exchange to the individual speaker fails to account for the fact that the same words simultaneously ring in the ears of the recipient (Roth 2014c). The ethnographical adequacy requirement aimed at in the movement towards rigorous forms of data analysis does orient researcher to the *concerted* nature of the effort of making social events, which is inconsistent with the reduction of talk to the individual.

**Unit (of) Analysis**

Over the years of doing research, I have come to realize that the unit of analysis is perhaps the most underrated and least-attended-to aspect of research generally and data analysis more specifically. What we choose as the unit of analysis determines what we find and how we understand it. Thus, for example, if the individual mind is the unit required for understanding social processes, then the totality of some event is reduced to the intention of individuals and the contents of their minds. The phenomenon, such as a meeting, is then re-constituted as the sum total or interaction total of the parts thought to be identities existing in and for themselves. This position, in other words, affirms the decomposability of the world into individual facts:

1. The world is everything that is the case.
   1.1 The world is the totality of facts, not of things.
   1.11 The world is determined by the facts, and by these being *all* the facts.
   1.12 For the totality of facts determines what is the case and also all that is not the case.
   1.13 The facts in logical space are the world
   1.2 The world divides into facts.
   1.21 Any one can be the case or not be the case and everything else remains the same.
2. What is the case, the fact, is the existence of atomic facts.

(Wittgenstein 1978, p. 11)

Here, Wittgenstein articulates the essence of the way in which the world is thought and researched. Embodied in this approach is traditional logic, as shown in
point 1.21 with its statement about identity, non-identity, and the impossible of a third position. A dialectical conception, instead, recognizes that the world ultimately does not exist of two different substances, thought and (material) extension, but two attributes, two different manifestations of one and the same substance (Il’enkov 1977). Whenever we do research, we therefore have to ask the question, what is the smallest unit that exhibits all the characteristics of the phenomenon. Even though such a unit exhibits parts, manifests itself in different ways, these parts, these manifestations, are not elements into which the whole can be decomposed and from which it can be (subsequently) re/constituted. Instead, there is a whole-part relation that cannot be understood by investigating and abstracting from properties. Take the following example of five members of the same family A through E with five properties (predicates) a through e.

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A quick look shows that there is no one common attribute that all members share. It would be impossible, therefore, to derive some common ancestor based on the properties, for there is nothing in common to all. We could also think about this example in terms of the classical ways thinking and thinking about concepts (Kant 1968). The five entities could not be classified into the same category because there is no one property on the basis of which we could combine them by defining a class that contains elements each of which has the same property or set of properties in common. In fact, one of those five individuals just might be a parent to the others, or there might be three generations of individuals from the same family included in that set. The commonality is that of origin, but it may manifest itself in very different ways.

Following such a line of reasoning, social psychologists including L. S. Vygotsky and A. N. Leont’ev suggested, taking up in this the dialectical logic articulated by K. Marx, that humans are fundamentally societal creatures. What is different in humans from other animals is the predominance of society and culture over nature. The minimum unit for understanding psychology has to retain the societal character of being human. This has been done, for example, by using societal relations as the minimal unit, the origin and life of specifically human characteristics, including higher psychological functions and personality (Vygotskij 2005); it also has been done by using productive activity—farming, manufacturing, food-producing—as the unit independent of which the individual subject cannot be understood (Leont’ev 1983). The individual is but one of the different manifestations of that unit, others including the means of production, the activity-focusing object/motives, and the reigning divisions of labor. Pragmatists make a similar move by understanding language together with the activity in which it is an integral part: “I shall also call the whole a language-game: language and the activities with which it is interwo-

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3 Following Marx, Leont’ev also understands consumption to be an activity, for all production ultimately is oriented towards consumption, itself oriented towards production (of life). We see it increasingly around us: leisure has become itself a productive activity. Thus, however useless some sport is in terms of helping others, it is part of a fabric that provides opportunities to productively participate and make a living.
ven” (Wittgenstein 1997, p. 5). The author uses an inflection of the verb weaving, thereby evoking the analogy of something woven. The language-game is something woven from language and material activity. Like any woven object, if we pull on a string, the whole thing will come undone and we no longer have the thing. There is no fabric. At a minimum, to understand something woven, I need to have a piece of fabric as a fundamental category. For Leont’ev, this piece of fabric that still retains all the characteristics of human society is productive activity. Thus, to understand a teacher or a student, we must not try finding out by looking into their minds, not even by investigating their interactions or the events in the classroom. Instead, we have to look at schooling, which is a societal activity, the purpose of which is to serve a fundamental collective, generalized need: reproduction of society.

Radical Doubt and Critique of Ideology

A scientific practice that fails to question itself does not, properly speaking, know what it does. Embedded in, or taken by, the object that it takes as its object, it reveals something of the object, but something which is not really objectivized since it consists of the very principles of apprehension of the object. (Bourdieu 1992, p. 236)

Bourdieu notes that the preconstructed can be found everywhere and constitutes and is constituted by the very ways in which we experience and make sense of our social and material lives. This system of ideas not only is pervasive but also invisible, as is the proverbial water to the fish that swims therein. The phenomenon is so insidious that even critical (feminist) sociologists may find themselves trapped in it without knowing or being aware of it. Thus, in an example evoked above, D. E. Smith describes how her own thinking and research design were structured by a mothering discourse that (initially) prevented them to collect the kind of that with hindsight they realized should have been collected. This mothering discourse—which historically had evolved from psychological studies and was disseminated by women’s magazine—is part of, and ordered by, a discourse of and about the standard North American family. The sociologist writes that when she and her graduate student “embarked on our study, we failed to register the extent to which our thinking and research design were organized by the mothering discourse and by conceptions of the Standard North American Family” (Smith 1999, p. 162). Literally then, Smith—and presumably at some stage all social researchers—did not know what she was doing until the point where she began to discover (register) how the existing discourse had framed what she attempted to do without her being aware thereof. It is not that everyone decides to actively disregard critical engagement with his/her own methods, concepts, problems, and instruments, as this may appear in the following critique:

It would be easy to show that this half-scholarly science borrows its problems, its concepts, and its instruments of knowledge from the social world, and that it often records as a datum, as an empirical given independent of the
act of knowledge and of science which performs it, facts, presentations or institutions which are the product of a prior stage of science. In short, it records itself without recognizing itself. (Bourdieu 1992, p. 236)

Even critical, Marxist sociologists such as Smith are subject to the pervasive effect of discourse, so that it sometimes takes considerable time and experience before a researcher recognizes having been subject to ideology. It was through her own participation in the mothering discourse, and through her experience of being subject and subjected to it when her son was in school trouble, that the structuring of the discourse became visible to Smith rather late in her research on women’s work as mothers and in an accidental manner. The functioning of the mothering discourse was particularly covered up by the fact that the women interviewed and the interviewers (Smith, her graduate student) were subject to the same structuring by the mothering discourse. The interviewees oriented to the very interpretive schema—in trying to figure out what the researchers are after, this may have well involved the documentary method of interpretation—that also had structured the questionnaires and interview questions.

The purpose of rigorous data analysis is to read what people actually do in the more or less contentious concerted social practices in which they engage, which they not only agentially produce but also patiently undergo. Rather than importing concepts such as power to explain social relations, rigorous data analysis focuses on analyzing relations as people participate in making and undergoing them. Any difference in knowledge, power, or institutional position—shown particularly in chapter 8—is the result of societal relations rather than the determinant causes thereof. Rigorous data analysis focuses on the ordered and orderly making and expositing of the (material and social) world as ordered and orderly phenomenon. Because it goes together with the bracketing of received and often accepted concepts, it may therefore serve as a tool for emancipation and critique of ideology (see chapter 12). Rigorous data analysis is thereby aligned with the possibilities that critical psychologists (Holzkamp 1983) and critical sociologists (Smith 1990a, 1990b) alike have outlined in the past when “subjectivity as directly immersed in contentious social practices was the focus and the starting point for a process that would seek to reconstitute subjects as they reconstructed and transformed the cultural categories and conditions that shaped their lives” (Lagemeyer and Nissen 2011, p. 190).

In this book, I focus on how people make the social world, exhibit to each other the social facts as facts that matter in the situation, and account for the order that they make and that surrounds them as an integral part of this making. There is general agreement, however, that this work can only be part of a more general, rigorous because (self-) critical approach to data analysis. When people use and exhibit to each other specific things and categories, then they tend to submit to these and accept the normative powers of the factual without investigating the very production of the categories and (social) facts. Instead, rigorous data analysis brackets the categories used by insiders and witnesses alike, takes them out of their circulation as explanatory resources, and investigates the history of the categories used—e.g. by tracing the origin of the psyche to the single-cellular origin of life (e.g. Leontjew 1964)—and not unlike genealogy and archeology (e.g. Foucault 1969, 1975). It is therefore never sufficient for social analysts to conduct themselves like
Sherlock Holmes or Miss Marple in the attempt to find who done it and to bring him/her/them to court. Instead, we also need to understand the very historical conditions and categories that allow us to understand the very production of the social facts and situations that have led to the crime in the first place. It is not sufficient to simply nominate the individual subject as the author of the crime but, to be rigorous, we have to analyze the very conditions that constitute not only the contexts within which the event has happened but also the very subject and subjectivities in play. This is so because accountability, the fact that we can provide reasons to others and to ourselves, can be found as well in those cases where the legally enshrined bourgeois order of society comes to be questioned the most: the legal and criminal codes that not only provide orientations to societal subjects what to do and how to do it, but also as guides for deciding retroactively what past action lies “within” the law and what lies outside.
PART B

Five Data Sessions
Non-experts often know more than experts and therefore be consulted and . . . prophets of truth . . . more often than not are carried along by a vision that clashes with the very events the vision is supposed to be exploring. (Feyerabend 1993, p. xiii)

In this part B of the book I present transcriptions of five data analysis sessions collected according to a think aloud protocol in an introductory graduate course on qualitative research method. Over the course of several semesters, the instructor-analyst introduced his students to thinking about data analysis as a rigorous activity. To highlight the point of rigor, he had invited the students to prepare transcriptions of videotapes that somehow related to their research interests but to leave out as much of the specifying detail as possible. The text was projected onto a screen visible to all participants in the course and then analyzed, line-by-line, while the instructor-analyst worked his way through it (Fig. B.1). He stated as the purpose of the self-posed task the production of an analysis that would reconstruct the original situation to the extent possible with any given transcription. Throughout each of the courses from which the following sessions issue, he pointed out that rigor was required. To underscore this point, he suggested that fictional or actual detectives such as Sherlock Holmes, Ms. Marple, or Arsène Dupin get their stories wrong, an innocent person could end up on the gallows or on the electric chair. Thus, the events, as reconstructed from the transcriptions, must not be the results of just some constructions, individual or shared. The person who had prepared the transcription would judge the accuracy of the event description and would also be invited to share the original video clip. That is, the instructor worked against the frequently perpetuated idea that the reading of data is a subjective, and perhaps even solipsistic exercise, where the only underlying criterion is the within-person fit with the reality (here the data) s/he perceives. (This would be the solipsistic position that I often hear and see being taken by colleagues who also denote themselves as constructivists.) Instead, because the analysis is publicly available and its results would be checked by the audience, it is inherently intelligible and therefore
shared within the small community. As a result, it is not anything that goes—here reversing the aphorism of the philosopher of science P. Feyerabend (1993)—but instead, the inherently social and shared viability of a situation description derived through a close reading of a transcription was at stake in each and every session. The purpose of these presentations is to work towards a response to the question raised by Garfinkel and Sacks in the opening quotation of chapter 1: “What is it about natural language that permits speakers and auditors to hear, and in other ways to witness, the objective production and objective display of commonsense knowledge, and of practical circumstances, practical actions, and practical sociological reasoning as well?” The analyst displays, in his (discursive) actions, ways in which researchers can recover precisely that which is displayed so that we can, in accountably rational ways, produce and perceive commonsense knowledge, practical actions, and sociological reasons.

