5 Theoretical Sampling, Saturation, and Sorting

Turns and twists in your research journey leave you with questions about directions to take, how quickly to proceed, and what you will have when you arrive. Theoretical sampling prompts you to retrace your steps or take a new path when you have some tentative categories and emerging, but incomplete ideas. By going back into the empirical world and collecting more data about the properties of your category, you can saturate its properties with data and write more memos, making them more analytic as you proceed. Afterwards, you are ready to sort and integrate memos on your theoretical categories. You may find it helpful to chart the course with diagrams and maps that explain what you have and where you are going.

Suppose that you have arrived at some preliminary—and perhaps tentative—categories. While making earlier comparisons between data, you selected some focused codes and wrote memos on them. Now several categories look like promising abstract tools for rendering your data analytically. Yet one quick reading of these memos tells you: These categories are intriguing but thin. You have not yet defined your categories and their properties clearly. Too much still remains assumed, unknown, or questionable. Instead you want robust categories that stand on firm, not shaky grounds. What do you do? How can grounded theory strategies advance your analytic thinking at this stage of the research?

The answer is to gather more data that focus on the *category* and its properties. This strategy is *theoretical sampling*, which means seeking and collecting pertinent data to elaborate and refine categories in your emerging theory.

> Theoretical sampling means seeking pertinent data to *develop* your emerging *theory*. The main purpose of theoretical sampling is to elaborate and refine the categories constituting your theory. You conduct theoretical sampling by sampling to develop the properties of your category(ies) until no new properties emerge.

You conduct theoretical sampling by sampling to develop the properties of your category(ies) until no new properties emerge. Thus, you *saturate* your categories with data and subsequently *sort* and/or diagram them to integrate your

emerging theory.[1] Conducting theoretical sampling can keep you from becoming stuck in unfocused analyses. Glaser and Strauss (1967; Glaser, 1978, 1998, 2001; Strauss, 1987) created the strategies of theoretical sampling, saturation, and sorting. Despite Glaser's continued efforts to explicate what theoretical sampling and saturation entail and Strauss and Corbin's (1990, 1998) explanations, researchers commonly misunderstand how grounded theorists use these strategies.

This chapter consists of guidelines for conducting theoretical sampling, saturating your categories and sorting them into an integrated theoretical statement. I draw upon an interview with Jane Hood[2] and her book *Becoming a Two-Job Family* (1983), as well as on other published materials to illustrate theoretical sampling. Hood is one of the very few authors whose grounded theory analysis and methodological decisions are both explicit. Because qualitative researchers routinely adopt the term 'saturation,' I qualify its meaning in grounded theory, show how it differs from standard understandings and suggest where some grounded theorists themselves have taken it amiss. The chapter ends with ideas about how to do theoretical sorting.

In the interview excerpt below, Jane Hood recounts how she used grounded theory strategies in her study. In her book, she specifies that these were not dual-career families. Rather they were working and lower-middle-class parents both of whom had full-time jobs or were one-career-one-job families. The thrust of Hood's research shifted as she studied her initial data. Originally, she had planned to study married women's self-concepts and friendship networks when they returned to work after having children. Early in Hood's fieldwork, however, she discovered an intriguing family issue: how couples negotiated childcare and housework when women returned to the workforce. As a result, she shifted her data collection to address this issue. Hood's data include 1) material from a small pilot study, 2) in-depth first interviews of 16 wives, 3) in-depth second interviews of these wives, 4) interviews with their husbands, 5) a follow-up questionnaire six years later, 6) telephone interviews she conducted six to seven years after the second round of interviews, and 7) fieldnotes about each interview and its setting, phone call, and informal meeting.

When I talked with her, Hood described how she adopted grounded theory strategies from the beginning of her research:

> It looks like I have something going on here [in her data]. Let's say, in my case it was with women who were working because they really wanted to. Women who were working because they wanted to weren't getting much help from their husbands with housework in my two-job family study. I began to wonder whether women who were working because they *had* to and whose income was really valued by their husbands might get more help but the way I had done my [initial] sampling I had asked for volunteers to be interviewed about the experience of going back to work after having been home full-time. So the volunteers tended to be people who wanted to tell me how wonderful it was to work. I wasn't getting people who were going to work more reluctantly because they had to. But since I was really interested in how women who returned to work kind of bargained with their spouses about getting help with childcare and housework, it was critical that I look at people with a little more bargaining power, who went to work

because their husbands really *needed* them to work. So then I went out and *looked* for those women and lo and behold it made a big difference.

I did have already one or two women in my original collection of seven or eight interviews who were working because they had to and that gave me a clue that that was an important distinction. Then I *expanded* on that category and that was theoretical sampling. Because I had a category of women who went back to work because they wanted to—for self-fulfillment—and another category who went back to work because their family really needed the money.

[The categories] came out of analyzing the data ... I would ask them, 'Why did you go back to work?' Some of the women would say 'Well I went back to work because I was bored at home,' 'I went back to work because I was getting eczema and I went to the doctor and the doctor told me that I had to get out of the house,' or 'I went back to work because I really needed more than just staying at home'... —for self-fulfillment reasons.

I coded reasons for going back to work. I was also coding the kind of help they were getting from their husbands and the kinds of things their husbands were saying about their income. When they went back to work because they wanted to, their husbands were more likely to be saying, 'Well we don't really need you to work. If you can't handle the housework, then you can just quit,' etc. They didn't have much bargaining power because their husbands weren't recognizing their income as necessary. They had gone back to work for self-fulfillment.

Then I realized that when husbands would say—because I would ask husbands, 'What would happen if she quit?' and they would say 'Well, I'd have to take a second job' or 'I don't know *what* we'd do if she quit.' In those cases, husbands *couldn't* say, 'Well, you know, she just can quit whenever she wants.'

'Quit whenever she wants' became a really important analytical code as far as reasons for going back to work: self-fulfillment vs. economic necessity—a few people did both. But what was really important is that the husband recognized and was willing to say that they couldn't easily get along without her income. And that they would have to make major changes—maybe sell their house, cut back on lots of things or—major changes in their lifestyle would be required if the wife quit work. If she could quit whenever she wanted, if that's what the husband basically said, then they described her income as 'icing on the cake.' That was another category that developed from the work. It's funny how many guys referred to it that way, 'icing on the cake.' 'It's a little extra.' When they thought of it that way, they didn't see her as a coprovider—that was part of the definition of a secondary provider, they described her income as 'icing on the cake' ... Even when a woman's salary was paying the whole mortgage payment, this guy said, well he was really putting the bread on the table; he wouldn't recognize her as a coprovider. She made the same amount of income as many women who were recognized as making a necessary contribution. He wouldn't let go of the provider role.

This is what's different [about grounded theory], I suppose, when we're developing these categories and developing an analysis as we go along, we are really looking at the data as we code and developing a grounded concept. We call them categories but it's really grounded in the data.

Hood's coding and sampling methods shaped her substantive study from its beginnings.[3] Because she had initially expected to study changes in women's self-concepts and friendship networks, she only interviewed wives during her first round of interviews. Yet her early analysis revealed that she needed to interview husbands as well as focus more on women who had financial pressures to return to work. Her *in vivo* codes such as 'quit whenever she wants' and 'icing on the cake' provide vivid indicators of certain husbands' stances toward having their wives' work. Such codes also gave Hood strong clues about how these husbands' views played out in interaction.

Note how Hood traced the conditions under which women gained bargaining power. Through following what she defined in her data, she linked bargaining power to marital roles. In Hood's book, role analysis in marriage emerges as a dominant theme. Her work fits into the family of theoretical codes on roles and extends knowledge of how couples enact roles. Granted, other researchers might construct the study differently, according to what they saw in the data. Another researcher, for example, might also identify the bargaining issues but pursue a different line of analysis with them, such as the partners' emotions about bargaining. Still another researcher might interview lesbian or gay couples who take neither the concept of gender nor conventional gender roles for granted. Rich data can spark multiple directions of inquiry.

