

The Practical Work of <Coding>: An Ethnomethodological Inquiry

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Abstract While previous methodological studies have suggested that coding is a useful technique for analyzing qualitative data, there is a stark lack of discussion about the incongruities that inevitably arise as researchers accomplish the actual work of coding. This article explores the complexities of the coding process, and how incongruities get resolved as researchers accomplish the practical work of coding. Three primary themes emerged from this study: <creating agreement>, <maintaining the integrity of the codes>, and <completing the work>. These three activities are grounded in the naturally evolving work of coding, and are rendered visible through an ethnomethodological investigation into this work.

Keywords Coding · Ethnomethodology · Interview analysis · Qualitative methods

Introduction

This article focuses on the practical work associated with coding interview transcripts, a common qualitative data analysis technique. We found that, during the process of coding, the incongruities and disagreements we had about what actual interviewee's words meant revealed details about the critical elements of qualitative data analysis. In other words, we found ourselves struggling to understand how researchers turn an interview transcript into a research object. Although

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data interpretation and procedures associated with qualitative data analysis have been extensively discussed (Altheide & Johnson, 1994; Guba, 1981; King, Keohane, & Verba, 1994; Peshkin, 2000), we found that the specific process of coding has not been carefully examined or fully described. We feel that this topic, a “black box” of qualitative data analysis, deserves greater attention.

Qualitative research methods

In-depth interviewing is a staple qualitative research method in academic fields such as sociology and communication. Although a triangulation of methods is preferred and often employed in many research projects, qualitative researchers often rely extensively on in-depth interviews to provide a detailed understanding of the respondents’ perspectives, values, and meanings that shape their everyday activities (Creswell, 1994; Fontana & Frey, 1994; Goetz & LeCompte, 1984). In-depth interviewing offers the ability to collect a wealth of rich detailed data, the capacity to make sincere human connections, and the opportunity to understand participants’ experience in their own language and setting. In combination with strong theoretical models, interviews can be used in a variety of settings to explore, describe, and explain variance in observed phenomena (Bogdan & Biklin, 1982; Creswell, 1998; Goetz & LeCompte, 1984; Guba & Lincoln, 1981; Lincoln, 2001; Yin, 2003a, b). There exist, however, limitations and weaknesses in using interviewing methods including small sample size, biased interviewee selection, and the possibility of interviewer bias. Further, depending on the interview location, the context of the interview setting may render data less rich than if subjects were captured in naturally occurring social activities (Lindlof & Taylor, 2002; Marshall & Rossman, 1999; Wimmer & Dominick, 2003).

Although the literature on qualitative methodology and in-depth interviewing extensively discusses these limitations as well as the procedural steps of coding data (Anfara, Brown, & Mangione, 2002; Constan, 1992; Marshall & Rossman, 1999; Miles & Huberman, 1994), there is scant mention of the practical work involved with analyzing interviews scientifically. Typically interviews are transcribed and then analyzed via a coding process. This involves researchers in creating a set of codes (which are descriptive labels), and applying the codes to selected segments of text. Sometimes these codes are constructed before the data are analyzed, although many scholars recommend a technique whereby codes emerge from transcript review (Anfara, Brown, & Mangione, 2002; Marshall & Rossman, 1999; Patton, 1990). The process by which any particular data are analyzed will vary based on constraints inherent with sampling, as well as strategic decisions made by researchers (Anfara, Brown, & Mangione, 2002; Creswell, 2002; Marshall & Rossman, 1999; Miles & Huberman, 1994; Patton, 1990; Tesch, 1990).

While numerous sourcebooks that discuss qualitative data analysis offer suggestions for analysis procedures, a review of studies that utilize qualitative methods, particularly interviewing, reveals a stark absence of any revelation regarding exactly *how* the interview data were analyzed. Most “methods” sections of such studies include a description of the participants, settings, recruitment procedures, interview process, and the importance of theoretical intersections and contributions to the methods. However, even work that is detailed in its explication of this process seems to overlook the *real work* that is involved in making sense of interview data. Further, admissions about disagreement and ambiguities regarding data interpretation are

inconclusive and somewhat vague. It is the incongruities themselves, made visible by practices associated with achieving inter-coder agreement, which reveal the work and negotiation that coders personally and collaboratively accomplish.

A study by Walzer and Oles (2003) examining post-marital identities points to just these incongruities, and how vaguely they are defined in research:

Yet as we analyzed our data, we had difficulty with some incongruities between people's narratives and their post-marital identities, and *found ourselves disagreeing with each other about how to characterize some of the people we interviewed ...* once we started to look directly for discrepancies, we found that at least half of the accounts in our sample had them—either because the rhetoric of the narrative did not match up, or because we literally could not figure out how to categorize people.
(Walzer & Oles, 2003: 338, italics added)

While this testimony does not admit *how* such vagaries may be reconciled either between researchers or with professional standards for reliability, it does at least admit the interpretive problem encountered in interview-based research. How does one code without manipulating a speaker's intended meaning to the point that the process of manipulation renders the researcher's understanding inaccurate? Or, more succinctly, how does one learn and know how to qualify or characterize what someone is saying in a way that furthers the research interests, while remaining faithful to what is actually being said? This is a methodological quandary.

