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CHAPTER 7

Grounded Theory as an Emergent Method

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During its 40-year history, grounded theory has served as a major method for conducting emergent qualitative research.[1] What is an emergent method? I start with a working definition of an emergent method as inductive, indeterminate, and open-ended. An emergent method begins with the empirical world and builds an inductive understanding of it as events unfold and knowledge accrues. Social scientists who use emergent methods can study research problems that arise in the empirical world and can pursue unanticipated directions of inquiry in this world. Emergent methods are particularly well suited for studying uncharted, contingent, or dynamic phenomena. These methods also allow for new properties of the studied phenomenon to appear that, in turn, shape new conditions and consequences to be studied. By adopting emergent methods, researchers can account for processes discovered in the empirical world and direct their methodological strategies accordingly.

How does grounded theory fit the definition of an emergent method? In which ways does the grounded theory method advance the development of emergent methods? Grounded theory is predicated on an emergent logic. This method starts with a systematic, inductive approach to collecting and analyzing data to develop theoretical analyses. The method also includes checking emergent categories that emerge from successive levels of analysis through hypothetical and deductive reasoning. Grounded theory offers systematic analytic strategies that combine explicitness and flexibility.

Fundamental tenets of the grounded theory method include: (1) minimizing preconceived ideas about the research problem and the data, (2) using simultaneous data collection and analysis to inform each other, (3) remaining open to varied explanations and/or understandings of the data, and (4) focusing data analysis to construct middle-range theories. Rather than viewing only the product of inquiry—the completed grounded the-

ory—as emergent, I argue that the *method* itself is emergent. Thus grounded theorists choose or create specific methodological strategies to handle puzzles and problems that arise as inquiry proceeds.

The publication of Barney G. Glaser and Anselm L. Strauss's *The Discovery of Grounded Theory* in 1967 marked the first systematic statement about how to construct emergent analyses. Prior to that time, students learned how to do qualitative research through an oral tradition of mentoring, as well as through immersion in fieldwork (Rock, 1979). The limited midcentury literature on qualitative methods attended to data collection (see, e.g., Adams & Priess, 1960; Junker, 1960) and attempted to answer quantitative concerns, such as achieving validity and reliability. Scholars had scarcely addressed how to handle the analytic phases of the research process.

Glaser and Strauss (1967) argued that qualitative research: (1) proceeded from a different logic than did quantitative inquiry and had its own rigor, (2) should be evaluated by different canons than those for quantitative research, (3) could integrate research and theory, and (4) democratized theory construction because any astute social scientist could engage in analytic practices that generated theory. Glaser and Strauss's arguments redirected the discussion of qualitative inquiry from methods of data collection to strategies for data analysis and challenged views about theory construction.

Prior to the work of Glaser and Strauss, midcentury theorizing had largely consisted of grand theories about societal structure, but these theories lacked empirical roots. Glaser and Strauss's arguments gained a receptive audience among established and aspiring qualitative researchers and provided them with ready justifications for doing inductive qualitative studies. Subsequently, grounded theory became the most cited qualitative research method across diverse disciplines and professions (Bryant & Charmaz, 2007b). Most researchers, however, adopted few, if any, of Glaser and Strauss's (1967) specific methodological strategies, and those who did often altered them beyond recognition as grounded theory.

Grounded theory is a method of explication and emergence. The method takes a systematic inductive, comparative, and interactive approach to inquiry and offers several open-ended strategies for conducting emergent inquiry (Charmaz, 2006; Charmaz & Henwood, in press). These strategies make grounded theory more than only inductive, because they encourage researchers to make conjectures and check them and therefore to engage in deductive reasoning as inquiry proceeds. Grounded theory strategies make the method explicit, and their open-ended qualities foster the development of emergent conceptual analyses. Grounded theory strategies prompt early analytic thinking and keep researchers interacting with their data and nascent analyses (Charmaz, 2006).

The logic of grounded theory provides a major contribution to emergent methods because grounded theory involves creative problem solving and imaginative interpretation.[2] Grounded theory strategies prompt the researcher to reach beyond pure induction. The method builds a series of checks and refinements into qualitative inquiry through an iterative process of successive analytic and data collection phases of research, each informed by the other and rendered more theoretical. In short, the grounded theory method emphasizes the process of analysis and the development of theoretical categories, rather than focusing solely on the results of inquiry.

The Place of Emergence in Grounded Theory

Any analysis of grounded theory as an emergent method must address the concept of emergence and its place in the method.

Emergence is a fundamental property of grounded theory—both in its products and, although perhaps unrecognized and sometimes contested, in its methodological strategies (see Bryant & Charmaz, 2007c; Charmaz, 2007b). The overriding stated objective of using grounded theory is to generate emergent theories from the data that account for the data.

Taking a step back and looking at emergence as a concept helps one to clarify its divergent understandings and uses in grounded theory. The concept of emergence assumes epistemological understandings and a theory of time. Disputes and misconceptions about what grounded theory is and should be occur at these foundational levels. Emergence is fundamentally a temporal concept; it presupposes a past, assumes the immediacy of the present, and implies a future. In keeping with George Herbert Mead (1932), the present arises from the past but has new properties. These novel elements of emergence distinguish the present from the past and make it distinctive. Emile Durkheim (1895/1982) takes the concept of emergence to its logical extension in his analysis of social structural change. His postulate of emergent reality holds that the whole is greater than and different from the sum of its parts. Emergence gives rise to a new phenomenon with qualitatively new properties.[3]

Whether or not researchers concur with Durkheim, they would agree that emergence means movement, process, and change. The concept of emergence takes into account that the unexpected may occur. The past shapes the present and future but does not make either wholly predictable. Emergent methods permit pursuing what researchers *could not* have anticipated. Grounded theory is particularly well suited to studying such areas because the method itself possesses emergent properties.

The language with which scholars construct the concept of emergence affects its use in the social sciences. Acts of distinguishing between past and present and differentiating the new from the old require language and shared meanings. Essentially, then, we understand the temporal dimensions of emergence through language. Individuals define and depict emergence through drawing on shared meanings. Nonetheless, innovations may occur as these individuals define and depict emergence and draw inferences from their studies. Thus emergence contains subjective elements, as well as collectively agreed-upon objective properties.

