Article

Adopting a Grounded Theory Approach to Cultural-Historical Research: Conflicting Methodologies or Complementary Methods?

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Abstract

Grounded theory has long been regarded as a valuable way to conduct social and educational research. However, recent constructivist and postmodern insights are challenging long-standing assumptions, most notably by suggesting that grounded theory can be flexibly integrated with existing theories. This move hinges on repositioning grounded theory from a methodology with positivist underpinnings to an approach that can be used within different theoretical frameworks. In this article the author reviews this recent transformation of grounded theory, engages in the project of repositioning it as an *approach* by using cultural historical activity theory as a test case, and outlines several practical methods implied by the joint use of grounded theory as an approach and activity theory as a methodology. One implication is the adoption of a dialectic, as opposed to a constructivist or objectivist, stance toward grounded theory inquiry, a stance that helps move past the problem of emergence versus forcing.

Keywords: qualitative methodology; grounded theory; activity theory

Introduction

Constructing a theory about "multilayered social situations," it has been argued,

> requires at least two things from the researcher. First of all it requires a clear picture of the interactions of individuals, both of the level of action and of motivation. Such a picture can emerge only through the utilization of close observational techniques. Second, it requires theoretical work to explain why individuals' interactions take the patterns that are observed during those techniques. (Porter, 2003, p. 70)

Although Porter presented these dual tasks in relatively straightforward terms, achieving them in actuality involves many thorny analytic moves. With respect to the first task, the researcher sets out to capture respondents' views along with rich details of the local setting. With respect to the second, he or she seeks patterns across multiple collection points and data types to analyze rather than simply describe. Here the researcher may follow hunches based on themes derived from the data; at other times he or she might explicitly adopt "sensitizing concepts" (Blumer, 1969; van den Hoonard, 1997) or otherwise take cues from an existing theory. The tensions involved in this kind of theoretical work are particularly relevant to grounded theorists, who might increasingly draw on existing theories to help them understand the multilayeredness of the social situations they study. Porter's statement thus points to one of the central issues—if not the central issue— facing grounded theorists from the 1990s onward: how to construct grounded theory when working from an existing theoretical point of view.

In this article I explore the problem of using grounded theory in an existing theoretical framework with its own methodological guidelines. I wish to frame the discussion with the question: For the researcher starting from an existing theoretical vantage point, what is the role of grounded theory, and how might one adapt its methods and strategies in light of different methodological guidelines? Given recent constructivist and postmodern challenges to long-standing assumptions about what it means to "do" grounded theory, this question becomes an important, and perhaps unavoidable, part of grounded theory inquiry. It is particularly pressing for constructivists, who have, controversially, transformed grounded theory from a methodology with objectivist underpinnings to an approach that can be used in projects with different methodological assumptions. This shift enables grounded theory to be used in a preexisting theoretical framework, yet few examples exist that help define what this use might entail. In this article I use cultural-historical activity theory as a test case to elaborate some of the ways in which traditional grounded theory can be stretched in new directions by following different methodological guidelines while also preserving its original intent: to help the researcher "develop explanatory theory concerning common social life patterns" based on themes derived from close interpretations of empirical data (Annells, 1996, p. 80).

Grounded theory as methodology, grounded theory as approach

Grounded theory's stance toward inquiry is said to have evolved from objectivism to constructivism (Mills, Bonner, & Francis, 2006). Over its history these contrasting views of reality have led to different rules for conducting research, which, in turn, have led to different methods and strategies for collecting and analyzing data. Grounded theory has traditionally aligned with objectivism, which reflects "the epistemological view that things exist as *meaningful* entities independently of consciousness and experience, that they have truth and meaning residing in them as objects" (Crotty, 1998, in Broido & Manning, 2002, p. 434, emphasis in original). This stance presupposes the neutrality of the researcher and the existence of objective meaning within

the data. Traditional grounded theory's core analytic procedures reflect this stance and were initially intended to help build theory on the basis of what "really exists in the data" (Glaser, 1992, in Annells, 1996, p. 385). This inductive process of discovery is accomplished through the exclusive use of emergent themes and comparative methods throughout the analytic process. Glaser especially eschews the use of extant theory during this process, maintaining that one can easily corrupt analysis by importing concepts and forcing meaning onto the data (see Glaser, 2002). Seeing how tightly interwoven are traditional grounded theory's history, epistemology, and analytic procedures helps illuminate why subsequent changes have sparked the deep controversy known as the emergence versus forcing debate (Boychuk-Duchscher & Morgan, 2004).

Strauss and Corbin (1998) departed from Glaser's positivism by referring to the construction, rather than the discovery, of grounded theory (Charmaz, 2000). This slight change in emphasis opens up a space for existing theory as part of one's analysis, but their methodological stance, as well as the highly technical procedures they developed, still tilts toward the emergence side of the debate. For instance, they have invited structuralist or feminist analyses but also sounded a caution: Researchers starting from these positions might "not able to see what else might be in the data" (p. 24). (They do not much discuss the possibility that presumably "neutral" researchers might also not be able to see what else might be in the data.) Despite their invitation to adopt critical or culturally informed viewpoints, specific methods and strategies for working from such viewpoints are not featured prominently in their work. They do, however, begin to separate grounded theory as a collection of methods from grounded theory as a methodological orientation.