As readers can observe in all five of the brief chapters of this part, the procedure of the analyst relies on consulting the “non-experts” that appear in the transcriptions and the non-expert graduate students who have produced them from videotapes found on the Internet. Although they are non-experts, they do in fact make available to others the accountably rational structures of practical actions and societal relations. The non-experts, therefore, provide all the clues that the analyst works with—as if he were overhearing a conversation and figuring out the where, what, when, how, and who of the societal situation that has given rise to, and was produced by, the conversation. That is, in a very literal way, the analyst acts according to the rule presented in the open quotation namely that non-experts should
be consulted . . . precisely because from the situation that unfolds before our eyes while reading the transcription has arisen from their visions and di-visions.

The problem of the instructor-analyst was posed in a particular way and created particular conditions that led to the analyses as observed. The task was that of finding out the type of situation that—particularizing itself in the case recorded—produced the transcription. It is therefore not surprising to see the analyst drawing on ethnomethodology and conversation analysis, suited for the present purposes because specifically developed to uncover the ways in which everyday folk produce the social world in accountably rational ways and make activities the structured and more-or-less predictable lifeworld that it is. These examples are not meant to suggest that ethnomethodology and conversation analysis are the only research methods valued. But, as shown in part C, these methods constitute an important aspect of the researcher’s toolbox because they allow approaching certain research questions much better than others.

On Reading the Chapters in Part B

In the following chapters, all of which report actual think-aloud data analysis sessions, there are three levels of text. At the lowest level are the transcriptions that the graduate students had prepared and made available to the instructor-analyst who saw them at that point for the first time. These transcriptions are made available, in their entirety, in Appendix A. As most of these originally did not contain numbered turns, I added these for the convenience of reading and referring to them. At a second level, readers find the transcribed think-aloud session. This is—following some cleaning up, removal of the interjections (e.g., “uh,” “uh,” and “um”) and half-finished words, and grammatical corrections for the purpose of representation as written text—what the instructor-analyst actually has said. This text therefore constitutes a “first go” at an analysis without the analyst having had any background information or pointers other than what was available in the transcription itself. The text at this level therefore shows what was salient to the analyst as he moved through the text, line by line, turn by turn, to produce a situation description that possibly generated the concrete talk in the transcription at hand. This is where readers actually can develop a feel for what experienced analysts do, what is becoming salient to them, what they focus on, and how they understand their task. At a third level, I provide further pointers and explanations to the work of the analyst. This third level is of the type that readers may normally find in a book on qualitative data analysis. It is at this level that I also refer to and cite relevant research.

A considerable time after I had written a first draft of this book generally and about the three levels specifically, including the three-level presentation that marks this part of the book, I found a conceptualization of what I had done in the early work of D. E. Smith (1981). She describes level-one talk to be the talk of the people at work, doing whatever it might be to get the day’s work done. This talk is part of the language-game that constitutes the ethnographer’s interest. Level-two talk is talk about the original situation, which may be used by the informants themselves
when they talk *about* what they are doing in a particular situation, such as when scientists speak about what they have done as part of their workday. What may confuse is that this language-game overlaps with the original language-game by making use of the same words. What is often not visible is the different use to which words are subjected on that second level. Essentially, however, level-two talk, talk about level one, presupposes familiarity with the ways in which level-one talk works. Level-three talk is part of the social scientific discourse, for example, the sociological, psychological, or social-psychological discourse. It serves to categorize and subsume the various ways of talking at levels one and two. Level-two talk mediates between the talk that participants employ as part of doing their everyday work—doing shopping, doing caring for children, or doing teaching—and the theoretical discourse. Importantly, there are sets of social relations put into relation by level-two description: that relevant to the social actors in their situation and that relevant to theorist theorizing society (Smith 1981). Using the sociological term “assignment” for a study of newsrooms as example, the author suggests that the solution to how it is possible to speak of “assigning” and “assignments” and to point to pieces of paper to describe courses of action, and perform “assigning,” is not to be found in the context of which these usages make their current sense. If we see that the terms of the setting must be taken up as expressing its social relations rather than as categorization procedures, and hence that a work of inquiry must investigate the social relations in which such usages as these and others are both possible and sensible in that context, we will be able to move to a non-ideological method of sociological description. (p. 334)

To easily distinguish the three levels and also to distinguish the different concerns that they exhibit, I chose the following convention. The first level text, that is, parts of the transcription that the analyst currently is focusing on, is printed in block quote indented twice and printed in a smaller font (9 points). Level-two text appears in block quote indented once, normal font (10 points). I use double parentheses and text in italics—e.g., ((turn 06))—to provide ethnographic descriptions, for example, where the analyst is pointing to on the projected transcription. I use square brackets—e.g., [the analysis]—to add words to make the sentences complete. Quotation marks are used to enclose quotations that the analyst indicated by means of voice inflections or “air quotes.” Finally, I use underline when the analyst prosodically emphasizes textual particulars. The third-level text appears below the “footnote” line in italics. Each part of this text is directly keyed to the phrase/s or paragraph that it is about. The intent of this presentation and structure is to provide readers with ways of making connections between actual data of the type they might be collecting and the descriptions that might be found in a traditional methods text. These two levels are held together in and through the practices of the instructor-analyst, who, with over 25 years of experience at the time, had gathered considerable experience in and familiarity with data analysis.

In each of the following sessions, what is happening is to be understood as a beginning rather than as a full analysis. Readers need to keep in mind that the instructor-analyst was taking only about 30 minutes with each transcription. He did so for a first time, and upon extended analysis, he might have picked out further
features, deepened the analysis, found more documentary evidence for the hypotheses that already captured the essence of the actual situations that have given rise to the recorded situation, a version of which was subsequently transcribed for the purpose of the data sessions. (These are described at the end of each analysis.)

We may think of the sessions as exhibiting a particular structure (Fig. B.2). Confronted with the transcription (Fig. B.2, right), he works out the (kind of) relational work that manifests itself in and through the give-and-take on the part of the participants in the verbal exchange. Once articulated, an inference is generated about possible societal situations (Fig. B.2, left) that could have, in the concrete realization of a specific instance, has produced the talk that is rendered again in the transcription. In other words, if we take a type of recognizable situation, TV talk shows, then it might be realized in a variety of ways, for example, in a particular episode of the Oprah Winfrey show, *Late Night* with David Letterman, or *Conan* with Conan O’Brien (Fig. B.2, center). The transcription represents the talk by means of which the participants in the specific societal situation make apparent to each other, in ordered, ordering, and orderly ways, the structured nature of the social world. This happens independent of the specific individuals, who staff a societal phenomenon that they not only produce but also to which they are also subject and subjected.

Fig. B.2  The structure of the work exhibited by the instructor-analyst.
Data Session 1 (Heidi)

(Heidi, Erin, David Suzuki)

And then you are usually tempted to import concepts. For example, when people say, “Oh there is a power relation,” I say, “Put your finger on it. Show it to me.” So I don’t like people explaining things with power. What I want to see is: I want to actually see it, how people both produce and reproduce institutional relations.¹ For example here we know David Suzuki. So, we probably can expect, and this is the danger, that there are maybe certain things going on. Working with a transcript where you don’t know who the people are, then you don’t have this kind of resources. The danger might be that because we know David Suzuki, we might think, “Oh, people will show respect.” Even if we don’t sort of explicitly think it. It could certainly tweak our analysis. And then we see people giving respect to him when in fact we don’t have any evidence for it. So, analyzing a transcript where we don’t know much about the people forces us to look at what’s going on. Now if I don’t have a good starting point, what I usually do is this: I describe what happens.² I begin with a description, in my words, what is happening here. And in my words it could be in varied ways. If I look at

¹ The instructor-analyst begins with a warning concerning the dangers that an analyst faces when drawing on common concepts. Power, or knowledge, is not something of the same nature as a desk or chair. It is a form of relation that participants produce and reproduce (e.g., Foucault 1975). The analyst therefore recommends focusing on the relation, as available from the back-and-forth of the talk, rather than using the position David Suzuki takes in society—he is a well-known Canadian scientist, broadcaster, and environmentalist—to explain what is happening in the conversation specifically and in the society-specific relation more generally.

² The analyst describes how he begins an analysis, especially in this case where he does not know anything about the background or about the actual videotape that has yielded the transcribed talk under consideration.
this, if I look just at this first page of the transcription globally, then I see that Heidi talks a lot. The other person that talks on this page is David Suzuki; and Amanda, Michael, and Ashley hardly talk at all. And so, initially, the first thing we see Heidi . . . and if I don’t have a starting point for my analysis, if I don’t see patterns right the way, then I might do what I am doing just now.