Such characterization or coding of subjects' remarks is central to the interpretive work qualitative researchers must accomplish to make sense of data. Our goal as researchers is not to avoid such interpretations, but instead to be reflective and understand how this process may affect our work. This concern for a reflexive understanding of the process of coding interviews is what led us to this project: an ethnomethodological inquiry into the practical work of <coding interviews>.¹

Ethnomethodology and this project

Ethnomethodology involves the study of the mundane details of interaction, and how members endogenously, *in situ* create and maintain social order to accomplish a task at hand (Garfinkel, 2002): in this instance, the local, *in situ* work performed by coders to turn an interview transcript into a research object. What types of "incongruities" arise in the work of coding? How are these incongruities worked out in a way that preserves the integrity of what interviewees actually tell researchers, while also satisfying the researcher's need for comparative analysis? Authors' presentations of their work suggest an illusory smooth research process without complications that culminates tidily into an article. However, the research process is never this clean: mistakes, snags, and "incongruities" occur all along the way to the completed product. It is just these problems and incongruities that are fascinating and edifying for researchers and the research process, for these problems lead to disagreement and reflective, critical moments wherein we, as researchers, have to

¹ Garfinkel (2002) uses < > to indicate a bracketing of a phenomenon for inquiry, similar to the phenomenologist's bracketing of a concept for analysis. Such brackets denote the necessity of looking at a phenomenon rigorously, analytically, and *freshly* to discover what it is we do to construct it, and what kind of entity the phenomenon is.

think carefully about the research process. An ethnomethodological approach is uniquely suited to discover how qualitative researchers go about working out the problems associated with the practice of <coding interviews>.

Being an ethnomethodological venture, this project is not concerned with rectifying the phenomena under study with professional, formal analytic standards of reliability. Instead, we exercise an indifference to these standards, and seek to describe the process for what it is: a local, endogenous, contingent activity collaborated between actors. The extent to which such practices conform to professional standards of reliability is another matter, and cannot be taken up in an ethnomethodological fashion. This is not to say that how coders resolve interpretative disagreements across cases is unimportant, nor that guidelines for such practices should remain obscure. Establishing such guidelines simply constitutes a fundamentally different project than the one accomplished here.

Materials and methods

The interviews used for this investigation are part of a larger program evaluation study designed and implemented by two of the coauthors (Lauren Lindstrom and Brandon Olszewski). That evaluation project examined a particular community college program that serves students with disabilities from various state agencies (for more information, see Flannery, K. B., Yovanoff, P., Benz, M. R., & McGrath-Kato, M. submitted for publication; McGrath-Kato, Nulty, Olszewski, Doolittle, & Flannery, 2006). Personnel from these agencies work in partnership with community college staff to develop effective training programs for students. Aspects of the program and the partnership were the phenomena of interest for that evaluation. For that project, Lindstrom and Olszewski wrote the interview questions, conducted the interviewing, developed the codes, and analyzed the data.

Interview questions were designed to help the researchers gather information about the community college program and the partnership. Interviews were transcribed and then analyzed using a coding process (Miles & Huberman, 1994). A set of basic descriptive codes was developed prior to conducting the interviews. However, after an initial review of the transcripts, Lindstrom and Olszewski revised the codes based on key themes and concepts that were present in the data. The descriptive codes were organized into six main categories: (1) Features of the partnership at local sites, (2) Stages of program development, (3) Contextual variables (such as community college policies), (4) Student characteristics, (5) Pattern of services, and (6) Interagency collaboration. These six broad categories each contained a set of sequentially numbered individual codes. For example, within category five our specific codes included: 5.1: screening, referral and orientation, 5.2: public relations and marketing, 5.3: community college instructional services, 5.4: employment site services, and 5.5: campus support services.

Once this evaluation was complete, Olszewski and Deborah Macey suggested an ethnomethodological study of the coding portion of that project. These two authors were interested only in the coding process and how coders resolved interpretive discrepancies. To discover these phenomena, Olszewski and Macey re-coded the

original transcripts, videotaped the coding process, and using Final Cut Pro, analyzed² the tapes in order to examine the work of coding. Our analysis was strictly inductive; there were no pre-conceived hypotheses regarding what we would find. In a sense, ironically, our analysis resembled a loose, inductive coding of the coding process: a meta-coding of sorts.

For the purposes of this article, the term “videotape” refers to the video of Olszewski and Macey coding the interview transcripts associated with the completed evaluation project. This videotape is our data: our analysis of it revealed the findings we report here. There are two different transcripts referred to in this article: the original interview transcripts we actually coded, and the transcribed rendering of the videotaped process of coding. The term “transcript” refers to the original interview transcripts we coded; the term “EM video transcript” refers to the transcription of our coding work captured on video. Dialogue between Olszewski and Macey is taken from the video transcript.