Hood built on her interest in marital roles and developed a theoretical framework and proposed testable hypotheses that locate bargaining power within the context of the marriage. She showed how these wives' bargaining power varied in relation to each spouse's commitment to and investment in the marital relationship, work and family priorities, thé extent of the wife's role overload, and the couple's style of resolving conflicts. Hood's work reveals how a researcher acts on her theoretical and substantive interests and engages her data as she constructs a grounded theory through making comparisons at each analytic level. Consider several of Hood's concluding remarks in her book:

> None of the couples in this book decided to become coproviders in order to adopt a more equal division of labour. Instead they became two-job couples either because the wife needed to get out of the house or the family needed money, or both. In the process of becoming a two-job family, some couples also developed a more equal balance of power in their marriages and a more equal division of labour in the household. This move towards equality was, however, an unforeseen and unintended consequence of becoming coproviders.
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> ... Couples who purposefully decide to share roles are like couples who began to share roles 'without really thinking about it' in at least one important respect, however. Most find that the new common ground created by role sharing and the increased communication necessary to maintain role-sharing relationships brings them closer together. (1983: 197–198)

Theoretical Sampling

Distinguishing Theoretical Sampling from Other Types of Sampling

To understand and to use theoretical sampling, we must relinquish our preconceptions about what sampling means. Sampling to develop a researcher's

emerging theoretical categories distinguishes theoretical sampling from other forms of sampling. Sometimes qualitative researchers claim to use theoretical sampling but do not follow the logic of grounded theory. They mistake theoretical sampling for the following types of sampling:

- Sampling to address initial research questions
- Sampling to reflect population distributions
- Sampling to find negative cases
- Sampling until no new data emerge.

These sampling strategies mistake theoretical sampling for conventional qualitative research approaches. Of course anyone who writes a research proposal seeks data to address his or her research questions—but this sampling is of an initial type. Initial sampling provides a point of departure, not of theoretical elaboration and refinement. We cannot assume to know our categories in advance, much less have them contained in our beginning research questions. Grounded theory logic presupposes that we will construct categories through the comparative methods of analyzing data.

Remember that criteria for initial sampling differ from those you invoke while theoretical sampling. Initial sampling in grounded theory is where you start whereas theoretical sampling directs you where to go. For initial sampling, you establish sampling criteria for people, cases, situations, and/or settings before you enter the field. You need to find relevant materials for your study whether that leads you to sampling people, settings, or larger structures such as government agencies or organizations.

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If, for example, you plan to study customer service relationships, gaining access to observe actual encounters is a prerequisite. What you will see and hear depends, of course, on your position in the organization and how you negotiate it. You will have access to some things but not others.[4] If you obtain permission to interview customer service agents but not to observe them, then your study shifts in another direction.

Seemingly straightforward topics may soon become complex. If you wish to explore drinking among people with disabilities, then you must start with at least a provisional definition stating what the term 'disability' will cover. Then you need to find out what drinking—and disability—mean to your participants and find out if you need to talk with their families or friends. You must decide whether you will include people with disabilities who view themselves as recovering alcoholics. Topics that prompt you to contact certain people but not others already circumscribe what you address. You should explicate and, not least among your tasks, examine your own preconceptions about drinking.

Theoretical sampling also follows a different logic than sampling techniques for traditional quantitative research design. The purpose of theoretical sampling is to obtain data to help you explicate your categories. When your categories are full, they reflect qualities of your respondents' experiences and provide a useful analytic handle for understanding them. In short, theoretical

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sampling pertains only to conceptual and theoretical development; it is *not* about representing a population or increasing the statistical generalizability of your results. Many quantitative studies require random samples of people whose characteristics are representative of the population under study. Whereas quantitative researchers want to use their data to make statistical inferences about their target populations, grounded theorists aim to fit their emerging theories with their data. Quantitative researchers test preconceived hypotheses; grounded theorists sometimes offer the grist for emergent hypotheses that other researchers might pursue.

Colleagues and teachers who invoke the logic of quantitative research often mistakenly advise qualitative researchers to make their samples represent distributions of larger populations. The error of this advice lies in assuming that qualitative research aims for generalizability. Although this strategy may be useful for initial sampling, it does not fit the logic of grounded theory and can result in the researcher collecting unnecessary and conceptually thin data.[5] During our talk, Jane Hood commented on understanding theoretical sampling:

> Very few people do [understand it]. I really think it's a craft ... You need somebody to give you feed-back as you're trying to learn how to do this because there is a subtle difference between theoretical sampling and other kinds of purposeful sampling. Theoretical sampling is purposeful sampling but it's purposeful sampling according to categories that one develops from one's analysis and these categories are not based upon quotas; they're based on theoretical concerns. And—the authors of textbooks don't get it. The authors of textbooks typically say [something like], 'Oh, you don't have enough women; go get more.' No, that's not theoretical sampling. That's basically quota sampling or sampling on demographic characteristics. There's nothing wrong with starting out that way *but* that's your first step. Theoretical sampling really makes grounded theory special and is the major strength of grounded theory *because* theoretical sampling allows you to tighten what I call the corkscrew or the hermeneutic spiral so that you end up with a theory that perfectly matches your data. Because you choose the next people to talk to or the next cases to find based upon the [theoretical] analysis and you don't waste your time with all sorts of things that have nothing to do with your developing theory.[6]

As Hood states, many researchers sample different settings or individuals to reflect empirical distributions or situations but they are not conducting theoretical sampling. For example, a specialist in organizations may plan to sample different businesses with both strict and loose systems of authority. This plan may produce interesting contrasts in data but it does not constitute theoretical sampling. Again, until researchers construct conceptual categories from the data and sample to develop these categories, they are not conducting theoretical sampling.

The search for negative cases raises more ambiguous questions. Whether or not sampling negative cases complements or contradicts grounded theory depends on the situation. Qualitative researchers often use negative cases to find new variables or to provide alternative explanations from their developing theory. The logic of negative cases assumes asking whether the data include individuals,

situations, or themes that do not fit your analysis. Virginia Olesen asks a further question: Did you try to find those cases? (Personal communication, June 5, 2005)

The source of the negative cases and how the researcher uses these cases shapes their relative fit with grounded theory. Did these cases arise in the data or did the researcher *import* them into the research process as though they furthered theoretical sampling? If the researcher does not define negative cases in the comparative analysis of his or her data, a search for them may result in importing them. If negative cases emerge in the data, however, these cases may indicate the need to refine one's emerging theory. Examining negative cases comes close to the emphasis on variation in a category or process and analytic density in grounded theory (Strauss & Corbin, 1990). Becker (1998) points out that some researchers consider hypothetical negative cases or draw on fiction for possibilities. To the extent that such practices cause the researcher to stray from their studied empirical world, they remain inconsistent with the grounded theory emphasis on building one's analysis from it.[7]

Perhaps the most common error occurs when researchers confuse theoretical sampling with gathering data until they find the same patterns reoccurring. This strategy differs from theoretical sampling because these researchers have not aimed their data-gathering toward explicit development of *theoretical* categories derived from analyses of their studied worlds. Instead, the patterns describe empirical *themes* in their studied worlds.

Some forms of sampling come much closer to theoretical sampling than others. Pertti Alasuutari's (1996) sampling strategies share similarities with theoretical sampling. He notes that his strategic selection of case study examples resembled theoretical sampling; however, his objective differed. Alasuutari's ethnographic study of a local Finnish tavern focused on the lives of regular male patrons who were heavy drinkers. Through his studies of alcohol use (1992, 1995), he aimed to gain a 'unified picture of different cultural logics within which the same historical structural conditions are viewed in people's lived experience,' not to develop a general theory (1996, p. 376). Nevertheless, his focus on cultural logics led to a sophisticated cultural theory of alcoholism (1992). When discussing the research process involved in this project, Alasuutari states:

> In ethnographic research the testing of hypotheses may have to do with more than just the kinds of thing you're making observations about or the kinds of subjects that you raise with the informants. On the basis of your results you may decide to move on and collect a new data set, as I did in the AA group project. When I learned that A-Guilds in Finland had their own journal, it seemed a good idea to go through all its back volumes to determine whether the 'treatment philosophy' I had discovered in Tampere was a local or a more national phenomenon. (1995: 172)

The Logic of Theoretical Sampling

Theoretical sampling involves starting with data, constructing tentative ideas about the data, and then examining these ideas through further empirical inquiry.