01 Heidi: It’s amazing how the landforms here really look like other things other than rocks. Do you notice that sometimes?
02 Amanda: Yeah
03 Ashley: Yeah
04 Michael: Yeah
05 Heidi: It’s funny
06 David: As long as you’ve got a good imagination

Heidi begins to speak in this episode. She describes the landforms as amazing; and then the three individuals Amanda, Michael, Ashley, they all say yes, yeah. And then, are these funny? Then David Suzuki comes in. So I would begin with describing this, because I don’t have a handle yet on the situation. And as I start describing that I hope stuff sort of comes up. And those who have observed me write in real time, analyzing in real time, they know that in trying to articulate what is going on, stuff comes up.

So we see Heidi, It’s amazing how the landforms here really look like other things other than rocks. Do you notice that sometimes. Yeah. Yeah. It’s funny. And David, As long as you’ve got a good imagination. Now we can understand what is being said here in response to something that happened or was said be-

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3 Gazing over the page of transcription provides an overall impression of the distribution of talk. This is equivalent to other ways of making the data look strange, for example, when we run the video at a much slower speed, in slow motion, or at a much faster speed than normal. I do almost all my video analytic work with QuickTime Pro because of its ease of operation, features to work with video—e.g., overlaying transcriptions, producing picture-in-picture or side-by-side video, and information panels—and general simplicity.

4 Over the course of the past 30 years doing analysis, I have encountered many colleagues, especially beginning scholars but also more seasoned ones, who find it hard to get started. In part, the difficulties arise because the individuals intend to write an article or a paper for a conference. In view of intending to produce a finished product, they experience themselves stifled. I therefore tend to recommend opening a text file with the name “Notes,” to which I often append an identifier number and a tracking number (e.g., “Notes_1_100.doc”). The writing in these notes is just for myself. This allows me to write anything that comes to mind without worrying about the political correctness of the content. Prior to including it in an article or paper I write, I will edit it or make it consistent with whatever ideas I might espouse in the text to be published. The version number is updated from time to time (Notes 100, Notes 101, . . . ), which not only gives me a historical record of the notes produced but also prevents me from losing materials in case the word processor crashes.
DATA SESSION 1 (HEIDI)

fore. So here, what has been said before—well, it was very little by Amanda, Michael and . . . Heidi—what we actually have is some statement: *It looks like other things other than rocks*. The next one isn’t what I read as an unfinished question and is possibly not what David reacts to ((turn 06)). *So they look like other things*, is the likely statement that has this one ((turns 02–04)) as the response or the next turn. So, the next thing then is, Heidi comes in, *Well we’ve noticed that maybe yeah, maybe let’s go down this way.*

07 Heidi: Well, we’ve noticed that maybe, yeah, maybe let’s go down this way. We noticed that the longer you’re out in the badlands, and the hotter it is, the more things look like things

08 David: Yeah-ha-ha-ha. Your imagination gets looser, huh?

We notice that she may have actually articulated something salient in the situation: if it is on videotape, you may actually see that they walk somewhere and she says, *We noticed that the longer you are out in the badlands and the hotter it is the more things look like*. The more things look like things. And David, *Yeah, yeah, you’re imagination gets loser?* If I now look at David’s lines ((turn 06, 08)), I already see the appearance of this idea of imagination. He appeared

The analyst will be seen to look for relations and turns, each line or turn in response to something else. Thus, even the first turn (turn 01) is in response to something else, which might have been something said before or the situation itself. Not a single analysis we may want to conduct is intelligible outside of its historical context—that of the event to be analyzed as much as that of the person analyzing it.

If taken as responses, each of the turns on the part of Heidi’s interlocutors has a counterpart. But which aspect of Heidi’s talk in turn 01 do the other turns respond to? The identification of pairs is important for reconstructing the inner dynamic of the event of which this transcription is a concrete document: the talk is an integral part of the situation, making and being made by it. The talk, here transcribed, also constitutes a trace that the living conversation will have left behind.

Here, the analysis points to the statement as a possible response to something to be seen. We observe a hypothesis about the context: A nature walk involving the five individuals, who are talking about what is visibly available to them. That is, the analyst is taking the text read so far as a concrete document of a situation as a whole. It is a documentary method of interpretation, where some whole phenomenon is reconstructed on the basis of quite varied and even contradictory manifestations it leaves behind (Mannheim 2004). Although the analyst does not articulate it here, he takes the transcription as a protocol of a situation in which the participants make available everything they need to produce the situation as an accountably rational one. They talk about and in ways required by the situation and do not talk about anything that goes without saying where and in the context they are, and when they are in that place. Yet what goes without saying, the literal, the ordinary, or the obvious can be uncovered in close readings of a written text or transcribed talk (Garfinkel 2007).

There is a pattern, something invariant across speaking turns. The topic of imagination appears repeatedly in the talk of David. Invariants are precisely what the analyst is searching because these provide clues to the type of situation that may
to have picked up on something articulated by Heidi, like things that look like other things. And now, repeatedly, he at first says *If you have a good imagination* and then, and then, in response to what Heidi says, which maybe *We noticed that the longer you are in the badlands and the hotter it is.* Then we can hear David *Your imagination gets looser.* So one may hear what David says here as almost ironical. And in the end, it’s not in the conversation. It doesn’t contribute to reproduce irony because Heidi doesn’t play with it. Now here, for Heidi it actually does. *So some people claimed that it might be kind of hallucination.* And what we are seeing here is a build up of denying.

| Heidi: | Well, we’ve noticed that maybe, yeah, maybe let’s go down this way. We noticed that the longer you’re out in the badlands, and the hotter it is, the more things look like things |
| David: | Yeah-ha-ha-ha. Your imagination gets looser, huh? |
| Heidi: | Well, it does. Some people claim it might be a kind of hallucination—now watch out for the cactus. When we get around here, you want to take a look around and see if there’s any landforms that look like something that would be familiar to you, not just like a rock. So what do you think that landform over there is? Does this one look, look like anything to you? |

Heidi, she has said *the longer you are out there, the more you see different things.* David is saying *Your imagination gets looser,* and it may be a probable implication that it’s almost like as if you were stoned. I mean, you can think of, my mind goes to *The Doors* going out into the desert and then hallucinate.  

have produced what can be seen in and as irrefutable, concrete evidence: the video and the literal transcription of what participants can be heard to have said.

9 The analyst is warning us against attributing intentions to a speaker when there is no evidence of knowing what is in his or her head. Moreover, it is a warning against making attributions when these in fact do not matter to the conversation, where participants only have available whatever others in the situation provide them with. Hidden intentions, contents of the mind, feelings, or beliefs are not generally available to others. However, if others were to hear or see something that matters, this would be made explicit as part of the work of maintaining the relation between the speakers.

10 It is only if Heidi “plays with [the irony],” that is, only if she takes up and puts irony into the play again that it will have mattered to the situation. As a result, a statement is to be analyzed as a joke only when participants treat the statement as such (e.g., Roth et al. 2011).

11 This is a reference to the rock group *The Doors,* the members of which had gone into the desert tripping on peyote. We can understand what is happening here as the elaboration of a particular (documentary) sense that is evoked. Analysts thereby “explicitly take a line on, and indeed start with, a certain politically or socially charged description of, the speakers or the subject of the talk being analyzed” (Antaki et al. 2008). However, it is in and through the rigorous analysis of the concrete documents that the relevance of this general sense or take on the situation has to be borne out.
Heidi was talking about hallucination, _When we get around here you want to take . . ._.

See what I am trying to do? I don’t have a starting point. I mean: I am cold. I am starting cold, knowing nothing about the situation. In order to get into [the analysis], I try to elaborate and describe what I see going on, but also explain and link it to other things. So, _When we get around here you want to take a look around and see if there is any landform that looks like something that would be familiar to you_, we already hear that as picking up a theme that already appeared in the statement and later on about looking differently. It’s all about perception and how things look and how they might look like other things that they were familiar with landforms that look like something that would be familiar to you. Not just like rock, but like something else.

09 Heidi: Well, it does. Some people claim it might be a kind of hallucination—now watch out for the cactus. When we get around here, you want to take a look around and see if there’s any landforms that look like something that would be familiar to you, not just like a rock. So what do you think that landform over there is? Does this one look, look like anything to you?

_So what do you think that landform over there is like? You probably all have played this: kids looking at the sky going, “Oh, a sheep, oh something else.” That’s what this generates for me, the idea._

And if I am blank with the analysis, these are the kind of things that I build from. I describe to get myself started. So, _What do you think that the landform over there is? Does this one look like anything to you?_ I stop reading now, again, and I think about what kind of relations there are. Well the three ((points to Amanda, Ashley, and Michael)), they haven’t talked yet at all. I haven’t seen the video. But the image I have is this: maybe they are people unfamiliar with the wilderness and maybe they are younger people. There is David; and there is Heidi, someone who functions in a situation where the kinds of questions seem to presuppose that the person al-

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12 _In these first few statements of the paragraph, the analyst is saying what he is doing with his other talk, that is, he is formulating. In the demonstration, talk about what he is doing, his method of praxis, has to follow or precede the talk where he is doing what he is doing, that is, the praxis of analysis._

13 _The analyst in fact describes a kind of situation that could have led to the statement, “So what do you think that landform over there is?” We may hear this as a hypothesis as to a social situation that could have led to the statement, which can in fact be heard as a question. In this case, the statement would be a concrete document of one kind of social situation. That is, we see an aspect of the documentary method of interpretation at work._

14 _Here again, the analyst articulates the “image” he has, of a situation type; the analysis now has to work out the structure and content of the concretely available documentary evidence to show the invariants that are typical for the situation hypothesized and those aspects of the transcription that are incidental and particular to the case. Heidi’s proper name is incidental, her occupation is not, as it belongs to that kind of social situation, which could have been staffed by someone else._
ready knows the answer. So what do you think? What do you think that that landform over there is? Does this one look like anything to you? There is something in this question that makes me think that the person already knows the answer, or knows an answer.¹⁵ But it is not asked like in a situation where, where a person says, “Oh that looks like a sheep to me and to you?” or like the question “What time is it?” And well, you respond.¹⁶ Whereas in teacherly discourse you will have: “What time is it?” And it is asked in a way where the asking person already has the right answer. And this question seems to be of that kind of questions:¹⁷ the person, the relation of the person ((Heidi)) to the others. So you see how even without having seen the video how I’m attempting to provide a description of the situation, of what’s happening here.

09 Heidi: Well, it does. Some people claim it might be a kind of hallucination—now watch out for the cactus. When we get around here, you want to take a look around and see if there’s any landforms that look like something that would be familiar to you, not just like a rock. So what do you think that landform over there is? Does this one look, look like anything to you?