Charmaz (2006) has taken a step further by announcing that researchers "can use basic grounded theory guidelines with twenty-first century methodological assumptions and approaches" (p. 9). Her move here is important: It fully repositions grounded theory as a flexible approach and not a strict methodology. This shift has enabled her to more sincerely invite researchers "starting from other vantage points—feminist, Marxist, phenomenologist" to use grounded theory (Charmaz, 2000, p. 511). Freed from their original purpose, which was to help discover what really exists in the data, grounded theory's methods can now support "varied fundamental assumptions, data gathering approaches, analytic emphases, and theoretical levels" (p. 511). Constructing grounded theory is now a process more of careful interpretation than of discovery. Although Charmaz (2005) has offered many useful suggestions to this end, she still expects preexisting concepts to "earn their way into the analysis" (p. 525). Grounded theorists of any stripe are thus enjoined to maintain a stance of openness and receptivity, regardless of their disciplinary starting points.

In light of this trajectory, it is easy to see how Mills and colleagues (2006) can accuse grounded theorists of ontological ambivalence. In the end they sided with Charmaz (DATE), concluding that the constructivist stance is "more reflective of the context in which participants are situated" than the traditional stance (p. 4). Specifically, it "includes relating participants' stories to the worlds in which the participants live" to a greater degree (p. 4). This awareness of context would undoubtedly be of central concern to researchers informed by critical or cultural perspectives, yet procedures that place these concerns at the center of one's inquiry remain underspecified in the grounded theory literature. For that, researchers might need to seek methodological guidance from another source.

Researchers starting from different vantage points find few methodological resources within traditional or constructivist grounded theory as to how the context in which participants are situated might be understood and incorporated more systematically into their analysis. Several options come to mind. Following the rules of traditional grounded theory, the researcher might

wait for a theme to emerge from the data. This can be unlikely, especially if interviews are the primary source of data, as they often are in grounded theory studies (Clarke, 2005). Interview respondents are unlikely to offer many explicit clues as to the effect of context on their actions. A second option is to import some cultural concepts from an existing theory. Given grounded theorists' long-standing hesitancy to rely on existing concepts to do their work, a better option might be to incorporate procedures that will open up context-analytic possibilities. Even this third option, however, does not free the researcher from the mental and emotional tension created when extant and emergent concepts are played against each other in the process of theory building. This tension became unavoidable once Strauss and Corbin (1998) opened the door to existing theory (which itself was probably unavoidable because a good deal of theory building has gone on since 1967), and it was compounded when constructivists transformed grounded theory from a strict methodology into a flexible approach (cf. Annells, 1996). This tension is also likely to be experienced with increasing frequency as interdisciplinary research becomes more common (e.g., Star, 1996). This inevitable tension has not been fully explored, let alone mined for its analytic implications.

Grounded theory and activity theory: Intersections and contradictions

Constructivist grounded theory and the question of culture as "context"

Regardless of one's ontological stance, grounded theory is characterized by the careful use of data to justify sampling decisions and analytic moves throughout the process of theory building. By developing representative codes, combining codes into categories, forming concepts, comparing like and unlike cases, and linking increasingly abstract concepts, researchers develop midrange theories that are supported by instances in empirical data (Charmaz, 2006). Grounded theory has traditionally been used to achieve

> the discovery of enduring theory that is faithful to the reality of the research area; makes sense to the persons studied; fits the template of the social situation, regardless of varying contexts related to the studied phenomenon; adequately provides for relationships amongst concepts; and may be used to guide action. (Boychuk-Duchscher & Morgan, 2004, p. 606)

With respect to the above quote, in which the continued influence of objectivism can be observed, constructivists have challenged the presumption of an inquiry-independent "reality" and the claim that any theory could ever be true regardless of varying contexts. For constructivists no analysis is ever neutral; no data are either as "grounded theorists select the scenes they observe and direct their gaze within them" (Charmaz & Mitchell, 2002, p. 162). Constructivists have exploited the ambivalence that might have always existed in grounded theory texts (Mills et al., 2006) and have suggested that "we can use grounded theory methods as flexible, heuristic strategies rather than as formulaic procedures" (Charmaz, 2000, p. 510). The methods and strategies developed by constructivists, however flexible, provide few systematic ways to address culture.