Consider how Hood (1983) kept moving back and forth between data collection and data analysis throughout her research. Codes became categories. Early categories were suggestive but not yet definitive. Further data collection strengthened them but Hood then saw new gaps in her nascent analysis. She returned to the field and asked further questions—and kept writing and analyzing.

Memo-writing leads directly to *theoretical sampling*. Theoretical sampling is strategic, specific, and systematic. Because you intend to use it to elaborate and refine your theoretical categories, conducting theoretical sampling depends on having already identified a category(ies). This pivotal grounded theory strategy helps you to delineate and develop the properties of your category and its range of variation.

Writing memos has already enabled you to flag incomplete categories and gaps in your analysis. Engaging in theoretical sampling prompts you to *predict* where and how you can find needed data to fill gaps and to saturate categories. Like Hood's hunches, your predictions arise from your immediate analytic work. They are not off-hand conjectures. Rather, they emerge from your grounded comparative analysis of earlier data. Follow hunches about where to find data that will illuminate these categories and then go *collect* these data. Next, code them and compare your codes with each other, earlier codes, and your emerging categories. Write increasingly more abstract and conceptual memos as you proceed to record your new comparisons—and all those flashes of insight you have while filling out your categories. Theoretical sampling ensures that you construct full and robust categories and leads you to clarify relationships between categories.

Theoretical sampling not only helps you fill out the properties of your major categories, you can learn more about how a basic process develops and changes. When you engage in theoretical sampling, you seek statements, events, or cases that will illuminate your categories. Like Hood, you may add new participants or observe in new settings. Quite possibly, you may ask earlier participants further questions or inquire about experiences that you had not covered before.

How does theoretical sampling benefit your analysis from the start? From early in the research process, you check emerging questions as you compare data with data. Note how Hood's comparisons between data led her to make conjectures about her categories that she subsequently checked out through further data collection. Her story about how she used theoretical sampling reveals how she formed analytic questions and used deductive logic. For example, Hood predicted that married women's bargaining power increased with their husbands' awareness and open acknowledgment of the wives' vital financial contribution to the household. Then Hood checked her hunches and found them confirmed in subsequent data collection. In this sense, theoretical sampling entails both of what we commonly refer to as inductive and deductive reasoning.

The particular form of reasoning invoked in grounded theory makes it an abductive method, because grounded theory includes *reasoning* about experience for making theoretical conjectures and then checking them through further experience.[8] Abductive reasoning about the data starts with the data and subsequently moves toward hypothesis formation (Deely, 1990; Fann, 1970; Rosenthal, 2004). In brief, abductive inference entails considering all possible

theoretical explanations for the data, forming hypotheses for each possible explanation, checking them empirically by examining data, and pursuing the most plausible explanation.

At this point, researchers take their ideas emanating from experience, form a follow-up hypothesis, and then move back to check this hypothesis in experience (Peirce, 1958).

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Thus after you examine cases, you make a logical inference that offers a theoretical interpretation of the relationships between these cases, and then you return to the field to check and evaluate your inference. These processes are central to theoretical sampling and are apparent in Hood's reflections during the interview about how she did theoretical sampling.

> You ... go back and forth between data collection and analysis and as your theory develops through the constant comparative method, you know with each step which data you need to collect in order to refine your theory. So in a way I see grounded theory as a combination of inductive and, to some extent, deductive work. You're inductively developing theory and then you're at least trying out your hunches here continuously ... We can call it an abductive method. ... I wouldn't say we are exactly testing theory, depending what you mean by testing, but we are testing our hunches.

As Hood's remarks imply, conducting theoretical sampling advances your analysis. Simultaneously it keeps you from getting stuck in either unfocused data collection or foiled analyses. Use theoretical sampling to keep you moving toward such emergent objectives such as:

- To delineate the properties of a category
- To check hunches about categories
- To saturate the properties of a category
- To distinguish between categories
- To clarify relationships between emerging categories
- To identify variation in a process.

Theoretical sampling is *emergent*. It follows constructing tentative categories. You cannot know which ideas you will need to sample before you begin analysis. The specific reason why you conduct theoretical sampling depends on the analytic problems you are grappling with and what ideas, gaps, ambiguities, and questions subsequently arise.[9]

Identifying problems and seeking solutions for them takes a certain amount of candor and distance. Are your categories analytically thin? Insufficiently supported? Are your ideas about the relationships between categories hazy? Are they indistinct but perhaps suggestive? Good researchers learn to recognize such analytic problems—and work to resolve them. Theoretical sampling in grounded theory provides a valuable tool for developing your analysis and

correcting trouble spots. Grappling with analytic problems is part of the research process. Feeling confused and uncertain—but learning to tolerate the ambiguity—shows your growth as a researcher. Researchers who treat the analytic process as transparent often have superficial analyses.

Conducting theoretical sampling encourages you to follow up on analytic leads. As a result, you improve your study through:

- Specifying the relevant properties of your categories
- Increasing the precision of your categories
- Providing the substance to move your material from description to analysis
- Making your analysis more abstract and generalizable
- Grounding your conjectures in data
- Explicating the analytic links between or among categories
- Increasing the parsimony of your theoretical statements.

Theoretical sampling gives you the data to delineate the properties of a category. When I was trying to sort through how people experienced a serious chronic illness, their accounts abounded with tales of uneven days, troublesome symptoms, and lost time. When comparing these accounts, I devised the category, 'experiencing intrusive illness.'[10] Certainly the category itself is mundane and specific to illness as stated, but what does it include? How might I conceptualize it? For what types of experiences beyond illness might experiencing unwanted intrusions have relevance?

After gathering more data through theoretical sampling, I defined the category of intrusive illness by its analytic properties as demanding continued attention, allotted time, and forced accommodation. Note how these properties fit the following account:

> There's a lot of things I can't do. ... When I go to night school ... I have to go straight home to lay down before I do, or I can't go, where years ago I wouldn't have had to do that.
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> And I have really had problems with lights. I can't be in a room that has fluorescent lighting without wearing special glasses. So if I go to class at night, I have to sit there with sunglasses on. Then that makes me even more tired. It makes my eyes swell shut ... And I've also missed three classes and before I've never missed class. (Charmaz, 1991a: 43)

As I examined many cases and incidents, I aimed to make the properties of the category of intrusive illness reflect the actions people took toward their illness and reveal meanings they attributed to it. In their view, the intrusiveness of their illness imposed special demands on them if they were to maintain some semblance of their earlier lives. The properties of this category seem straightforward although they provide grist for making abstract statements about time and self. When conducting theoretical sampling about experiencing an intrusive illness, I gathered more data on how people defined their uneven days, what allotting time to illness-related tasks to get through the day meant to them, when they felt forced to accommodate to illness, which accommodations they made, and how

they saw themselves. For example, one woman wanted to minimize her co-workers' knowledge of her condition. She felt forced to complete her work assignments early in the day before fatigue overtook her and tried to camouflage her symptoms in the afternoon. As her problems with getting through the workday increased, she realized that she could no longer hope to hold on until retirement eight years hence. When asking about such accommodations, few questions elicited many stories. Moreover, I witnessed events that illuminated how intrusive illness affected my research participants and was able to piece their implicit views and actions together as I developed the analysis.

Note that theoretical sampling gives you the material to compare theoretical category with category. Think about whether you have lumped properties under one category that might call for constructing separate, distinctive categories. Experiencing intrusive illness differs from the other two ways of experiencing illness, as an interruption or immersion in it. By defining each category by its properties, I raise the analytic level of the category and sharpen the definitions of each.

Delineating links between views and actions is one way of sharpening your ideas. Subsequently, an analysis of mundane experiences in a field setting became more analytic, abstract and potentially generalizable. Theoretical sampling gives your work analytic depth and precision. As you engage in theoretical sampling, your work gains clarity and generality that transcends the immediate topic. By focusing on your *theoretical categories* rather than on a single empirical topic, theoretical sampling leads you to sample across substantive areas. Thus, engaging in theoretical sampling can encourage you to raise your theory to a formal, more abstract level that cuts across different substantive areas.