10 Amanda: Hmm. Oh! That rock right there looks like a camel

11 Heidi: Oh . . . no . . . that’s it! We actually have a name for this guy. We call him Fred the camel . . . see the hump . . . see the big droopy lips pointing to the left. And if you look off in the back can you see anything else?

¹⁵ This analysis focuses on the structure of the statement, here heard as a question, which indicates that there already is a prefigured reply against which whatever the participants—Amanda, Ashley, or Michael—say will be judged. Here it is the interrogative “What do you think . . .” and the definitive article “the landform” that together lead to the clue. The three are asked about their thoughts concerning the specific landform that exhibits some characteristic that is to be disclosed. We can hear the opening as implying that the questioner already has something in mind and now asks the three individuals what they think the form looks like. The analyst notes: “There is something.” It is now up to the analysis to give a concrete form of this something, the objective sense associated with it, so that we can understand it as documentary evidence for the kind of situation generally and this society-specific relation particularly.

¹⁶ This analytic move is to be understood as a variation. That is, the analyst just has provided a description of a hearing. Now he provides alternative descriptions of what the heard statement does not sound like. Variation here provides alternative descriptions and, in so doing, alternative hypotheses about how to hear a particular statement.

¹⁷ This would be the statement of the hypothesis about the particular statement heard as a question on the part of the analyst. He says, “It seems to be of that kind of question,” which makes the tentative nature of the analytic statement apparent. This production and maintenance of multiple hypotheses, each of which is to be tested in the transcribed turns to come or, backwards, to what has already been read.
Hmm, Oh! that rock there looks like a camel. Oh no, that’s it. I haven’t been there, but the person saying That’s it confirms that the answer was the one that’s prefigured, preconceived in the question. So, What do you think that landform over there is? There is a children’s game: Do you know what I think? Or you look at the some cloud, “I see. What do I see?” And then she goes, We actually have a name for this guy, I call him Fred the camel see the hump? So the big droopy lips pointing to the left, and if you look off in the back, can you see something else? So again, Can you see something else? The question is of the kind that signals that the person already knows the answer. And you are tested whether you can actually produce it. This is the kind of question that in the literature has come to be called by some as “preformatted answer,” where the person who asks the question already knows the answer. The question is simply out there to test the person. Whereas genuine questions are the kind of questions people genuinely ask each other: “What time is it?” You know, when people don’t have their watches and you know as a competent member of the culture that the question is genuine. People don’t . . . Imagine yourself in the street and a person asked you what time is it, and you go, “A quarter after seven.” And the person says, “No, it is actually sixteen minutes after seven.” You go like, “What a weird-do.” So we are accountable for the kind of questions that we are asking; and in this particular situation, the questions seem to be already prefigured, there is a particular kind of an answer. And those who answer do so knowing that there is some such preformatted answer. So and the same, If you look off in the back can you see anything else?

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18 Now there is a confirmation of the hypothesis and, simultaneously, a disconfirmation of the alternative hypothesis or hypotheses. It may not be confirmation and disconfirmation to certainty (i.e., probability p = 1) but an updating of probability of the hypothesis under consideration based on the data. This is expressed, in a Bayesian approach, as the posterior probability of hypothesis $H_x$ given the data, or, in formal terms, $p(H_x|\text{data})$.

19 The phenomenon is referred to differently in different communities of practice. In education, we frequently find reference to a turn-taking sequence denoted as IRE, which is short for initiation–reply-evaluation (e.g., MacBeth 2003; Roth 2009). In schools, teachers tend to take the first and third position in this sequence, students the second position. It is not only a way of constituting whether a student does or does not know, but also a way of producing science as a heroic effort (van Eijck and Roth 2011) or of providing feedback to students who, in this way, can find in their own actions and talk those aspects that are relevant to the production and reproduction of science or mathematics or any other subject (Roth 2013).

20 Here we find a variation produced. It stands both as alternative, and therefore as a second hypothesis, and also as a ground against which the actual situation becomes figure. It is highlighted and articulated specifically for the benefit of the graduate student audience, but may operate in a tacit manner if the analyst was working on his own. Variation assist us in identifying other possibilities and, in this way, get closer to why this statement has been made in this situation rather than some other statement.
Now, to me, what I’ve said just now, what is it? Why would I, who has not read the transcript before, who has not seen the video, who has not heard the intonation, why might I have detected that here this is a preformatted question?\footnote{This is a crucial instant in this analysis, because the focus no longer is on the construction of a social reality on the part of the participants in the situation. Rather, the analyst turns attention to his own instruments of construction. This is important because the worst (critical) analysts can do is remain blind to their own instruments of construction all the while believing they are critical because they take such a stance with respect to the object (e.g. Smith 1990a). This demands a double-edged criticism, both with respect to the research object under construction and with respect to the instruments of this construction. Why, he is asking, does he hear the question as one that has a preformatted answer? What is it in his hearing, standing in for hearing in general, that makes the statement a question with a preformatted answer rather than a genuine question? This paragraph then continues to raise questions about the specific hearing and where it might originate, and what kinds of cultural competencies are expressed in such a hearing.}

What appears later on here shows that she indeed already has had the answer, \textit{this} answer in mind. Why would I’ve picked that out? What is my competence that allows me to detect this just in the question? \textit{That} could be a research question in its own right. What is it that allows us to look at or hear a question for a first time—maybe it’s a question in content—and make a suggestion that this person already knows the answer to the question? And the question is only a fake one to test someone else. What is it? What is it about that question? What is it in the question? And what is it in my cultural competence? Because once you understand better what the kinds of question are, for example, that teachers ask, you become attuned. One might find this kind of relation between parents and their children or between teachers and their students, this particular kind of question.\footnote{In this final statement there are two important ideas. First, the concrete question, which is treated as a document, may be functioning as such for different kinds of societal situations (relations). Second, the statement can be heard and read as a formulation of two hypotheses (H$_1$, H$_2$) about possible phenomena that manifest themselves in this statement-question (i.e., Can you see something else?). Without any additional data, the two hypotheses would be equally likely, i.e., p(H$_1$) = p(H$_2$) = .5. As soon as additional data pertinent to these hypotheses are available, the probabilities will change and will be updated to the posterior hypotheses p(H$_1$|data) and p(H$_2$|data).}

Someone might think that this has to do with the idea of \textit{habitus}. Habitus is a theoretical term that the sociologist Pierre Bourdieu generated.\footnote{Readers may be interested following up on this concept, articulated by Bourdieu (1980) in a book subsequently translated and somewhat inaccurately entitled in English as The Logic of Practice. (Inaccurate because Bourdieu uses the term “practical sense,” which is different from the term “logic of practice” that evokes the specters of the rationalism that the book critiques. However, and in this the translators had some justification, Bourdieu also talks about the logic [logique] of practice in the text itself.)} It’s actually
not a very easy concept. The translation some people use is “disposition.” Habitus then is a set of dispositions that makes us act and see in the way we do. So it’s not actually describing what we do and see, but names our predispositions to see and act in that particular ways. So when I say it’s my habitus, then we go very quickly to an explanation, to a theory. And so we basically subsume my actions to this theory, whereas I would encourage you to work with the data and sort of come up with an ethnographically adequate description, from the data, and to understand what is going in there.

11 Heidi: Oh . . . no . . . that’s it! We actually have a name for this guy. We call him Fred the camel . . . see the hump . . . see the big droopy lips pointing to the left. And if you look off in the back can you see anything else?

12 Amanda: ?
13 Michael: No.
14 David: I’ll give you a clue. Where are camels found?

So she asks the question, And if you look off in the back can you see something else? There’s something said, probably the question mark means that you didn’t hear Amanda. Then David . . . now David is in cahoots, because he says I’ll give you a clue. So he also knows the answer. So those two, Heidi and David, they seem to be in cahoots. David also knows what is been asked. The two are in cahoots about what’s been asked. And something particular is to be

24 At the beginning of the paragraph, the analyst points out that the audience might explain his own competencies in terms of the habitus concept. However, just as he warns them of the dangers in applying high-level theoretical concepts in the analysis of the data at hand, he warns them of the danger to think about what it makes a researcher to read data in a specific way by drawing on high-level concepts. Instead, he encourages descriptive and data-driven analysis. Such analysis works from the data upward in the attempt to make intelligible what is going on—in the data as much as in the analysis.

25 Readers may ask themselves what is it that allows the analyst, without even stopping for an instance, to take the question mark in turn 12 as an indication that the transcriber did not hear what Amanda is saying, whereas he takes the question mark in other places as the transcriber’s hearing of a question. Although this might be taken as a self-evident situation—not so self-evident because in this way, the placing of the question mark does not follow standard conversation analytic practice that makes use prosody markers—it provides a nice example of some of the impossible-to-teach aspects of data analysis. Why is something salient in a particular way? For example, why may the analyst focus on the use of definite and indefinite articles but not do so in another transcription? This question will be taken up in the chapter 10 on the documentary method of interpretation. In brief, however, my answer will focus on the relation between the document—e.g., the use of definite and indefinite articles—and the original situation to be reconstructed, which, at the moment, is only an object*- or situation*-in-the-making (e.g. Roth 2013b). (The asterisk denotes the unfinished nature of the phenomenon it marks.)
When some people know and ask for things that are there to be seen and others they don’t see it, then you maybe in some kind of didactic situation where people actually learn to see certain things. This is what happens when parents read with their children. Read images. You begin and you point to things—banana, the elephant, or the bird—and later on you question: “Do you see the bird?” Or, “Do you see, whatever, Peter who is hidden?” “Where is Peter?” So you have this whole cultural routine of learning to identify things.

And here we have the kids, and David asks I’ll give you a clue. Where are camels found? Eh, Egypt. Very good. And the other person, A pyramid, a camel and then a pyramid. Very good.

14 David: I’ll give you a clue. Where are camels found?
15 Ashley: Egypt.
16 David: Very good!
17 Amanda: A pyramid. A camel and then a pyramid
18 David: Very good! Has Fred changed that much while you’ve been here Heidi?
19 Heidi: Not that much although he did get a bit of a facelift, he’s lost his double chin. But, uh, we’re really concerned that the cap rock on the hump of Fred may fall off. That ironstone. And if that falls off the hump could erode away very quickly.

Has Fred changed that much while you’ve been . . . Not that much, although he did get a bit of a facelift, he’s lost his double chin, but very really concerned that cap rock on the hump of Fred may fall off and then come back and I have an idea. So David asks Heidi, Has Fred changed that much while you’ve been here Heidi? David appears to know that Heidi is here or has been here more than once.