The problem with grounded theory's abiding ontological ambivalence and the question of culture as context is that the converse of Charmaz and Mitchell's (2002) previous point is also true: Grounded theorists avoid certain scenes and avert their gaze as well, and it is perhaps these locations where the most telling data can be found. Given the grounded theorist's dependence on data, one's emerging theory is both enabled and constrained by the type and quality of data collected. Setting out to discover "what really exists in the data" assumes that the data are

sufficiently illustrative and that embedded in them is a sufficiently complete story to develop a satisfying theory. Therefore, although Glaser's (1994) emphasis on constantly comparing data to data and concept to concept remains one of the most valuable procedures in grounded theory—retained also by constructivists—unless a multiplicity of data types are actively sought in ways that are likely to illuminate key themes, narrow analyses might result from even the most vigorous comparisons. To circumvent this problem, an important procedural step is to expand context-analytic possibilities in grounded theory inquiry. This can include seeking new data sources and analytic strategies that facilitate a more context-rich analysis.

Activity theory

Activity theory is less a unified theory than a diverse range of scholarship based in the Marxist psychology of 20th-century Russian scholars such as Vygotsky (1978), Luria (1976), and Leont'ev (1981), lines of scholarship that "more often than not overlap rather than separate" (Holzman, 2006, p. 5). It is often compared with social practice and sociocultural theories (e.g., Lave, 1977; Rogoff, 2003), all of which view human psychological, social, and cultural functioning as deeply interdependent. Regardless of the differences between these traditions, they agree on several key methodological points, including:

- the study of the human mind in its cultural and historical contexts;
- a general conceptual system with these basic principles: the hierarchical structure of activity, object-orientedness, internalization/externalization, and tool mediation and development;
- theoretical approaches that place culture and activity at the center of attempts to understand human nature;
- a psychology that focuses not on the individual but on the interaction between an individual, systems of artifacts and other individuals in historically developing institutional settings;
- a nondualistic approach to understanding and transforming human life that takes dialectical human activity as its ontology. (Holzman, 2006, p. 6)

Viewed broadly, cultural-historical activity theory and grounded theory are compatible in several ways, yet they can contradict in others. For one, "activity theory is a powerful and clarifying descriptive tool rather than a strongly predictive theory" (Nardi, n.d., para. 1). Because its methodological guidelines are well defined but not overly restrictive, working with them might helpfully supplement grounded theory without forcing concepts. Second, comparisons have been drawn between the philosophies behind activity theory and symbolic interactionism, grounded theory's parent discipline (Batuik & Sacks, 1981). Both are profoundly social. Even their ontological differences might be put to productive use, as will be discussed shortly. Finally, activity theory and grounded theory have what can be called complementary ambiguities. Both traditional and constructivist grounded theory offer useful procedures for interacting carefully with data; however, neither offers clear strategies for substantively analyzing how social situations are constituted by culture. Conversely, activity theory's methodological emphasis is the reciprocal relationship between culture and human interaction, yet methods for collecting, managing, and interpreting data are often underspecified.

Ontological intersections and tension:
Beyond emergence versus forcing

Although activity theorists would undoubtedly embrace the sensibility that "research can never be independent of the researcher's or respondents' assumptions" (Broido & Manning, 2002, p. 439;

cf. Wardekker, 2000), they would likely reject the "ontologically relativist and epistemologically subjectivist" stance that Mills et al. (2006, p. 6) have attributed to constructivist grounded theory. Activity theory, especially the line pursued in this article, presupposes an extant structure—activity—in which human interaction and individual development must be understood. As Holzman (2006) explained (see above), activity theory's ontology is dialectic; it assumes a biologically, materially, and historically constructed reality that both shapes and is shaped by individual actions. Far from being deterministic, activity theory views change as basic to this process of social and individual transformation (John-Steiner & Mahn, 1996). Moments of change are studied as contradictions that are worked out individually and between people, resulting in new patterns of interaction, new meanings, and new tools for solving future problems (Engeström, 1987). Indeed, recognizing how processes of change occur in different circumstances and on different time scales and levels (individual, institutional, societal, and cultural) is a central aim of empirical inquiry in activity theory. Given the historical and cultural emphasis within activity theory, the up-close analytic procedures of grounded theory, and the mutual interest in social processes of change, a combined approach might help the researcher analyze the multilayered nature of individual, institutional, societal, cultural, and historical change in varying settings.

Developing methods and strategies for doing grounded theory in the context of other methodological guidelines requires confronting directly the emergence versus forcing debate, however. This either/or paradigm seems particularly counterproductive for researchers who want to start their grounded theory inquiries from existing theoretical viewpoints or who want to undertake interdisciplinary projects. Especially confounding to these researchers is the traditional sensibility to let the data speak for themselves, paired with the realization that participants typically do not talk in ways that demonstrate an awareness of underlying structural or cultural influences on their actions (Clarke, 2005; Ratner, 2002). Handling this tension productively might require adopting a new stance toward the debate. Examining the intersection of activity theory and grounded theory prompts me to suggest that the tension between extant and emergent concepts, which constructivists claim is inherent in all contemporary grounded theory work (Charmaz, 2006), can be reinterpreted as dialectic: a contradiction that is productive to inquiry rather than a problem or distraction to avoid. The idea of contradiction might, in fact, be used in multiple ways as a powerful analytic tool, helping the researcher to harness the full potential of constructivist grounded theory.