If we moved the analysis of having an intrusive experience across substantive fields, where would we take it? Certainly some types of caregiving demand continued attention, allotted time and forced accommodation—and may be unwelcome, similar to having a serious illness. A few weeks ago, a caregiver whose father was dying of cancer read portions of my book. She commented on how my analysis of time applied to her caregiving experience as well as to her father's situation. People who find themselves mired in unexpected, unpleasant legal or bureaucratic battles might offer insights on how an intrusive experience encroaches on their lives. Experiencing identity theft or obtaining special services at school for a child with learning disabilities are two examples. In each situation, we could explore how properties of experiencing an unwanted and persistent situation shape qualities of time—and subsequent selves and situations. We might compare what began as an unwelcome, sometimes shocking disruption with situations that began as inconvenient and became intrusive. We could look at how and when the intrusive experience takes over people's lives. Depending on how encompassing it is, life changes may occur that have consequences for these individuals' development of self. Had I taken my analysis of self and time beyond the experience of illness, I could have constructed a formal theory of them.

Anchoring your categories in a solid substantive base first gives you leads about where and how to proceed in other areas. Jane Hood's book provides a

substantive grounded theory of marital bargaining about family work.[11] Through her analysis, she builds a foundation from which further research across fields could generate a formal theory of both silent and strategic bargaining. She might establish, for example, a theoretical continuum between gradual accommodation and explicit negotiations. In any case, she has the initial material to seek new individuals and groups involved in bargaining. Then she could check how participants' relative equal or unequal power and different stakes in the outcome of bargaining affect how it proceeds and what happens as a result of it.

Using Theoretical Sampling

You can use theoretical sampling in both early and later stages of your research—*if* you have categories to direct your sampling. Use theoretical sampling as a strategy to narrow your focus on emerging categories and as a technique to develop and refine them. Begin theoretical sampling when you have some preliminary categories to develop. Theoretical sampling helps you to check, qualify, and elaborate the boundaries of your categories and to specify the relations among categories. Initially, theoretical sampling helps you to fill out the properties of a category so that you can create an analytic definition and explication of it. Later, theoretical sampling may help you demonstrate links among categories.

Some attempts to conduct theoretical sampling may not be particularly theoretical. In this case, researchers pursue an interesting finding but they may not theorize its significance. They fail to push the boundaries of a substantive finding and answer the 'So what?' question. Of what larger, more abstract theoretical category or problem is this finding a part? Theoretical sampling means more than following up on intriguing earlier codes, which good researchers routinely do. Conduct theoretical sampling after you have already defined and tentatively conceptualized relevant ideas that indicate areas to probe with more data. Otherwise, early theoretical sampling may result in one or more of the common grounded theory pitfalls:

- Premature closure of analytic categories
- Trite or redundant categories
- Over-reliance on overt statements for elaborating and checking categories
- Unfocused or unspecified categories.

Textbook authors often treat theoretical sampling as a procedure that researchers conduct through interviews. Theoretical sampling is less of an explicit procedure than a *strategy* that you invoke and fit to your specific study. Methods for conducting theoretical sampling vary accordingly. Theoretical sampling can entail studying documents, conducting observations, or participating in new social worlds as well as interviewing or reinterviewing with a focus on your theoretical categories.

What you look for through theoretical sampling and *how* you conduct it depends on your purposes in doing it. Consistent with the logic of grounded

theory, theoretical sampling is emergent. Your developing ideas shape what you do, areas you tap and questions you pose while theoretical sampling.

When I was trying to figure out how people with chronic illnesses defined the passage of time, I went back to several participants whom I had interviewed before to ask them more focused questions about how they perceived times of earlier crisis and when time seemed to slow, quicken,

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drift, or drag. Because such topics resonated with their experiences, they responded to esoteric questions and offered numerous insights about meanings of temporal duration. For example, when I studied their stories, I realized that chronically ill adults implicitly located their self-concepts in the past, present, or future.[12] These timeframes reflected the form and content of self and mirrored hopes and dreams for self as well as beliefs and understandings about self. Hence, I made 'the self in time' a major category. Thereafter, I asked more people how they saw themselves in relation to the past, present, or future. An elderly working-class woman said without hesitation:

> I see myself in the future now. If you'd asked where I saw myself eight months ago, I would have said, 'the past.' I was so angry then because I had been so active. And to go downhill as fast as I did—I felt life had been awfully cruel to me. Now I see myself in the future because there's something the Lord wants me to do. Here I sit all crumpled in this chair not being able to do anything for myself and still there's a purpose for me to be here. [*Laughs.*] I wonder what it could be. (Charmaz, 1991a: 256)

Through theoretical sampling you can elaborate the meaning of your categories, discover variation within them, and define *gaps among categories*. By gaps between categories, I mean that your current categories do not account for the full range of relevant experience. Theoretical sampling relies on comparative methods for discovering these gaps and finding ways to fill them. These methods are particularly helpful when you attempt to analyze liminal experience and tacit views. For example, as I talked with people about their experiences of illness and time and wrote memos about the properties of locating one's self in time, I realized that meanings of the past differed (Charmaz, 1991a). For some people, the past was a tangled web in which they felt ensnared. They sought to explain and account for past events that had brought them to the present. Other people located themselves in a familiar past because the present seem so alien and inexplicable. Still others located themselves in a reconstructed past that shone bright with happiness, fullness, and vibrancy when juxtaposed against a lived present with which they did not identify. As I analyzed differences in how people located themselves in the past, my subcategories depicting their pasts, 'the past as a tangled web,' 'the familiar past and the inexplicable present,' and 'the reconstructed past,' refined the larger category of the self in the past and showed how living in the past varied.

Discovering Variation

Variation within a process usually becomes apparent while you are conducting theoretical sampling. For example, when living with physical impairment, people show considerable variation in how they act and feel about it. They may ignore impairment, minimize it, struggle against it, reconcile themselves to it, embrace it, or adapt to it.[13] Not only may these ways of living with impairment differ among people, but also they may differ over time with the same individual. I wanted to see what changes occurred over time, so I talked with a subset of my interview participants for a number of years. Being selective about which data you seek and where you seek them aids you to see variation in the studied process. You focus on certain actions, experiences, events, or issues, *not on individuals per se*, to understand how, when, and why your theoretical categories vary. However, you will likely gain more knowledge about those experiences, events, or issues that you seek to treat theoretically through observing or talking with certain individuals. For example, one of my main categories was 'immersion in illness' (Charmaz, 1991a). Major properties of immersion include recasting life around illness, slipping into illness routines, pulling into one's inner circle, facing dependency, and experiencing an altered (slowed) time perspective. Activities of all sorts took longer but not everyone's time perspective changed, despite being immersed in illness.

How could I account for this phenomenon? What supported maintaining the time perspective of a former workaday world? By going back through my data, I gained some leads. Then I talked with more people about specific experiences and events that influenced their time perspective. Theoretical sampling helped me to refine the analysis and make it more complex. I then added a category 'variations in immersion' to highlight and account for different experiences of immersion in illness.

My earlier interviews contained hints that immersion in illness varied and affected experiencing time but the significance of this variation only occurred to me after I developed the larger category of immersion in illness. I had begun to see variations in what being immersed in illness was like when I compared telling events and specific experiences of people with different illnesses, with different life situations, and different ages. Subsequently, theoretical sampling helped me to define more specific forms of variation. For example, I sampled to learn how illness and time differed for people who spent months in darkened rooms and how both varied when people anticipated later improvement or defined their situations as facing continued uncertainty. Demarcations of time stretched when people had few activities, little companionship, and minimal responsibilities. Making comparisons explicit through successive memos enabled me to draw connections that I did not initially discern. The memo became a short section of a chapter that begins as follows and then goes on to detail each remaining point:

Variations in Immersion

A lengthy immersion in illness shapes daily life and affects how one experiences time. Conversely, ways of experiencing time dialectically affect the qualities of immersion in illness. The picture above of immersion and time has sharp outlines. What sources of variation soften or alter the picture

of immersion and time? The picture may vary according to the person's 1) type of illness, 2) kind of medication, 3) earlier time perspective, 4) life situation, and 5) goals.

