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Research as Pragmatic Problem-solving: The Pragmatist Roots of Empirically-grounded Theorizing

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INTRODUCTION: THE STRONG BOND BETWEEN PRAGMATIST PHILOSOPHY AND STRAUSS'S METHODOLOGICAL STANCE

One of the originators of grounded theory obviously draws heavily on the pragmatist and interactionist traditions. But what traits did this legacy go on to leave in Anselm Strauss's methodological work? I will claim that there is a strong bond between the thoughts of early North American pragmatism and both the methodological and the socio-theoretical concepts at the core of grounded theory—at least as long as it is the Straussian variant of grounded theory that we are talking about.

This chapter outlines some of the key concepts of early pragmatism, such as George Herbert Mead's notion of objective reality as that of interacting perspectives, John Dewey's iterative-circular understanding of problem-solving processes, and Charles S. Peirce's concept of abduction as the long sought-after explanation for the creation of new ideas in problem-solving. With regard to grounded theory, this chapter discusses, among other notions, the processual character of theory underlying the concept of empirically grounded theorizing and the reciprocal means-ends relationship between methods and theory. It will be shown that Strauss's understanding of empirical research as grounded theorizing is part of his attempt to improve interactionism's theoretical potential by revitalizing its pragmatist legacy.

Much writing on grounded theory is concerned with the question of how to *do* it, that is, with practical matters of doing empirical research the grounded theory way. Considerably less research effort, however, has been spent on the issue of the epistemological and socio-theoretical grounding of grounded theory. True enough, looking at the genesis of grounded theory, it is the story of a systematization of those strategies and heuristics employed in practical research endeavors, specifically in the studies on illness and dying in medical hospitals conducted by Glaser and Strauss in the 1960s (Glaser and Strauss 1965, 1968; see Strauss 1987: 5). It is also true, simultaneously, that these practices were inspired and guided by those theoretical and methodological schools of thought which shaped the originators of grounded theory in their formative years. In *The Discovery of Grounded Theory*, Glaser and Strauss name the Columbia School of Lazarsfeld and Merton and the Chicago tradition of Park and, later, Blumer as main influences on their work (Glaser and Strauss 1967: vii). Nonetheless, they do so from a critical perspective, pointing to the fact that not even their own schools (at which they received their academic training) were able to surmount the 'embarrassing gap between theory and empirical research' (Glaser and Strauss 1967: vii). In the above writing, both Glaser and Strauss were wrestling with the shortcomings of mainstream sociology with regard to a sound conception for the generation of new theory based on empirical data and they had to admit that their respective traditions (Glaser a Columbia School descendant and Strauss a Chicago-style interactionist) inevitably harbored certain flaws in spite of their acclaimed merits.

Regardless of this critique, in the process of developing their own style by systematizing their empirical research practices, it became increasingly obvious how heavily these authors drew upon the conceptual frameworks of their respective schools of thought. This was especially apparent in their later and separate writings on grounded theory. In *Emergence vs. Forcing*, the book that marked Glaser's break with Strauss, the author claims the foundation of grounded theory for the Columbia School (Glaser 1992: 7). Demonstrating a similar allegiance, Strauss clearly draws on the Chicago traditions of fieldwork and the formative role of pragmatist epistemology for his conception of grounded theory in his earlier introductory book.[1] Although the split between Glaser and Strauss has become common knowledge among grounded theory researchers, the theoretical underpinnings of this split have not yet been explored to their full extent.[2]

This chapter cannot address this question. Nevertheless, the controversy between Glaser and Strauss does constitute an important point of departure for the following discussion. The most frequently cited work on grounded theory continues to be *The Discovery of Grounded Theory,* and that is a problem. Jointly conceived and written by Glaser and Strauss, this writing represents more of a mixed bag of socio-theoretical and methodological arguments in reaction to late 1960s mainstream sociology's take on empirical research than a sound, self-contained conceptual foundation for the new approach proposed by its authors. By 1992, if not before, Glaser's accusations directed at Strauss and

Corbin that they 'wrote a whole different method' in their introductory book, one which 'distorts and misconceives grounded theory' (Glaser 1992: 2), made it clear that Glaser's understanding of the methodological basis of grounded theory differs profoundly from that of Strauss.