Grounded theory starts with an inductive logic but moves into abductive reasoning as the researcher seeks to understand emergent empirical findings. Abductive reasoning aims to account for surprises, anomalies, or puzzles in the collected data. This type of reasoning invokes imaginative interpretations because the researcher imagines all possible theoretical accounts for the observed data and then forms and checks hypotheses until arriving at the most plausible interpretation of the observed data (see also Charmaz, 2006; Reichertz, 2004, 2007; Rosenthal, 2004). For example, Patrick Biernacki's (1986) study not only employed abductive reasoning but also began because of puzzling findings that arose in an earlier small study of marijuana use. Biernacki had discovered that some individuals recovered from heroin addiction without formal treatment, something that health practitioners at that time believed to be impossible. What could account for this surprising discovery? Biernacki's study reveals his search for a theoretical explanation and the movement he made between detailed empirical data and an emergent interpretation of them.

Abduction allows for intuitive interpretations of empirical observations and creative ideas that might account for them (Dey, 2004; Reichertz, 2004, 2007; Rosenthal, 2004). Not only are the surprising data emergent, but the researcher's theoretical treatment of them is also emergent. Abductive reasoning can take the researcher into unanticipated theoretical realms.

Contested Meanings of Emergence in Grounded Theory

The original statement of grounded theory, as well as its current versions, emphasized emergence (see, e.g., Charmaz, 1983, 1990, 2006; Glaser, 1998, 2003, 2006; Strauss, 1987; Strauss & Corbin, 1990, 1998). Yet authors of different versions of grounded theory diverge in how they view and treat emergence in practice. Thus their divergent use of the concept of emergence in grounded theory has resulted in contested versions of the method (Charmaz, 2000, 2006; Clarke, 2005; Glaser, 1992, 1998; Strauss & Corbin, 1990, 1998).

As Kelle (2005) underscores, what emergence means in grounded theory has become a focal point in divisions and debates among its proponents. Glaser's (1992) subtitle, "Emergence vs. Forcing," exemplifies this division in his critique of Strauss and Corbin's (1990) grounded theory methods text. Other proponents' views on emergence are seldom as apparent or contentious as Glaser's but nonetheless shape their approaches to grounded theory. The method now has second-generation and, in some cases, third-generation spokespersons (see, e.g., Bryant & Charmaz, 2007a; Charmaz, 1983, 1990, 2003, 2006; Chenitz & Swanson, 1986; Clarke, 2005, 2006; Clarke & Friese, 2007; Stern, 1994a, 1994b; Wilson & Hutchinson, 1996). In addition, Glaser and Strauss and Corbin (1990, 1998; Strauss, 1987) have influenced numerous commentators, such as Boychuk-Duchscher and Morgan (2004), Dey (1999, 2004), Goulding (2002), Locke (1997, 2001), Lonkila (1995), May (1996), Melia (1996), and Uruquat (2007). The method has spread across diverse disciplines and professional fields, but its inextricable link to its originators continues. Thus I next clarify Glaser's and Strauss's early shared but later divergent views of emergence.

Glaser and Strauss's (1967) original statement portrays the analytic process as emergent in the sense that researchers develop increasingly more theoretical categories and connections as they engage in successive levels of data collection and analysis. Glaser and Strauss imply that these categories emerge automatically through invoking comparative methods. What facilitates the emergence of theoretical categories is less clear. In their book, Glaser and Strauss take a seemingly contradictory stance. They encourage researchers to conduct their research without preconceptions from earlier theory and research. Yet they assume that these researchers already possess sufficient theoretical sensitivity to discern and follow theoretical leads from examining their data. A fine line exists between asking theoretical questions and applying extant concepts. The subsequent tensions between asking and applying will substantially affect the extent to which grounded theory remains an emergent method or becomes a method of application.

The different strategies with which each originator attempted to resolve these tensions have influenced the development of the grounded theory method, as well as how later researchers have seen fit to use it. Numerous researchers have applied the method mechanically and prescriptively by treating grounded theory strategies as rigid, sequential rules rather than flexible, open-ended guidelines. Nonetheless, each of its originators has unwittingly fostered mechanical applications of the method. A renewed emphasis on using grounded theory as an emergent method can counter this trend.

The role of emergence remains central in Glaser's version of grounded theory. Glaser expands his view of emergence in his later works (1978, 1992, 1998, 2003) and sees it as a definitive property of grounded theory. In his version of grounded theory, emergent categories are objective, general, and abstract. Glaser asserts that the process of abstraction removes traces of subjectivity, raises the theoretical level of the analysis, and increases its generality and parsimony. In his view, using systematic comparative

methods leads researchers to discover theoretical categories. Glaser admonishes his followers to "trust in emergence," as though the comparative process of working through levels of analysis will magically generate ideas. He treats emergence and the development of abstract categories as though they are devoid of interpretation and contends that abstraction is objective whereas description is interpretive (Glaser, 2002).[4] Similarly, Glaser (2003, p. 48) argues, "All knowledge is not perspectival. Description is perspectival; concepts that fit and work are variable." Nonetheless, variables are expressed in words and therefore import interpretation.

In his early works, Glaser (1978; Glaser & Strauss, 1967) aimed to use grounded theory to study emergent social or social psychological processes. In this case, emergence derived from the researcher's discovering a single overriding process in the field. The subsequent grounded theory would conceptualize that process by establishing the properties of its core categories or variables. Glaser has since abandoned the search for a single basic social process. He came to view this quest as misguided; it forced data into one framework at the expense of developing emergent categories and immobilized researchers who saw multiple processes in their research settings. Several former students from the 1970s and 1980s report having had similar reservations—and immobilizing setbacks—in their early studies (Charmaz, 2006; Clarke, 2005).

Glaser continues to view grounded theory as a variable analysis but has modified his view about which variables to seek. He now urges researchers to investigate how participants in a particular setting try to resolve their main concern. In 1992, Glaser asserted that research participants would tell the grounded theorist their main concern and their strategy for resolution, but by 2003 he viewed the main concern as latent and therefore assumed and largely unstated. Despite this change of view, Glaser continues to contend that researchers should focus on what emerges in the setting.

As analysis proceeds, potential tensions increase between invoking theoretical sensitivity and drawing on extant theoretical concepts. Glaser (1978, 1992, 1998) has relied on "theoretical codes" to guard against such tensions. "Theoretical codes" are an ad hoc, loosely integrated formulation of varied theoretical families of concepts, such as Glaser's well-known "Six Cs: Causes, Contexts, Contingencies, Consequences, Covariances, and Conditions" (Glaser, 1978, p. 74). Other coding families include those that invoke major sociological concepts such as "means-goals," "identity-self," and "consensus codes." What Glaser includes in a given coding family sometimes seems arbitrary and haphazard. The coding families are not necessarily mutually exclusive, and their boundaries are often indistinct. Substantive codes in a specific study may indicate a number of theoretical codes that cut across different coding families. Glaser asserts that theoretical codes provide the conceptual power to integrate substantive codes. His purpose in establishing theoretical codes is to give the substantive analysis new coherence at an abstract level. However, researchers might find these theoretical codes more helpful as possible directions rather than as definitive integrative links.