Research in practice:
A grounded theory approach to studying activity

Activity theory research spans multiple levels and time scales (Lemke, 2000), from microgenetic developments that take place in a matter of seconds, through ontogenetic developments that take place over lives, to cultural-historical patterns that evolve over generations. Many activities, such as schooling, have been studied extensively at these different levels (e.g., McDonald, Le, Higgins, & Podmore, 2005; Varenne & McDermott, 1998). Other activities, where the theories used to understand them are deductive or speculative, are relatively understudied. In these cases a grounded theory approach might be most beneficial (Seaman, 2006). An aim of inquiry in such cases is to generate a close yet contextually embedded rendering of an understudied activity: a grounded theory of activity.

Several innovations in approach, methods, and strategies result from synthesizing grounded theory and activity theory. Defining these terms more carefully at this point will help clarify the remainder of the article (I should note, however, that these definitions are not meant to be rigid; they merely help structure my probing of grounded theory's flexibility).

The term *approach* refers to the fundamental process of doing grounded theory, its basic principles. These include

> (a) simultaneous data collection and analysis, (b) pursuit of emergent themes through early data analysis, (c) discovery of basic social processes within the data, (d) inductive construction of abstract categories that explain and synthesize these processes, (e) sampling to refine the categories through comparative processes, and (f) integration of categories into a theoretical framework that specifies causes, conditions, and consequences of the studied processes. (Charmaz, 2003, p. 313)

The term *method* refers to the established ways of attending to these principles. Some of these enjoy consensus and some do not. For example, open, or initial, coding is broadly regarded as the first step in grounded theory analysis. Axial coding, on the other hand, is a cornerstone of Strauss and Corbin's (1998) approach but is regarded by Charmaz (2006) as highly structured and optional. Like Charmaz, I suggest that these different methods can be used flexibly in the context of activity theory.

The term *strategies* refers to the useful variations on method that have been suggested by different authors. For example, Charmaz's (2000) action coding might be adopted to preserve a sense of flow in one's codes and categories. Such strategies help to make grounded theory an extremely useful approach for research on activity. Overall, these terms should be viewed in the context of an ontological stance, such as constructivism, or the dialectical stance I develop here.

Starting out: The level of approach

In the remainder of the article I outline a systematic approach to conducting grounded theory research in the context of activity theory. Broadly, Engeström and Miettinen (2003) have explained that the study of activity

> calls for complementarity of the system view and the subject's view. The analyst constructs the activity system as if looking at it from above. At the same time, the analyst must select a subject, a member (or better yet, multiple different members) of the local activity, through whose eyes and interpretations the activity is constructed. This dialectic between the systemic and subjective-partisan views brings the researcher into dialogical relationship with the local activity under investigation. (p. 10)

Using grounded theory can be an extremely practical way to attend to Engeström and Miettinen's (2003) dual focuses by (a) providing important reminders about holding conceptual commitments at bay and (b) offering data-gathering and analytic procedures that keep the analyst in close touch with the data. Conversely, activity theory stretches grounded theory in important directions by (a) broadening the cultural and historical context of a study and (b) suggesting important sources of data that have been underspecified in traditional grounded theory literature.

These complementary aspects come together as practices in the following areas: the unit of analysis, the adoption of data collection techniques, sampling and analytic procedures, and in the researcher's own interaction with the data and with extant theory, which leads to crucial decision points: the conflicts one experiences internally throughout the analytic process. These moments of felt contradiction, far from being destructive to inquiry as a kind of forcing, can instead be seen as pivotal touch points in the construction of grounded theory.
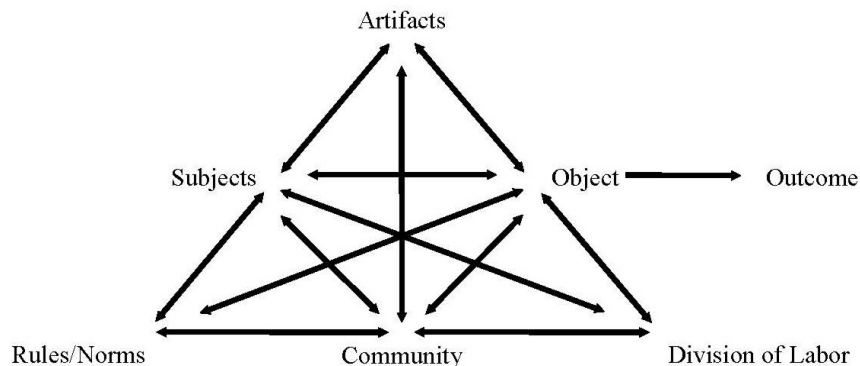
The unit of analysis

A common unit of analysis in activity theory is the activity system (see Figure 1). By Engeström's (1987) account, the development of large-scale capitalism and the rise of evolutionary theories in biology, philosophy, and social science led to breakthroughs in perspective, chiefly "that organism and environment, man [sic] and society, could no more be understood as stable, unchanging entities but only as something characterized by qualitative transformations requiring a historical perspective" (p. 34). Both society as a whole and specific activities are seen as having evolved historically into the structure of capitalist forms of production, exchange, distribution, and consumption. In this view, culture is both responsible for and transformed by individual and societal lines of development. Activity as a concept can be applied to different scales, given these analytic assumptions, as Engeström indicated: "In a more complex and differentiated society, there exist a multitude of relatively independent activities, representing all the sub-triangles. But within any such relatively independent activity system, we find *the same internal structure*" (p. 66, emphasis in original). Changes in the organization of internal elements of activities are thought to occur when contradictions arise because old tools are put to new uses. Activity theory thus specifies a developmental analysis by examining contradictions and their resolution or nonresolution in various human activities (Engeström, 1987).