Rather than presenting a comparative discussion of the two versions of grounded theory represented by these authors, this chapter focuses instead on a reconstruction of the socio- philosophical and epistemological foundations of the Straussian variant of grounded theory. As a general thesis underlying this endeavor, I hold that Strauss, both in his socio-theoretical and his methodological work, remains deeply rooted in the intellectual tradition of American pragmatism established by C. S. Peirce and further developed by W. James, J. Dewey, and G. H. Mead. In order to adequately understand Strauss's methodological stance, we first need to grasp the basic understanding developed by classical pragmatists in regard to the issues of reality, problem-solving, inference, and theory. Thus, it becomes equally necessary to analyse the ways in which these philosophical notions shape Strauss's approach to grounded theory.

In order to demonstrate the pragmatist legacy in its relationship to grounded theory, I will begin by elaborating on the issue of data: What is the pragmatist understanding of data? Obviously we cannot discuss this issue without at the same time asking questions about reality, since the proposed definition of data must in one way or another relate to a certain conception of reality. In grounded theory, much emphasis has been laid on the so-called concept indicator model as presenting a specific understanding of the link between data and theory. Thus, after dealing with data, 'Theory As Process' looks at the notion of theory in pragmatism. Here, the distinctive feature is the processual perspective pragmatists have developed on theory: a perspective that can be easily rediscovered in Strauss's methodology. Linking data and theory employs different procedures of inference. For grounded theory, the issue of induction is not only one that has raised a lot of criticism, it is also the source of a most profound misunderstanding of what happens when researchers try to develop new theory based on empirical data. This issue will be dealt with in 'Inference', while 'Inquiry as Iterative-Cyclical Problem-Solving' focuses on the iterative-cyclical form of the research process as proposed by both pragmatism and grounded theory. The concluding section will then address an overall evaluation of the strong bond between epistemological and practical procedures in grounded theory. The importance of a clear relation between these two aspects for the discussion of validity issues will be especially emphasized.

DATA: 'THE MOST DIFFICULT OF ABSTRACTIONS'

The notion of 'raw data' in empirical research presents an ill-structured, albeit common, conceptualization of data's epistemological status. The critical artificial intelligence researcher Hubert Dreyfus once noted: 'Data are far from being raw' (Dreyfus 1972). The idea behind this criticism is that in order to end up with

what is often seen to be pristine empirical material, a construction process must first take place. A multitude of operations, negotiations, and decisions has already transpired before an interview transcript or a set of field notes is laid out for analysis. All this is obvious, yet the question remains: what *is* data? We are used to think of data as representing reality—not in its entirety of course, but in certain parts and perspectives. But then again: what is reality?

This brings us right to the heart of pragmatist epistemology since one of its most fundamental, axiomatic arguments is that 'for rationalism reality is ready-made and complete from all eternity, while for pragmatism it is still in the making [...]', as William James puts it (James 1907/1981: 115). Reality is not 'out there' but rather continually in the making on the part of active beings. Furthermore, a predetermined endpoint to this process is not assumed. Dimitri Shalin gives us an impressive picture of the pragmatist perspective on reality:

> Pragmatist philosophy [...] conveys an image of the world brimming with indeterminacy, pregnant with possibilities, waiting to be completed and rationalized. The fact that the world out there is 'still' in the making does not augur its final completion at some future point: the state of indeterminacy endemic to reality cannot be terminated once and for all. It can be alleviated only partially, in concrete situations, and with the help of a thinking agent. The latter has the power to carve out an object, to convert an indeterminate situation into a determinate one, because he is an active being. The familiar world of color, sound and structure is his practical accomplishment, i.e. he hears because he listens to, he sees because he looks at, he discerns a pattern because he has a stake in it, and when his attention wavers, interest ceases, and action stops—the world around him sinks back into the state of indeterminacy (Shalin 1986: 10).

It should be noted, however, that this pragmatist understanding of reality entails two theoretically and methodologically significant consequences: not only is pragmatism one among a number of 'philosophies of the flux' (Dewey 1925/1958: 50) (which necessarily arrive at a notion of data as a potential representation of parts of reality *at a certain point in time*) but it also defines reality as being made by and experienced only through human activity. Concisely: reality is nowhere else but in active experience, i.e. in action. 'Reality in itself, or in its uninterpreted nakedness, is a pragmatically meaningless notion, for it is a notion [...] of the unknowable [...]' (Thayer 1973: 68). As an initial clarification: neither is it denied that a certain 'something out there' might exist independently of social actor(s), nor do pragmatists claim reality-in-action to be an idealistic concept of a reality existing, produced, and manipulated exclusively in cerebral form. For pragmatists any possible 'something out there' can rather be likened to an undefined openness, experienced as specific kinds of obduracy requiring active dealing with for the solution of practical problems. Reality *becomes* such only insofar and as long as it is part of the environment within which actors act. Through action, obduracy is transformed from its state of opaque resistance into meaningful objects: this is much more than a labeling process, more than a naming of things; it is a materially and corporeally grounded process of bringing things-as-objects about. Pragmatists stress that not only are things meaningless if they are not acted upon, but moreover that in the absence of (inter)action they cease to have an existence for us at all as things.[3]