Findings—the work of <Coding>

What is accomplished in coding interviews? That is, *just what* is accomplished by researchers in the process of applying codes to segments of text? While numerous details regarding local, *in situ* tools were noted for their efficacy in achieving order and guiding the work, we found three overarching practices that described the key elements of coding. These practices are: <creating agreement>, <maintaining the integrity of the codes>, and a decisive practice, though it may seem obvious, <completing the work>. These three goals were always displayed as interdependent, simultaneous, and compulsory: all three were ubiquitous throughout the videotape.

<Creating agreement> refers to the interpersonal work achieved by coders, who have to agree about how to code a portion of text before moving on to the next portion. This process often proceeds in the following way: one coder offers her account, such as “Ok...so I have a 3.1 picked up at 181,” (with 3.1 referring to a code and 181 referring to a line number on a transcript). The other coder will then offer his account; sometimes this will be a simple agreement, but usually there is some discrepancy which mandates some negotiation between the coders regarding how to code that particular portion of text: “I did it until 180, but I’m inclined to think I would want to stop it sooner.” Once an agreement is reached, the coders usually double-check by reiterating the negotiation to each other to ensure that the portion of text was adequately coded (since textual segments can be double coded, triple coded, etc.) before moving on to fresh text. This excerpt demonstrates how this negotiation takes place for a textual segment that is double coded (the same portion of text receives both a “3.1” and a “5.5” code):

Olszewski (351)³—I did it until 180 but I’m inclined to think I would want to stop it sooner.

Macey (352)—I have it until 176 ... or maybe even 175 ... 3.1, 3.1.

² Our analysis was strictly inductive in the sense that we went to the tapes with no hypotheses or pre-conceived notions of what we would find. Instead, we watched the tapes together many times until interesting things emerged via our viewing. These things formed the basic outline of this article, and this article is a discussion about those things we noticed.

³ This line number refers to the “EM video transcript” where Olszewski and Macey were coding interviews for the ethnomethodology portion of this project.

- Olszewski (353)—Yeah, I want to stop it...at 175.
 Macey (354)— ... or 173, “Until some student wants her money back” ... - because this is financial.
 Olszewski (355)—Yeah, I’m with you. They’re more talking about financial aid and not really the program.
 Macey (356)—Alright.
 Olszewski (357)—Ok.
 Macey (358)—So 173 is where we’re cutting off 3.1?
 Olszewski (359)—3.1.
 Macey (360)—And then we still have 5.5 ...
 Olszewski (361)—5.5 ...
 Macey (362)— ... running all the way through to 180.
 Olszewski (363)—I have it going through the next page.
 Macey (364)—Actually, so do I.
 Olszewski (365)—Ok.

At times, this negotiation goes relatively smoothly (as in the example above), and at times it requires significant deliberation.⁴

The negotiation process is central to coders’ responsibility for what we call *<the integrity of the codes>*. While agreement facilitates the goal of completion (and moving on through the work), it cannot be premature; coders must make sure that their interpretations are as honest and accurate as possible. During negotiation, coders scan through the transcript in search of proof for justification or negation of a particular code. This process is captured most saliently on tape as the camera documents coders, with their eyes glued to transcripts, searching for why they coded something the way they did:

- Macey (367)—Yeah I do ... but I have a 3.1 picked up at 181.
 Olszewski (368)—Ok, how come?

This direct challenge from Olszewski merits a period of silent scanning where Macey and Olszewski retrospectively look for justification for Macey’s application of 3.1. After nine to ten seconds of silent scanning, conversation resumes and an agreement is reached (the proposed 3.1 code is dropped) by way of discussion regarding general coding guidelines that are facilitating the coding practice (these guidelines will be taken up in detail later).

While agreement and integrity are at the heart of honest coding, *<completing the work>* (getting through the transcript) is also of paramount importance because, as with all research, one has to get the job done. However, “getting through the transcript” can only be done in a way that satisfies both of the above requirements: those of agreement between coders themselves (the negotiation process), and also between the codes and the transcripts (the integrity of the codes and the coders’ responsibility to the honest application of the codes). The details of how these three goals are simultaneously, interdependently accomplished constitute the remainder of this article.

⁴ Two coders were involved with this study, making the facilitation of agreement easier than if more coders were involved. While we do not address the issue of three or more people coding in this work, it is certainly an interesting topic that deserves attention in line with other important issues raised in this paper.

Before proceeding to the selected segments, two more items are worth mentioning. Physical actions caught on tape are indicative of different aspects of the coding process. Coding is an activity whereby portions of text are delineated and indicated in margins with pencil. When a change is to be made, an eraser is used to remove the old code, and a new code is entered. During negotiation sometimes an eraser is brought out, the code is changed, and the coders happily move on. However, sometimes an eraser is brought out, but coders continue to look for something else in that portion of text, re-affirming their commitment to the integrity of the codes. The tapping of a pencil or other non-verbal cues such as “hmmm” often indicates that the coders are reflecting about the fit of certain codes. Also, coders look at each other’s transcripts in order to get an idea of what is going on. For example, during the second clip when the coders begin work on the second transcript, Olszewski immediately looks at Macey’s script to get a feel for how they will begin. Noticing a stark discrepancy, he mutters, “So ... off to a rocky start” to show that he has seen that the two accounts already don’t match up.