The Center for Activity Theory and Developmental Work Research (n.d.-a) has offered the following description of the activity system:

> In the model, the subject refers to the individual or sub-group whose agency is chosen as the point of view in the analysis. The object refers to the "raw material" or "problem space" at which the activity is directed and which is molded and transformed into outcomes with the help of physical and symbolic, external and internal mediating instruments, including both tools and signs. The community comprises multiple individuals and/or sub-groups who share the same general object and who construct themselves as distinct from other communities. The division of labor refers to both the horizontal division of tasks between the members of the community and to the vertical division of power and status. Finally the rules refer to the explicit and implicit regulations, norms and conventions that constrain actions and interactions within the activity system. (para. 3)
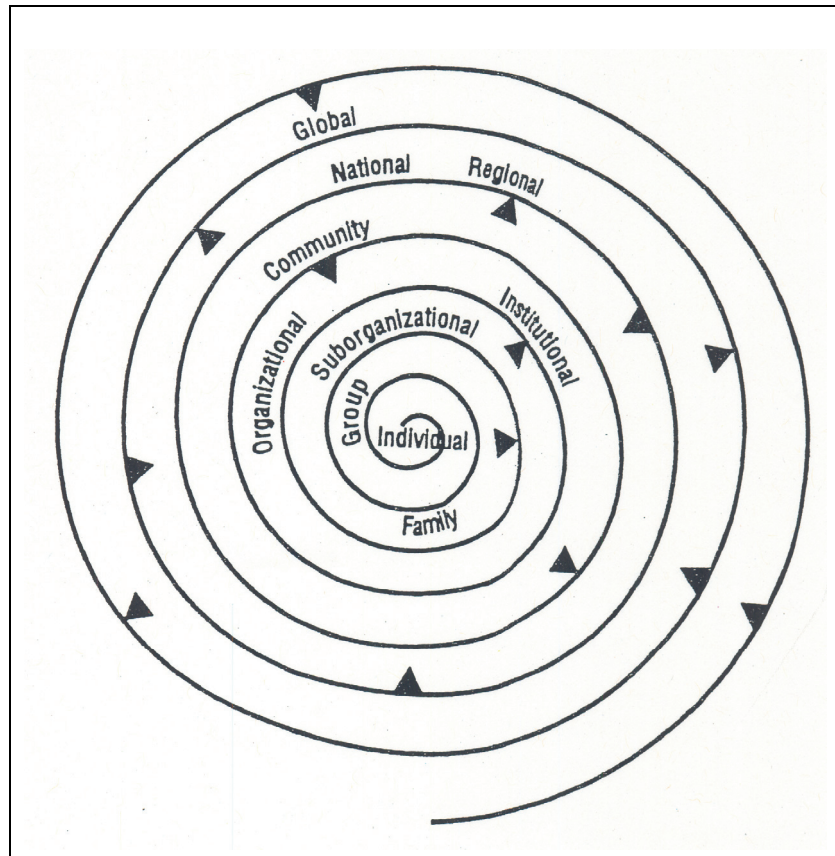
Figure 1: The Activity System

Source: Center for Activity Theory and developmental Work Research (n.d.-b). Reproduced with permission.

Although differing in important ways, principally in the way it specifies an internal structure, activity as the unit of analysis finds some compatibility with Strauss and Corbin's (1998) consequential/conditional matrix, a heuristic device intended to help examine distal influences on local action. The matrix can be seen in Figure 2.

Strauss and Corbin (1998) have described the intent behind the matrix: "Events that occur 'out there' are not just interesting background material. When they emerge from the data as relevant, they too should be brought into the analysis. Sorting all this out is where the matrix is helpful" (p. 183). Although the matrix encourages a broader analysis of structure and process in specific settings, Strauss and Corbin's ambivalence is evident here. The idea may be stated in stronger terms: The researcher ought to seek data sources representative of "events that occur 'out there.' " Indeed, from an activity theoretical perspective, distal influences are very much "in here" and are crucial to the understanding of an activity's internal structure and the positions actors take with respect to one another. For example, material artifacts do not "speak" about their histories or connections to other situations, yet clearly their design is influential, providing an important (but often overlooked) source of information about how local action is coordinated (Rogoff, 1995; Star & Griesemer, 1989).