Strauss and Corbin's (1990, 1998) version of grounded theory relies less on emergence than does Glaser's version. Whereas Glaser enjoins researchers to initiate their studies by focusing on what is happening in the setting, that is, what the researcher defines as emerging there, Strauss and Corbin view starting points with a wider lens. They point out that, in addition to what emerges in the study, other influences, such as personal experiences, professional exigencies, and earlier ideas, may spark inquiry. Their introduction of techniques to apply to data, axial coding and the causal–conditional matrix, made grounded theory prescriptive and signaled critical departures from Glaser's version. Strauss and Corbin define axial coding as a way of specifying the dimensions of a category, relating categories to subcate-

gories, delineating relationships between them, and bringing the data back together into a coherent whole after having fractured them during the initial coding (Charmaz, 2006, p. 186; Corbin & Strauss, 1988, p. 125). In this sense, Strauss and Corbin supply an alternative to Glaser's reliance on theoretical codes, but it requires application rather than relying on emergence. The conditional/consequential matrix is a coding device used to show the intersections of micro and macro conditions/consequences on actions and to clarify the connections between them. Strauss and Corbin present this matrix as an effective means of attending to structural context that links structures and situations.

The prescriptive character of Strauss and Corbin's books is something of a paradox, for Strauss had long emphasized Mead's analysis of temporality and the significance of agency, alternative actions, and indeterminacy in social life (Fisher & Strauss, 1979; Strauss, 1959/1969, 1993). Strauss's view of social life assumed emergence through dynamic processes of action (including interaction) and the construction and reconstruction of meaning. Perhaps sharp criticisms of Strauss and Corbin's 1990 book as technical and prescriptive led to their considerably more flexible view of grounded theory in the first edition of the *Handbook of Qualitative Research* (Strauss & Corbin, 1994). In addition, Margaret H. Kearney (2007) observes that Strauss received enormous pressure from graduate students to make grounded theory concrete and rule-bound.

The most recent version of grounded theory, constructivist grounded theory (Bryant, 2002; Charmaz, 2000, 2005, 2006; Clarke, 2005, 2006; Mills, Bonner, & Francis, 2006), retains the original focus on emergence but does so in relation to the conditions of the research and the standpoints and interactions of the researchers. Thus the research product includes more than what the researcher learns in the field. Whether or not researchers are conscious of what they bring to the study or of the conditions under which they conduct it, constructivists contend that all become part of the research process and product. The constructivist position views research as an emergent product of particular times, social conditions, and interactional situations. Constructivists argue that researchers' perspectives will direct their attention but not determine their research (see also Clarke, 2005, 2006). Unlike the view held by Glaser that researchers can and should remove themselves from the influences of their disciplines and the conditions of their research, constructivists aim to make these influences explicit.[5] Here researchers view themselves as embedded in the research process rather than as distanced observers of empirical phenomena. Thus constructivists attend to the conditions and relations of research, considering them part of the knowledge gained from the investigation.

Similarly, Clarke (2005, 2006) argues that classic grounded theory erases perspectives, positions, standpoints, and differences. Like the other constructivist approaches, Clarke's postmodern critique challenges the fundamental epistemological premises that support objectivist views and practices. Both Clarke (2005, 2006) and Charmaz (2006) observe that the generalizing thrust of Glaser's (1978, 1992, 1998, 2002) approach separates the conditions of research from the abstract concepts that the researcher generates. Glaser aims to gain objective concepts through observing many cases, which certainly helps to broaden the resulting scope of knowledge. Yet observing many cases does not necessarily answer the question of how the conditions of the research—the researcher's standpoints, interactions, and choices—affect the research process and product.

Constructivists reveal the significance of grounded theory as an emergent method: *The method does not stand outside the research process; it resides within it*.[6] Commentators often treat grounded theory as rule-bound, es-

pecially those influenced by Strauss and Corbin. At present Glaser also proffers rules, albeit a different set. Constructivists, however, view the emergent nature of the method itself as arising from researchers' questions, choices, and specific strategies and thus remain inseparable from their earlier and evolving perspectives. When constructivist grounded theorists enter research sites and engage their data, their perspectives may grow and/or change and thus permit the structure of inquiry, as well as its content, to be emergent. Researchers who treat grounded theory as consisting of a few flexible yet systematic guidelines create the conditions to define emergent categories.

A constructivist stance on emergence contrasts with both Glaser's (1978) theoretical codes and Strauss and Corbin's axial coding and conditional/consequential matrix at the level of grounded theory practice. Each of their respective approaches encourages researchers to force their data into extant categories. Adopting theoretical codes resounds of application, not emergence. If researchers use these theoretical codes to integrate their theories, where is the line between application and emergence? One solution is to pose theoretical questions about the nascent analysis rather than to apply theoretical concepts (see Charmaz, 2006, pp. 335–340) to it. Thus the theoretical questions that researchers pose arise from the particular issues grounded in the studied empirical world.

Emergence in Grounded Theory Practice

Grounded theory has evolved into a constellation of methods rather than an orthodox unitary approach.[7] My preceding discussion highlights major differences between Glaser and Strauss's classic statement, Glaser's development of it, Strauss and Corbin's version, and constructivist grounded theory. Nonetheless, these major versions of grounded theory also share certain similar guidelines and specific strategies in research practice. Hence I critique the strategies here and note crucial points at which researchers advance their emergent analyses or pursue directions that undermine emergence and their claims of having produced a grounded theory study.

Like those of many other qualitative researchers, grounded theorists' initial topics in new research arenas provide starting points of exploration—but not of specific research questions.[8] These questions depend on what arises in research sites and stories. Two defining properties of the grounded theory method create the conditions for emergent inquiry: (1) the systematic, active scrutiny of data and (2) the successive development and checking of categories. From the initial stages of research throughout the process, grounded theorists scrutinize their data by asking both action and analytic questions: "What is happening here?" and "What (theoretical category or theory) are these data a study of?" (Glaser, 1978, p. 57). The first question pushes the researcher to examine the empirical world—in close detail. The second question links this world to theoretical possibilities early on during data collection. Both questions encourage researchers to follow emergent leads systematically.

