Grounded Theory Methods and Qualitative Family Research

There is an irony—perhaps a paradox—here: that a methodology that is based on "interpretation" should itself prove so hard to interpret. (Dey, 1999, p. 23)

Among the different qualitative approaches that may be relied upon in family theorizing, grounded theory methods (GTM), developed by Barney Glaser and Anselm Strauss, are the most popular. Despite their centrality to family studies and to other fields, however, GTM can be opaque and confusing. Believing that simplifying GTM would allow them to be used to greater effect, I rely on 5 principles to interpret 3 major phases in GTM coding: open, axial, and selective. The history of GTM establishes a foundation for the interpretation, whereas recognition of the dialectic between induction and deduction underscores the importance of incorporating constructivism in GTM thinking. My goal is to propose a methodologically condensed but still comprehensive interpretation of GTM, an interpretation that researchers hopefully will find easy to understand and employ.

Beginning in the early 1970s with the creation of the National Council on Family Relations' Theory Construction and Research Methodology Workshop, and continuing through a series of volumes on family theories and methods (Bengtson, Acock, Allen, Dilworth-Anderson, & Klein, 2005a; Boss, Doherty, LaRossa, Schumm, & Steinmetz, 1993; Burr, Hill, Nye, & Reiss, 1979a, 1979b), family studies has become a field where methodologically based theorizing matters. Cognizant of this fact, family scholars place a premium on research techniques that facilitate the development of new ideas.

In quantitative studies, multivariate statistical techniques are essential to the theorizing process. In qualitative studies, any number of approaches may be used to generate theory, but family scholars tend to rely on a multivariate nonstatistical (or quasistatistical) set of procedures, known as grounded theory methods (GTM). GTM were originally devised to facilitate theory construction, and their proponents routinely assert that a GTM approach promotes theorizing in ways that alternative methods do not (see Glaser, 1978, 1992; Glaser & Strauss, 1967; Strauss, 1987; Strauss & Corbin, 1990a, 1998).

Besides being drawn to GTM's theorygenerating potential, family scholars may be attracted to GTM's compatibility with quantitative research. Unlike some other qualitative approaches, which are expressly descriptive in their intent (e.g., phenomenological analysis), GTM are purposefully explanatory (Baker, Wuest, & Stern, 1992). With government granting agencies viewing quantitative and qualitative methods as "mutually supportive" (National Institutes of Health, 2001; see also Ragin, Nagel, & White, 2004), investigators may feel that referring to GTM procedures in their proposals will increase their chances of getting funded. Yet another reason that family scholars may be disposed to use GTM is that a number of

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qualitative software programs (e.g., ATLAS, ETHNOGRAPH, and NUD*IST) were designed or are at least believed to have been designed or reconfigured—with GTM in mind (Seale, 2005).

Given the many books and articles devoted to outlining the procedures, one might presume that a basic grasp of GTM is within easy reach. Such is not the case, however. Apart from the fact that GTM guidelines can be opaque and confusing, there is also a war of sorts being fought among different GTM interpreters. Debates abound over whose version of GTM is genuine, and the verbal sparring occasionally has gotten nasty. Studying GTM can be exhilarating, but it also can be extremely challenging, with an inordinate amount of time devoted to trying to figure out what different GTM procedures mean. Some of my students have confessed that they found doing grounded theory more tiring than inspiring, and a few have abandoned the approach altogether, after deciding that the procedures were needlessly cumbersome.

GTM are not the only way to do qualitative research, but they are a valuable set of procedures for thinking theoretically about textual materials (i.e., intensive-interview transcripts, observational fieldnotes, historical documents, and the like). I thus find it troubling that, despite all the attention in recent years to publicizing the methods, they have become, if anything, less user friendly. The result is that GTM are not being employed to their full advantage. Given how much family studies has relied on qualitative research to generate important theoretical insights (Gilgun, 1999; LaRossa & Wolf, 1985), family researchers can ill afford to ignore a situation that threatens their ability to do theoretical work.

Is there a solution? Perhaps. After teaching qualitative methods for a number of years, I have come to think that, if it were possible to reduce GTM to a set of essentials, people would use them to greater effect. This article springs from that belief. My goal is to propose a methodologically condensed but still comprehensive interpretation of GTM, an interpretation that researchers hopefully will find easy to understand and employ.

The interpretation that I present rests on five principles. These are (a) Language is central to social life. Thus, the microanalysis of written texts, the heart of a grounded theoretical analysis, is a worthwhile enterprise. (b) Words are

the indicators upon which GTM-derived theories are formed. The connection between the words on a page and the theories in one's mind, however, is more reciprocal than is sometimes realized. (c) Coding and explanation are built upon a series of empirical and conceptual comparisons. The construction of variables (categories in the GTM lexicon) depends on classifying concepts and infusing dimensionality into the theorizing process. (d) From a grounded theoretical perspective, theories are sets of interrelated propositions, whereas propositions state how variables are related. Scholars are free to subscribe to other definitions of theory, but this is the definition that undergirds most GTM manuals. (e) There is value in choosing one variable from among the many variables that a grounded theoretical analysis may generate and making that variable central when engaged in theoretical writing. It will serve as the backbone of a researcher's "story." This central variable, according to GTM guidelines, will be one that developed in the course of the analysis and is well grounded in the textual materials being studied. But it also is a variable that can and should be chosen for artistic as well as procedural reasons. There is an aesthetic quality to GTM, as there is in all research, that cannot be denied. If anything, it should be celebrated.

The specific procedures of GTM, as I view them, flow from these five principles. Exactly how is outlined below. Important to this discussion is the acknowledgment that there are multiple ways to do grounded theory. Hence, I make no claim to presenting "the true version" of GTM. I offer only an interpretation. Also, I caution that what follows is not a self-contained manual on GTM. Researchers who want to use the methods should familiarize themselves with the major GTM how-to books and articles and the chief critiques, most of which are included in the list of references. Finally, I emphasize that GTM are a compendium of procedures spanning research design, coding, sampling, and writing and that not every one of these procedures is covered here. Rather, my primary focus is on three topics. The first is the history of GTM and the interpersonal conflicts that have arisen since the methods were devised. The second is the coding procedures in GTM and what they entail. The third is the question of whether GTM are as inductive as some interpreters have made them out to be.

HISTORY AND CONTROVERSY

GTM were first developed in the 1960s by Barney Glaser and Anselm Strauss and are rooted in the Chicago school of symbolic interactionism, which achieved prominence in the 1920s and 1930s, and the Columbia school of multivariate analysis, as it was practiced in the post-World War II era. (Other influences may be noted, but these are the two that were identified from the beginning and arguably continue to be the most important today.) Strauss received his PhD from the University of Chicago in 1945 and generally is credited with incorporating a symbolic interactionist perspective. Glaser received his PhD from Columbia University in 1961 and often is recognized as the one who pushed the importance of multivariate analysis.

Although their backgrounds may have been different, their collaboration grew out of their similar discomfort with the supremacy of theory testing in the 1940s, 1950s, and 1960s. In *The Discovery of Grounded Theory*, Glaser and Strauss (1967) said that graduate students in the social sciences were being trained to confirm the ideas of early theorists (e.g., Marx, Weber, Durkheim) but were not being encouraged to generate theory themselves. The result of this one-sidedness was an interruption in the flow of ideas and a failure to appreciate the complexity and diversity of social life.

[M]any potentially creative students have limited themselves to puzzling out small problems bequeathed to them in big theories. ... [But] the masters have not provided enough theories to cover all the areas of social life. ... Further, some theories of our predecessors, because of their lack of grounding in data, do not fit, or do not work, or are not sufficiently understandable to be used and are therefore useless in research, theoretical advance and practical application. (Glaser & Strauss, 1967, p. 11)

Glaser and Strauss wrote their book with the aim of "closing the embarrassing gap between theory and research" and "improving social scientists' capacity for generating theory." They admitted that "[n]ot everyone can be equally skilled at discovering theory," but they also felt that one did not have to "be a genius" either (Glaser & Strauss, 1967, pp. vii–viii). Their procedures thus were designed to provide concrete steps that both novice and experienced researchers could understand and follow.