Figure 2: The Consequential/Conditional Matrix

Source: Strauss & Corbin (1998, p. 184). Reproduced with permission.

Both the activity system and the matrix are centrally concerned with actions. Leont'ev (1977) regarded actions as "the basic 'components' of separate human activities" (p. 184). Although keeping action at the center, activity as the unit of analysis broadens the scope of inquiry beyond observation, talk, and interview data to include the intersecting communities in which events take place (a subproject to which the matrix might be usefully applied), the organization of physical space and materials, tacit and explicit norms, and the activity's overall social aims. It also might offer more detailed direction within settings to account for structure and process; the division of labor, for example, becomes a powerful source of data regarding distal influences that might not otherwise arise. It can be taken for granted by respondents as "natural," but why are roles arranged in a particular way? Is labor stratified into superordinate and subordinate positions? How do these positions affect individuals' perspectives on the activity? Are roles flexible or rigid? What does it take for someone to move between them? What happens individually and/or institutionally if/when this movement occurs? Investigation into these elements can be aimed at noticing points of tension in these areas and its effects on the further (re)organization of the elements of the system.

Studying the activity system

It is important that the elements of the activity system are used as data sources rather than as pregiven conceptual categories. Charmaz (2006) has cautioned researchers to not "unwittingly start from their own preconceptions about what a particular experience means or entails" (p. 67). Here grounded theory makes an important contribution: Conceptual terminology might be used (at least in the early stages of the analysis) that stays relatively close to the situation. A lack of receptivity to participants' concerns (in activity theory terms, the subject view) can foreclose important insights into local variations of historical patterns, can lead to limited views of the contradictions that might arise, and can delimit the potentially innovative ways in which local actors navigate such tensions.

The sensibility within grounded theory to "let the data speak for themselves" might be used as a strategy here. It impresses on the researcher the necessity of receptivity to local conditions, particularly as participants describe them. In addition, depending on the researcher's social position, he or she might be unable to recognize structural impediments of significance to respondents, even to the extent that he or she will be unlikely even to consider asking about them (Harding, 1993). The researcher must be receptive to participants' responses and meanings to understand the nature of the relationship among the elements of the activity system, even if participants do not see all the connections themselves. Through comparing data to data, analyzing data as they are collected, and following hunches, the researcher is able to explicate the relationships between the elements of the activity system in ways that reflect both the lived reality of participants and the broader cultural and historical influences that shape emerging patterns. This stance can also infuse other areas of the research project.

Data collection

Aside from seeking data from a wider range of sources, researchers can use other strategies that might help them recognize incidents of tension and change. Process-oriented questioning facilitates the investigation of key points of transition during the activity under study. Guiding questions in grounded theory can relate specifically to concerns about social processes. Following Charmaz (2003), such questions might include the following:

- When did you first notice (your feeling of "X")?

- When is "X" most evident? What is going on when "X" is evident?
- How has your experience changed over the past day (week, etc.)? When did you notice this change happening? What do you think it could be attributed to?
- What made you decide to do . . . ?
- Is there one instance that jumps out as significant? What was going on when this happened?
- What led up to this experience? What was going on around this event? What happened afterward?

Several of the questions above indicate responsiveness on the part of the researcher to changes in local conditions that might elicit a reaction from subjects. The researcher might need to lead respondents back into events from prior observations or might follow their lead instead. Decisions about whom to interview and how to structure questions over time can be made on the basis of theoretical sampling (Strauss & Corbin, 1998).

Sampling

Theoretical sampling is the process whereby the researcher seeks new data based on tentative hypotheses that add conceptual definition to emerging categories. Focusing explicitly on theoretical sampling along lines central to the research project can serve to facilitate the dialogue between the system view and subjective and/or partisan views sought in activity theoretical research. Through this movement back and forth between the data and the heuristic device of activity, it becomes possible to notice points of tension and change: the contradictions that are central to development. As one notices such moments, one might need to shift one's sampling emphasis to move in unexpected directions, seeking guidance from local members as to how contradictions are perceived, experienced, and negotiated. Here it can be helpful to obtain multiple perspectives on different elements in the system because different actors are likely to assign meaning in different ways. Such sensitivity becomes an important tool as moments of disagreement or agreement can be significant.

Analytic methods

Several methods used in grounded theory research can aid in achieving definition of an activity. Open, or line-by-line, coding is an early step in analysis when the researcher works at a very close level with the data in a line-by-line manner. Here the researcher applies codes that capture the meaning of a small segment of data. Adopting Charmaz's (2000) strategy of action emphasis, whereby each code conveys a sense of motion and purpose, can help preserve the chronological flow of a situation, helping the researcher incorporate process and change as central features of the analysis. Charmaz's (2006) recommendation to retain in vivo codes for some time throughout the analysis might also be a useful strategy here as the researcher aims for a careful representation of respondents' meanings and forms the basis for future comparisons.