Finally, something should be said about the unique adequacy requirement⁵ for coders. Olszewski and Macey pioneered the ethnomethodological portion of this project although Macey was completely unfamiliar with the original evaluation, the interviews, and the codes. Because the programs, agencies, and contexts involved with the original project are complicated, several meetings were necessary to prepare Macey to make intelligible sense of the transcripts since she was not vulgarly competent in the local production surrounding the original project. This unique adequacy requirement, as indicated by Garfinkel (2002) in his study of the order of a college chemistry class, is necessary to make good, accurate, adequate sense of the local situation, and implies that for interview-based studies to be reliable, researchers who are centrally involved with the project should do all of the design, implementation, and analysis that the research project requires. This implies that doling out significant portions of the work to persons external to and unfamiliar with the project may significantly and detrimentally impact the accuracy and strength of the findings.

Reviewing the video tapes: what does coding look like?

In this section we explore three separate episodes or segments of videotaped coding. Each of these segments demonstrates different types of techniques and work that are produced and implemented by coders in order to accomplish the necessary tasks. These particular segments were selected because they display a set of diverse techniques that are particularly interesting in relation to the creation of agreement between coders. Within each segment, we describe how the practical art of coding gets accomplished, including what guidelines operate to facilitate this process. These guidelines are malleable, interpretive, and emerging, and are thus more like advisories than laws: they are not definitive, yet they do have a ubiquitous impact

⁵ Garfinkel (2002: 175) discusses the unique adequacy requirement as referring to a “vulgar competence” that those who do the work (of coding, understanding a chemistry lecture, or even crossing the street) have regarding a particular subject. This suggests that people not fluent with how one actually accomplishes the phenomenon under study face a barrier to really understanding the phenomenon. This barrier, which exists for the subjects and for the researchers, should be addressed when thinking about one’s research and the research process.

throughout the work. Further, they are reflexive in the sense that once they are uttered and understood, their influence seems to extend both backwards and forwards throughout time and text, forcing coders to revise their own interpretations of the text. Because of the presence of these guidelines, the coders' understandings of the transcripts may change significantly throughout the coding process. While the guidelines by which the codes are to be applied seem to be present at the beginning, the tapes reveal how their invocation, alteration, and invention are accomplished by the actual coders in the process of doing the work, and not stipulated by either outside agents or *a priori* guidelines.

Segment 1—"How come?" and the 4.X Rule"

Agreement and challenge

We begin our analysis with a segment entitled "'How come?' and the 4.X rule." The beginning of this passage demonstrates a fairly simple agreement between the coders as they decide about when to stop a particular code. Throughout the video, the coders work through the interview transcripts both by code and by line number to ensure comprehensive coverage of each section of text. When a paragraph has been appropriately coded with one code (such as a 5.4), coders cannot move on to the next paragraph until they are sure that no additional codes apply to that particular section. They must continue to scan that paragraph to make sure other codes are not appropriate for the selection, since some portions of text may require double, triple, or even quadruple coding. The transcripts are coded by line numbers and in "chunks": anywhere from two lines to whole pages may bear a common code. Coders learn to communicate easily about the transcripts, citing both code numbers (such as "3.1") and line numbers (such as "173") fluidly. The following excerpt (which was also presented earlier) shows how this talk is accomplished:

- Macey (359)—So 173 is where we're cutting off 3.1?
 Olszewski (360)—3.1.
 Macey (361)—And then we still have 5.5?
 Olszewski (362)—5.5 ...
 Macey (363)—Running all the way through to 180?
 Olszewski (364)—I have it going through the next page.
 Macey (365)—Actually so do I.
 Olszewski (366)—Ok.

After this agreement is finalized, there is a very quick movement forward to the next line and next code. However, some discrepancy occurs:

- Macey (367)—...Yeah I do...but I have a 3.1 picked up at 181.
 Olszewski (368)—Ok, how come?

Here there is a direct challenge from Olszewski regarding Macey's decision. Both coders then carefully look through the codes and the text to develop the proper reasoning for marking the particular section. Macey offers an explanation, "I think I was coding the question," citing her understanding of a guideline offered earlier. As she talks, she goes back to the text, disconfirms her "3.1" characterization, and agrees in line 378 (of the EM video transcript) that, "This is still all financial aid," thus suggesting that the code 3.1 is inappropriate. While agreement is the goal of

coders' activity, integrity to the codes and coders' reasoning about the codes is also important. These two goals often facilitate each other, but this is not always necessarily the case. Here, Macey continues to offer an explanation for why she had originally thought 3.1 was appropriate: "I think ... the only thing I can think of is that's personal attention ... it's individualized attention; that's the only thing I can think of." Olszewski then asserts a new guideline when he states in line 382, "Yeah, I guess I feel like it's not big enough to pick up though."