As committed as Glaser and Strauss were to offering guidelines that would be helpful, they

were not dogmatic in their approach. Indeed, just the opposite was true: "Our strategies do not insist that the analyst engage in a degree of explicitness and overdrawn explanation in an effort to coerce the theory's acceptance by 'drugging the reader's imagination and beating him [or her] into intellectual submission." Glaser and Strauss also said that they expected others would be motivated to propose their own procedures: "Our principal aim is to stimulate other theorists to codify and publish their own methods for generating theory. We trust that they will join us in telling those who have not yet attempted to generate theory that it is not a residual chore in this age of verification" (Glaser & Strauss, 1967, p. 8).

Hence, GTM, as initially formulated, were designed to be pluralistic. And pluralistic the methods certainly have become, though not along the lines that Glaser and Strauss might have predicted. Each went on to produce his own set of maxims, Theoretical Sensitivity (Glaser, 1978) and Qualitative Analysis for Social Scientists (Strauss, 1987); and, starting with the publication of two volumes that purportedly lay out the fundamentals of the approach, Basics of Qualitative Research (Strauss & Corbin, 1990a, 1998) and Basics of Grounded Theory Analysis (Glaser, 1992), each has been locked in debate over whose version is more valid. Deciphering and evaluating the two versions-referred to as the Glaserian and Straussian schools by some (Melia, 1996; Stern, 1994)-has turned into a cottage industry, with various individuals choosing sides or advancing their own similar-but-not-identical-to-GTM methodologies (e.g., see Charmaz, 2000; Clarke, 2005; Schatzman, 1991).

As if the war among devotees were not enough to confound things, there also are disparities in how the premier GTM interpreters convey the methods. The second edition of Basics of Qualitative Research (Strauss & Corbin, 1998), published after Strauss died in 1996 at the age of 79, defined terms differently than did the first edition (Strauss & Corbin, 1990a); and an edited volume intended to show students what completed grounded theory projects look like, Grounded Theory in Practice (Strauss & Corbin, 1997), included several articles in which GTM were not even mentioned. Major works in GTM are described as "inaccessible" or leaving readers in a "maze" (Charmaz, 2000, p. 512). Some practitioners believe, in fact, that it is

impossible to learn GTM by reading about them and that, without a mentor, one is doomed to fail (Stern, 1994). Courses and seminars on GTM thus have flourished, but even these may not have the desired outcome. Said one teacher, "Quarter after quarter, our students worked with Strauss, Glaser, and me, and after all that, some of them still struggled. How can anyone learn to do this from a book?" (Interview with Leonard Schatzman, reported in Gilgun, 2001, p. 357).

Seeing the ambiguity surrounding GTM, we should not be surprised that manuscripts, avowedly based on GTM, do not appear to follow the same rules. Some authors will say simply that "grounded theory methods were employed," cite one article or book (not unusually, only Glaser & Strauss, 1967, disregarding the revisions in later publications), and then go on to describe a study where there is little, if any, theoretical development. Others will refer to one or two steps in GTM but ignore other steps that leading proponents consider crucial. The harshest editorial reviewers of these qualitative manuscripts often are other GTM researchers (e.g., see Baker et al., 1992; Locke, 1996; Stern, 1994; Wilson & Hutchinson, 1996).

Does the pluralistic nature of GTM mean that researchers can do pretty much whatever they want and call it grounded theory? I say no, because there are certain principles about which grounded theory proponents, more or less, concur. I do think, however, that as long as these principles are kept in mind, the *details* of the procedures can be modified to suit a researcher's needs. This is the message that Glaser and Strauss (1967) conveyed when they said that they wanted to stimulate other theorists to codify their own methods for generating theory. Strauss (1987) also advised, "Study them, use them, but *modify* them in accordance with the requirements of your own research" (p. 8). Strauss and Corbin (1998), in addition, recommended, "Students should stay within the general guidelines outlined in [Basics of*Qualitative Research*] and use the procedures and techniques flexibly according to their abilities and the realities of their studies" (p. 295). Given that the details of the procedures can vary, it is imperative that GTM researchers be very specific about how they go about doing their analyses. Thus, it is insufficient for an author to say, "I did grounded theory," with a citation to one or more of manuals and leave it at that. Outlining one's coding operations as

clearly as possible is a sine qua non. On this count, reviewers are adamant: "The author has to tell the reader what specific techniques were used" (Ambert, Adler, Adler, & Detzner, 1995).

CODING PROCEDURES

Researchers often encounter difficulties with GTM when they start to code their materials. Understandably, they want to know the precise steps to follow. It turns out, however, that the coding procedures differ, depending on who is describing them. Whereas Glaser and Strauss (1967) specified *four* phases, Glaser (1978, 1992) talked about *two* major phases plus several subphases, and Strauss (1987), along with Strauss and Corbin (1990a, 1998), referred to *three* phases.

I divide coding into the same three phases that Strauss (1987) and Strauss and Corbin (1990a, 1998) suggest, namely open coding, axial coding, and selective coding. I do so because, over time, these have become the most widely accepted phases in GTM. I want to acknowledge, however, that after poring over the different GTM manuals, I have come to have a greater appreciation of the significant but, all too often, unrecognized influence that Glaser had on Strauss's and Strauss and Corbin's works. It was Glaser in a 1965 article who first developed the central tenets of GTM, and it was Glaser (1978) in Theoretical Sensitivity who first wrote about the value of open and selective coding and formalized GTM's approach to the study of variable linkages.

I use the triadic coding scheme of open, axial, and selective coding because I believe that GTM are most productive when all three phases of coding are employed. Given the laboriousness that some researchers associate with GTM, one or more of the coding phases often are skipped. I recognize, too, the cyclical connection among the three phases, which introduces an important dynamic to the coding process. The nonlinear nature of the methods, however, does not deny the fact that, at certain points in a research project, one or more of the phases will be brought to the foreground.

Open Coding

Analysis begins with open coding. Glaser (1978) characterized open coding as "running

the data open" (p. 56; see also Strauss, 1987, p. 29), whereas Strauss and Corbin described it as a procedure where "the data are broken down into discrete parts, closely examined, compared for similarities and differences, and questions are asked about the phenomena reflected in the data" (1990a, p. 62; 1998, p. 102).

The rudiments of open coding are captured in what Glaser (1978, pp. 62-63) called the concept-indicator model (see also Strauss, 1987, pp. 25-26). The concept-indicator model is predicated on the constant comparison of indicators, that is, on regularly identifying similarities and variations in texts. The "basic, defining rule" of constant comparison is that, while coding an indicator for a concept, one compares that indicator with previous indicators that have been coded in the same way. An indicator refers to a word, phrase, or sentence, or a series of words, phrases, or sentences, in the materials being analyzed. A *concept* is a label or name associated with an indicator or indicators; stated another way, a concept is a symbol or conventional sign attached to a referent. Thus, man and woman are concepts. So are love, mate selection, divorce, death, and depression.