Emergent leads shape the search for emergent concepts. By interrogating their data repeatedly with these two questions, grounded theorists explicate, expedite, and enhance intuitive strategies that other qualitative researchers often invoke on a descriptive level. These strategies include probing beneath the surface: comparing data, checking hunches, refining emerging ideas, and constructing abstract categories from data analysis. Simultaneously, grounded theory makes these strategies more efficient and analytically effective by indicating how and when to use them. The iterative process of going back and forth between collecting and analyzing data raises the emergent levels of analysis.

Hence researchers' interactions and observations in the field affect both their devel-

oping analysis and their attempts to grapple with their constructed data. At each stage of the research process, new ideas, questions, and deeper refinements of earlier conceptions can emerge. A few crucial grounded theory strategies expedite the analytic process.

Because grounded theory relies on emergence, researchers should remain open to what happens in their research sites and settings. Narrow research problems and research questions seldom work until a grounded theorist has established intimate familiarity (Blumer, 1969; Lofland & Lofland, 1995) with the research topic or site.[9] This intimate familiarity with the topic gives grounded theorists a window to see emergent processes in their data, allowing them to pursue a specific research problem that addresses these processes.

In addition, the grounded theory goal of generating theoretical analyses that fit empirical reality requires researchers to gain an intimate familiarity (Blumer, 1969; Lofland & Lofland, 1995) with this empirical world. Researchers cannot assess how well their analyses fit their data unless they have gained intimate familiarity with the studied phenomenon. The openness of the grounded theory method allows researchers to develop an analysis of a major process, problem, or phenomenon in their data. Ironically, many researchers claim to adopt grounded theory to study narrowly defined preconceived problems in the field. Imposing either preconceived problems or narrow interests on a study stifles emergence and undermines effective use of grounded theory. Under these conditions, researchers treat grounded theory as a method of application rather than emergence.

Several grounded theory strategies have become part of the repertoire of the larger field of qualitative inquiry. Paradoxically, their translation into the lexicon of general qualitative methods has cost them emergent power and obfuscates the issue of whether and to what extent researchers' claims of using grounded theory can be supported (Charmaz, 2006; Hood, 2007). Simultaneous data collection and analysis has become common practice in qualitative research, although it marked a grand innovation when Glaser and Strauss first advocated it in 1967. They proposed that early data analysis would focus researchers' further data collection. In turn, this focused data would illuminate and inform construction of emergent categories.

At present, many qualitative researchers conduct simultaneous data gathering and analysis but do not necessarily use explicit comparative methods or adopt grounded theory forms of coding data. The grounded theory method integrates and streamlines data collection by constructing systematic comparisons throughout inquiry of data with data, data with code, code with code, code with category, and category with category.

Grounded theorists adopt an inductive approach yet move their nascent analyses beyond induction. In contrast, many qualitative studies remain solely inductive. These studies likely have a wider lens on the studied realities than do grounded theory studies, which progressively focus data collection and analysis. The grounded theory method not only calls for using comparisons to generate categories but also builds in checks that keep the researcher's ideas grounded in data. Grounded theorists go back to the setting to observe specific events or to ask key informants further, more specific questions to shed light on their developing theoretical categories.[10]

In my view, grounded theory strategies are few and flexible, so researchers may adapt them to the exigencies of their studies. Thus a researcher has latitude not simply to *choose* the methods but also to *create* them as inquiry proceeds. Grounded theory consists of transparent analytic guidelines; the transparency of the method enables researchers to make transparent analytic choices and constructions. The researcher can see and create a direct relationship between data and abstract categories.

Using Grounded Theory Guidelines

Effective use of the grounded theory method depends on adopting several of Glaser and Strauss's (1967; Glaser, 1978; Strauss, 1987) early grounded theory guidelines—with 21st-century caveats. Adopting comparative, interactive analytic strategies in coding, memo-writing, theoretical sampling, sorting, and integrating the analysis is only part of the grounded theorist's task. In keeping with constructivist premises, researchers must also (1) entertain a range of theoretical possibilities and (2) examine their own epistemological premises and research principles and practices. Grounded theory fosters openness to what is happening in the empirical world. That means studying data and developing an analysis from conceptualizing these data rather than imposing a theoretical framework on them.

Qualitative researchers often receive advice to choose research topics that affect their lives. Since the inception of the method, grounded theorists have pursued substantive topics in which they held a decided stake. Strauss and Glaser each had experienced the death of a parent before they began to study the social organization of dying. Elizabeth Cauhapé had experienced a midlife divorce before she undertook the dissertation research that led to her book, *Fresh Starts: Men and Women after Divorce* (1983). Adele E. Clarke had long-standing interests in women's reproductive health and in organizational analysis, which she combined in her 1998 historical study of the emergence of reproductive biology, *Disciplining Reproduction: Modernity, American Life Sciences and "the Problems of Sex."* Researchers who start where they are at may risk importing preconceived ideas into the study; however, engaging in reflexivity and invoking grounded theory strategies can challenge their previously taken-for-granted actions and assumptions.

What makes grounded theory distinctive? The comparative and interactive nature of grounded theory at every stage of analysis distinguishes grounded theory from other approaches and makes it an explicitly emergent method. First, crucial coding practices lay the foundation of grounded theory research. Second, writing progressively more analytic as opposed to descriptive, memos advances grounded theory practice. Third, a pivotal but often neglected grounded theory strategy, theoretical sampling, distinguishes grounded theory from other methods. Fourth, theoretical saturation is widely claimed but scarcely practiced. Following these four strategies enables researchers to make their theoretical analysis the basis for sorting and integrating their studies. I outline only how grounded theory strategies support emergent analyses here, as they are detailed elsewhere (Bryant & Charmaz, 2007b; Charmaz, 2003, 2006; Glaser, 1978; Strauss, 1987; Strauss & Corbin, 1990, 1994, 1998).

Coding Data

Coding begins the emergent process of analyzing data in grounded theory. Coding consists of at least two phases: initial coding and focused coding. Initial or open coding requires a close reading and interrogation of the data. This phase of coding moves grounded theorists' attention from the research field to the analysis of the data, as they engage in simultaneous data collection and analysis. Grounded theorists conduct coding as they gather data. Specific forms of grounded theory coding lead researchers to focus on possible meanings of the data and to stick closely to the data while actively interrogating them. By asking both of Glaser's questions, they can gain greater insight into their data and define what they might mean.