Discovering guidelines—"Coding the question" and what to pick up

Two guidelines governing the coding process are in operation here. The first is excavated from Macey's assertion that "I think I was coding the question." This is a guideline that states that when a question is issued and the interviewee answers that question, then the question (spoken by an interviewer) is coded with the interviewee's response in order to provide context for the answer given. However, if the question is not answered, and the interviewee addresses something significantly different, the interviewer's question would not be coded with that answer, because it would not provide relevant information. In this selection, Macey attempts to invoke this guideline because she feels that the interviewee was asked something that would merit an answer about program features (code 3.1), but Macey discovers that this guideline is inappropriate for the text under consideration. Instead, the interviewee provides substantive information only about financial aid issues (code 5.5), and not about program features (code 3.1):

Macey (374)—And so it might be something in the answer that made me code that 3.1 ... (reading from transcripts) ... "I think we'll get more information as we go along but it's helpful to hear from you all what are the pieces you think make it work in general."

Olszewski (377)—Mhmm...

Macey (378)—...and (reading from transcripts) ... this is still all financial aid.

Olszewski (379)—Yeah, I'm picking all that up as just a 5.5.

After some discussion, code 3.1 is dropped, and an agreement is reached that 5.5 suffices as appropriate coding for that section of text.

The second guideline in operation here is that of whether or not something is "big enough to pick up." This practical rule refers to the interpretive judgment a coder must make *in situ* in order to determine if something mentioned in the text is substantial enough to officially "pick up" with a code, or if the reference is insignificant. Thus, although something about "personal attention" (coded with a 3.1) may be implied or brought up in the transcript, the reference to personal attention may not deserve a specific code because of its lack of substance.⁶ At this point, Macey and Olszewski search for a justification for Macey's proposed 3.1 label, but conclude that this particular section deserves only one code, that of 5.5:

Macey (378)—And ... (reading through the transcript for 25 seconds ... looking for 3.1) ... this is still all financial aid.

⁶ Later, this guideline of "not big enough to pick up" is addressed again, and this guideline gains further clarification during a discussion about a financial aid reference: "You see, this is the guideline, right? Is there a substantive chunk? Does this count as a substantive chunk of information about how financial aid is important?" (496–499)

Olszewski (379)—Yeah, I’m picking all that up as just a 5.5.

Macey (380)—I think the only thing I can think of is that’s personal attention ... it’s individualized attention ... that’s the only thing I can think of.

Olszewski (382)—Yeah, I guess I feel like it’s not big enough to pick up though.

Macey (383)—Ok.

At line 383, Macey confirms Olszewski’s assertion that only one code (5.5) is appropriate for the section (“Ok”), but then offers an explanation about her background to justify her coding of the particular section. From line 393–397, Macey explains:

Macey (393)—Ok ... umm ... but no 3.1. And I think, honestly ... I think that comes from working in admissions where it’s a big deal that we as admissions counselors work with our students and do financial aid and we consider that individualized attention. We don’t pass them off to financial aid until they’re a matriculated student and so that’s where I think I’m getting that.

While not completely relevant to the project at hand, Macey offers this explanation in an attempt to validate her use of code 3.1. While this characterization of the in-the-course-of-work of admissions counselors does not change the code ascribed to the text, it does tell of Macey’s experience with college admissions, which contributes to her ability to become vulgarly competent in the local production studied as part of the original community college evaluation project.

The discovery of a “rule”

After the explanation is made and an agreement is reached, Macey moves quickly to the next code. From line 398 to 400, Macey offers an account (a code and her reasoning for that code) when she states, “But also in here at 187 I have a 3.4 or a 4.1, um ... and I have that and this is why: ‘Because so many of them have limited resources.’” Olszewski (401) agrees, “Hmmm ... yes,” and Macey continues reading from the transcript to justify her coding:

Macey (402)—“And it’s not only that it can help them pay for their tuition but maybe help them with some additional costs whether it’s transportation, or childcare, or something ... um ... while they’re in school so ... because ... they just don’t know that sometimes that exists for them.” So that, to me, was a feature of the student, right?

Olszewski agrees with Macey that this section of the transcript is about students and student characteristics; however, he disagrees with her about the particular codes used. In contrast to Macey’s proposed 4.1, Olszewski suggests a double coding of 3.4 and 3.5. The remainder of this episode demonstrates how the two coders come to an agreement via an explanation, by Olszewski, regarding how 4.1 and the other “4” codes are intended to be used (this is referred to as the 4.X rule):

Olszewski (408)—Yeah ... I would pick that up as 3.4 and maybe a 3.4/3.5 because 3.4 is student characteristics, but [agency]-referred and, so ... remember how we were talking about how there are other students? And ... let’s see ... are they talking about ... see, from the previous discussion, it’s not certain they’re talking about students that come from that agency.

Macey (413)—Ok.

Olszewski (414)—They're just talking about the students they serve in general so I would code it as a 3.4 and 3.5. I wouldn't code it as a four—anything because these are more for the case study interviews which ... we didn't really get into that.

Macey (417)—Ok.

Olszewski (418)—These codes were kind of designed for something else.

Macey (419)—Ok.

Olszewski (420)—We pick it up somewhere ... but not a lot.

Macey (421)—I used a lot of fours.

Olszewski (422)—Ok, then we'll get into it. I should have said something about that before.

This passage demonstrates how a lack of explanation regarding a particular rule (in this instance, the rule about the appropriate uses of section 4 codes) can create incongruities between coders' analysis of a transcript when one coder knows something that the other coder does not. Unlike the guidelines that are more endogenously discovered as coders accomplish their work, this rule exists as a formal, *a priori* law that was established not during the work of coding, but when the codes were first designed.