After the data have been "fractured" by the process of open coding (Strauss & Corbin, 1998), the researcher begins to assemble categories to group phenomena. It is important to note that categories represent increasing levels of abstraction from the data as the researcher is now making decisions based on codes, not data directly. Axial coding can help give definition to these emerging categories. Strauss and Corbin (1998) have recommended to researchers to define the properties and dimensions of categories. In terms of activity theory, these notions can assist as the researcher seeks responses to changes in conditions: How did a change in conditions precipitate a reorganization of the system? In what ways? To what extent? Did this vary by subject? By answering such questions, the researcher can come to a keen awareness of the activity's functioning.

The final method included here is the constant comparative method (Glaser & Strauss, 1967; Strauss & Corbin, 1998). Glaser's (1994) strict adherence to this method was a cornerstone in traditional grounded theory as it was by comparing data to data and data to emergent categories that the researcher was to arrive at theory. Even in constructivist approaches the method remains important. The constant comparative method forces the researcher to return to data frequently during conceptualization, noting points of agreement and conflict with the emerging conceptual framework. New data that challenge the researcher's understanding of the phenomena are not discarded as an outlier, as in verificational research (Glaser & Strauss, 1967), but, rather, are considered as essential pieces of data that productively extend the emerging categories.

Seeking multiple data sources can again be a useful strategy here. Comparing observational data with interview data, for example, can reveal the extent to which respondents individually identify with or abandon the conceptual or material artifacts used publicly in collective situations. Furthermore, questions can fruitfully be aimed at the meaning participants make of the processes, whereby key artifacts are defined and employed in shared situations. This is relevant to three purposes: First, transcripts of naturally occurring talk might illustrate who speaks and how subsequent discussants take up or depart from an original statement or question. Second, by comparing instances of naturally occurring talk with formal or informal interviews, it might be possible to recognize unique speech genres (Wertsch, 1991) and trace the specific codes attributed to those genres back to their points of origin (locally or far away). Thus, it becomes possible by comparing data to data across types and instances to situate styles of talk in an institutional and cultural context. Finally, by relying on data other than interviews and by analyzing naturally occurring interactions as the data are collected, it is possible to recognize points of resistance in observations and follow up quickly with participants regarding their motivations behind their actions. It is thus possible to notice differential lines of stress, as Blumer (1969) might characterize the problem, in naturally occurring situations and to see if these lines result in a restructuring of the activity or, in activity theory terms, under what conditions contradictions occur and how they are resolved. Constant comparison can be used as a powerful method in this synthetic approach; it might be guided by an evolving awareness of the history of, and tacit influences on, local situations that might not be apparent in traditional grounded theory data sources.

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Dealing with contradictions:
Adopting a dialectic stance

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Introducing the notion of a dialectical stance toward grounded theory research highlights the tension created by the use of extant theory in two ways: within the analysis itself and in the researcher's thoughts and feelings. With respect to the data, one mines situations for ruptures, inconsistencies, mutual agreements, expressed hesitation, pauses, novel actions, surprises, and moments of strong emotion. These are potentially vital insights into the processes of change and development within activities. Such moments can be flagged as important events and taken up later in interviews, compared with future events, or used to guide theoretical sampling. With respect to the researcher's process, he or she might experience internal conflict while wrestling with the inevitable tensions that arise when new data are compared with emergent and existing concepts. These felt tensions—moments of confusion, hesitation ambiguity, doubt, or insight— represent key analytic events. Adopting the grounded theory method of frequent memoing can aid the researcher in tracking her or his thoughts throughout the development of the theory. These memos can later be used as data, identifying how the researcher interacted with the data and with the broader conceptual context. Memos can be used to handle these important moments of conceptualization and can later be reorganized and extended into article or chapter sections (Charmaz, 2000).

Table 1: Constructing a grounded theory of activity

Key Methodological Guidelines

- From activity theory: Historical analysis will play an important part in understanding the activity under study. What are its origins? How did it arrive at its current state? What major events helped shape it? How does its history influence the way in which it is carried out locally?
- From grounded theory: Withholding conceptual commitments will help facilitate the development of fuller categories and processes.
- From grounded theory: Engaging in frequent and ongoing memoing will help track and work with the inevitable conceptual tensions that will arise throughout the research project.
- From activity theory: Being sensitive to the way in which action is mediated by culture will help maintain a broad focus.
- From both: Engaging in a dynamic process of looking broadly at the activity and your emerging conceptual framework while also attending to participants' views.
- From both, together: Embrace the tensions that are involved as your ideas are challenged with new data and with existing theories. Probe these tensions in memos. How are the patterns in your data similar or dissimilar to patterns described in the literature? Where do they intersect, and where do they separate?