Most qualitative researchers code for themes and topics rather than actions and analytic possibilities. From the very beginning, coding for actions and theoretical potential distinguishes the grounded theory

method and, likely, its product from other types of qualitative research. Researchers conduct initial grounded theory coding by comparing incidents or by coding word by word, line by line, or paragraph by paragraph. Coding in larger chunks works well with ethnographic data, whereas line-by-line coding is an excellent heuristic device for coding initial intensive interviews and certain types of narrative data. Coding with gerunds, that is, noun forms of verbs, such as *revealing*, *defining*, *feeling*, or *wanting*, helps to define what is happening in a fragment of data or a description of an incident. Gerunds enable grounded theorists to see implicit processes, to make connections between codes, and to keep their analyses active and emergent. Compare the excerpt of grounded theory coding with the one of general qualitative coding in Figure 7.1. The excerpt is taken from an interview with a woman I call Karen Liddell, who has a debilitating neck injury.

Note the difference between coding for topics as contrasted with grounded theory coding for actions. The general qualitative coding identifies topics about which the researcher can write; the researcher may use such topics as areas to sort and synthesize the material. The line-by-line grounded theory coding goes deeper into the phenomenon and attempts to explicate it. This type of coding gives researchers more directions to consider and already suggests emergent links between processes in the data. The codes indicate the simultaneous occurrence of a disintegrating marriage and family and the research participant's disintegrating self. The codes also indicate conditions under which each process occurs; readers gain a sense of what is happening in this statement and how it happens. The analytic level of the grounded theory codes ranges from describing a fragment of data, such as "disappearing husband," "being exhausted," and "explaining distress," to potential analytic categories such as "disintegrating self" and "disclosing a plausible identity." Karen Liddell imparts a sense of moving between past and present while describing her ex-husband's actions. I tried to portray this movement by coding him as an ex-husband in certain statements and a husband in others.

Grounded theory coding is interactive and comparative. Line-by-line coding forces the researcher to interact with the data. Even in so short an excerpt as I have provided in Figure 7.1, we can make some comparisons. Note how Karen tells the story of her husband's addiction and uses it to frame her story of her own struggle with addictive pain medications. In addition, the excerpt suggests conceptions of normal life compared with and juxtaposed against continual crises. My ideas and leads emerged while I grappled with the coding rather than from a reading of the entire interview. Grounded theorists may also gain emergent leads through identifying *in vivo* codes, which consist of research participants' direct statements. *In vivo* codes aid grounded theorists in discerning participants' meanings and in explaining their emergent actions.

After grounded theorists have established which initial codes are most frequent and/or significant, they engage in focused or selective coding. This coding allows them to sort and synthesize large amounts of data, thereby expediting their work. Grounded theorists scrutinize their focused codes to evaluate which ones best explain or interpret the empirical phenomenon. These codes then become tentative theoretical categories. Like their scrutiny of initial codes, which codes grounded theorists select to develop is an emergent process. They test their focused codes against the data by using them to examine large batches of data. When deciding which codes to raise to theoretical categories, they look for those codes that carry the weight of the analysis—what Clarke[11] calls "carrying capacity"—and that provide "analytic momentum" (Charmaz, 2006). Grounded theorists then treat these major focused codes as tentative categories subject to further analytic treatment.

Initial Grounded Theory Coding	
Examples of Codes	*Initial Narrative Data to Be Coded*
Living with ex-husband's double life	My ex-husband had kind of a double life going on as it turns out; he would disappear for two or three days at a time which became increasingly worse. He had colitis . . . part of it was his colitis but part of it, [as] it turned out was a hidden cocaine addiction so I couldn't continue to—in my chronic pain condition and his behavior, just kept me so stressed out where I couldn't function emotionally and physically to a point. That's why I say my survival was at stake . . . it hurt me. And there was no support there for my pain issue. . . . I always had to be the one who had to be strong because he'd be gone on these disappearing things and then somebody had to hold down the fort and keep everything going when this would happen. And then sometimes it would take him a week to recover because whatever he was doing would cause his colitis to flare up, so I was always forced to be in the position of the emotional anchor in the family and it was so exhausting to me and again I had to keep escalating that pain medication then to continue on and normally, then, at the time the disk was fully herniated so I was being treated for chronic pain but there was still some questions to the validity of my pain factor whether it was emotionally induced or physically and some question as to whether it was a lot psychological, that I was perhaps, you know, had a painful addiction and was just self-medicating.
Disappearing husband Escalating disappearances Accounting for husband's disappearances	
Defining hidden addiction Alluding to limits for self-explaining distress	
Being unable to function Disintegrating self Questioning survival of self/ of way of life Feeling hurt/betrayed Wanting husband's support for *her* pain	
Carrying doubled responsibilities Expressing resentments (in tone of voice)	
Keeping life (family and business) together	
Detailing ex-husband's lapses Timing then-husband's recovery/ explaining his complicating illness	
Feeling forced to be family emotional anchor	
Being exhausted Feeling forced to escalate pain meds Seeing pain meds as allowing a normal life	
Explaining extent of injury	
Externalizing questions about pain Revealing ambiguous cause of pain—physical and/or psychological	
Questioning the possibility of addiction	
Raising the specter of self-overmedicating Disclosing a plausible identity	

General Qualitative Coding	
Examples of Codes	*Initial Narrative Data to Be Coded*
Marital tensions	My ex-husband had kind of a double life going on as it turns out; he would disappear for two or three days at a time which became increasingly worse. He had colitis . . . part of it was his colitis but part of it, [as] it turned out was a hidden cocaine addiction so I couldn't continue to—in my chronic pain condition and his behavior, just kept me so stressed out where I couldn't function emotionally and physically to a point. That's why I say my survival was at stake . . . it hurt me. And there was no support there for my pain issue. . . . I always had to be the one who had to be strong because he'd be gone on these disappearing things and then somebody had to hold down the fort and keep everything going when this would happen. And then sometimes it would take him a week to recover because whatever he was doing would cause his colitis to flare up, so I was always forced to be in the position of the emotional anchor in the family and it was so exhausting to me and again I had to keep escalating that pain medication then to continue on and normally, then, at the time the disk was fully herniated so I was being treated for chronic pain but there was still some questions to the validity of my pain factor whether it was emotionally induced or physically and some question as to whether it was a lot psychological, that I was perhaps, you know, had a painful addiction and was just self-medicating.
Ex-husband's illness	
Ex-husband's addiction	
Stress	
Lack of support Pain issue	
Pressures	
Family role	
Questions on source of pain	
Possible addiction	

FIGURE 7.1. Comparison of grounded theory coding and general qualitative coding. Initial narrative data from Charmaz (2004).