This distinction between “guidelines” and “rules” as they are described in this way is important. Not all the instructions for practice can be, nor *must be*, formulated up front. Some must be discovered while one is accomplishing the actual work: these we refer to as guidelines. Likewise, some more official “rules” are established at the project's outset, steer the project in one way or another, and remain fairly unaltered throughout the inquiry: these we refer to as rules. Although several meetings took place in which Olszewski and Macey discussed the ethnomethodology portion of this project, the original project, and the many programs and people involved with the original project, some guidelines and rules associated with coding were not addressed until the actual, *in situ* work of coding began. This is not necessarily detrimental. Unclarified guidelines may not lay dormant though, and, as we will see in segment two, the discovery of a rule at one time serves to help the two coders resolve other similar discrepancies (related to section 4 codes) later during their work.

This passage also illustrates how negotiation is accomplished when the reasoning about and understanding of some text is the same, but the proposed codes differ. Unlike in the beginning of this segment—when the coders disagreed about what a portion of text was actually referring to—here, coders agree about what the text is talking about, but disagree about how exactly to code it. To resolve this dilemma, Olszewski asserts a rule (that pertains to the use of section four codes) regarding the proper use of the codes, a rule that was previously agreed upon by Lindstrom and Olszewski. Unaware of its existence and applicability, Macey needed an explanation of the code and the rule in order to offer her agreement. In line with the three overarching goals of coding work, this particular negotiation serves as a faithful implementation of the codes, and facilitates both agreement between coders, and the effort to move forward and complete the work.

Segment 2—“Earlier Rule and Features”

The beginning of this passage illustrates a quick agreement and subsequent advancement through the transcript:

- Macey (968)—Yeah I would go maybe through 367?
 Olszewski (969)—Let's see...and then what at 368? (reading through transcript for 10 seconds)
 Macey (970)—Mhmm ... I say stop it at 367.
 Olszewski (971)—Me too.
 Macey (972)—And leave it as 5.5 though.
 Olszewski (973)—Mhmm ... yeah.
 Macey (974)—Ok now the next section which I think starts at 368, or 367 ... I would say 367 ... oh, it's already there: it's 3.4.
 Olszewski (976)—3.4 and 3.5.
 Macey (977)—Yeah ... but I didn't know to code 3.4 and 3.5 so I only coded 3.4 ... ok so this is 3.5 as well because 3.5 then is for all students and 3.4 is for specific students...and I have that coded through 374.
 Olszewski (980)—Mhmm.
 Macey (981)—Ok and ... I have a 4.1 over here too.
 Olszewski (982)—We'll probably dump the 4.1 ...
 Macey (983)—Ok.
 Olszewski (984)—Because we've already got 3.4s and 3.5s here.
 Macey (985)—Oh that's right ... ok ... yeah the fours are about specific students and case studies.

Here, an agreement is easily reached in part due to a previously discussed rule about the use of section 4 codes, codes that Olszewski had previously informed Macey about (in segment one). Thus, the decision to “dump the 4.1” required little discussion on the part of coders as they move on to more text, and the discovery of a new, interesting guideline.

The question of exactly what to include or *how much* to code is one that requires *in situ* decisions and judgments on the part of the coders; there are no definitive guidelines for when to start and stop a code. In negotiating where to stop a segment coded 3.4, Olszewski comments that “Yeah, so we would just pick the whole thing up,” suggesting that, once coders have agreed that the text deserves a particular code, they should not be too conservative with applying the code and instead, should code in a way that preserves the contextual coherence of the comment. Thus, when coding a portion or “chunk” of text, coders must ensure that the chunk is (1) substantive enough to “pick up” as more than just a passing reference (this guideline is referred to in note six), and (2) coded adequately so as to include the context necessary to understand the reference: this adequate coding makes a passage “coherent.” The following passage highlights the importance of “picking the whole thing (chunk) up” in order to maintain the coherence of the transcript:

- Macey (986)—Ok, so 373 is where you cut off 3.4 and 3.5?
 Olszewski (987)—I ran it the whole way.
 Macey (988)—You ran it the whole way? (four second pause)
 Olszewski (989)—Because they're still talking about it at 376 ... “Sometimes they're dually enrolled” ... (mumbling through transcripts) ... yeah, and then at 380, “And the other thing that happens when students are already in training is we find out for some reason...”
 Macey (992)—I definitely have 3.4 coded for 381.
 Olszewski (993)—Yeah, so we would just pick the whole thing up.
 Macey (994)—Ok.

Olszewski (995)—So that it's, you know, coherent.

If Olszewski and Macey had not previously discussed this guideline of “picking the whole thing (substantive chunk) up,” it is unlikely Macey's acquiescence would have been attained as easily as it was in this case. This is another display of how guidelines discovered at one point in the work facilitate easier agreement at later times.