George Herbert Mead, drawing on both evolutionary theory and Einstein's theory of relativity, repeatedly stressed the 'relativity' that characterizes the link between actor and environment. The two, as he puts it, 'determine each other', the result of which is the 'situation' (Mead 1908: 315). In the course of the action involved in constituting reality as an interacting ensemble of meaning-imbued objects, the concepts of perspectivity and abstraction come into play. Mead positions his notion of perspectivity critically against the idealist concept of reality as lying entirely within the realm of subjective experience (Mead 1932/1959: 161). While it is true that conceptualizing objects and thereby reality as being actively 'carved out' (Mead 1938: 660) includes the possibility of different perspectives of different actors, more often than not perspectives overlap or are in many aspects identical. Mead explains this 'objective reality of perspectives' (1932/1959: 161) by drawing on the dialectical concept of the mutual shaping of actor and object as well as by postulating his idea of interaction based on the processual integration of the 'generalized other' into one's own actions. In this way, every intelligent act of 'carving out' an object is 'social to the very core' (Mead 1934: 141). Whenever humans act with reference to their social or physical environments, they reflect their doing in light of what actions these environments might evoke in other actors. 'The individual learns to do the carving' out of objects from the hitherto unstructured world 'against the background of meaningful objects shared with others' (Shalin 1986: 12).

The 'generalized other', however, does not determine the actions of individuals, but rather shapes them. Since the practical problems requiring a solution are different, 'each individual has a world that differs in some degree from that of any other member of the same community' (Mead 1925: 259). This is what made Thomas' 'definition of the situation' such a groundbreaking statement for sociology and garnered it a central place in interactionist social theory.[4] At the same time, the objective reality of perspectives means that every perceptive act includes the process of *abstraction*. 'Our very treatment of things as definite objects involves an abstraction, that is, it requires an active selection of certain elements from among the many encompassed in our field of experience' (Shalin 1986: 11).

In thinking about the nature of data, it follows that the sheer act of selecting a piece of data is more than a mere culling, plucking, or picking out of ready-made objects, like we might pick up shells on a sandy shore. Mead states it very pointedly: 'We cut our objects out of this world' (Mead 1936: 155). It is not only that objects are constituted solely through our activity, but that this activity inevitably involves choices based on (known or unknown) preconceptions. 'But facts are not there to be picked up. They have to be dissected out, and the data are the most difficult of abstractions in any field. More particularly, their very form is dependent upon the problem within which they lie' (Mead 1938: 98).

It is this understanding of data around which Straussian grounded theory develops its procedures: the positivistic conception of objectivity is rejected, however objectivity is not denied per se. Following in the footsteps of Mead's concept of an objective reality of perspectives, grounded theory treats data as the

representational material of a reality that is under construction. In the case of empirical research, this construction involves not only the actors in the field under scrutiny but also the researcher themselves: 'what a thing is in nature depends not simply on what it is in itself, but also on the observer' (Mead 1929: 428). Thus, data itself, as well as its objectivity, is to be gained through researchers' continual negotiations with their environment including both the 'problem within which they lie' and the questions they try to answer through their analysis. Data, seen in this way, is not the unhewn material that a researcher starts out with, but rather the *relation* between the field, the research issues, and the researchers established in the course of the analytical process.

THEORY AS PROCESS

As a methodological style, grounded theory emphasizes the generation of theory. This is a distinctive feature of grounded theory as compared to both the hypothetico-deductive conception of theory testing and to some more descriptively oriented approaches in qualitative and ethnographic research. Having shown how fluid and relational the concept of 'data' is in grounded theory, it becomes apparent that we need to have a look at what pragmatism and grounded theory have in mind when they use the term 'theory'. Beginning with grounded theory, in Glaser and Strauss's *The Discovery of Grounded Theory*, we come across a phrase which provides an important initial insight into the nature of theory. The authors note: 'The published word is not the final one, but only a pause in the never-ending process of generating theory' (Glaser and Strauss 1967: 40). Evidently, the presumption of the fluid and interactive character of reality results in the need for a similarly processual understanding of theory, provided, that is, that empirically meaningful theories (in contrast to mathematical theories) make up the focus of our discussion. When the theoretical subject matter lies in selected aspects of the process of reality (as it is constantly shaped by human activity), the respective theories seeking to capture this reality need to convey not just a state of being, but the process of its evolution as well. Theory as process is among the preferred topics in Strauss and, for that matter, Corbin's methodological writings.[5] In a more theoretical article on grounded theory methodology, Strauss and Corbin characterize grounded theories as follows:

> Because they [grounded theories] embrace the interaction of multiple actors, and because they emphasize temporality and process, they [...] have a striking fluidity. They call for exploration of each new situation to see *if* they fit, *how* they might fit, and how they *might not* fit. They demand an openness of the researcher, based on the 'forever' provisional character of every theory (Strauss and Corbin 1994: 279).

In the absence of ready-made reality out there, or any pre-given ontological status or properties of things prior to the interference of knowledgeable actors, theories are, seen in this perspective, nothing more than the conceptual thinking

that actors bring forth in interactively producing their reality. With this under-standing, we find theories on two levels: first, the common sense theories of actors solving their everyday problems by making sense of the 'world out there' and taking measures to reach their goals. And secondly, of course, there are theories of empirical social sciences, created in processes of actively understanding what people do 'in the field' as well as the motives and causes behind these actions. From a pragmatist perspective, these two types of theory are not categorically differentiated. Instead of presenting a dualistic conceptualization, theories are seen as existing in a relation of gradual difference along a continuum of knowledge. While it is true that scientific theories distinguish themselves from common sense theories in regard to the degree of systematization, logical inference, and validation invested in the course of their construction and main-tenance, all of these properties are, to a certain extent, also relevant to the conceptual knowledge gained in everyday problem-solving. *Theory* in grounded theory is therefore understood as commencing from a very basic level of abstraction. The process of theorizing literally starts with the aforementioned 'carving out' of data, that is, with the active transformation of experienced aspects of the 'world out there' into conceptual objects and their interrelation. This is an issue with which beginners in grounded theory often struggle. Largely due to their academic education, their expectations regarding proper theories tend to be located on a higher level in relation to coherency and range. In contrast to the traditional prestige accorded to more abstract and formalized theories in academia, grounded theory departs from the notion that all knowledge is theoretical to its core. The purpose of grounded theory is to elaborate the abstraction level of its theoretical results to the amount needed to solve the problems defined by the respective research purpose. In both sciences and humanities, this involves the formulation of plausible propositions that must be accessible to scrutiny. This is precisely what grounded theory aims at:

> Theory consists of *plausible* relationships proposed among *concepts* and *sets of concepts*. (Though only plausible, its plausibility is to be strengthened through continued research.) Without concepts, there can be no propositions, and thus no cumulative scientific (system-atically theoretical) knowledge based on these plausible but testable propositions (Strauss and Corbin 1994: 278).

Another important aspect of grounded theory's concept of theory is that it is never seen as being made 'from scratch'. However highly we may estimate the importance of both empirical data and the embeddedness of every grounded theory in data: when even data is the result of the interplay between perception and cognition, all the more so is theory. Long debates have been held over the appropriateness of utilizing previous theoretical knowledge for the analysis of data in grounded theory projects. This is also one of the central issues surround-ing the Glaser and Strauss controversy (Glaser 1978: 31 passim; Kelle 2005; Strübing 2006). This question arose not only due to Glaser's heated comments on Strauss and Corbin's *Basics of Qualitative Research* (Glaser 1992; Strauss

and Corbin 1990) but also because of the suggestions put forth in *The Discovery of Grounded Theory* 'literally to ignore the literature on theory and fact on the area of study in order to assure that the emergence of categories will not be contaminated' (Glaser and Strauss 1967: 37). This misleading phrase has the ring of an inductivist tabula rasa stance—all the more so in light of Glaser's later interpretations of grounded theory. However, on the third page of their book, Glaser and Strauss explicitly reject any tabula rasa approach to encountering reality and instead state that a researcher 'must have a perspective that will help him see relevant data and abstract significant categories from his scrutiny of the data' (Glaser and Strauss 1967: 3). This reference to the necessity of a perspective clearly indicates the pragmatist roots at least in Strauss's approach to grounded theory.