The question also shows that Heidi has been here more than

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26 We clearly see the analyst’s orientation to the actors’ point of view. These articulate something for each other; and this something is salient and important to the event in which they are both subjects and patients. What they say is a verbal protocol, a way of exposing and accounting for the rationality of what will have been the outcome of their irreducibly joint work. The members to the setting not only talk to have some conversation but also make the situation be of a particular kind; and this making of the situation requires exhibiting the situational structures and the members’ work.

27 Earlier the analyst evokes school-like situations, where formatted-answer questions are asked in the IRE routine. Here another didactic situation is articulated where the same type of questioning and turn taking might occur, but where the purpose differs: Allowing the learner or newcomer to see what others already can and do see. The question is part of the way in which whatever can be seen is accounted for. It is grounded in the insight that language has apophantic function, that is, allowing a phenomenon, which the learner does not know and therefore cannot intend to see, to show itself from itself (Heidegger 1977).

28 The analyst attends to the grammatical structure of the locution. The conjunction “while” together with the present perfect tense “have been” articulate a continuing presence in that place (“here”) over a period of time. “While” functions as a conjunction to joint Heidi’s being there to the change in the camel-shaped land-
once. David knows; and David may actually be less frequently there because he says while you’ve been here. Now if he says while you’ve been here it could be that Heidi has been working in that area. If I bring knowledge in that David is concerned with the environment and so on, I could, for example, hazard a guess that Heidi is something like a ranger or a naturalist working in a particular area.\(^9\) There are three visitors to that park, and David is there. David works with Heidi for some time; and they are in cahoots. This ((transcription)) is my data.\(^{30}\) They know the questions and the answers that they want. But David also gives away clues that Heidi has been there for a while. She actually has been there more frequently than David; and he asks the question, has he changed. It’s possibly not the same kind of question . . . well there are two possibilities. The question is not the question that David truly knows the answer to, and then it would be a genuine question; or it could also be a didactic one.\(^{31}\) He might want Heidi to explain something that she didn’t think of in the situation, but he wants her to bring it up in the end. Rather than him telling what it is, she could ((i.e., following the question)).

These are possibilities. So when I analyze data, I often to test whether I understand what’s going on I generate hypotheses simply for the pleasure of generating hypotheses, which I can then test afterwards.\(^{32}\) I’m almost conducting an experiment with my own understanding and then I can weed out. Because if the hypothesis is confirmed—it is not a very good research to merely confirm hy-
hypotheses, it’s better to reject them. But if it is confirmed it shows me that that I have somewhat of an understanding for what is going on.  

So there’s a question and then she says, not that much, although he did get a bit of a facelift, he’s lost his double chin. There was a question. I cannot hear or read whether it is a set up or genuine question. But it is a question that allows Heidi to articulate that there is a change. The students may not have thought of the question that there might be change in the hump, in the camel, in Fred.

Fred is the camel, because it has been named. This is another interesting thing. So they are looking at nature and identifying a hump. They say, Ok it’s a camel, and then Heidi introduces it: Oh, we call him Fred. This is another indication that she’s been there more often. She also says we. And it may not imply, entail, or include David. The We may not include David at all. It certainly does not include the three (Amanda, Ashley, Michael), because they seem to be the target of this didactical situation. But David, although he has been familiar, he may actually not be part of the club that is included in the We. So that could point me towards another hypothesis: Heidi is familiar with the area, she works in the area, whereas David, he comes regularly, he’s familiar with them, he’s familiar with the area. But he is not there as often as she is.

So then they’re really concerned that the cap rock on the hump of Fred may fall off. That ironstone. And if that falls off the hump, it erodes away very quickly.

19 Heidi: Not that much although he did get a bit of a facelift, he’s lost his double-chin. But, uh, we’re really concerned that the cap rock on the hump of Fred may fall off. That ironstone. And if that falls off the hump could erode away very quickly.

20 David: But erosion is natural, it’s going to fade away over time.
21 Heidi: Fred is naturally going to erode away. But if he ever lost his hump, all we’d do is change his name to Humphrey the camel.

22 David: Awwwwwooooooo
23 Heidi: Ha ha Ha Ha HA Ha
24 Amanda: [Ha ha
25 Michael: [Ha ha

33 The logic of the investigation is not one of refutation, where (null) hypotheses are stated and rejected, and where confirmation is viewed as a form of bias (Popper 1962). Instead, the logic is better understood in terms of abductive reasoning and the Bayesian approach. New data are used to update the likelihood of all alternative hypotheses, which, for some data, may not lead to any change.

34 The analyst makes reference to one of the hypotheses articulated earlier, which, in and through the use of the “we,” a concrete piece of evidence and therefore document of, is updated. Thus, the data is constituted by the use of “we,” which is heard in the context of the differential knowledge about the situation and what participants (David) state about knowing it. This data is used to update the probability of the hypothesis $H_1 = \{\text{Heidi is a naturalist working in that place from which the camel-shaped mountain called Fred can be seen}\}$: $p(H_1|\text{data})$; it is also used to update the equivalent probability $p(H_2|\text{data})$ concerning hypothesis $H_2$ about David as being familiar with the situation but as an occasional visitor.
DATA SESSION 1 (HEIDI)

26 Ashley: [Huh ha
27 Heidi: Sometimes it takes a while. Hmmm Hmmm Hmmm

Heidi articulates a lot of the kind of things that may go on in this environment. This shows that she has a concern that it may fall off, that she is probably more familiar with that particular situation and that what kind, whatever is going on, possibly erodes that sufficiently quickly, that whatever she says is going happen.35 And David then comes in, but erosion is natural, it’s going to fade away over time.” He now makes reference to it, but erosion is natural. So what he does is . . . what does he pick up on?36 This comment ((i.e., but erosion is natural) is made to something that has been said. And here is somehow it’s modified. But erosion is natural. When we look at the interaction, what this seems to be the next, the follow up of seems to be the concern articulated previously. A concern that the cap rock may now fall off, but it’s natural. What are the other things David might react to?37 He doesn’t react to all the statements. So what we get here is a statement of concern and the next, the follow up is, but it’s a natural process, if these things erode. Don’t forget that David says, very good ((turn 16)). Very good! You have an exclamation mark, which points me

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35 Here the concerns are used as data to further update the hypothesis about Heidi and the role she plays in the concrete situation the type of which the analyst attempts to reconstruct based on the documentary evidence left behind.

36 In the analyst’s question about what David picks up on, we have (documentary) evidence for a transactional orientation. What David says is not taken as an individual piece of talk, an idea somehow externalized by means of talk. Instead, David picks up and acts on something said before, and, in so doing in the form of talk, speaks for others, to whom the talk thereby returns. That is, any locution is understood in terms of language that comes from the other, is produced for the other, and returns to the other (e.g. Derrida 1996). Every locution, therefore, is an aspect of the societal-cultural situation rather than an emanation and product of the speaker’s subjectivity. For the conversation to be an intelligible social event, the intelligibility of anything speakers can say already has to be presupposed. It is not that hearers have to interpret and construct what the speaker means to say; instead, the intelligibility of the Said is presupposed in any situation where talk occurs. When the intelligibility is in question, then the participants in the situation tend to make this a topic of talk (unless that is more difficult, such as in a lecture situation where the members of the audience may not want to interrupt even though they do not comprehend the talk).

37 The referent of what some previous speaker has said and that is taken up in the current speaker’s locution is not taken as given. The analyst exhibits a concern with finding those parts of the transcript that together constitute a pair, where the second member “picks up on” whatever is stated by the first member. Without additional information, for example, the bodily orientation of the speakers, the text alone may not provide sufficient resources for a more definite determination of the first member of a pair taken up by the second member currently in the analytic focus.
to the fact that this is sort of made as an assessment. This [assessment] points me to another issue. It’s giving me sort of a clue that David and Heidi are in cahoots. And David knows the kind of answers that are expected and he assess it: Very good! Very good!

So, do you see how I reconstructed the situation? I try to reconstruct the situation from the clues that I have. Think of yourself as Sherlock Holmes and Dr. Watson or Kathy Reichs, who is a female anthropologist. Think of yourself as trying to piece together a story, but you don’t really have the truth. So what you are trying to piece together, what you are trying to document and explain instead is the most plausible story, a plausible interpretation. You always go back and you check: what is my evidence? What is my evidence here? I don’t have a need to know where the data comes from. What I try to do is piece the best story together that I can.

One question I would have is how much David Suzuki’s name weighed in on my analysis? If it hadn’t been David Suzuki who was named, I just may have played more of all these other things. Their nature is giving away the situation. There are so many things giving away the situation that I did not need David Suzuki’s name in there. So think of yourself as the anthropologist that Kathy Reichs writes novels about or as Sherlock Holmes. You are taking this video or transcript and you are trying to make sense and piece together what is going on. The detective may be a good image to bring to your work. And you can start

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38 The assessment was not articulated by the members. Instead, whatever preceded the exclamation mark was heard by the transcriber as an assessment, a hearing that was then marked and articulated as such by means of the exclamation mark. All punctuation used in transcription should be taken as pointers to the competence of the transcriber and, therefore, constitute as an index to ways in which the situation can be seen and heard.

39 This can be heard as an encouragement to do data-driven analysis, where everything said in and as part of the analysis is directly linked to the available data. This means that mere speculation is not allowed. Mere speculation consists in statements that by their very nature cannot ever be tested. For example, statements about what someone thinks, how someone feels, or what someone intends all belong to the category of the inadmissible, for it cannot be connected to the data at hand—unless we are in a situation where the members to the setting formulate what they are doing for the purpose of accounting for their and others’ actions. But even in this case, the formulation needs to be taken for what it is, a part of an inherently social action produced for the accountable rationality of the situation rather than as a true statement about the inherently inaccessible.

40 Here again a critically reflexive articulation of the possible role that being familiar with one of the participants may have played in the analysis. Analysts always have to ask themselves about those aspects of our analysis derive from the prefigured constructions (Bourdieu 1992), unless they allow themselves to practice a science that does not know what it is doing. If we do not know how our preconceptions do or may affect our analysis, we literally do not know what we are doing and where our analytic results derive from. We simply reify the common sense underlying our own preconceptions.
your analysis. Try to piece together, in your analysis, a plausible narrative, a plausible explanation. The only things that matter are the questions “Where is the evidence and how does it connect?” Put together a plausible story. Ask yourself, “Where is the evidence?” I will ask, “Can you show me the evidence for this or that?” Or I may say, “But you are invoking a concept that’s really from far away. Let’s come back to the data and work upwards.” So from the data upwards, try to come up with explanations and explications only after we have described what is going on.