It helps to see how the concept-indicator model was first applied. In their study of the social reality of dying, Glaser and Strauss (1964) used the concept of social loss (concept a) to summarize the meaning of a series of statements that nurses in the project made. These verbalizations included "He [the deceased] was so young," "He was to be a doctor [but he died before he completed his studies]," "She had a full life," and "What will the children and her husband do without her?" (Glaser & Strauss, 1967, p. 106). If we assume that the first statement (*indicator 1*) initially triggered the social loss concept in Glaser and Strauss's mind and that the second statement (indicator 2) also prompted them to think about social loss, before the two indicators would be grouped together, the second statement would be compared with the first. If, as a result of this comparison, the two statements seemed to belong together, the statements would be classified as indicators for the concept, social loss. If, however, the statements did not seem to belong together, a second concept (concept b) would be developed to give meaning to the second indicator. As coding continued, through the application of constant comparison, a number of concepts (a, b, c, etc.) and their accompanying indicators (1, 2, 3, etc.) would be identified and linked. When a researcher got to a point where the addition of another indicator to those already grouped under a concept did not appear to generate significantly new insights about that concept, then, in GTM terms, the concept is *theoretically saturated*. A theoretically saturated concept essentially is a well grounded concept.

Figure 1 illustrates how indicators and concepts are integrated in open coding. The figure builds on, but also revises, a drawing that Glaser (1978) and later Strauss (1987) used to depict the concept-indicator model. In the figure, indicators are linked to a concept, but also to each other, demonstrating the principle of constant comparison.

One may ask, how do these statements lead to the concept of social loss? How are the lines drawn between one and the other? The key element in concept formation is to pose generative questions (see especially Strauss, 1987). What does it connote when, in a hospital setting, people say of another who has died, "He [or she] was so young" or "He [or she] was to be a doctor"? What is being talked *about*? In answering this last question, we may begin to wonder: Why is it so bad to die young? What difference does it make that the deceased was going to be a doctor? Would the same have been said of a teacher or a housekeeper? Glaser and Strauss may have grouped the statements under social loss, because they thought that the nurses were saying that, in certain situations, the social reality of death was not just about absence but also about dispossession.

How many indicators can be associated with a concept? Early in coding, a single indicator may prompt the researcher to develop a concept; that is, the researcher might note the concept in the margins of a transcript and write a memo about the concept's possibilities. Eventually, however, multiple indicators will be needed to theoretically saturate a concept. As to how encompassing a concept should be, logic suggests that coders keep in mind the following rule.

If a [conceptual] label is insufficiently abstract or too general, too few observations will fall [under that conceptual label].... In such cases, the label merely restates or rephrases the data. To "work" (Glaser & Strauss, 1967), a conceptual label must occupy a higher level of abstraction than the incidents [or indicators] ... it is intended to classify. If the concept[ual] label is too abstract, however, too much information will fall into that category. For example, a concept ... labeled "interaction"





Note: In the beginning of an analysis, there may be a single indicator for a concept, but a theoretically saturated concept generally will have numerous indicators. Lines among indicators are intended to show how the constant comparison of indicators generates concepts. (This figure builds on, but also revises, a drawing that Glaser, 1978, and later Strauss, 1987, used to depict the concept-indicator model.)

^{ar-}He [the deceased] was so young." ^{br-}He was to be a doctor [but he died before he completed his studies]." ^{cr-}She had a full life." ^d "What will the children and her husband do without her?" or "exchange" might include every observed instance of persons talking to one another ... (Martin & Turner, 1986, p. 149)

To paraphrase, coders must decide how abstract to be and choose a level between two extremes. A totally restricted level of abstraction would result in thousands of concepts, each with a single indicator. A totally unrestricted level of abstraction would result in one concept that incorporated every indicator.

The level-of-abstraction issue comes up not just during open coding but throughout a GTM study. For example, toward the end of their projects, some GTM researchers will endeavor to develop not only substantive theories, which are topic specific (e.g., a theory about mate selection), but also formal or generic theories, which are issue transcendent and thus more abstract (e.g., a theory about how interpersonal relationships are socially constructed).

Besides developing concepts, open coding also is said to involve the formulation of categories. Although categories are mentioned in virtually every GTM manual, the definition of a category remains vague. Glaser and Strauss (1967) said that a category "stands by itself as a conceptual element of the theory" (p. 36), whereas Strauss (1987) defined a category as "any distinction [that] comes from dimensionalizing" (p. 21). In the first edition of their book, Strauss and Corbin (1990a) said that a category was a "classification of concepts" (p. 61), but in their second edition (1998), they defined a category as a concept "that stand[s] for phenomena" (p. 101). Glaser (1992), in his rebuttal to Strauss and Corbin (1990a), said that a category is a "type of concept" that is "usually used for a higher level of abstraction" (p. 38).

If you find these descriptions hard to follow, you are not alone (see Dey, 1999). Part of the difficulty may stem from the fact that, in GTM, the term *category* is used in two ways. These are not necessarily contradictory but are more like two sides of the same coin. First, categorization in GTM may be said to involve the grouping of putatively similar but not identical concepts under a more abstract heading. An observer, for example, might group birds, planes, and kites under the heading "objects that are alike in that they fly" (cf. Strauss & Corbin, 1998, p. 113). In this instance, categorization is analogous to the standard dictionary definition, which emphasizes the idea of putting things into a category (e.g., putting shirts and

trousers into the category of clothing). Second, categorization may be said to involve the grouping of *putatively dissimilar but still allied* concepts under a more abstract heading. A researcher studying children at play, for example, might categorize toy grabbing and toy hiding under the heading "various strategies to avoid sharing a toy" (Strauss & Corbin, 1990a, p. 68). In this instance, categorization means *dimensionalization* (i.e., whereby *strategy a* is distinguished from *strategy b*).

Although both kinds of grouping are important to GTM and to the scientific enterprise in general, it is the second that leads most directly to axial and selective coding. Dimensionalization, in other words, is crucial to categorization in GTM, if one is to progress to other phases in the coding regimen.

Dimensionalization is explicitly mentioned in Strauss's (1987) definition of a category. Dimensionalization also is central to the notion, mentioned in several GTM manuals, that categories should be developed in terms of their "properties," which, in turn, are then "dimensionalized" (Strauss & Corbin, 1990a, pp. 69–72; 1998, pp. 116–119; see also Schatzman, 1991).

Property is another term about which there is some confusion. Glaser and Strauss (1967) defined a property as "a conceptual aspect or element of a category" (p. 36), whereas Strauss (1987) talked about a property as "the most concrete feature of something (idea, thing, person, event, activity, relation) that can be conceptualized" (p. 21). Strauss and Corbin (1990a) initially described a property as an attribute or characteristic "pertaining to a category" (p. 61) and then later said that a property referred to the "characteristics of a category, the delineation of which defines and gives it meaning" (Strauss & Corbin, 1998, p. 101). Glaser (1992) defined a property as a "type of concept that is a conceptual characteristic of a category, [and] thus at a lesser level of abstraction than a category" (p. 38).

How does a property contribute to our understanding of a category? Glaser and Strauss (1967) initially illustrated the difference between a category and a property by saying that nurses' perceptions of the degree to which the death of a patient impacted others (e.g., family members) constituted a category, whereas the types of rationales that nurses used to justify those perceptions constituted a property of their

perceptions (p. 36). But it is difficult to know from this example how a category and property differ. One GTM interpreter indeed inquired, "[W]hat relationship is being illustrated between the category ... and its property ... [?] In what sense is the latter [the nurses' rationales for the loss of a patient] a 'property' of the former [the nurses' perceptions of how the loss impacted others]? The answer is not clear." The interpreter went on to say that it would have been better if Glaser and Strauss simply had said that the category and property were separate categories, with the rationales "referring to the strategies used by nurses in response to perceptions of social loss" (Dey, 1999, pp. 49-50). I agree, with one important qualification. I suggest that *variable* be substituted for category. Such a transposition makes it clear that a category essentially is intended to capture not only similitude but also dimensionality among a set of concepts.