Collaborative discovery

Satisfied with their work on the previous section, the coders move on to new text. Olszewski inquires into whether or not Macey notices something “institutional” about what the transcripts say:

Olszewski (995)—So that it's coherent ... but I am wondering if there is anything institutionally that's going on here too, like in between 375 here and the end?

Macey (997)—I have 6.2.

Olszewski (998)—Ok ... (coders silently scan transcripts for 15 seconds)

Olszewski (999)—Are you saying maybe, like a 6.2 ... from 376 to 379?

Macey (1000)—I have from 374 to 380.

Olszewski (1001)—Ok ... yeah, same thing.

Macey (1002)—So ... because I have ... I have, “And so” ... I started it up there ... “And so.”

Olszewski (1003)—Uh huh.

Macey (1004)—And I went through, “And so that's the one way they're connected.”

Olszewski (1005)—Yeah, I'm with you.

This question accomplishes several things. First, it helps to keep the work moving, i.e., keep the coders moving through the transcript. Second, such open-ended questions encourage coders to closely and honestly look at the transcripts. This dedication to the integrity of the codes helps ensure that coders adequately and accurately code the text in ways that will help with data analysis, while still being faithful to what interviewees actually said (thus, avoiding a tyranny of codes).⁷

The fruitfulness of flexibility

Although it may be somewhat disconcerting to quantitative researchers, qualitative data analysis can afford a greater depth of understanding while being less concerned with exactitude. In the above segment, one may wonder how many lines end up coded with a 6.2: the four lines from 376 to 379, or the seven lines from 374 to 380? The discrepancy is casually and vaguely resolved with Olszewski's assertion that the two slightly different accounts are actually “the same thing.” Here, the exact line numbers are not the critical concern; instead what is of concern is reaching an agreement and moving through the transcript to address a new topic. This ambiguity suggests that, for better or for worse, certain standards regarding exactitude may be flexible. This flexibility is contingent upon the local exigencies pertaining to the

⁷ This tyranny resembles problems inherent to the formal analytic methods of mainstream social science (as described by Garfinkel, 2002), wherein particularities and haecceities of phenomena are disregarded in lieu of the scientist's penchant for a clean, snag-free research process.

work, so that coders may be more or less strict at different times pending on any number of factors, including the presence of other interesting phenomena in the data, the desire to conclude a tumultuous negotiation, or the feeling that minor disagreements are not worthy of much attention.

In this particular case, subsequent discussion suggests that the flexibility employed enabled coders to immediately discuss some interesting new phenomenon that they mutually and freshly co-discover:

Olszewski (1005)—Yeah, I'm with you. And the other thing I see is from 380 till the end ...

Macey (1006)—Mhmm.

Olszewski (1007)—It says, "Another thing that happens when students ..." I think they're saying...

Macey (1008)—[Program] features? (interjecting)

Olszewski (1009)—(Simultaneously with Macey's above interjection) I think this is a 3.1 (program features).

Olszewski (1011)—Yeah, totally ... and that takes us to the end.

Macey (1012)—Alright.

Here, both coders are closely reading the transcript as they move through it, and find together how a new code about "features" (3.1) is appropriate to the text. As Olszewski reads from the transcript, Macey glances at her coding key (which lists all the codes and their descriptions) to check on the number for the "features" code, at which time she responds to Olszewski's insinuation that a 3.1 is appropriate. This synchronous, mutual application of a code signifies an agreement that necessitates no further discussion; the coders move on.

Segment 3—"Rocky Start and Wrong Code"

This clip begins with Olszewski looking at Macey's copy of a new transcript and, upon noticing stark discrepancies in their coding, states, "Off to a rocky start." Macey immediately offers an account for the section, and Olszewski quickly recognizes that Macey is missing important information needed to understand what's going on in the transcript: Olszewski had forgot to tell Macey something important about what happened in this particular interview, something that would impact how one would code it. Fortunately, this discrepancy is easily resolved by Olszewski explaining to Macey what happened, and why it is important:

Olszewski (1041)—So...off to a rocky start.

Macey (1042)—I start 5.3.

Olszewski (1043)—5.3.

Macey (1044)—At uh ... 25 ... ok you don't have anything in the beginning.

Olszewski (1045)—Yeah, I know ... I have ...

Macey (1046)—I have underlined, "Critical to the development of the way the partnership looks today" ... but that's the question you're asking, so you're asking about development ... you're asking about what took place before.

Olszewski (1049)—Ok...actually, see ... and here's something important for you to know, I'm *not* asking about that. See how that says, um ... line fifteen, "So we're about to give you a couple of sheets here ..."

Macey (1052)—Ah ... that's right.

Olszewski (1053)—And then at line 24 he says, “It looks alright to me.”

Macey (1054)—Yeah.

Olszewski (1055)—What happened is ... we had a timeline of things that had happened and then a little sheet that said, “These are some of the things about the program” and we gave them to him ... and so I said, “Can you look over it and tell us if you notice anything critical to the development of the way the partnership looks today that’s not on there.”

Macey (1059)—Yeah ... right, right, right.

At this point, the discrepancy is resolved; however, coders continue to discuss this issue until they move on to a new section of the transcript, and a new, puzzling disagreement.