41 Readers also need to hear, though not stated explicitly, that the analyst is accountable to others for the analysis in the same way that the fictive or actual detective is accountable to victims, their families, perpetrators, and society to point to the actual perpetrator rather than an innocent person.

42 The transcription was produced from a documentary presented by and featuring David Suzuki, a Canadian naturalist, broadcaster, and environmentalist. The documentary in question features the Canadian Badlands (Fig. 2.1). David was accompanied by three children and a park ranger (Heidi). The situation, therefore, was precisely of the nature that the instructor-analyst had produced a description of.

Fig. 2.1 The five participants in the situation, David to the far left, Heidi to the far right, are looking wards the camel-shaped configuration in the not-too-far distance; pyramid-shaped mountains are visible further back, just as Heidi describes them in the conversation.
Data Session 2 (Vicky)

01 Vicky: So you may be on red you may be on amber, like some of those questions you can answer . . . you may be on green. Let’s just look at first impression. Would everybody just show me . . .

I’m looking for clues right now. Vicky: So you may be on red you may be on amber like some of those questions you can answer. You may be on green. Let’s just look at first impressions. Okay, so we only have one speaker here. So we could scan for the moment I see [turn] one, Vicky, [turn] two, Vicky, [turn] three, Vicky.¹ So far I see that there appears to be only one speaker.² We don’t see another person. So we might be looking at a lecture.³ So you may be on red you may be on amber like some of those questions you can answer. You may be on green. So she is, Vicky is talking about something. She is, we seem to be in the middle of something, not at the beginning because there is something about, like some of those questions you can answer.⁴ So it is about some questions that

¹ As in chapter 2, the instructor-analyst has quickly glanced downward on the page, without actually reading the transcription, who is speaking. He notes that the first three turns all pertain to Vicky.
² Note that the analyst says, “there appears to be . . .” rather than saying definitively that there “is only one speaker.”
³ This is the first hypothesis, the first conjecture about a possible type of situation a specific case of which that might have led to the production of this concrete transcription. The incontrovertible (objective) data for this is the fact that there are three (longer) consecutive turns, all of which were produced by the same speaker. A lecture would be one possible case of a situation type that leads to one speaker having all the turns.
⁴ The analysis highlights that the opening part of the transcription likely is from the middle of the video. What might it be in the transcription that allows an analyst to hear it as being from the middle of something rather than of the beginning? It is not good enough to say that the analyst is an expert or has a lot of experience.
they can answer; and about the different kind of states. They may be acting out an analogy, or a metaphor is being used of which state you are in prior to answering a question. It could be red or amber or green. *Would everybody just show me, would everybody, no, Let’s just look at first impression. Would everybody just show me.* Okay, so they are in a situation, there’s an audience. There’s everybody so they are a bunch of people, *let’s just look at first impression would everybody just show me.*

02 Vicky: If you show green traffic light are you on green means yes I understand it all, I can do the question, I’m confident, I’m happy. Um an amber traffic light means that you . . . have grasped it a little . . . you think . . . you think you can sort of do it . . . but you’re not really shhh, you’re not absolutely sure and a red traffic light means I’ve got no idea, I don’t get it.

*If you show green traffic light you are on green, means yes I understand it all. I can do the question. I’m confident. I’m happy. Um an amber traffic light means that you have.* So we are in a kind of situation where they are giving answers and where the audience *would everybody just show me.* It could actually be that– if we listen to this *let’s just look at first impression,* we can hear it as the person articulating something that just looks [like a first impression], she is

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5 Even without knowing anything else than what Vicky has said so far, the analyst takes the talk about the three color in the statement “You can be «color»” as the description of a situation in which the colors are used to signal the state of the person. This is much like the braking light of a car signals that the car is in the state of braking, or like the turn light signals that the car is in the state of turning. For humans, a red face often is a signal that a person is embarrassed (i.e., in a state of embarrassment). How does an analyst come up with such hypotheses? It may well be because of the experience of analyzing, which involves creating passing hypotheses or theories. It has been suggested that any such passing theory “is like a theory at least in this, that it is derived by wit, luck, and wisdom from a private vocabulary and grammar, knowledge of the ways people get their point across, and rules of thumb for figuring out what deviations from the dictionary are most likely” (Davidson 1986, p. 446).

6 Here “Would . . . just show me” is heard as an invitation to an audience, for the benefit of which the speaker invites a larger group (“everybody”) to show something.
actually telling a mental narrative. It may actually be a real situation, in a novel, if we have two levels of text. One, what is, a person telling something and then the other and that person also telling about another situation. So you may be on red and you may be on amber, and it is about question and answer. Let’s just look at first impression. So it may be that the speaker Vicky sets us up for a situation where we’re teachers, we listen to Vicky and she is trying to tell us how to teach and maybe that those who respond, just look at first impression. From your class, the students, they might give indications with a flag red, the amber, or green, how they feel about responding to the question. Hypothesis. It’s a possible hypothesis of who and what the story might be.

If you show green traffic light you’re on green. So if she is talking about the situation, about how to teach, and she is telling me she is a teacher. She’s asking students to show the state they are in then a student raising a green flag would indicate that she or he knows the answer to the teacher question. So it could be that we are in a situation where this teacher explains how she is teaching in a particular way and how she gets so quick answer to the question of how students feel about, a quick indication of how students feel about their answer. Again I can do the question, I’m confident, I’m happy. An amber traffic light means that you have grasped it a little. Or it could also be that Vicky is the ac-

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7 The analyst picks out a change in voice brought about by a change in the intended recipient. One form of talk is directed towards the students (turn 02), whereas the other form of talk is like a narrative (turn 01) where the audience is invited to look at a first impression. The analyst does suggest a shift to a different audience, a shift in voice, even without hearing the original soundtrack, where the intonation might give away such a different orientation.

8 These quotation marks would have been further indicators to the fact that a narration about the other event is occurring. The analyst then develops this idea of two levels of talk, one directed towards others in some first situation and the other one towards a recipient with whom the speaker is talking about the first situation.

9 Here the analyst clearly identifies the two levels. Turn 01 would be talk about the events to be see in turn 02, a fact that the analyst expresses by saying that Vicky is setting us up, the viewers, to watch out for something that she will subsequently show or talk about. Previously he has noted two levels of talk. Here there is a further specification as a prospective formulation, that is, as a formulation of what is to come, which is then happening in turn 02.

In both ways of looking at the situation, knowing what will happen next appears to be implicit in the talk. If the talk is prospective, being certain about what is to come tends to be observed in situations where a presenter anticipates what the audience is to see or hear. If the talk is retrospective, it describes what the particular audience has seen or heard. In both instances, the speaker (and audience) know the referent of the talk. The analyst’s tasks lies, in part, in teasing out which of the two possibilities was de facto enacted to have led to the transcription as it is available.
tual teacher and she is in the class and she introduces her method.\textsuperscript{10} She says, she might have said, if it was a class situation, “Okay students, I have here, I have three traffic lights and from now on when I ask questions, I don’t just want to have . . . I don’t want you to respond right away. I first I want you to think and then I ask you to raise a flag and you indicate to me how confident you are. If you say green then you feel confident.”\textsuperscript{11}

So at the moment I don’t have enough evidence from the text [for updating the hypotheses]. So it could be one situation where she actually talks to the students about what is going to happen and how they have to respond, and how they indicate that they are ready for a response, or she might explain it to an audience of how she’s teaching. See now I create, I have two hypotheses. I don’t know yet, I have no further evidence. From this text that much I can see.\textsuperscript{12}

03 Vicky: We’ve got a whole range of answers here . . . look at this see part one . . . k . . . Right . . . 25.73 to correct to one decimal place . . . you look at the next number and you say; is it five or bigger? Does anyone know the relevance of that question? Hands down.

An amber traffic light means that you have grasped it a little. But you are not really sure, you are not absolutely sure. And the traffic light means I’ve got no idea, I don’t get it. We’ve got a whole range of answers here, look at this, see part one twenty five point seven. So now we seem, okay it’s three, there may have been something. I don’t know what it says on the video before. It could be that they are in a natural classroom, she says Raise the flag, and then she says We’ve got a whole range of answers here.\textsuperscript{13} Look at the, see part one okay right

\textsuperscript{10} Here an alternative hypothesis is stated. The analyst is not yet certain whether turn 02 is an actual teaching situation where the teacher Vicky introduces her method to the students or whether Vicky is commenting on her teaching. In fact, Vicky’s talk in the classroom also would be talk about the classroom, where she describes to the student of what they—teacher and students—are projected to do when questions are asked and answers to be provided.

\textsuperscript{11} This is the generation of an alternative hearing as a form of producing variation, which serves as a hypothesis the probability of which is to be tested with subsequent data.

\textsuperscript{12} In this paragraph, we observe meta-talk about how to conduct the analyses. The instructor-analyst explains the generation of hypotheses, which, at this state in the analysis—i.e., after two turns of talk—cannot be further specified with respect to their probabilities. That is, the probabilities of hypothesis $H_1$ and hypothesis $H_2$ are equally likely based on the data analyzed so far, that is, \( p(H_1|\text{data}) = p(H_2|\text{data}) = .5 \).

\textsuperscript{13} He previously suggested the different voices, or the voice directed towards a different audience. Here the analysis picks out that the talk appears to be describing the situation, that is, the talk is formulating what is happening. This formulating is happening in situation to make salient something. That is, it is a way of the accountably rational aspect of the situation: it can be talked about and seen by the audience. In this, the description also functions as a prescription, an instruction to
twenty-five point seven three, to correct to one decimal place. Oh, to correct, now we are to correct to one decimal place. Now we are in a situation, one of the things I would pick up here is “Why would the person say if she’s a teacher, correct to one decimal place?” It could be during a math class. And it might be because, a history teacher, geography teacher might not care because one decimal place, it’s [not important]. It could be a science class, physics. In different science classes, my hypothesis would be more like a physics teacher or a chemistry teacher than a biology teacher. Okay? Hypothesis!

So it’s five. Is it five or bigger? Okay so here, what all of a sudden what is happening, okay, twenty-five point seven three to correct to one decimal place, you look at the next number and you say at the next or last number, whatever it’s seven three, or seven four. So what happens here in turn three? There seems to be a teaching going on: on how you round to one decimal. Seven three . . . is it five or bigger? Does anyone know the relevance of that question? Hands down.