The type of illness shapes the experience and way of relating to time. Clearly trying to manage diabetes necessitates gaining a heightened awareness of timing the daily routines. But the effects of the illness may remain much more subtle. People with Sjögren's syndrome, for example, may have periods of confusion when they feel wholly out of synchrony with the world around them. For them, things happen too quickly, precisely when their bodies and minds function too slowly. Subsequently, they may retreat into routines to protect themselves. Lupus patients usually must retreat because they cannot tolerate the sun. Sara Shaw covered her windows with black blankets when she was extremely ill. Thus, her sense of chronological time became further distorted as day and night merged together into an endless flow of illness. (Charmaz, 1991a: 93)

Theoretical sampling focuses further data collection to refine key categories in your research. You can then define these categories quite explicitly and identify their properties and parameters. Your subsequent memo-writing becomes more precise, analytic, and incisive. Theoretical sampling keeps you moving between targeted data collection and analytic memo-writing. You follow leads, check out hunches, and refine your ideas in successive memos. Because theoretical sampling forces you to check your ideas against direct empirical realities, you have solid materials and sound ideas with which to work. You gain confidence in your perceptions of your data and in your theorizing about them.

The logic of theoretical sampling implies a quick, focused method of gathering pinpointed data. Some grounded theorists present it as an unproblematic step in refining theory. Yet conducting theoretical sampling entails more than technical and analytic procedures. It brings you back into empirical worlds with all their ambiguities and tensions.

Empirical worlds have their own rules and traditions. Theoretical sampling may not fit them. Textbook explanations of theoretical sampling seldom take into account interactional reciprocities and situational demands. These technical explanations ignore relationships and reciprocities in the field and all the actual work it takes to gain ready access to information. You may not be able to dash in, grab the needed data, and dart back to your desk. The lines between involvement and distance in field research often blur and may require continual renegotiation. Remember that human beings are unlikely to relish being treated as objects from which you extract data. Reciprocities are important, and listening and being there are among them. Some researchers may command access on the basis of their authority and the prestige of their projects. Many other researchers cannot. Instead we gain access through the trust that emerges through establishing on-going relationships and reciprocities. Ignoring such reciprocities not only weakens your chances of obtaining telling data but, moreover, dehumanizes your research participants—and yourself.

The logistics of legitimacy, formal access, and entry also pose problems. During a recent presentation on grounded theory, one researcher asked me, 'How do you do theoretical sampling when you have to have approval of IRBs (institutional

review boards)?"[14] An excellent question. Depending on the situation of your participants and your situation, conducting theoretical sampling may require further clearance with institutional committees. Biomedical models of experimentation may well guide these committees. Through their decisions, they attempt to enact principles of doing no harm to research subjects, anticipating potential harm, and articulating strategies for minimizing and handling whatever harm arises. Funded research proposals receive careful scrutiny before their principal investigators can gather any data. Most researchers and students who pursue unfunded research also must receive approval from institutional committees before proceeding with their studies. How can they reconcile the emergent process of doing grounded theory with institutional constraints on research?[15]

Given the current practices of institutional review committees, many qualitative researchers try to anticipate all possible contingencies and account for them in their research proposals. Taken literally, theoretical sampling poses obstacles because you cannot anticipate what your core categories will be beforehand. You can, however, create a rationale to justify using theoretical sampling later without explaining the logic of theoretical sampling or specifying core categories in advance. Just seek approval for a possible second and perhaps third set of interviews and observations from the start. It helps to include participant observation at interview and field sites as part of your methodological approach. Multiple interviews and observations give you access. A discourse of clarification and confirmation should then suffice to gain approval of your proposal. By delineating key grounded theory steps, you show how you plan to increase the conceptual precision of your emerging ideas and to focus your data-gathering to achieve this precision as you proceed. Thus, your later observations, interviews, cases, or other data are pinpointed to address conceptual issues. In short, building plans to return to the field settings and key 'informants' into your original proposal gives you some leeway to gather further data to develop properties of categories. Similarly, when you design an interview study, plans to conduct follow-up interviews on the major ideas will allow for theoretical sampling.

Adopting the language of member-checking in your research proposal may also help, as a large literature on member-checking has made it an accepted— and sometimes expected—practice. Although member-checking generally refers to taking ideas back to research participants for their confirmation, you can use return visits to gather material to elaborate your categories. Cheryl Albas and Dan Albas[16] devised a clever method of checking and refining their categories late in their research. They explain their major categories to certain participants they have studied and then inquire whether and to what extent these categories fit each participant's experience. Albas and Albas observe the participant's expressions given in the conversation and those unwittingly given off. When a participant offers bland agreement with their analysis, Albas and Albas conclude that their categories have not penetrated the core of the participant's experience. Subsequently, Albas and Albas engage the participant in a discussion to generate new properties of a category or a range of categories. They report that they have gained some of their best data from this technique.

Alasuutari (1992, 1996) invokes a similar strategy but turns it inside out. Instead of aiming to discover what he might have overlooked or under-analyzed, as

Albas and Albas did, he confronts his research participants with their tacit actions. Thus, Alasuutari aims for what *they* have overlooked or understated. He speaks from the standpoint of the researcher when he points out that informants typically provide meaningful but partial interpretations. The researcher must dig deeper to develop a more complete explanation. Alasuutari's strategies for constructing this explanation resemble theoretical sampling. See how he brought his observations back to his informants:

> In one particular conversation I raised the issue of why members were always so eager to compete for the title of heaviest drinker and at the same time to belittle the drinking of other members:
>
> PA: Somehow I feel there's this feeling in this group that there's some-one here who hasn't drunk as much as the others or who's been down and out for a shorter while than others, that you tend to belit-tle that person's drinking, that, you know that's nothing really, I drank a lot more than he did.
>
> A: Where've you heard that?
>
> PA: I have you know.
>
> B: I see.
>
> PA: Even during these sessions right here.
>
> C: It's always better the sooner you have the sense to go and get help isn't it.
>
> A: That's right.
>
> C: The longer you drink the more stupid you are, there's no doubt about that.
>
> PA: But do you brag about being more stupid?
>
> C: You tend to color things a bit, like I've been drinking longer than you have. You've only been drinking for a year but I've been there two years. So the one who's been drinking a year realizes that this is the point where I need to go and get help for myself. I'm so stupid that I didn't have the sense to come and get help, I had to carry on. So this is how I describe the situation so that there you are, I'm a bit better, *I know these things*, a bit better.
>
> When I raised this question, the members of the group first wanted to deny my interpretation, even though I had clear examples of these sorts of situations in my field notes. When at long last it is admitted that the phenomenon really exists, member C (in the italicized section of his speech) renders further support to my interpretation that the emphasis on the seriousness of one's earlier alcohol problems is associated with the respect that members show for practical experience. (1995: 170–171)

In this instance, Alasuutari offered his interpretation and pushed for a dialogue about it.[17] He gained confirmation of his view then pushed further later in the same conversation. In my view, Alasuutari's effectiveness relied on dual sources: strong bonds with group members and solid data from which to speak. Strong bonds build trust and foster open conversations with research participants about

areas ordinarily left unspoken. Solid data ground the questions—*despite their provocative nature*. What might be a preconceived leading question by an unskilled observer can become an incisive strategy by a practiced ethnographer. Interestingly, Alasuutari did not take the men's support for his interpretation at face value. Rather he took it a few analytic steps further. He located his confirmed interpretation in the context of the group culture and concluded that it also reflected the group members' contradictory relationships with staff and lack of trust in professionals.

Saturating Theoretical Categories

When do you stop gathering data? What criteria do you use? The standard short grounded theory answer to the criteria question dictates: stop when your categories are 'saturated.' The longer answer is that categories are 'saturated' when gathering fresh data no longer sparks new theoretical insights, nor reveals new properties of your core theoretical categories.

> Categories are 'saturated' when gathering fresh data no longer sparks new theoretical insights, nor reveals new properties of these core theoretical categories.

As implied above, grounded theory saturation is not the same as witnessing repetition of the same events or stories, although many qualitative researchers confuse saturation with repetition of described events, actions, and/or statements. The common use of the term saturation refers to nothing new happening. 'I kept finding the same patterns.'

In contrast, Glaser (2001) takes a more sophisticated view of saturation than implied by common research parlance.