Can categories legitimately be thought of as variables? Some might say no, that the notion of categories is too embedded in the GTM vernacular to be altered. A close examination of GTM manuals, however, shows that categories and variables often have been used interchangeably. Glaser (1978, 1992), for example, equates variables and categories. So do other grounded theory interpreters (e.g., see Charmaz, 2000; Creswell, 1998; Gilgun, 2001; Stern, 1980). The major GTM manuals also refer to causes, consequences, hypotheses, and propositionsterms that imply, if not explicitly denote, a form of variable analysis (see Strauss, 1987; Strauss & Corbin, 1990a, 1998). If, technically speaking, a category is "any distinction [that] comes from dimensionalizing" (Strauss, p. 21), or a "classification of concepts" (Strauss & Corbin, 1990a, p. 61), then categories are essentially variables because they represent dimensions of concepts or conceptual classificatory schemes.

Categorization in GTM thus is not just about grouping concepts together; categorization is also about *arraying* concepts. Taking two or three similar concepts and thinking of how they may be subsumed under a higher level heading means moving from one level of abstraction to another level of abstraction, while still remaining in the realm of concepts. Taking two or three dissimilar concepts and thinking of how they may be arrayed along a dimension also means moving from one level of abstraction to another level of abstraction, but now the aim is

	TABLE 1. OPEN CODING: DEVELOPING CONC	CEPTS AND VARIABLES
Concepts	Variables (i.e., Categories)	Variable Clusters (i.e., Categories and Properties)
Blue Romantic love	Types of color (e.g., blue vs. red) Types of love (e.g., romantic vs. platonic)	<i>Types</i> of color (e.g., blue vs. red), <i>shade</i> of blue, <i>intensity</i> of blue, et <i>Types</i> of love (e.g., romantic vs. platonic), <i>intensity</i> of romantic love
No-fault divorce	Types of divorce (e.g., no-fault vs. fault)	frequency of romantic love, etc. Types of divorce (e.g., no-fault vs. fault), frequency of no-fault divor accentance level of no-fault divorce etc
Depression after a divorce	<i>Types</i> of feelings after a divorce (e.g., depression vs. elation)	<i>Types</i> of feelings after a divorce (e.g., depression vs. elation), <i>acceptance level</i> of postdivorce depression, <i>duration</i> of
		postdivorce depression
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Thus, there may be an advantage to thinking about variables rather than categories and properties. It is important to recognize, too, that variables need not stand alone but may be clustered Note: Categories and properties, terms generally used in grounded theory methods manuals, basically are synonymous with variables (i.e., categories and properties = variables). into groups (e.g., types of divorce and types of feelings after a divorce, along with frequency of no-fault divorce and acceptance level of postdivorce depression, may be part of the same variable cluster). to shift from the explication of concepts to the development of variables.

Thinking in terms of variables not only underscores how important dimensionalization is to open coding but also negates the need to speak about categories and their properties. Table 1 shows how. Strauss and Corbin (1990a) described the difference between a category and a property by using color as an illustration. Types of color, they said, constitute a category whose properties are shade, intensity, hue, and so on (p. 70). But how is this different from stating that color types can vary by shade, intensity, and hue and that, instead of there being a category and its properties, there simply are different variables: the types of color (e.g., the primary colors, blue, red, and yellow) and the shade, intensity, and hue of each type (e.g., the shade, intensity, and hue of blue). If color combinations are considered (e.g., mixing blue and red to make purple), more variables can be imagined. All of these variables or dimensions may be grouped into a cluster of variables pertaining to color, but that does not mean that the distinction among the variables has to be "muddled," in the way that the distinction among concepts, categories, and properties often is (Dey, 1999, p. 251; Schatzman, 1991, pp. 307-308). (Schatzman, in his alternative GTM approach, advocated generating "clusters of dimensions.") So also, if a researcher were studying love, it would be understood that there could be types of love (e.g., romantic, platonic, courtly) as well as variations in intensity (i.e., high to low) within each type. (These are not the only possibilities, of course.) Similarly, if a researcher were studying *divorce*, one would assume that there could be types of divorce (e.g., no-fault, fault) as well as variations in frequency (i.e., very common to hardly common) within each type. Lastly, we know that people who have gone through a divorce may experience a sense of depression ("I feel empty inside") or elation ("I feel great"), either of which can vary in duration (i.e., from a very short period of time to a very long period of time). At certain points in the analysis, a researcher might draw a mental circle around the variables to indicate a variable cluster, but that would not require that all these dimensions be bundled into a single variable.

Figures 2 and 3 show how indicators, concepts, and variables can be integrated in open coding. Again, indicators are linked to

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concepts, but also to each other, demonstrating the principle of constant comparison. In these two figures, concepts also are linked to each other to show how comparing concepts will result in the creation of a variable. Focusing once again on the general concept of love, types of love might include romantic love, platonic love, and courtly love. Each of these types would constitute a separate concept, and each concept would have a set of indicators. One interviewee might have said, "I am sexually aroused during intimate moments with my partner," which a coder might classify as an indicator for romantic love. Another interviewee might have said, "I feel affection for my partner but it is not a sexual kind of affection," which a coder might classify as an indicator for platonic love. A coder also might feel that interviewees talked about degrees of intensity within each type, and thus construct three other variables (besides types of love): intensity of romantic love, intensity of platonic love, and intensity of courtly love. One interviewee might have said, "I am burning with sexual desire during intimate moments with my partner," which a coder might classify as an indicator for the concept, high romantic love. Another interviewee might have said, "I am lukewarm with sexual desire during intimate moments with my partner," which a coder might classify as an indicator for the concept, low romantic love. Again, each concept would require numerous indicators to be considered theoretically saturated. Also, indicators that initially seemed to belong with the same concept later might be grouped with other developing concepts. Concepts, in other words, could be *fractured* or reconstituted. This demonstrates the kind of typology or variable construction that characterized the Columbia school of multivariate analysis (see Glaser, 1978, pp. 66-72). In this sense, typologies also are variables. Cuber and Harroff's (1965) five types of marriage (total, vital, devitalized, passive-congenial, and conflict-habituated) basically constitute a variable, with each type representing a different concept.

A final point needs to be made about open coding. Despite the enormous influence that the Chicago school of symbolic interactionism had on the birth of GTM, the question has been raised as to whether the methods require a symbolic interactionist perspective (Charmaz, 2000, p. 513; but see Clarke, 2005, pp. 2–5). Some have said that symbolic interactionism is not

essential to GTM, that any theoretical perspective can inform the analysis. Strauss and Corbin (1990b), themselves, said, "One need not subscribe" to symbolic interactionism to employ the methods (p. 5).

My take on the matter is that, although a variety of perspectives can be brought to bear (e.g., a feminist perspective can provide sensitizing concepts that are relevant to the study of gender politics and patriarchy), a theoretical perspective that places language at the nucleus of the analysis is critical. If symbolic interactionism is not used, then an alternative framework that accords as much weight to the study of language must be substituted. Social constructionism (e.g., Berger & Luckmann, 1966), poststructuralism (e.g., Foucault, 1978), cognitive sociology (e.g., Zerubavel, 1997), and cultural studies (e.g., Griswold, 1994) are four that can work, but there are others. The basis for this position is that, as can be readily seen, open coding relies heavily on a line-by-line coding of texts (Glaser, 1978; Strauss, 1987; Strauss & Corbin, 1990a, 1998), with both the concept-indicator model and variable-concept-indicator model encouraging the microanalysis of one indicator after another. A case, in fact, could be made that line-by-line coding is "the guts of the [GTM] approach" (Orona, 1997, p. 179). From a macrodemographic perspective, the close inspection of texts might be considered unnecessary and maybe even frivolous, an example of misplaced precision. From a symbolic interactionist perspective, however, the linguistic analysis of texts is thought to be valuable. Thus, symbolic interactionism-and language-oriented frameworks, in general-provide the theoretical license to scrutinize page after page of discourse. Without that warrant, open coding can look and feel like nothing more than busy work.