04 Newscaster: Vicky’s using traffic lights together with the controversial no hands up policy.

Newscaster. Vicky’s using traffic lights together with the controversial no hands up policy. Okay now we seem to have a newscaster, perhaps a voice-

see something. If it is in the classroom, it would then be an instruction for the students to find in their own actions or situation a state that here is intended to be present. The “Raise the flag” can be heard as an instruction, and the “We have a whole range of answers here” is a description of a situation where the students have indeed raised the required flags. It is also an instruction for seeing—to the students—that this state, the raised flags, is what ought to occur after a question has been posed.

The analyst draws on some unstated familiarity with the fact that rounding would be less common among history and geography teacher than for a mathematics and science teacher. Among the science teachers, it is more likely a physics or chemistry than a biology teacher. The analyst thereby indicates being considerably certain about Vicky being teacher—the probability of this being near certainty, that is, \( p(H) \approx 1 \). He assigns different degrees of probability to the different subject matters, which we might capture in the following relation: \( \{p(H_{\text{GEO}}|\text{data}), p(H_{\text{GEO}}|\text{data}) < p(H_{\text{BIO}}|\text{data}) < \{p(H_{\text{MAT}}|\text{data}), p(H_{\text{PHY}}|\text{data}), p(H_{\text{CHEM}}|\text{data})\} \), where \( \text{data} = \{\text{teacher uses rounding of second digit following decimal}\} \).

Whatever was said before the statement “there seems to be teaching going on” is further data. This data supports the hypothesis that this turn 03 is a teaching situation rather than the alternative hypothesis that this is a situation in which Vicky talked about here teaching. We can represent this has \( p(H_{\text{ABOUT-TEACH}}|\text{data}) < \{p(H_{\text{TEACH}}|\text{data}), \) where the data = \{instruction “You look at . . . and say ‘Is it five or bigger?’”\}. That is, the analyst hears this as an instruction of how to go about deciding whether to round up, as opposed to the unstated rounding down.
There seems to be an explanation of what is going on, if this is the case. We are in a real classroom, and there is a commentator explaining to us what is happening. We also see that there is a no-hands-up policy. You have to indicate with flags, Vicky’s using traffic lights together with the controversial no-hands-up policy. Now we have evidence, it is a disconfirmation that it is Vicky explaining in turn 03 to an audience, it is Vicky in a class we have a second commentator explaining to us what is actually happening here. It is a policy, the traffic lights, where students have to indicate their response, levels of response. Not only indication that they want to speak but in fact the levels of confidence that they have for their answer. And there’s also a policy in this classroom of no hands up.

04 Newscaster: Vicky’s using traffic lights together with the controversial no hands up, policy.
05 Vicky: (whispers) hands down, hands down

Vicky, hands down hands down. Oh, the newscaster now has actually—perhaps it was not even visible on the any hands up or down. But the newscaster could see, O-four ((turn 04)), O-five ((turn 05)) being teaching, actually the newscaster or the commentator commenting on this teaching lesson might anticipate, see, tell the audience, “Now you need to watch, it’s a hands down policy and the next instance is the teacher implementing no hands up policy.”

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16 Notably, the analyst does not simply assume that a newscaster might be shown and heard but also generates the hypothesis that the text was heard in the form of a voice-over. Here, the graduate student, in denoting the speaker as “newscaster,” actually gives away information. But this information is not required to hear turn 04 as a comment about Vicky’s teaching. As stated, without the preceding or succeeding line, the statement may be heard as a backward-looking description of what has just happened; but it also may be a prospective description of what is to come. In fact, it is more than that: It is also an instruction for intentionally looking at what is coming as an instance of Vicky using traffic lights—i.e., red, amber, and green—as a teaching strategy. In other words, the projective description functions like a caption to an image, which both describes to the reader what there is to be seen and, in the same move, instructs readers what to look for or how to orient their gaze. As a voice-over, it instructs the viewer of the video to see what is currently occurring as Vicky’s traffic-light-cum-controversial-no-hands-up policy in action or as an instruction to find in what is happening evidence for the traffic-light-cum-controversial-no-hands-up policy in progress.

17 The analyst suggests that besides Vicky’s own commentary, there is a second commentary, a second voice talking about her teaching. What Vicky is showing or exemplifying is the traffic-light-cum-controversial-no-hands-up policy; and in the classroom, this may be staged for the sake of the video or actually occurring, as stated in a previous hypothesis.

18 The analyst has noted a contradiction between the newscaster’s comment that there is a no-hands-up policy and Vicky’s whispering “Hands down, hands down.” The hypothesis stated here is that the newscaster invites the audience to see the
06 Vicky: There’s some very enthusiastic students there who were dying to speak out and . . . they find it boring if they can’t . . . um so they . . . I suspect they do get frustrated (break to class) . . . as a teacher you sometimes resort to picking them because you want the lesson to move forward . . . and . . . it often can be that five or six students will have a dialogue with the . . . teacher all the way through the lesson and that the other 25 will sit . . . dormant.

And then Vicky is actually commenting. Vicky’s next turn is There’s some very enthusiastic students there who are dying to speak out and. So we are probably in the classroom where there is a no-hands-up [policy] and the signals are a group policy. Vicky makes available to us, she says Hands down hands down and then she comments upon or elaborates how she does it, this one ((turn 05)) here. Hands down is actually a description. She says what she wants to happen. Whatever the students do, we do not get it here. But then we have here ((turn 06)) a reading. The teacher reads what she sees or how she understands all of this, it may have been asked, some very enthusiastic students. And they forgot ((in turn 05)) about the rule that she implements: namely hands down hands down, no hands up.19

And so we can read here what might have happened. We can make up a hypothesis of what might have happened before even though in this case I don’t have what has happened before. I do not have the beginning of the story or what that video was being used for. The guys are speaking; they find it boring. So she provides a commentary ((in turn 06)), she articulates what she sees in all these hands up, how she understands all these hands up. But that she wants, whisper.

Why whispering? And it is Hands down hands down and not “I told you, didn’t I tell you that we have this, it’s called hands-down policy.” This may be an indication that this is a demonstration lesson and the students did something that they were not supposed to do.20 And now that they are so eager, they really want to participate even though this was this demonstration lesson for her method.

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19 In this paragraph, the instructor-analyst distinguishes two types of descriptions. The first one occurs in turn 05, where she articulates what is to happen because this is not currently the case. In other words, she provides an instruction, which takes the form of a description of what the future state ought to look like: Hands down. The second description occurs when Vicky “reads” what she sees and, in this, what she makes available to the audience to see: The hands are up despite her hands-down policy because “there’s some enthusiastic students there who were dying to speak out.”

20 The analyst works with a variation. Why the description that “Hands down, hands down” was whispered? Why would the teacher, if she were teaching her class under normal circumstances, whisper rather than doing as the analyst describes. This description is an alternative hypothesis. The analysis then uses this observation as documentary evidence for the type of situation: this is a demonstration lesson for this method rather than a regular lesson. The students are to exhibit
Now, I do this analysis not knowing the video. But if you already know the video, then pretend to go in as if it was the first time. When I write in my articles doing “first-time-through analysis,” this means that nothing that has happened after, nothing that I knew only afterwards was used in my analysis. Some may find it hard [implementing this policy].

And it is not something that comes overnight. The other issue is this: It is actually very helpful that we can do that ((see something as an instance of a category, such as force)). Once we are familiar, we recognize these situations everywhere. So it is actually an evolutionary product: Knowledge-wise it is of an advantage that we can recognize a situation very quickly. But there is also a danger. We recognize the situation, we don’t even worry about it and we may actually be wrong.

compliance with the hands-down policy, which they are not, so that Vicky is reminding them of the policy. She is not only reminding them of the policy, she is in fact pointing out that they have not acted according to the instruction, “No hands up.” Using this as data, the probabilities of two alternative hypotheses—H₁ = normal lesson, H₂ = demonstration lesson—are updated to p(H₁|data) > p(H₂|data), in other words, the probability of the first hypothesis is higher than that of the second hypothesis.

One common mistake in qualitative data analysis is to take the final outcome of an event and then go back and read the beginning in view of the outcome. One of my favorite examples for showing how fallacious such an approach can be is when one partner in a couple says, “Honey did you do the dishes?” Most readers may be tempted to say that a question has occurred. However, if the recipient were to say, “Why do you always have to nag?,” then the event now is at a point that the first speaker has to defend him/herself, because s/he has been heard to nag. That is, from the perspective of the event, the participants now have to deal with the nagging issue rather than with the response to a query about the dishes. If we are interested in how events evolve, and how they sometimes get out of hand (e.g., were this couple succumb to a spiral of back-and-forth statements until they end in a major argument). Suggesting that there was a question at the origin misses the entire development that unfolds from the way the statement was heard and affected the situation in its unfolding.

Wherever we look, we see familiar things, or rather, instances for which we have concepts. We look outside and we say, “Look at the pear tree.” What we see is in terms of the concept «pear tree». We look at certain interactions and we might say, “This is a pushy person” even without having to analyze the situation. This is so because the pre-constructed is everywhere. The relationship between the social world, the ways in which bureaucratic (institutional) and professional discourse produce accounts (records), and the description of professional scientists (sociologists, psychologists) are displayed in Fig. 3.1.

In some sense, this is an evolutionary advantage, as the analyst points out, because it allows us to capture very quickly the essence of a situation and act without having to think very much. But, as the analyst points out consistent with critical sociologists (e.g. Smith 1990a) and critical psychologists alike (e.g. Holzkamp 1983), there are also serious disadvantages. One of the most important ones is that
The method that I am trying to articulate [here for you] is this: working blank. Starting blank, I am trying to use only what I have available. I am generating hypotheses: “This could go on, this could happen, oh no this cannot.” And then later on I say, “Oh no, this hypothesis described the little girl, it’s not girl one that’s the house, it’s the other one.” Because all the evidence that’s afterward appears to indicate, to the moment that we got that girl-one is the little girl and girl-three is the house. The same is the case here. So we tried to do that. Now your analysis might slightly differ because you want to show something different. Or you might say: “In this situation, in my paper I want to show how it is.” Or “I want to use a first-time-through method in order to show what’s going on. What these people actually make available to one another.” And so I only go with what I have. Initially I have no clue what is going on. But as you see here, there are many things that I can use as clues in making something out of it.