Macey begins the work on the new section by offering an account of “5.3.” Olszewski questions her account, and then offers a counter-account with some detailed explanation that lasts almost a full minute. During Olszewski’s commentary, Macey focuses on why she would have coded the section as she did in the first place, because it seems now that her code of 5.3 doesn’t make logical sense. As Macey scans the transcript, she realizes that she miscoded the section, and had meant to code it 5.2; Macey begins looking at the codes sheet, signifying her realization of this mistake, and then verbalizes her self-acknowledged error. At that point Olszewski collaboratively realizes that 5.2, in addition to a code originally applied by him (1.5), is appropriate for that section:

Macey (1100)—I think I meant ... I don’t think I meant 5.3 ... I think I meant 5.2.

Olszewski (1101)—Ahhh!

Macey (1102)—I think I meant 5.2, and I’m sticking to it.

Olszewski (1103)—(Reading from the transcript) “I don’t know if promote is the right word...”

Macey (1104)—But I say ... I say even farther up, “Because I think my role is to enforce,” and I have enforce underlined; “I think that’s a bad word ... that it’s a viable option.” So my understanding to what he was saying here is that ... so maybe it is a 1.5, but to me it was really ... he’s trying to promote this program as a viable option ...

Olszewski (1108)—Uh huh.

Macey (1109)—To their consumers ... so that’s why I have it. And I have the numbers messed up it’s; I meant 5.2 because I couldn’t figure out for the life of me why I had ...

Olszewski (1111)—I’m with you. I’m thinking we code that as a 1.5 and 5.2

Macey (1112)—I’m ok with that.

Olszewski (1113)—Ok.

This episode is an excellent example of Macey’s commitment to the integrity of the codes. When a discrepancy occurs, seeking resolution between contrasting accounts (reaching agreement) is not necessarily sufficient: figuring out why one originally coded something a certain way is of critical importance to ensure that each coder provides input, and that the coders do as good a job as possible in their work. Turning a transcript into a research object requires a lot of local work and negotiation on the part of coders, and negotiating agreement is a joint effort. However, for the coding to be honest, both partners need to be open to amending their previous interpretations of the text.

This segment concludes with some negotiation and an agreement about a stopping point for more text coded “5.2,” a quick agreement on a small piece of text coded “6.2,” and agreement on where another code, “1.5,” is cut off. This section demonstrates how simply and easily negotiation works when the two coders independently code something the same:

- Olszewski (1180)—I wouldn’t go with a 2.5, but I would go with 5.2.
 Macey (1181)—I’ll go with 5.2 all the way to 59?
 Olszewski (1182)—59 ... ok.
 Macey (1183)—So, 5.2 ... and I also have it coded as 6.2.
 Olszewski (1184)—6.2 ... I have a little bit of 6.2 ... I have from 56–59 because they’re talking about their relationship with the staff at the local community college.
 Macey (1186)—Ok ... Where’d you cut off the 1.5?
 Olszewski (1187)—Uh, at line ...
 Olszewski & Macey (together, 1188)—51.
 Olszewski (1189)—Yeah, I’m with you.

In such cases when some text is coded the same by both coders, little to no justification is necessary for why things were coded that particular way. Instead, because both coders marked the text the same, it is assumed that the reasoning is sound even though the congruence of their thinking is left unexamined, and no discussion is necessary. This demonstrates an assumption in coding that until something goes wrong, everything is presumed to be correct. However, as is evident, there are many disagreements that inevitably arise during their work, and coders must continually negotiate with each other, interpret the text, and re-examine the codes in order to complete their work competently.

Conclusions

In spite of the many sourcebooks for conducting qualitative research (Creswell, 2002; Lindlof & Taylor, 2002; Marshall & Rossman, 1999; Merriam, 1998; Miles & Huberman, 1994; Patton, 1990) and recommendations for making qualitative analysis more transparent, public, and responsible (Anfara, Brown, & Mangione, 2002; Conostas, 1992), the practical work of coding interview transcripts has rarely been described.

An exhaustive list of coding guidelines, rules, and techniques would not have constituted an ethnomethodological study of <coding>. Instead, we remained as close as we could to the phenomena in order to honestly examine the work we do to accomplish our tasks as coders. We discovered that agreement, integrity, and progress guided the entire activity. Further, a number of *ad hoc* guidelines helped us complete our work as coders: to get the work done, we had to create, preserve, and interpret a number of guidelines regarding coding in an *in situ* fashion in order to competently analyze the data.

What is also noteworthy about these guidelines is how one cannot code strictly to rule: coding in this manner may render the research object unwieldy or ambiguous. Instead, coding guidelines must be interpreted and applied in ways that make the research object more serviceable and accessible: guidelines are present to assist the researcher, not to determine his or her activity. This suggests

that coding guidelines exist in order to make the work of qualitative data analysis more fruitful and lucid, and when coding incongruities occur, coders must keep in mind that the guidelines themselves may require modification in order to generate a quality research object that simultaneously preserves the integrity of the interviewed subjects, while also meeting the needs of the researcher. This openness and reflexivity on the part of coders is integral to making the process of interpretation effective (Lieberman, 1999), and is ubiquitous throughout the dialogue.

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