Axial Coding

Axial coding, according to Strauss (1987), consists of "intense analysis done around one category [i.e., variable] at a time, in terms of paradigm items (conditions, consequences, and so forth)" (p. 32). The phrase "paradigm items" was an allusion to a *coding paradigm*, a conceptual device that Strauss said is "especially helpful to beginning analysts" and "part and parcel of the analyst's thought processes." Its function is to serve "as a reminder to code data for relevance to whatever phenomena are referenced by a given category," with special attention to "conditions, interactions among actors, strategies and tactics, consequences" (pp. 27–28). Axial coding also has been defined as "a process of relating categories to their *sub*categories [italics added]" (Strauss & Corbin, 1998, p. 123; see also Strauss, p. 27; Strauss & Corbin, 1990a, p. 99). Subcategories also are categories, but they are categories that answer the questions of "when, where, why, who, how, and with what consequences" around a focal category (Strauss & Corbin, 1998, p. 125). The focal category or variable is *temporarily* placed at the hub of the analysis and the *when, where, why*, and so on constitute the spokes around the hub.

Axial coding appears to be similar to three specific coding procedures that Glaser (1978) covered under a phase that he called "theoretical coding." These specific procedures include (a) looking for "causes, contexts, contingencies, consequences, covariances, and conditions" ("the six C's") around a focal category; (b) building process into the analysis (i.e., "stages, staging, phases, phasing," etc.); and (c) paying attention to people's "strategies, tactics, ... maneuverings, ploys, ... dominating, positioning," and so on (pp. 74, 76).

The fact that process and interaction are discussed under axial coding, and, in Glaser's case, under theoretical coding (Glaser, 1978, pp. 74-75; Strauss & Corbin, 1998, pp. 123–135) could lead one to believe that these are important only during this phase. In actuality, they are important at every phase in a GTM project. Strauss and Corbin (1998) acknowledged as much when they said, "Analyzing data for process is not a separate aspect of analysis" (p. 167). In their books, they also emphasized, "Bringing process into the analysis is an important part of any grounded theory study" (1990, p. 143; 1998, p. 163), and offered extensive examples of how to incorporate process in qualitative research (see also Glaser, 1978; Strauss, 1987). The same point can be made about the study of strategies, tactics, maneuvering, and so on. Researchers should always be asking, how do power and politics play a part in social situations?

Based on symbolic interactionism and other language-oriented frameworks, GTM encourage the study of how "reality" is socially constructed (e.g., how dying is socially constructed or how love is socially constructed). The social construction of reality, however, is not a static happening but a series of interactional and political episodes that occur chronologically (Berger & Luckmann, 1966). Thus, in designing their studies, GTM researchers should strive, whenever possible, to take into consideration *time*. A longitudinal study generally is the best way to capture events as they unfold.

Whether or not a researcher is able to carry out a longitudinal study, sensitivity to process should be central to a grounded theoretical study from the very beginning. Translating nouns into verbs when developing concepts and variables during open coding can be especially helpful. For example, *gender* can be translated into the *process* of "engendering" or "doing gender" (McMahon, 1995; West & Zimmerman, 1987), whereas *we-ness* in a couple's relationship can be translated into the *process* of "becoming a 'We'" and "marking 'We'" (Richardson, 1988; see also Berger & Kellner, 1964). Both sets of processes are based on social interactions and proceed through stages.

Coding for process does not end here, however. A full-scale examination of process necessitates also, in grounded theoretical terms, the investigation of causes, contexts, contingencies, consequences, covariances, and conditions (Strauss & Corbin, 1990a, p. 153). The addition of these relational factors to an analysis—the search for (or, more accurately, the development of) "the six C's"—is the distinctive feature of the axial coding phase.

Although there is a parallel between Strauss's axial coding and Glaser's theoretical coding, there is a difference in the sequencing of the two. In Strauss's (1987) version, axial coding is a phase that "becomes increasingly prominent during the normally lengthy period of open coding" (p. 32). In Glaser's (1978) version, theoretical coding takes place later in the analysis, after selective coding (pp. 72–82). Selective coding, to be covered in the next section, is the delimited coding that is done around a centrally important variable (p. 61).

As in open coding, there is confusion about the mechanics of axial coding. Strauss and Corbin's (1990a, 1998) use of the term *subcategory* is not very helpful. In many people's minds, the prefix *sub* denotes under or beneath as in submarine or subsample. Thus, a subcategory can be thought to refer to a category that is under another category (e.g., pens and pencils subsumed under writing instruments). But this is not how sub has been used in Strauss and Corbin's version of GTM. In their scheme, subcategory denotes a category that is related to not a subclass of—a focal category.

As already noted, I believe that a researcher can substitute variable for category, without violating the spirit of GTM. I also believe that Strauss and Corbin's (1990a, 1998) discussion of subcategories can be translated into a discussion of variables. My reasoning is that questions pertaining to when, where, why, and so on essentially are about relating a set of variables to a focal variable. In essence, axial coding is about developing *hypotheses* or *propositions*, which, in scientific parlance, are generally understood to be statements about the relationship between or among variables. Figure 4, based on Glaser's (1978) elucidation of "the six C's," illustrates the point.

Imagine that a researcher is doing an intensiveinterview study on the social reality of love. Interviewees have been asked about their definitions of love and whether they have ever fallen in and out of love and how they came to that determination. Through open coding, the researcher has developed variables and variable clusters associated with love (e.g., romantic love vs. platonic love, high-intensity romantic love vs. low-intensity romantic love) and has begun to wonder about the when, where, why, and so on regarding these variables. Strauss and Corbin would advise the researcher to place a focal variable temporarily at the center of the analytical inquiry (say, intensity of romantic love) and answer questions about its subcategories. Another option, not at odds with theirs, would be to advise the researcher to think about the variables that might relate to the focal variable. A question about why would encourage the researcher to imagine variables that might influence a person's intensity of romantic love. The interview transcripts might have included repeated references to physical appearance (e.g., "My partner is very attractive" and "She has beautiful eyes"). These references (specifically, indicators) might have prompted the researcher to develop a variable, degree of physical attractiveness. The why question thus might lead the researcher to ask whether the degree of physical attractiveness positively influences the intensity of romantic love. The researcher might also turn the question around and ask whether the intensity of romantic love positively influences the degree of physical attractiveness because it is possible that after



people fall in love, they tend to perceive their partners as more physically attractive. In this reversal of variable order, the researcher would be exploring the *consequences* relating to a focal variable. Other questions to ask might include: What are the conditions under which the *degree* of physical attractiveness influences the *inten*sity of romantic love? Might a partner's physical attractiveness be more important to men than to women? In what kinds of contexts is the relationship between *degree* of physical attractiveness and intensity of romantic love relevant? Is the relationship more relevant in some countries than in others? Is it more relevant today than 100 years ago? In all of these cases, the search for whys or consequences or conditions or contexts ultimately is about developing hypotheses or propositions because one is relating variables.

The difference between open coding and axial coding appears to come down to the difference between a typology and a theory. In open coding, the researcher, for the most part, is developing variables. The variables may be very elaborate, but how they are interrelated remains largely unexplored. In axial coding, the relationship between or among variables is explicitly examined. If the development of theory is said to rest heavily though not entirely on explanation (Bengtson, Acock, Allen, Dilworth-Anderson, & Klein, 2005b), and if explanation is said to rest on empirically or logically establishing how variables are interrelated, then axial coding is the phase at which GTM research begins to fulfill its theoretical promise.