Memo Writing

Grounded theorists typically define memo writing as the intermediate stage between data collection and writing a draft of a paper or chapter (Charmaz, 2003, 2006; Glaser, 1978, 1998). Yet memo writing is so much more. Memo writing is about capturing ideas in process and in progress. Successive memos on the same category trace its development as the researcher gathers more data to illuminate the category and probes deeper into its analysis. Memos can be partial, tentative, and exploratory. The acts of writing and storing memos provide a framework for exploring, checking, and developing ideas. Writing memos gives one the opportunity to learn about the data rather than just summarizing material. Through this writing, the grounded theorist's ideas emerge as discoveries unfold.

Memo writing is a distinct contribution of grounded theory, although most qualitative researchers now use some form of this method. Grounded theorists vary in the detail and analytic level of their memos. Essentially, however, memos first open the codes to scrutiny and then later examine the categories. Several guidelines are important for grounded theory memos: (1) title the memos for easy sorting and storage; (2) write memos throughout the entire research process; (3) define the code or category by its properties found in the data; (4) delineate the conditions under which the code or category emerges, is maintained, and changes; (5) compare the code or category with other codes and categories; (6) include the data from which the code or category is derived right in the memo; (7) outline the consequences of the code or category; (8) note gaps in the data and conjectures about it. Glaser (1998) urges researchers to write memos whenever and however they have an idea. Memos give grounded theorists something to work with, to ponder later, and to explore further.

Memo writing gives researchers the opportunity to stretch their thinking as they interrogate their data. Grounded theory approaches to memo writing shift qualitative inquiry into an explicit analytic endeavor. This type of memo writing prompts the researcher to move beyond description and storytelling. If, for example, I pursued the code "disintegrating self" in Figure 7.1, I would define each account of a "disintegrating self" according to properties I found in a range of interviews. Then I would try to outline the conditions in which each of these categories emerge and show how they might be related to other categories. I would see whether and to what extent the notion of a disintegrating self held when the social structure of a person's life was also disintegrating. I would then explore how other codes, such as "carrying doubled responsibilities" and "feeling hurt/betrayed," might fit into my emerging analysis. The analytic process of exploring meanings, weighing situations, and examining actions through memo writing raises questions that I could then try to answer through subsequent data collection.

Theoretical Sampling

Theoretical sampling keeps a study grounded. It is a method of sampling data for the development of a theoretical category. The term *sampling* here often leads to confusion and misunderstandings. Many researchers cannot separate the notion of sampling from studying populations and their characteristics. Hence they are able to envision sampling only as a procedure done before the collection of data. In contrast, researchers who subscribe to the grounded theory method conduct theoretical sampling only after they have tentative categories to develop or refine. For grounded theorists, emergent categories form the basis of theoretical sampling. Grounded theorists cannot anticipate where their theoretical inquiry will take them. Their tentative categories arise through the analytic process, and thus theoretical sampling may take them into new research sites and substantive areas.

Grounded theorists' major task in theoretical sampling is to fill out the properties of their categories. In keeping with grounded theory logic, they may seek comparative data to tease out hidden properties of a category. For example, if my data indicated that in each instance in which I found a disintegrating self, I also found a deteriorating social network, I might seek people who faced serious chronic conditions but had robust social networks. My subsequent comparisons could then illuminate to what extent and how the quality of a person's social network figures into his or her disintegrating self.

The logic of theoretical sampling distinguishes grounded theory from other types of qualitative inquiry. Through considering all possible theoretical understandings of their data, grounded theorists create tentative interpretations, then return to the field and gather more data to check and refine their categories. In this sense, grounded theory methods are abductive (Deely, 1990; Peirce, 1931/1958; Rosenthal, 2004). Abductive logic entails attempting to imagine all possible hypothetical accounts to explain surprising findings and then subjecting these hypothetical accounts to test. Abductive logic involves both imaginative interpretation and *reasoning* about experience, both of which grounded theorists invoke when they check and refine their categories. At this point, grounded theorists entertain all conceivable theoretical explanations for the data; they then proceed to check these explanations empirically through further experience—more data collection—to pursue the most plausible theoretical explanation (Charmaz, 2006). Thus a major strength of the grounded theory method is that these budding conceptualizations can lead researchers in the most useful, often emergent and unanticipated theoretical direction to understand their data.

Theoretical Saturation

Theoretical saturation means saturation of the properties of a theoretical category. Researchers define theoretical saturation as having occurred when gathering more data sheds no further light on the properties of their theoretical category. Much theoretical sampling is devoted to the quest of attaining theoretical saturation, and theoretical categories are mandatory for this achievement. Yet many qualitative researchers claim to have achieved saturation with no reference to theoretical concepts.

Theoretical saturation is another grounded theory strategy that found its way into the general lexicon of qualitative methods. Qualitative researchers who do not use grounded theory methods have stripped the term of its defining theoretical dimension. Instead, most of these other qualitative researchers talk of "saturation" of data, meaning that the same themes repeatedly arise in their data. Repetitive themes have very little to do with theoretical saturation and grounded theory when the repetitive data are not in service of a theoretical category.

Grounded theorists themselves have also diluted the strategy of theoretical saturation. Many researchers who claim grounded theory allegiance assert that they have achieved theoretical saturation without providing evidence for it (Morse, 1995). Very small initial samples in some grounded theory studies compound the problem of claims of theoretical saturation. How can researchers know that they have saturated a theoretical category if they have not gathered sufficient data to establish the parameters of the category or to explicate its properties?

Conclusion

The four grounded theory strategies of coding, memo writing, theoretical sampling, and theoretical saturation form the defining features of the method. How and when researchers employ these strategies emerges during the course of inquiry. Like applications of Elisabeth Kübler-Ross's (1969) stages of dying, followers of grounded theory have reified and rigidified its strategies. Efforts to make grounded theory mechani-

cal and rule-bound erode the emergent qualities of the method and erase its potential for sparking new theoretical analyses. Despite efforts to make grounded theory prescriptive, its strategies have substantial flexibility, and researchers may adapt them to fit their emerging studies.

Grounded theory advances emergent methods because it is both inductive and abductive. The inductive, iterative process of going back and forth between data collection and analysis makes emergent grounded theory analyses focused and incisive. The abductive process of accounting for emergent findings raises the level of abstraction of the analysis and extends its "theoretical reach" (Charmaz, 2006, p. 128). Theoretical sampling and theoretical saturation provide solidity for the emergent analysis and keep it grounded.