Methods and Strategies for Data Collection

- Ask process-oriented questions aimed at respondents' views of activity elements.
- Record participants' talk in naturally occurring situations (i.e., noting when they talk, in what order, how they describe things and each other).
- Observe how they use conceptual or material tools to solve the problems at hand, when these tools break down, and how they might be put to use to solve new problems.
- Analyze the history of the primary organizations involved in the activity (the institutional locus). What norms are emphasized or enforced? How are these taken up or modified?
- Conduct a historical analysis of the primary conceptual and material tools that are used to coordinate local action: Which tools are figured prominently? Where did they come from? Who introduced them? What was their original purpose? Is that purpose still relevant?
- Use theoretical sampling to refocus on elements of the activity system that are underrepresented in the data. Has anything been overlooked? Do you need to return to any of the elements and get a different perspective, perhaps at a "higher" conceptual level?

Analytic Methods and Strategies

- Use initial coding as a way to sketch out the elements of the activity system, begin to grasp your subjects' views of it, and generate emergent themes. Use higher level theoretical or axial coding to elaborate the nature and extent of their relationship under different circumstances.
- Look for contradictions between naturally occurring talk and actions, historical ways of doing things, and participants' descriptions of events; raise these contradictions with participants.
- Code with an action emphasis to preserve the dynamic flow of events.
- Return to specific elements of the activity system based on questions raised during analysis and based on the reshaping of your emerging conceptual system.
- Memo frequently, especially when you recognize a pattern in the data either emergently or because it looks like something you have read about elsewhere. Does drawing on an extant concept make sense here? What doubts linger about its fit?

Seeing the research act as dialectical in this way acknowledges the full complexity both of the data and of the research act. Maintaining receptivity to emergent themes can shed light on the way in which local actors expand their thinking as well as the systems of which they are apart. These are key insights into how individual and societal and/or institutional development are coextensive in different settings. Existing theory can play a productive role in this process; the researcher's excitement, anxiety, or even hesitation in this process becomes a creative rather than a destructive impulse as he or she develops theory. These moments should be probed, explored,

and even compared with the themes emerging in the data and then captured and worked out in memos. In addition, by holding conceptual commitments at bay, the researcher places him- or herself in dialectic tension with theory more broadly, extending the possibility of developing new adaptations of the theory itself. In the case of activity theory, this could be particularly important as it faces the challenge of accounting for heterogeneity in situations; it is no longer appropriate to assume the existence of a singular activity system (Engeström, 1987). Recognizing how activity systems intersect and transform one another in particular situations remains an important theoretical question (see e.g., Barowy & Jouper, 2004), and—invoking Glaser (1994, 2002) a bit here—by prematurely foreclosing conceptual development, the researcher can overlook the ways participants' actions do not fit with historical patterns and hence miss out on the actions that might lead to systemic, developmental reorganization.

In Table 1 I have summarized the methodological guidelines, methods, and strategies that emerge from the intersection of grounded theory and activity theory.

Conclusion

In the ongoing evolution of grounded theory, the criteria for the use of extant theory should expand rather than restrict analytic possibilities. The achievement of robust explanations about social phenomena remains an aim of the grounded theory approach that seems to be realized infrequently; Charmaz (2005) has remarked that "researchers have done so little grounded theory, despite their claims to use it. Its potential for developing theory remains untapped" (p. 511). Priest, Roberts, and Woods (2002), similarly, noted that when authors say they are doing grounded theory, it usually means that they have put some of the methods to use rather than that they have developed a substantive theory. "Doing grounded theory" might result in more robust midlevel theories if the approach is used within a set of methodological guidelines that support finding deeper theoretical and process-oriented connections in the data.

Research along the lines I have described might be aimed at sociocultural activities that have received little attention or, in the founders' spirit, where deductive theory has historically been employed and where closer insights are desired. Developing a grounded theory on the basis of activity might be helpful in establishing frameworks for future research seeking greater ecological validity (Bronfenbrenner, 1989). This kind of grounded theory of activity might be developed and employed at different levels of analysis—microgenetic, ontogenetic, sociogenetic, phylogenetic—and along different time scales (Lemke, 2000), depending on interest. Then, future research can again engage dialectically as new situations are encountered and new interests develop.

By adopting a grounded theory approach to activity theory research, the researcher is able to place her- or himself in dialectical relationship with the data as well as with a theoretical vantage point that offers its own methodological guidelines and assumptions. Seeing grounded theory as an approach, although not uncontroversial, facilitates this kind of flexible use and offers potential compatibility with other theoretical frameworks. The synthetic methods that result—and I have listed a few—can generate new theoretical insights into activity and can stretch grounded theory in new directions. Reciprocally, the historical and cultural emphases in activity theory can help safeguard against the problem identified by Charmaz (2000) when she stated, "An acontextual reliance on respondents' overt concerns can lead to narrow research problems, limited data, and trivial analyses" (p. 514). She has noted that typical data-level descriptions might not "go beyond commonsense tales and subsequent obvious, low-level categories that had nothing new" (Charmaz, 2003, p. 317). Referring back to the quote from Porter (2003) with which I began, a historically and culturally oriented form of grounded theory research might not be concerned

exclusively with the ways in which individuals' actions take patterns but might also relate to how individuals' actions change patterns or, perhaps more accurately, how individuals change in patterned ways and how, when, and under what conditions historical patterns of individual, social, and cultural change are transformed.

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