The definitions of concepts, variables, and hypotheses/propositions being employed here should be familiar to most researchers. They are similar to those used in axiomatic theorizing (e.g., see Burr et al., 1979a, 1979b). GTM and axiomatic theorizing are, to a certain extent, aligned (e.g., see Strauss & Corbin's, 1998, p. 22, reliance on Hage, 1972; note, too, that GTM have certain similarities with conceptual modeling, see Soulliere, Britt, & Maines, 2001). When Strauss (1987) defined hypotheses as "a provisional answer to a question about conceptual relationships," he plainly stated that he was using the term "exactly as in the usual scientific lexicon" (p. 21). It is no coincidence that GTM, which encourage qualitative researchers to think in terms of variables and hypotheses/propositions, were developed in the same era that axiomatic theorizing was at its peak. This is one reason, if not the major reason, that GTM is said to have "positivist roots" (Clarke, 2003, p. 558). These roots, however, can be transcended (e.g., see Charmaz, 2000), a point that is addressed in a later section on induction and deduction.

Where axial coding belongs in the GTM sequence is a major point of contention. Besides suggesting that axial coding essentially was his idea, Glaser (1992) also took issue with Strauss and Corbin's (1990a) portrayal of the phase. Glaser felt that axial coding, especially if done early in the analysis, would encourage researchers to *force* conceptual linkages upon their data. Glaser said that conceptual linkages between or among variables—and he did speak of "variables"—should *emerge*.

Although Glaser implied that Strauss's version and his version of axial or theoretical coding are antithetical, there is a middle ground. On the one hand, I support Glaser's perspective that GTM researchers should routinely ask themselves how saturated variables relate to one another. On the other hand, I do not think it is necessary to restrict axial coding to the later phases of coding. Although a focus on saturated variables should be central to any grounded theoretical analysis, I believe that a GTM researcher should feel comfortable relating generated variables (saturated or yet to be saturated) to other variables whose relevance would be suggested from either prior research or an established theoretical framework. This appears to be what Strauss and Corbin (1990a, 1998) were saying when they talked about looking for causes, consequences, and so on in the beginning phases of a project.

For example, a researcher might ask, very early in the analysis, how gender and social class relate to other variables, because that researcher has been trained to believe that gender and social class are almost always important correlates. As another example, suppose that, while open coding a set of transcripts on the social reality of divorce, a researcher became interested in the rationales for why the divorce occurred. We will assume that the variableconcept-indicator model was employed and that the concept of rationales was associated with a number of indicators (e.g., "I got a divorce because"). The researcher, familiar with a symbolic interactionist perspective, might begin to speculate how these rationales can be conceptualized as "vocabularies of motives" (Mills, 1940; see Hopper, 1993) and, in the

course of doing so, the researcher could transpose the concept of rationales into a set of variables (e.g., *types* of rationales, *intensity* of different types). Soon thereafter, the researcher might begin to ask questions such as, do men and women use different rationales? (who), what purpose do different rationales serve? (why), what happens if certain rationales are not offered? (consequences), and so on. In other words, the researcher will generate hypotheses.

The basic question is, when and to what degree can GTM researchers carry out literature reviews? Early versions of GTM suggested that researchers should disregard prior studies, at least in the beginning of an analysis, in order not to contaminate their coding. Glaser (1978) said, "The first step in gaining theoretical sensitivity is to enter the research setting with as few predetermined ideas as possible. ... His [or her] mandate is to remain open to what is actually happening" (p. 3). He added, "When the theory [generated from the analysis] seems sufficiently grounded and developed, then we review the literature in the field" (p. 31). Later versions of GTM, on the other hand, not only acknowledge the value of reviewing prior research but also contend that the literature significantly influences coding, even if the researcher is unaware that it does (Glaser, 1992, pp. 31-37; Strauss, 1987, p. 12; Strauss & Corbin, 1998, pp. 46-53, 136-137).

How prior work should be used is up to the individual researcher. Although some GTM researchers prefer not to conduct literature reviews until they are well into a project, others feel that it is important to know what has been done before, so as not to "reinvent the wheel" (Clarke, 2005; see also Gilgun, 2005). Certainly, we cannot avoid being influenced by what we read and, on some level of consciousness, absorb. But as long as we are not "terrorized by the literature" (Becker, 1986) and allow it to dictate what we see, we should be able to mine previous research without stifling our own inventiveness. Ultimately, "prior conceptions need not become preconceptions" (Dey, 1999, p. 251; see also Strauss, 1987, pp. 306–311; Strauss & Corbin, 1998, pp. 47–52).

Selective Coding

In any study, a researcher will decide—or should decide—the main story underlying the

analysis. Davis (1974) summed up the choices that a researcher faces, when he wrote

I want to bring us to that awesome point where you have collected the closetfull or tons of data and then you have to do something with them. You face the terrible moment when you want to leave this mortal coil because you are wondering what all of this awful buzzing confusion called "the data" can possibly mean. ... What is the story? ... Naturally, where you have been, what you have done, whom you have spoken with and what the data are about limit the range of stories to select among. But when you come upon one which seems appropriate, I would suggest that you begin fearlessly by trying to "impose" it upon the data. Now, of course, we all know that this "imposition" will not work; that any such attempt to impose a particular story, a plot, an extended metaphor or rhetorical scheme, is bound to reveal all sorts of lacunae, contradictions, falsehoods, and so forth between the more or less fully plotted story in your mind and what you sense to be true of the data. But the story still has the virtue of being able to illuminate facets of the data that you otherwise might not have been aware of. In any case, the disjunction of imposition begins to generate an internal conflict in which the story illuminates the data, the data modifies the story, and so forth, to where, hopefully, in the end you come up with something coherent, something readable and, best of all, something interesting. (Davis, 1974, pp. 310-312)

In short, the stories that researchers put together should be lucid, understandable, and hopefully compelling. Unless it is assumed that research-based narratives are entirely fictional, they also should be reasonably accurate. (For a debate on the notion of accuracy in qualitative research, see "Street Corner Society Revisited," 1992.)

Stories can vary not only in content but in style too (Van Maanen, 1988). Some researchers may prefer to tell idiographic stories, with anecdotal indicators fleshing out the particulars. Other researchers may like to tell confessional ("let-me-sharewhat-happened-to-me") stories, putting themselves at the center of their write-ups. Still others may lean toward theoretical stories, accounts of how a complex of variables are interrelated. GTM were designed to facilitate the crafting of stories that fall into this third grouping. Theoretical stories are GTM's forte.

Idiographic, confessional, and theoretical stories, which can be combined in a single GTMinspired narrative, essentially are second-order stories that frame the first-order stories signified in the interview/observational/historical materials being analyzed (Daly, 1997; see also Emerson, Fretz, & Shaw, 1995; Howell & Prevenier, 2001). That is, through various channels of direct and indirect expression, research subjects tell stories to frame their lives (LaRossa, 1995), and researchers, in turn, tell stories about their subjects' stories. (The second-order stories that researchers impart are also about their lives—and ultimately about their "selves." If I write an article or a book that tells a feminist theoretical story, what am I trying to say about "me"?)

Different methodological strategies advance different techniques to help researchers choose a project's main story. In quantitative research, measures of association and tests of significance are used. In GTM, selective coding is employed. As Strauss and Corbin (1990a, p. 116; 1998, p. 148) have noted, selective coding can be defined as the explication of "the story line."

Although there is disagreement between Glaser and Strauss as to when selective coding should occur, there is unanimity that selective coding entails the identification of a core variable. The core variable is the one variable among all the variables generated during coding that, in addition to other qualities, is theoretically saturated and centrally relevant. (The 11 criteria for choosing a core category or variable were first provided by Glaser [1978] and repeated by Strauss [1987]. Strauss & Corbin [1990a, 1998] paraphrase Glaser's list.) The core variable, according to Strauss and Corbin (1998), is a variable that has "analytic power" because of "its ability to pull the other categories [variables] together to form an explanatory whole."