To begin, what I do is this: I just write down what I kind of think and I ask myself okay, “On what basis do I say that?” See you have to almost train yourself not to draw on stuff, not to infer. We looked at the video and we read the situation. We were talking about power and we were talking about what some-}

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we merely contribute to the reproduction of the rules of relations, institutional and institutionalized differences that play themselves out in struggles of power/knowledge. The only way to undercut the automatic reproduction of the differences and struggles is to critically interrogate one’s own instruments of construction. The forms of analysis proposed here, which begin with the relations prior to attributing explanatory concepts, are ways of deconstructing what is actually happening and how power/knowledge phenomena are actually produced.

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Fig. 3.1 The relations between different forms of discourses that let researchers find in field settings what they have previously found there and theorized. The three levels of talk are clearly articulated in the distinction of the events on the left, in the center, and on the right.

23 This is a reference to another analysis that was conducted in this class, which turned out to involve little girls in the course of enacting the story of one of them. It functions here as another example for the approach presented: the continued updating of the probabilities of hypotheses with additional data.

24 Not all analyses have to work as that conducted here by the analyst. But if researchers are interested in understanding the unfolding of events, then they have to place themselves within it rather than using the final outcomes in the description and theorization of its earlier stages. This is so because from the perspective of the participants, who act upon and react to what has happened so far, the endpoint is not available. Even the event itself is an event-in-the-making, where the very nature of the “event” is at stake (Roth 2014a).
one might think. But, see, I don’t know the video. Nobody here ((graduate student audience)) knows what was before and what is after the instant described. In this situation we pretend. We come in there, into the conversation, and all we have is what we hear. This already gives us many clues about what is going on, what is presupposed, what people know or possibly know and what they possibly don’t know.

The person, the interviewer, we don’t know if it is a he or a she. Even that is not known. But there might be evidence in the text that allows us to eliminate this question. It could be a male or a female. Here we already have the answer. For Sherlock Holmes a smoking cigarette is a give-away, is an indicator. For me, Vicky is just another such indicator. But it does not tell us the whole story. We have to piece together the story by eliminating some alternatives and leaving others open. It could be that [the transcriber] sets us up, using a pseudonym. [The transcriber] could have said, I’m getting this to you [instructor]. And he is saying, “This is a woman and really it is a man. But at the moment we do not know. Some names, such as Taylor, we would not know if it was a boy or girl, a male or a female teacher. Vicky is female teacher. But we do not know. [The transcriber] might have said, “Oh I want to get [the instructor].” Right? So at the moment I take it in this way: “Okay, it could be in here.” But nowhere in my information have I brought in that it is a female teacher.

The instructor-analyst makes reference to a video he had shown, involving children in the construction of model buildings from straw, and where the graduate students had used concepts such as “power” to explain the relation that they were seeing. They suggested that everything in the group they watched was controlled by one of the children. Unbeknownst to the naïve analysts, the children themselves had described and experienced their relations of power very differently. This, therefore, served as an example for the problematic ways in which concepts may function—much like horoscopes that predispose their perusers to find confirmatory evidence in virtually every step of their lives.

The cigarette, the “indicator,” is the “hard” facts, incontrovertible results of the specific events that produced them, and documentary evidence of the type of phenomenon that is to be described. These facts are the data that are used in the modification of the hypotheses about the nature of the phenomenon of interest.

Some students in these classes do indeed attempt to make the instructor-analyst’s task more difficult by choosing difficult situations—such as where the same person speaks to different audiences, where some individuals talk very little, or where translation between languages may be one of the characteristics of the situation.

This is a reminder to not explain relations based on a-priori characterizations, such as the fact that Vicky (likely) is a female, but to analyze relations first and to work out anything that is itself material or instrument in the production of gender differences. If we were to begin with gender, then it is easy to identify differences between any two relations one involving a boy the other a girl and to suggest. However, we do not know whether these differences are coincidental, that is, particular to the relation or whether these are invariants that hold for all girls and all boys.
transcriber] knows [the gender], because he looked at it. I would refrain from saying something definitively. My most likely hypothesis is that it is a female.

The same earlier, when you said “Little girl.” When we already put together three pieces of information that we may or may not have found out whether these are three little girls. And we have a teacher but the teacher and the interviewer, we probably would have figured out very quickly the gender. If we could from just by looking at these transcripts without knowing the gender of these people, figure out the gender, that tells us that there is a gender issue, that something in this discourse is different for different genders. And that is actually a much stronger for me much stronger evidence about what our socialization does. By putting boys and girls on very different trajectories then all the discourse about gender that people have.

But you do that only if your research is based on a gender, based on evaluating the differences in gender.

29 I much admire V. Walkerdine’s work on gender and mathematics (e.g. Walkerdine 1998). But I do find in her analyses frequently—though much less frequently than in the work of much of mathematics (or science) education research on gender—readings in which the differences between gender are already accepted and theoretical concepts come to be mobilized for the purpose of doing so.

Charlotte constantly asks questions which her mother answers patiently and explicitly. Throughout the afternoon, she engages Charlotte in essentially domestic tasks—some commonplace, like helping mummy put the shopping away; others involving making things. Charlotte helps her mother to make muesli, and this becomes a site for number work. Unlike Penny’s mother, she does not have to resist her daughter’s demands because she immediately and consistently sets up what she must get done alongside strategies for amusing her. This form of mixing domestic work and play forms a particular mode of regulation, a way of disciplining the child. (Walkerdine 1998, p. 48)

Here, regulation, disciplining (Foucault 1975), and domestic work become explanatory terms rather than being the end result of deconstructive readings. We do not see that disciplining has a double function, that it not only means imposition of an exterior will but also the development of the practices of a discipline. Moreover, we do not see in parallel the work involving boys. In particular, the differential mode of production of mathematics is already assumed rather than shown before showing that these modes exhibit differences that are associated with gender differences. That is, I personally would analyze relations of people and categorize these. If it turned out that one type of relation only involved girls whereas another type of relations only involved boys, then there would be strong evidence for the production of gender differences. The relations themselves are the source of these differences. This approach also would be more consistent with the theoretical approach of L. S. Vygotsky, who suggested that every higher psychological function specifically and personality more generally is the result of the ensemble of societal relations that a person has participated in (Vygotskij 2005). If the societal relations are the sites of the production of higher psychological functions and of personality, then we need to analyze relations and show the work accomplished and the results achieved. We must not use the results, gender differences, and then
If I wanted to see that there is something about gender, then I would love for someone, for a research person, to provide me [a transcription] so that I do not know whether it is a boy or a girl. And if I can figure out from the discourse that there are differences, that would be much stronger evidence about gender differences, if I can identify it without knowing beforehand. It is very easy to say, okay here there is a teacher and a girl, and here are a teacher and a boy. There are differences; and these differences are because the participants are of different gender. That for me is a weak argument. If you give me a transcript and if I can, just by seeing differences in discourse, pick out all the boys and all the girls in this class, then there would be strong evidence that there is a bias, that there is a difference in which the different genders are addressed. Because if I can identify gender without even seeing these people, that is strong evidence that there is a difference in this conversation, in the way these people relate. And if this is such, then that is much stronger evidence for making a hypothesis about how discourse, how interactions, not just discourse but interaction, forms of interaction put people, boys and girls, on very different trajectories.

Point to any relation and say that it shows the difference in gender. In the philosophy of science, such a move of going from gender to differences in relation is called using the explanandum (that which is to be explained) as the explanans (that which is supposed to do the explaining). The relations produce gender and gender differences not the other way around.

Readers interested in gender issues might find it an interesting and rewarding exercise to analyze transcriptions without knowing beforehand the gender of the speakers or even the nature of the speaker (e.g. student or teacher). They would then be focusing on the relational work that comes to be accomplished, which may or may not be associated with sex differences. With a little more experience, the analyst may then conduct such impartial analyses even when confronted with the actual videotape. They may then be attuned to the fact that not only institutionally designated students are learning while talking to institutionally designated teachers. Instead, more symmetrical analyses become possible in this approach, where we can see how teachers learn while teaching and where students teach while learning (Roth and Radford 2010). Vygotsky’s zone of proximal development may then be shown to be the worksite for the learning of all participants. Far too many, if not all studies of mathematics or science classrooms are blind to teacher learning that occurs while the individuals engage with their students.

It constitutes in fact a form of confirmation bias, which not only characterizes many everyday practices of laypeople but also scientific research (Couzin-Frankel 2013; Nickerson 1998).

The transcription analyzed here was produced from a video on SchoolsWorld.tv. The video is part of a series on “secondary assessment—assessment for learning,” here addressing questions and answers. There are three levels of talk: Vicki teaching mathematics, Vicki talking about how she is teaching, and a narrator providing voice-over comments. The description of the video reads:

In this programme we visit Valentine’s High School in Ilford where the teaching and learning group are spearheading a whole-school strategy for Assessment for Learning.
At an evening meeting we see teachers brainstorming ideas and offering feedback on experimental work undertaken in their own departments. Science teacher Richard Griffin uses Key Questions with Year 9, but also grapples with more complex ways of questioning pupils to deepen their understanding.

Maths teacher Vicky Inman combines “Traffic Lights” and “No Hands Up” techniques with her Year 9 class. She comments on their value as tools for inclusion in a subject that traditionally alienates many pupils.

In addition, Vicky discusses the excitement of getting positive responses from students rather than the usual sea of blank faces.

Back at the meeting, we hear views on the deeper meaning of AFL that lies beneath the surface “ticklist” of strategies.

(http://www.schoolsworld.tv/node/908?terms=719)

Just as the analyst hypothesizes in the opening lines of this chapter, the graduate student had transcribed a fragment from the middle of the video rather than providing the transcription of the beginning (at about 7:15 of the video provided at the website indicated). Such a beginning, because it is a beginning, would have provided even more clues to allow the audience to make sense of what the video is about and how to hear what is coming.

In turn 01, Vicky is teaching students (Fig. 3.2a); in turn 02, she is talking about her teaching, initially hearable as a voice-over to her class and then full face-on to the camera in an interview situation (Fig. 3.2b). In turns 03 and 05, we are back in the classroom, whereas in turn 04 we can hear a female speaker in voice-over mode while Vicky’s teaching is continuing. Turn 06 again begins in voice-over mode while viewers can see her classroom and then turns to the interview mode.

Fig. 3.2  a. Vicky talking about her teaching. b. Vicki teaching mathematics in her classroom. (Source: http://www.schoolsworld.tv/node/908?terms=719)