Students and new PhDs may want the structure and seeming certainty that a procedural application of grounded theory may provide.[12] Although their wishes to follow rule-bound procedures are understandable, adopting and applying a procedural approach to grounded theory suppresses its emergent elements and likely stifles their own creativity. Learning to tolerate ambiguity permits the researcher to become receptive to creating emergent categories and strategies. Subsequently, the flexibility of constructivist grounded theory guidelines can frame inquiry and further imaginative engagement with data.

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Notes

1. Consistent with conventional methodological parlance, I use the term *grounded theory* to represent the method as well as the completed grounded theory analysis of an empirical problem. A more precise distinction would call for distinguishing between the method of conducting research, the grounded theory method, and the product of that research, the substantive or formal grounded theory (Bryant & Charmaz, 2007c; Charmaz, 2003, 2006).

2. Here I allude to the pragmatist roots of grounded theory and the scientific but creative reasoning of C. S. Peirce. Strauss may not have engaged Peirce's concept of abduction explicitly in his writings, but he described grounded theory as an abductive method in his teaching—at least in the early years of the doctoral program at the University of California, San Francisco, when I was a graduate student.

3. The congruent views on emergence of Mead, an American pragmatist, and Durkheim, a French structuralist, reflect their realist assumptions of society preceding individuals and, likely, exposure to Henri Bergson's ideas. William James brought Bergson's ideas to the pragmatists, and Durkheim knew Bergson from their student days at the Ecole Normale. For more on Bergson's contributions, see his 1903/1961 and 1921/1965 works.

4. I am indebted to Matthew James, a paleontologist, for reminding me that natural scientists would disagree with Glaser's statement (personal communication, February 23, 2007). Glaser inverts conventional scientific reasoning here. Natural scientists treat description as straightforward, unproblematic, and replicable. They view the abstractions of description as interpretive.

5. Diana Grant (personal communication, February 23, 2007), who uses quantitative methods, points out that Glaser's position come close to the reified focus on researcher objectivity for which quantitative researchers are criticized.

6. My position here is analogous to Clarke's (2005) depiction of situations. In both cases, we aim to treat the whole phenomenon rather than focus on certain parts.

7. Glaser has recently modified his earlier insistence on representing the only version of grounded theory and now sees alternative versions as well (Bryant & Charmaz, 2007c).

8. Note that I specify new research arenas here. Grounded theorists may work in the same or related arenas on subsequent projects. If they do, having a rich reservoir of data and experience from prior studies may considerably expedite moving to a specific research question, as well as to conceptual analysis.

9. Grounded theory and naturalism (Lincoln & Guba, 1985; Lofland & Lofland, 1995) are congruent on this point.

10. Most grounded theory studies are interview studies. Grounded theorists who do not have access to interview participants more than once can form specific questions in the later interviews to check their theoretical categories.

11. Personal communication, February 28, 2005.

12. I am indebted to Melinda Milligan for suggesting the implications of the preceding analysis for students (personal communication, February 23, 2007).

References

Adams, R. N., & Preiss, J. J. (Eds.). (1960). *Human organization research: Field relations and techniques* (pp. 267–289). Homewood, IL: Dorsey Press.

Bergson, H. (1961). *An introduction to metaphysics* (M. L. Andison, Trans.). New York: Philosophical Library. (Original work published 1903)

Bergson, H. (1965). *Duration and simultaneity, with reference to Einstein's theory*. Indianapolis, IN: Bobbs-Merrill. (Original work published 1921)

Biernacki, P. (1986). *Pathways from heroin addiction: Recovery without treatment*. Philadelphia: Temple University Press.

Blumer, H. (1969). *Symbolic interactionism*. Englewood Cliffs, NJ: Prentice Hall.

Boychuk-Duchscher, J. E., & Morgan, D. (2004). Grounded theory: Reflections on the emerging vs. forcing debate. *Journal of Advanced Nursing*, *48*(6), 605–612.

Bryant, A. (2002). Re-grounding grounded theory. *Journal of Information Technology Theory and Application*, *4*(1), 25–42.

Bryant, A., & Charmaz, K. (2007a). Grounded theory in historical perspective: An epistemological account. In A. Bryant & K. Charmaz (Eds.), *The handbook of grounded theory* (pp. 31–57). London: Sage.

Bryant, A., & Charmaz, K. (Eds.). (2007b). *The handbook of grounded theory*. London: Sage.

Bryant, A., & Charmaz, K. (2007c). Introduction. In A. Bryant & K. Charmaz (Eds.), *The handbook of grounded theory* (pp. 1–28). London: Sage.

Cauhapé, E. (1983). *Fresh starts: Men and women after divorce*. New York: Basic Books.

Charmaz, K. (1983). The grounded theory method: An explication and interpretation. In R. M. Emerson (Ed.), *Contemporary field research* (pp. 109–126). Boston: Little, Brown.

Charmaz, K. (1990). Discovering chronic illness: Using grounded theory. *Social Science and Medicine*, *30*, 1161–1172.

Charmaz, K. (2000). Constructivist and objectivist grounded theory. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 509–535). Thousand Oaks, CA: Sage.

Charmaz, K. (2003). Grounded theory. In M. Lewis-Beck, A. E. Bryman, & T. F. Liao (Eds.), *The Sage encyclopedia of social science research methods* (pp. 440–444). London: Sage.

Charmaz, K. (2004). Premises, principles, and practices in qualitative research: Revisiting the foundations. *Qualitative Health Research*, *14*, 976–993.

Charmaz, K. (2005). Grounded theory in the 21st century: A qualitative method for advancing social justice research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (3rd ed., pp. 507–535). Thousand Oaks, CA: Sage.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London: Sage.

Charmaz, K. (2007). Reconstructing grounded theory. In L. Bickman, P. Alasuutari, & J. Brannen (Eds.), *Handbook of social research* (pp. 461–478). London: Sage.

Charmaz, K. (in press). Grounded theory. In J. A. Smith (Ed.), *Qualitative psychology: A practical guide to research methods* (2nd ed.). London: Sage.

Charmaz, K., & Henwood, K. (in press). Grounded theory in psychology. In C. Willig & W. Stainton-Rogers (Eds.), *Handbook of qualitative research in psychology*. London: Sage.

Chenitz, W. C., & Swanson, J. M. (Eds.). (1986). *From practice to grounded theory: Qualitative research in nursing*. Reading, MA: Addison-Wesley.

Clarke, A. E. (1998). *Disciplining reproduction: Modernity, American life sciences, and "the problems of sex."* Berkeley: University of California Press.