[It] may evolve out of the list of existing categories [variables]. Or, a researcher may study the categories [variables] and determine that, although each category [variable] tells part of the story, none captures it completely. Therefore, another more abstract term or phrase is needed, a conceptual idea under which all other categories [variables] can be subsumed. (Strauss & Corbin, 1998, p. 146)

When I teach GTM, I bring a *Tinkertoy* set to class. I assemble a configuration of multicolored spools and sticks and tell the students to think of the spools as variables and the sticks as relationships among the variables. Although this is not the only way that relationships among variables can be visually portrayed, I like the *Tinkertoy*-show-and-tell approach because it allows me to demonstrate both the mechanics and aesthetics of selective coding. Holding the

configuration up for the students to see, I tell them that a good candidate for core-variable status is the spool that has the most connections to other spools. I also remind them of the other criteria for choosing a core variable. Then, I begin to rotate the configuration, moving different spools and sticks to the foreground and other spools and sticks toward the back. Because the configuration is a three-dimensional mock-up, there are numerous ways that different spools and sticks can be "accentuated." Rotating the configuration also helps to convey the artistry that goes into selecting a core category and to story telling. Although the spool that is singularly central has not changed, the slant on that spool and the entire configuration has shifted. Thus, much the same as a newspaper report or novel will have a slant to it, so also research narratives will have a slant. And that slant may make the difference in whether an article or book is read—and, if read, remembered (see Figure 5).

An example of how a study can be given a compelling slant is Richardson's (1988) American Sociological Review article on extramarital affairs. I like using this GTM article not only because it was published in a high-prestige journal and is widely cited but also because Richardson (1990, pp. 53-59) wrote about the narrative stance that she chose when she wrote it. The study was based on "intensive interviews with 65 single women who had or were having long-term (over a year) intimate relationships with married men" (1988, p. 211). Richardson could have reported her results in a variety of ways. She opted, however, to pitch the piece at a fairly high level of abstraction: "My rhetorical plan was to make *limited* claims for the statistical representativeness of my findings-but unlimited claims to their generality and theoretical significance" (1990, p. 55). How she configured her major variables, and how she selected which variables to accentuate, nicely illustrates how to both know one's audience (in her case, sociologists) and maximize a study's impact.

The title of the paper, "Secrecy and Status: The Social Construction of Forbidden Relationships," ... keyed two core sociological concepts, status and relationships; identified a theoretical home, social construction; and signaled new conceptual links, secrecy *and* status and *forbidden* relationships. ... My decision was to cloak the specific something (the data base of single women/married men), but to accentuate "secret, forbidden, sexual relationships," and then make the case that



Note: The core variable is the one variable among all the variables generated during coding that, in addition to other qualities, is theoretically saturated and centrally relevant. In a configuration of spools and dowels (imagine a *Tinkertoy* set), the spool with the most connections to other spools would be considered the core variable. Rotating the configuration and allowing different spools (variables) to be shifted more to the front or more to the back (as you view the set) illustrates how artistic considerations also play a part in grounded theory research. Much the same as a sculptor gives shape to a marble or bronze creation, accentuating some features over others, so also a grounded theory researcher gives shape to a scholarly work.

these were not trivial, uncommon, rare, or without theoretical significance. The eventual acceptance of the paper, I felt, depended upon my convincing the reviewers, first, that the *category* of relationships fulfilled the generality criterion, and second that the *particular* class (single women/married men) was theoretically and empirically *paradigmatic* of the category. (Richardson, 1990, pp. 55–56)

In effect, Richardson sculpted her argument. Her decision to highlight secrecy and status in the later stages of her analysis illustrates how variables can be moved to the foreground and how that rotational action (using the *Tinkertoy* analogy) can influence a study's story line. In her analysis and writing, she made artistic as well as other kinds of decisions.

Striving to fulfill the generality criterion, Richardson chose to engage in formal or generic theorizing, a strategy that is often applauded in GTM (Strauss, 1987; but see Clarke, 2005, for an alternative assessment). One of the criteria for selecting a core category or variable explicitly states, "A core category [variable] in a substantive study has *clear and grabbing* *implications for formal theory*. The analyst can talk of hospital shifts and immediately realize the implications of shifts as a basic social condition in any twenty four hour a day work operation, and start to conceive of generating a formal theory of work shifts" (Glaser, 1978, pp. 95–96; see also Strauss, p. 36). This is precisely what Zerubavel (1979) did when he developed the concept of *continuous coverage* in his study of hospital life. Initially intrigued with how nurses and doctors structured their schedules so that patients would receive uninterrupted care, he went on to generate a formal sociological theory of time.

Formal/generic stories developed in nonfamilial contexts can be profitably applied to familial contexts—and vice versa (Prus, 1987). To cite an example from my own research, when Maureen Mulligan LaRossa and I were analyzing the interview transcripts in our study of the transition to parenthood (LaRossa & LaRossa, 1981), we borrowed Zerubavel's (1979) theory of time to help explain why fathers and mothers would shift toward a more traditional division of infant care in the first 9 months postpartum. Another example is how Diane Vaughan applied Glaser and Strauss's (1964) typology of "awareness contexts" (closed, open, pretense, suspicion), developed in their study of dying patients, to her analysis of marital breakups ("Uncoupling begins with a secret," Vaughan, 1986, p. 3). What is especially interesting about Vaughan's study is that she also talked about how her theory of the divorce process could be applied to other social contexts.

INDUCTION AND DEDUCTION

In the figure that Glaser (1978) and later Strauss (1987) produced to represent the concept-indicator model, arrows were drawn *from* a set of indicators *to* a single concept. By having the arrows go in only one direction, Glaser and Strauss gave the impression that GTM rely almost exclusively on the epistemology of induction. In actuality, the methods rely upon induction *and* deduction. Thus, a better way to represent the concept-indicator model would have been to show the arrows going in both directions. Note that in Figures 1 through 3, the arrows between indicators and concepts are bidirectional. This was intended to illustrate GTM's inductive and deductive sides.

Bidirectional arrows also are in keeping with the tenets of symbolic interactionism. Mead (1934), one of the principal architects of symbolic interactionism, made the point, "Language does not simply symbolize a situation or object which is already there in advance; it makes possible the existence or the appearance of that situation or object" (p. 78; see also Blumer, 1969). Because concepts are symbols, they are a *language* and thus create as well as reflect indicators. What is a valid indicator, and what is not, is in the eye of the beholder/researcher. By the same token, the lumping and splitting that underlies the classification of concepts in variable construction is a product of mental activity (see Zerubavel, 1991).

The question of induction versus induction/ deduction in GTM is important. GTM were described as an inductive mode of analysis when they were first formulated (Glaser & Strauss, 1967, p. 5), and, to a certain extent, they continue to be described as such today (e.g., see Creswell, 1998; Gilgun, 2001). The original message was and, for some, may still be that these are methods in which indicators *drive* the research. *The Discovery of Grounded Theory* (1967), by its very title, certainly communicated that concepts were "discovered" in a data set. Interesting, too, is that much of the controversy surrounding GTM centers on Glaser's (1992) contention that Strauss and Corbin (1990a) had disregarded GTM's inductivist principles.

At first glance, the differences on this point appear to be fairly solid. In *Qualitative Analysis* for Social Scientists, Strauss (1987) said that GTM were erroneously referred to as "inductive theory" and that, in retrospect, it would have been better to say that the methods included elements of induction, deduction, and verification, because one cannot deny that personal experience and prior studies influence "provisional formulations of hypotheses" (p. 12). In Basics of *Oualitative Research*. Strauss and Corbin (1990a, 1998) alluded to the same three elements, arguably even more so, which may help to explain why Glaser has been so upset with their books. In his 1965 article and in The Discovery of Grounded Theory, the provisional testing of theories was not in the GTM rules (Glaser, 1965; Glaser & Strauss, 1967); and Glaser saw no reason subsequently to add the criterion. "Grounded theory is not verificational," he insisted (Glaser, 1992, p. 29).