> Saturation is not seeing the same pattern over and over again. It is the conceptualization of comparisons of these incidents which yield different properties of the pattern, until no new properties of the pattern emerge. This yields the conceptual density that when integrated into hypotheses make up the body of the generated grounded theory with theoretical completeness. (p. 191)

Glaser's perspective on saturation forms the foundation for treating theoretical concepts in grounded theory. When you treat categories theoretically, you raise them to an abstract and general level while preserving their specific connections to the data from which you constructed these categories. When assessing whether you have saturated your categories, consider asking such questions as the following:

- Which comparisons do you make between data within and between categories?
- What sense do you make of these comparisons?
- Where do they lead you?
- How do your comparisons illuminate your theoretical categories?

- In what other directions, if any, do they take you?
- What new conceptual relationships, if any, might you see?

Grounded theory logic invokes saturation as the criterion to apply to your categories. As such, some grounded theorists (Glaser, 1992, 1998, 2001; Stern, 2001) argue that you keep sampling until your categories are saturated and that this logic supercedes sample size—which may be very small.

Other considerations may supercede sample size. Think about how your claims of saturation affect the credibility of your study. A small study with modest claims might allow proclaiming saturation early. Researchers who make hefty claims should be circumspect about the thoroughness of their data and the rigor of their analyses. A study of 25 interviews may suffice for certain small projects but invites skepticism when the author's claims are about, say, human nature or contradict established research.

Theoretical saturation is what grounded theorists aim for—or should aim for, according to the canons. Yet grounded theorists often invoke the term, 'saturation' uncritically. Disagreements arise about the meaning of saturation. As Janice Morse (1995) observes, researchers often proclaim saturation rather than prove that they have achieved it. Thus, like other qualitative approaches, the grounded theory approach shares the hazard of assuming that categories are saturated when they may not be.

The kinds of initial research questions and the analytic level of the subsequent categories matter. Mundane research questions may rapidly produce saturated but common or trivial categories. For example, a researcher who asks whether obese women experience stigma may find that all of her interviews indicate that they do and claim that her category of 'experiencing stigma' is saturated without beginning to analyze what stigma means and how it is enacted. Uncritical or limited analytic treatment may also result in early saturation of categories. Novel questions may demand more complex categories and more sustained inquiry.

Dey (1999) challenges the notion of saturation on two counts: the meaning of saturation and its consequences. First, he points out that grounded theorists produce categories through partial—not exhaustive—coding. Dey views the term 'saturation' as 'another unfortunate metaphor' (p. 257) because of its imprecise usage. For him, the term saturation is incongruent with a procedure that 'stops short of coding all of the data' (p. 257) and relies on the researcher's *conjecture* that the properties of the category are saturated. In short, you cannot produce evidence to support this conjecture without doing the work. Rather than establishing categories saturated by data, Dey contends that we have categories *suggested* by data. Instead of claims of achieving saturation, Dey's preferred term, '*theoretical sufficiency*' (p. 257), better fits how researchers conduct grounded theory.

Second, Dey implies that following grounded theory methods may lead to unanticipated consequences for saturating categories. He wonders if saturation of categories itself is an artifact of how grounded theorists focus and manage data collection. Such concerns spark further questions. Are our claims to having saturated categories legitimate? If so, when? Is the method a teleological closed system? When researchers treat grounded theory guidelines like recipes,

they do foreclose possibilities for innovation without having explored their data. Strauss and Corbin's (1990, 1998) axial coding matrix may force data into preconceived frameworks, as any set of Glaser's theoretical codes may also. Adopting and applying these frameworks takes the focusing inherent in grounded theory and renders it directive and prescriptive. Subsequently, researchers undermine the value and legitimacy of their analyses.

By extension, Dey's argument complements my concerns about foreclosing analytic possibilities and about constructing superficial analyses. My solution? Be open to what is happening in the field and be willing to grapple with it. When you get stuck, go back and recode earlier data and see if you define new leads. Use grounded theory guidelines to give *you* a handle on the material, not a machine that does the work for you.

Theoretical Sorting, Diagramming, and Integrating

Sorting, diagramming, and integrating your memos are inter-related processes. Your sorting may integrate the analysis and a diagram may simultaneously sort and integrate it. The visual image of a diagram may suggest the content and direction of the analysis as well as its form. All qualitative researchers use such methodological strategies as sorting, diagramming, and integrating their materials; however, grounded theorists use these strategies in service of the *theoretical* development of their analysis. I treat sorting, diagramming, and integrating separately below for clarity although they are intertwined in grounded theory practice.

Theoretical Sorting

Analytic memos provide the substance for creating first drafts of papers or chapters. Writing memos during each analytic phase prompts you to make the analysis progressively stronger, clearer, and more theoretical. You already have developed categories in your written memos and have titled them in as concrete, specific, and analytic terms as possible. Now you are ready to sort them.

In grounded theory, sorting goes beyond the first step in organizing a paper, chapter, or book: sorting serves your emerging theory. It gives you a means of creating and refining theoretical links. Through sorting, you work on the theoretical integration of your categories. Thus, sorting prompts you to compare categories at an abstract level.

> Grounded theory sorting gives you a logic for organizing your analysis and a way of creating and refining theoretical links that prompts you to make comparisons between categories.

Think of the logic of your emerging theory. It became apparent in my research on the experience of chronic illness that certain events reverberated in people's consciousness long after their occurrence and became turning points. I called them 'significant events' and treated them as a major category because they shaped meanings of time and self. My treatment[18] of the category reads:

Significant Events as Turning Points

Relived moments. Retold stories ... recurring feelings. Significant events echo in memory. Whether validating or wholly disrupting, a significant event reveals images of present or possible self and evokes feelings. Thus, these events mark time and become turning points.

A significant event stands out in memory because it has boundaries, intensity, and emotional force. Furthermore, a significant event captures, demarks, and intensifies feelings. Frequently, those feelings are unhappy ones such as bewilderment, humiliation, shame, betrayal, or loss. The event flames and frames these feelings. The emotional reverberations of a single event echo through the present and future and therefore, however subtly, shade thoughts and feelings about self and alter meanings of time (cf. Denzin, 1984).

Significant events transcend the actors within them and the stage on which they occur. These events are emergent realities, events *sui generis*; they cannot be reduced to component parts (Durkheim, 1951). Thus, a significant event reflects more than a relationship or another's actions. When, where, and how the event occurs, and who participates in it, contribute to the force of the event and affect subsequent interpretations of it. Sorting what the event means and the 'correct' feelings to hold about it shapes self-images and self-worth.

A significant event freezes and enlarges a moment in time. Because of inherent or potential meanings of self within the event, people grant obdurate qualities to it. They reify it. To them, the event supercedes past meanings and foretells future selves. (Charmaz, 1991a: 210)

In the narrative above, I spelled out the properties of the category. Then I addressed two processes subsumed by it: finding positive events and reliving negative events. When research participants defined specific positive or negative events as turning points that held meaning for self, I treated them as significant events. Next I considered how a person's present emotions were tied to a past self. In this case, sorting proceeded from a straightforward logic but became more complex as I brought the analysis from past to present with memos about subcategories of 'experiencing present emotions and a past self' and 'transcending past emotions.'

Researchers construct how they sort and compile memos. The closer your sorting reflects your depiction of the flow of empirical experience, the smoother it will seem to you and likely to your readers. When you have a logic that makes sense, sorting and integrating memos falls into place. When you include several processes or pursue multiple categories, how to sort and integrate your memos may not always be so clear-cut. Try several different sortings and think through how each portrays your analysis. When you are working out the implications of each way of sorting, it may help to diagram them.

Sorting, comparing, and integrating memos seem like simple steps. Each memo on a category may become a section or subsection of the draft. If so, integrating memos may merely reproduce the theoretical logic of the analysis, or stages of a process. However, sorting, comparing, and integrating memos may be more

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complicated. Take a memo from your pile and compare it with another, then another (see also Glaser, 1998). How do the memos compare? Does your comparison spark new ideas? If so write another memo. Do you discern new relationships between memos? What leads do you gain by sorting the memos? If it helps, take your related memos and form quick clusters with them. How do they fit together? What makes most sense? Some sets of memos fit together so well that the answers seem obvious. But for many analyses, you must create the order and make the connections for your readers. The first draft of your paper represents how you sort, compare, and integrate a set of memos into some kind of coherent order.