Clarke, A. E. (2005). *Situational analysis: Grounded theory after the postmodern turn*. Thousand Oaks, CA: Sage.

Clarke, A. E. (2006). Feminism, grounded theory, and situational analysis. In S. Hess-Biber & D. Leckenby (Eds.), *Handbook of feminist research methods* (pp. 345–370). Thousand Oaks, CA: Sage.

Clarke, A. E., & Friese, C. (2007). Grounded theory using situational analysis. In A. Bryant & K. Charmaz (Eds.), *The handbook of grounded theory* (pp. 363–397). London: Sage.

Corbin, J., & Strauss, A. L. (1988). *Unending work and care: Managing chronic illness at home*. San Francisco: Jossey-Bass.

Deely, J. N. (1990). *Basics of semiotics*. Bloomington: Indiana University Press.

Dey, I. (1999). *Grounding grounded theory*. San Diego, CA: Academic Press.

Dey, I. (2004). Grounded theory. In C. Seale, G. Gobo, J. F. Gubrium, & D. Silverman (Eds.), *Qualitative research practice* (pp. 80–93). London: Sage.

Durkheim, E. (1895/1982). *The rules of sociological method*. New York: Free Press. (Original work published 1895)

Fisher, B. M., & Strauss, A. L. (1979). George Herbert

Mead and the Chicago tradition of sociology. *Symbolic Interaction*, *2*, 9–26.

Glaser, B. G. (1978). *Theoretical sensitivity*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (1992). *Basics of grounded theory analysis: Emergence vs. forcing*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (1998). *Doing grounded theory: Issues and discussions*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (2002). Constructivist grounded theory? *Forum: Qualitative Social Research*, *3*. Retrieved October 20, 2002, from *http://www.qualitative-researh.net/fqs-texte/3-02/3-02glaser-e-htm*

Glaser, B. G. (2003). *Conceptualization contrasted with description*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (2006). *Doing formal grounded theory: A proposal*. Mill Valley, CA: Sociology Press.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory*. Chicago: Aldine.

Goulding, C. (2002). *Grounded theory: A practical guide for management, business, and market researchers*. London: Sage.

Hood, J. (2007). Orthodoxy vs. power: The defining traits of grounded theory. In A. Bryant & K. Charmaz (Eds.), *The handbook of grounded theory* (pp. 151–164). London: Sage.

Junker, B. H. (1960). *Field work: An introduction to the social sciences*. Chicago: University of Chicago Press

Kearney, M. H. (2007). From the sublime to the meticulous: The continuing evolution of grounded formal theory. In A. Bryant & K. Charmaz (Eds.), *The handbook of grounded theory* (pp. 127–150). London: Sage.

Kelle, U. (2005). "Emergence" vs. "forcing" of empirical data: A crucial problem of "grounded theory" reconsidered. *Forum: Qualitative Social Research*, *6*(2). Retrieved May 30, 2005, from *www.qualitative-research.net/fqs.texte/2-05/05-2-27-e.htm*

Kübler-Ross, E. (1969). *On death and dying*. New York: Macmillan.

Layder, D. (1998). *Sociological practice: Linking theory and social research*. London: Sage.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Locke, K. (1997). Rewriting the discovery of grounded theory after 25 years? *Journal of Management Inquiry*, *5*(1), 239–245.

Locke, K. (2001). *Grounded theory in management research*. Thousand Oaks, CA: Sage.

Lofland, J., & Lofland, L. (1995). *Analyzing social settings: A guide to qualitative observation and analysis*. Belmont CA: Wadsworth.

Lonkila, M. (1995). Grounded theory as an emerging paradigm for computer-assisted qualitative data analysis. In U. Kelle (Ed.), *Computer-aided qualitative data analysis* (pp. 41–51). London: Sage.

May, K. (1996). Diffusion, dilution or distillation? The case of grounded theory method. *Qualitative Health Research*, *6*(3), 309–311.

Mead, G. H. (1932). *The philosophy of the present*. La Salle, IL: Open Court.

Melia, K. M. (1996). Rediscovering Glaser. *Qualitative Health Research*, *6*(3), 368–378.

Mills, J., Bonner, A., & Francis, K. (2006). The development of constructivist grounded theory. *International Journal of Qualitative Methods*, *5*(1), 1–10.

Morse, J. M. (1995). The significance of saturation. *Qualitative Health Research*, *5*, 147–149.

Peirce, C. S. (1958). *Collected papers*. Cambridge, MA: Harvard University Press. (Original work published 1931)

Reichertz, J. (2004). Abduction, deduction, and induction in qualitative research. In U. Flick, E. von Kardoff, & I. Steinke (Eds.), *A companion to qualitative research* (pp. 150–164). London: Sage.

Reichertz, J. (2007). Abduction: The logic of discovery of grounded theory. In A. Bryant & K. Charmaz (Eds.), *The handbook of grounded theory* (pp. 214–228). London: Sage.

Rock, P. (1979). *The making of symbolic interactionism*. London: Macmillan.

Rosenthal, G. (2004). Biographical research. In C. Seale, G. Gobo, J. F. Gubrium, & D. Silverman (Eds.), *Qualitative research practice* (pp. 48–64). London: Sage.

Stern, P. N. (1994a). Eroding grounded theory. In J. Morse (Ed.), *Critical issues in qualitative research methods* (pp. 212–223). Thousand Oaks, CA: Sage.

Stern, P. N. (1994b). The grounded theory method: Its uses and processes. In B. G. Glaser (Ed.), *More grounded theory: A reader* (pp. 116–126). Mill Valley, CA: Sociology Press.

Strauss, A. L. (1969). *Mirrors and masks*. Mill Valley, CA: Sociology Press. (Original work published 1959)

Strauss, A. (1987). *Qualitative analysis for social scientists*. New York: Cambridge University Press.

Strauss, A. (1993). *Continual permutations of action*. New York: Aldine de Gruyter.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.

Strauss, A., & Corbin, J. (1994). Grounded theory methodology: An overview. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 273–285). Thousand Oaks, CA: Sage.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Grounded theory procedures and techniques* (2nd ed.). Thousand Oaks, CA: Sage.

Uruquat, C. (2007). The evolving nature of grounded theory methods: The case of the information systems discipline. In A. Bryant & K. Charmaz (Eds.), *The handbook of grounded theory* (pp. 339–359). London: Sage.

Wilson, H. S., & Hutchinson, S. A. (1996). Methodologic mistakes in grounded theory. *Nursing Research*, *45*(2), 122–124.