Despite what appears to be significantly different epistemological viewpoints, both Glaser and Strauss generally emphasize induction in their descriptions of GTM. Early on, Glaser and Strauss (1967) did say, "Of course, the researcher does not approach reality as a tabula rasa," but "must have a perspective that will help him [or her] see relevant data and abstract significant categories from his [or her] scrutiny of the data" (p. 3). Their use of the word "abstract" in the structure of the sentence suggested, however, that conceptual categories were removed from or embedded in the data. Strauss and Corbin (1998) later acknowledged a dialectical relationship between induction and deduction, but they were more likely to do so when talking about the formulation of hypotheses rather than the development of concepts in open coding (e.g., pp. 136–137; but see p. 294). In this regard, Glaser and Strauss and Corbin, despite their sensitivities to the insights of symbolic interactionism, come close to subscribing to *naïve realism*, an epistemology that is often associated with positivism (Guba & Lincoln, 1994).

Others have leveled the same charges. Charmaz (2000) criticized the *objectivist* thinking in traditional GTM coding, and proposed a "constructivist grounded theory" as a new alternative. (Constructivism here is equated with constructionism. Both are assumed to be based on a combination of biological, psychological, and sociological factors [see, however, Gergen, 1999, p. 237].)

[E]arly grounded theory texts imply that categories and concepts inhere within the data, awaiting the researcher's discovery (Charmaz, 1990, 1995). Not so. Glaser (1978, 1992) assumes that we can gather our data unfettered by bias or biography. Instead, a constructivist approach recognizes that the categories, concepts, and theoretical level of an analysis emerge from the researcher's interactions within the field and questions about the data. (Charmaz, 2000, p. 522)

Similarly, Emerson et al. (1995), in a particularly stinging assessment, admonished grounded theorists for "depict[ing] analysis as a clearcut, almost autonomous activity" (p. 143).

[G]rounded theorists focus on the "discovery" and modification of theory through the close examination of qualitative data. But such an approach dichotomizes data and theory as two separate and distinct entities; it avoids seeing theory as inherent in the notion of data in the first place. But ... data are never pure; they are ripe with meanings and always the products of prior interpretive and conceptual decisions. Grounded theory slights the processes whereby data are assembled, processes that build concepts into the data from the start in the very process of writing fieldnotes [or conducting interviews, reviewing documentary sources, etc.]. In this respect, it is something of a distortion to talk about "discovering theory," as we often are tempted to do. ... [T]heory only seems to jump out of the data and hit the researcher in the face; this flash of insight occurs only because of the researcher's prior analytic commitments built into the notes, the theoretical concerns and commitments she [or he] brings to the reading, and the connections made with other "similar events" observed and written about. Thus, it is more accurate to say that the ethnographer creates rather than discovers theory. (Emerson et al., 1995, p. 167)

These criticisms may seem unduly harsh, especially when it is acknowledged that Glaser and Strauss were not ignorant of the fact that mental lenses help researchers "see relevant data" (again, see Glaser & Strauss, 1967, p. 3). Nonetheless, they are criticisms that are not entirely off the mark. They also are criticisms that all GTM researchers should be aware of, lest they find themselves susceptible to the same kinds of charges. A familiarity with this debate is essential to doing grounded theory.

The transition to parenthood study that I briefly talked about before (LaRossa & LaRossa, 1981) helped me to appreciate the importance of the debate and may serve as a lesson for others. In that study, 20 married couples were conjointly interviewed during the third, sixth, and ninth months postpartum, with 10 couples having their first child and the other 10 having their second. Reading the transcripts of the interviews was a joy. So much seemed to be "going on." For example, at their sixth-month interview, a husband and wife, with a 10-yearold daughter and new baby boy, were asked, "What's been happening since the last time we met?" The wife responded that she was now "adapting" to "increased demands," which led the interviewer to probe, "What kind of increased demands?"

Constant attention that I have to give him [the baby], and then turn around and be able to give it to her [the older child] and to him and all that, but once the school year started, it really got difficult, because she's in so many activities, and I have to carpool, or I wish I were carpooling. I'm driving it by myself because nobody else is going anymore, and so that I have to wake him up regardless, and sometimes come close to interrupt[ing] his feeding. The other day I refused to interrupt his feeding when they had to close for the supposed ice storm that was coming through, so it made me like 15 minutes late to pick her up and she had panicked and gone home to a friend's house and the friend thought, I could see the expression on the friend's face, like "What are you doing to your child?" You know? But you have to draw the line, and I just refused to interrupt his feeding. But anyway. So that's what it amounts to. It just drives me crazy.

In the grounded theory analysis that we carried out, *accessibility* to children became a salient concept. We were intrigued by how often parents talked about having to be *on duty* or *on call* vis-à-vis their kids. Indicators for accessibility included phrases such as "constant attention" and "so many activities" (to which children have to be ferried) and transcript passages pertaining to the trials and tribulations of infant feeding, a parental job that, as the excerpt shows, cannot be interrupted freely. From the start, we felt that the concept of accessibility was literally jumping off the page. It seemed to us that it was everywhere in the interviews. Strictly speaking, however, the concept was not on the page or in the interviews. Rather, the association of the concept with a variety of indicators was a dialectical linkage. What cannot be denied are the theoretical assumptions that we brought to data collection (e.g., see our instructions to the interviewer, LaRossa & LaRossa, 1981, pp. 239-246), or the theoretical insights that we gleaned from prior research and applied to the texts (especially Zerubavel [1979] on continuous coverage). We offered a conflict sociological model on the transition to parenthood (p. 208), but we certainly cannot maintain that the variables in the model had sprung de novo during our analysis. After all, I had offered a conflict sociological approach to marriage and first pregnancy only a few years before (LaRossa, 1977). Finally, we noted in the book's preface that our first child was born just as we were beginning the early phases of analysis, which meant that we were "experiencing our own transition to parenthood at the same time that we were trying to understand the experiences of others" (p. 12). Without a doubt, becoming parents in the midst of the project influenced how we approached the interviews. How could it not?

CONCLUSION

A number of criteria may be used to assess qualitative research. Theoretical development is often at or near the top. The National Science Foundation offered a series of recommendations for writing qualitative research proposals. Among the items listed were "articulate the theoretical contribution the research promises to make" and "describe a strategy to refine the concepts and construct theory" (Ragin et al., 2004, p. 17). The editors of the Journal of Contemporary Ethnography, outlining what "readers and reviewers should take into consideration when evaluating the quality and contribution of a piece of ethnography," said that the most important element was to "have a clear conceptual or theoretical significance" (Adler & Adler, 1995, p. 21). A similar point was made about qualitative manuscripts submitted to the Journal of Marriage and Family: "They should challenge or enlarge an existing theory or strike out in a new direction with new theory" (Ambert et al., 1995, p. 884).

This is not to say that qualitative work has to be theoretical. Qualitative research can be descriptive and spectacular. But in disciplines where theory *is* valued—and family studies is one of those disciplines—qualitative research routinely is judged by how well it is connected to theory.

GTM are a valuable set of procedures for thinking theoretically about textual materials, but they can be difficult to decipher. Believing that simplifying the methods would allow them to be used to greater effect, I have proposed a methodologically condensed but still comprehensive interpretation of GTM, an interpretation that researchers hopefully will find easy to understand and employ. The history of GTM established a foundation for the interpretation. Five basic principles served as its linchpin. These principles emphasized the centrality of language in social life, the importance of words as indicators, the significance of empirical and conceptual comparisons, the value of thinking about how variables are linked, and the mechanics and aesthetics of crafting a story line. The dialectical relationship between induction and deduction was also discussed to underscore the importance of incorporating constructivism in GTM thinking.

In *The Discovery of Grounded Theory*, Glaser and Strauss (1967) said that generating theory was both an "exciting adventure" and fundamentally necessary (p. 8). They were right. The creation of theory can be an exhilarating experience for those of us who do research; but it is, first and foremost, a responsibility to the public that we serve. In the end, we must do it; and we must do it well.

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