How does one go about sorting, comparing, and integrating memos?

- Sort memos by the title of each category
- Compare categories
- Use your categories—carefully
- Consider how their order reflects the studied experience
- Now think how their order fits the logic of the categories
- Create the best possible balance between the studied experience, your categories, and your theoretical statements about them.

Some practical advice may help. Sort your memos by hand in an area where you can see and shuffle them. Turn the computer off for now. A large table works well; the floor can too if you have no cats or children to disrupt your sorted designs. I once plastered my dining room walls with cards containing the titles of my memos. Be willing to experiment with different arrangements of your memos. Treat these arrangements as tentative and play with them. Lay out your memos in several different ways. Draw a few diagrams to connect them. When you create a sorting that looks promising, jot it down and diagram it.

Continue to compare categories while you sort memos. Sorting fosters your efforts to refine comparisons between categories. As a result of sorting, you can see relationships between your categories more clearly. For example, sorting memos about time and self, clarified a major shift in how people with serious chronic illnesses viewed themselves. I saw how easily they went from trying to live in the present to situating their selves in the past as the present became more problematic. Relationships between categories form an outline of what you cover and *how* you cover it. They give your future readers important information. And studying and sorting these categories helps you learn when and where you go astray.

Diagramming

Diagrams can offer concrete images of our ideas. The advantage of diagrams is that they provide a visual representation of categories and their relationships. Many grounded theorists, particularly those influenced by Clarke (2003, 2005), Strauss (1987) and Strauss and Corbin (1998), treat creating visual images of their emerging theories as an intrinsic part of grounded theory methods. They use various types of diagrams—including maps, charts, and figures—to tease out relationships while constructing their analyses and to demonstrate these relationships in their completed works.

Diagrams can enable you to see the relative power, scope, and direction of the categories in your analysis as well as the connections among them. You may find that diagrams can serve useful and diverse purposes at all stages of analysis. You might revise an early quick clustering about a category into a more exacting form as a diagram illustrating the properties of a category. You might develop a conceptual map that locates your concepts and directs movement between them.

Maps show positions and processes (Clarke, 2003, 2005). Conceptual maps can plot the relative strength or weakness of relationships. Adele Clarke (2003, 2005) uses maps to create sophisticated situational analyses that offer a fresh alternative to the earlier grounded theory emphasis on basic social processes. She argues that we already know much about our research sites and problems before officially collecting data and that maps are one way to make fruitful use of this knowledge.

Through mapping situations, social worlds and their arenas, and positions in discourses, Clarke intends to develop grounded theory methods in ways that preserve empirical realities and complexities without resorting to reductionist analyses or wholly relying on the basic social process model that Glaser (1978) long argued was essential to grounded theory. Consider Clarke's techniques (see Figures 5.1 and 5.2) for sorting conventional grounded theory memos in addition to explicating the social arenas and social worlds' levels of analysis for which she devised them.

Clarke's situational maps take Glaser's (1998) dictum 'All is data' seriously because she builds structural properties right into her maps and positions them in social worlds and arenas. The structural elements that shape and condition the situation being studied can be plotted on the map. Her strategy allows us to move from micro to organizational levels of analysis and to render invisible structural relationships and processes visible. Similarly, this approach fosters making relationships and processes between different social worlds and arenas visible that ordinarily might be hidden from view. The situational analysis that follows provides provisional, flexible, interpretive theorizing about the construction of the studied social worlds.

Strauss and Corbin (1990, 1998) introduce the conditional/consequential matrix as a way of providing a visual representation of the observed transactions in the empirical world and their interactions and inter-relationships. In particular, they offer this matrix as an analytic device for thinking about macro and micro relationships that might shape the situations the researcher studies. They provide a depiction of the conditional/consequential matrix as concentric but connected circles that place the individual at the core in their 1998 edition (as contrasted with placing action at the core in the 1990 edition). The concentric circles represent increasingly larger social units.

A major purpose of the conditional/consequential matrix is to help researchers to think beyond micro social structures and immediate interactions to larger social conditions and consequences. Strauss and Corbin propose that the conditional/consequential matrix can aid researchers in making theoretical sampling decisions as well as in locating the contexts in which the conditions occur and the paths between them. They present this matrix as offering a means for developing theory that advances the researcher's work beyond describing phenomena. The conditional/consequential matrix is a technique to *apply*; therefore, it may force

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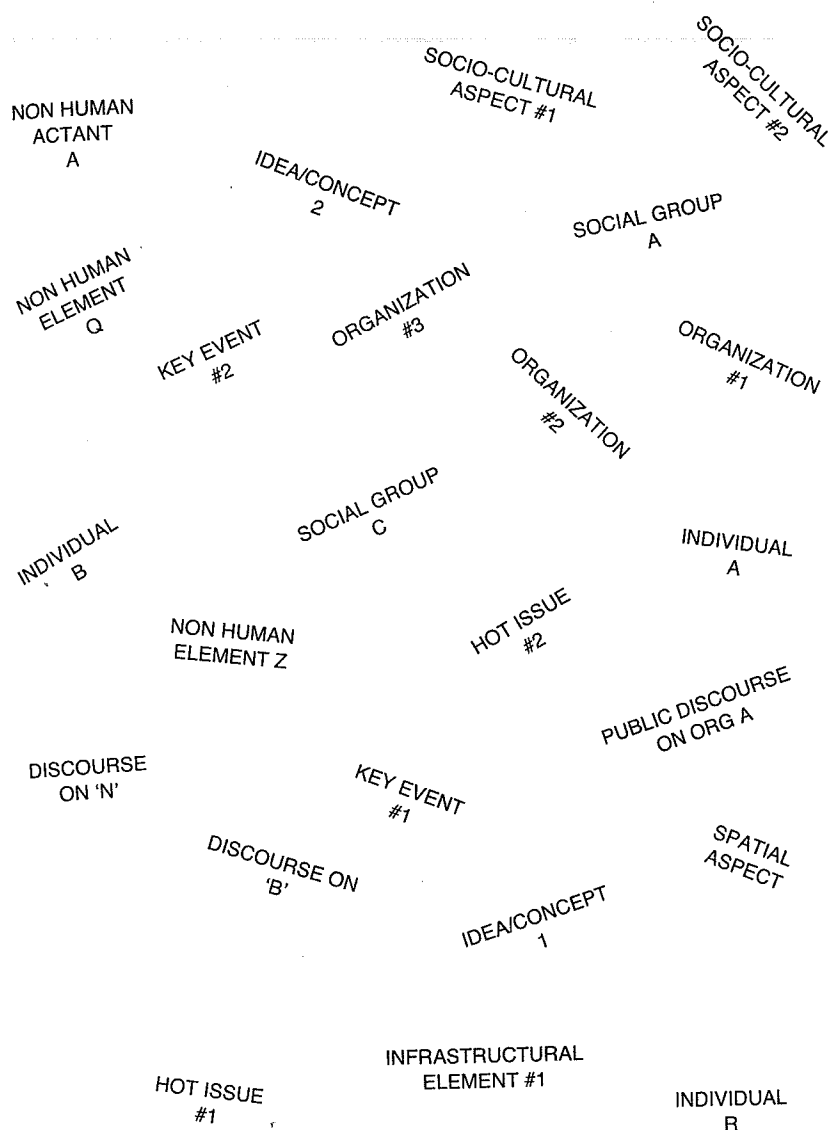)ling deci-
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FIGURE 5.1   Abstract Situational Map, Messy Working Version

Source: Clarke, 2003: 564. © 2003 by the Society for the Study of
Symbolic Interaction. Used with permission.

moving your data and analysis in a pre-established direction. If, however, your
emerging analysis indicates that mapping conditions, contexts, and consequences
in this way fits your data, you might wish to use this matrix.

Integrating Memos

How do you integrate the memos? Ordering for process is one obvious solution
to integrate the piece. If you build your paper on a major category, then you must
decide how the memos about it best fit together. Processural analyses have a

HUMAN ELEMENTS/ACTORS	NON HUMAN ELEMENTS
e.g., individuals	e.g., technologies
collective actors	material infrastructure
specific organizations	specialized knowledges
	material 'things'
POLITICAL/ECONOMIC ASPECTS	**SOCIO-CULTURAL ASPECTS**
e.g., the state	e.g., mass media
particular industry/ies	religion
local/regional/global orders	ethnicity
political parties	race
TEMPORAL DIMENSIONS	**SPATIAL DIMENSIONS**
e.g., historic aspects	e.g., geography
seasonal aspects	
crisis aspects	
DISCURSIVE CONSTRUCTION(S)	**DISCURSIVE CONSTRUCTION**
OF NON HUMAN ACTANTS	**OF HUMAN ACTORS**
As found in the situation	As found in the situation
MAJOR ISSUES/DEBATES	**MORE SYMBOLIC**
[USUALLY CONTESTED]	**DIMENSIONS**
As found in the situation, and	e.g., aesthetic elements
see positional map	affective/sentimental elements
	moral/ethical elements
OTHER KINDS OF ELEMENTS	**DISCOURSES**
As found in the situation	e.g., normative expectations of actors, actants, and/or other particular elements; popular cultural discourses; situation-specific discourses

FIGURE 5.2   Abstract Situational Map, Ordered Working Version

Source: Clarke, 2003: 564. © 2003 by the Society for the Study of
Symbolic Interaction. Used with permission.

built-in logical order, but analytic categories may have a subtle one that will make
sense to your readers. For example, in my analysis of disclosure, it made sense to
talk first about avoiding disclosure of illness followed by assessing the risks and
then disclosing illness. Taking this example into another realm, avoiding and risk-
ing disclosures—personal, professional, and organizational disclosures—occur in
work settings of all kinds. A corporate manager who knows that downsizing lies
on the horizon may first avoid disclosure, and then risk it with trusted staff, and
later make strategic general announcements. In this case, disclosure dilemmas
relate to the type and extent of public release of information or potential discov-
eries of hidden information, and other conditions that affect disclosure.

Much of the grounded theory literature emphasizes writing about a single
category. You may, however, need to juggle several categories. If so, then your
sorting attends to how these categories fit—or do not fit—together. The subse-
quent integration may reflect what you found in the empirical world. The inte-
gration makes relationships intelligible. Early grounded theory studies stressed
causal relationships but now many scholars aim for interpretive understand-
ings. Such understandings remain contingent on contextual conditions.

Through sorting and integrating memos, you may explicate implicit theoretical codes which you may have adopted without realizing it. In addition, these strategies may force you to think through theoretical links among categories that may have been left implicit. Diagramming sharpens the relationships among your theoretical categories. All three strategies can spark ideas for constructing your written report and shaping the introduction and writing the theoretical framework.

Concluding Thoughts

Like coding and memo-writing, theoretical sampling occupies a crucial place in grounded theory. It articulates a practice that the best qualitative researchers may follow but may not define. The movement back and forth between category and data in theoretical sampling fosters raising the conceptual level of your categories and extending their reach. As you develop your categories, you can see which ones to treat as major concepts in your analysis.

By engaging in theoretical sampling, saturation, and sorting, you create robust categories and penetrating analyses. Capturing what you have gained in successively more abstract memos gives you the grist for the first draft of your finished piece. Sorting and diagramming gives you its initial analytic frame. Now you are ready to write the first draft of your report but first you may wish to think a bit more about theorizing in grounded theory.

NOTES

1 Strauss (see Strauss, 1987; Strauss & Corbin, 1990, 1998) emphasized diagramming as a way of laying out conceptual relationships. Since then, this approach is most developed in Adele Clarke's (2003, 2005) works. As a graduate student, I wrote a paper, 'Conceptual Mapping' (1969), that addressed ways to integrate theoretical analyses by showing relationships between concepts and by offering a visual representation of their relative significance.

2 Interview with Jane Hood, November 12, 2004.

3 Hood's use of theoretical sampling built directly on grounded theory guidelines; however, her coding strategies diverged. She began coding with open-ended codes and quickly went to a formal procedure with code sheets to sort and organize the material into more general categories (see 1983: 200–202). Hood stated that she might have done something different had she had access to something like The Ethnograph, a computer-assisted program. She said that she used the code sheet approach as a way of 'interviewing' her data and holding herself accountable for patterns in the data as well as to check properties of categories. Although the code sheets may look like survey coding, she said that she was not using survey coding because the point was not to count but to establish category boundaries. Social scientists frequently draw on several methodological approaches simultaneously, depending on the research problem and/or the researcher's proclivities. Some nurse researchers disdain such methodological ecumenicalism as method slurring (see Baker, Wuest, & Stern, 1992).

4 Should customer service representatives define your presence as a management plant, they will likely conceal their concerns and perhaps their usual practices. Moreover, they may see you and your research as an extension of organizational forms of domination consistent with Dorothy E. Smith's (1999) warnings about researchers reproducing domination that participants already experience in the setting. If they see you as an ally, then you may gain a different picture, and gain still another view on the scene if you talk with customers about their experiences.

5 Doctoral students might negotiate with their advisors by building several stages of data collection into their research proposals. That way, they could begin by taking population distributions into account but plan to follow the leads in their emerging analyses thereafter.

6 Jane Hood edited this passage for clarity.

7 Fiction can provide great data for all kinds of projects when researchers treat them as texts to analyze, rather than as substitute realities. For example, we could look at how authors represent women and men, collective values, or individual quests during specific time periods. Hypothetical negative cases are trickier. The extent of researchers' knowledge about their studied worlds and how they use these cases matters here. Superficial knowledge and scant further inquiry can derail a grounded theory analysis. Researchers who rely on hypothetical negative cases risk slipping into armchair theorizing.

8 Charles Sanders Peirce (1878 [1958]) developed abductive reasoning. It underlies the pragmatist tradition of problem-solving and supports the notion that the borders between scientific discovery and justification are indistinct. Strauss was heavily influenced by Peirce and John Dewey as well as George Herbert Mead. The creative, cognitive dimensions of abductive reasoning in grounded theory may be most emphasized by Strauss and his followers.

9 As I pointed out in earlier chapters, you can revisit and recode earlier data from the vantage point of a new idea, which expedites theoretical sampling of your new category.

10 I chose to make experiencing illness the focus of the book because it would speak to broader audiences than a book on time. This focus did, however, allow developing the analyses of time and self.

11 For a study in which married women in middle-class dual-earner families took the lead in time negotiations and indirectly maintained control over family tasks, see Kerry Daly (2002). The couples worked in managerial or professional positions for fifty hours a week or more. Daly found that by controlling the family schedule, these women obtained their husbands' participation in childcare and household work.

12 Gubrium (1993) has observed that nursing home residents similarly locate themselves in time. While some saw their lives as in the past, others were rooted in their nursing home experience, and still others looked over their current situations to the future.

13 I developed these subcategories from depictions of my participants' statements and actions. Hence they import fewer implied judgments than the psychological concepts of acceptance and denial that pervade professionals' discourse about illness and impairment.

14 Her question arose during a presentation titled, 'Constructing Qualitative Research through Grounded Theory,' at the Center for AIDS Prevention Studies (CAPS), University of California, San Francisco, September 7, 2004.

15 Qualitative researchers in a number of disciplines and professions are challenging narrow institutional directives that hinder their research. They are engaged in educating colleagues who adhere to a biomedical model about its limitations for qualitative research. Changes in ethics policies and institutional reviews should result.

16 Personal communication, March 29, 2004. Albas and Albas found that they obtained some of their most compelling data with this method and, simultaneously, they expedited and strengthened their analyses. See also, D. Albas & C. Albas (1988, 1993) and C. Albas & D. Albas (1988).

17 Alasuutari's strategy is reminiscent of advice that Anselm Strauss once gave me about not taking textbook prescriptions of conducting neutral interviews too seriously. He found that sometimes provocative questions worked and field researchers could ask them, as long as they did not get kicked out of the setting.

18 The copy editor changed my final wording about relived moments and recurring feelings without consulting me. My original rendering is included here.