The primary point here is not whether previous knowledge should be used in actual data analysis; the important insight lies rather in how to make proper use of previous knowledge. This was stated not only by Glaser and Strauss but also even earlier by Blumer (1954). Blumer's rejection of 'definitive concepts' in favor of 'sensitizing concepts' makes this point crystal clear: the only problem with preknown or preheld theoretical concepts is their potential dominance over the empirical data at hand (as it is well documented for hypothetico-deductive research). What is called for instead is a certain attitude of the researcher in actively relating knowledge and data. Throughout the whole project we are confronted with taken for granted concepts, although they might become less important as the process of theorizing comes up with a more convincing set of categories and concepts. But even so, during a project we associate aspects of prior knowledge with current research issues. The attitude called for would be to let ourselves be inspired to look in directions indicated by this knowledge without assuming that this would be the only solution to our research problem.

As we have seen in the above quote from Strauss and Corbin on 'theory' as consisting of 'plausible relationships', the authors do not simply claim theory to be the main aim of the research process but also insist on the criterion of testability of a theory's propositions. Nonetheless, for theories 'burdened' with processuality and perspectivity, the traditional mode of theory testing does not seem appropriate. Since theories and reality are not—as in analytic epistemology—seen as different entities but instead as existing in an intertwined means-ends relationship, the question arises: which criteria might be used to test a grounded theory's claims? In the following quote, Strauss and Corbin indicate a direction which they see as providing a viable testing ground for such a theory (while also emphasizing the strong ties between grounded theory and pragmatism):

> We follow closely here the American pragmatist position [...]: A theory is not the formulation of some discovered aspect of a preexisting reality 'out there'. To think otherwise is to take a positivistic position that [...] we reject, as do most other qualitative researchers. Our position is that truth is enacted [...]: Theories are interpretations made from given perspectives as adopted or researched by researchers. To say that a given theory is an interpretation—and

therefore fallible—is not at all to deny that judgments can be made about the soundness or probable usefulness of it (Strauss and Corbin 1994: 279).

Apart from the logical soundness of the formation of a theory, its real test is in its usefulness. That brings us back to the core of the pragmatist claim: the proof of every proposition lies in its practical consequences or, colloquially speaking: 'The proof of the pudding is in the eating'.

INFERENCE

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Although data and theory are joint parts on a continuum of knowledge, the transformation of data into theory requires certain types of activity that we are accustomed to calling 'data-analysis'. The general understanding of data-analysis in grounded theory is the 'constant comparative analysis', which provides the researcher with general instructions on how to proceed analytically in working with data. While only roughly addressed in *The Discovery of Grounded Theory,* in *Theoretical Sensitivity*, an in-depth explanation of the practical analytical tasks of constant comparative analysis is provided. With this latter work, Glaser introduced the 'concept-indicator model' as an analytic mode 'based on constant comparing of (1) indicator to indicator, and then when a conceptual code is generated (2) also comparing indicators to the emergent concept' (Glaser 1978: 62). It is his purpose here to advocate a comparative mode which clearly recognizes data as the point of departure for any ensuing conceptual endeavor: this in contrast to other, more quantitatively-oriented, analytic approaches. Ten years later, in his introductory monograph, Strauss (1987: 25) not only adopted this model but also the repeated references to grounded theory as an analytical method predominantly driven by induction.

The strange thing about this shared emphasis on induction in the individual works of Glaser and Strauss is that their respective methodological positions, as revealed in their later writings, differ profoundly in exactly this point: though both use the rhetoric of induction, it is only Glaser who insists strictly on what Kelle terms 'naïve empiricism' (Kelle 2005: paragraph 24) as the basic logic of research in his version of grounded theory.[6] With Strauss (and Corbin) it is another matter altogether: in his introductory book, Strauss picks up on critiques of grounded theory that 'mistakenly' understood it as an 'inductive theory' (Strauss 1987: 11). Later, he and Corbin acknowledge that this 'persistent and unfortunate misunderstanding' was partly the result of a number of dubious phrasings in *The Discovery of Grounded Theory* (Strauss and Corbin 1994: 277). And although they continued to call grounded theory a theory 'that is inductively derived from the study of the phenomenon it represents' (Strauss and Corbin 1990: 23), in those passages where details of their logic of research are discussed, they name at least three types of inference involved: 'Scientific theories require first of all that they be conceived, then elaborated, and checked out [...]

the terms that we prefer are induction, deduction, and verification' (Strauss 1987: 11). Strauss's image of an iterative-cyclical process of analysis can be understood as unfolding along the lines of these three inferential modes. The possibility of arriving at meaningful hypotheses by means of only one of the three modes is ruled out by Strauss. With respect to induction he states: '[...] How can there be hypotheses without either thinking through the implications of data or through "data in the head" (whether experiential or from previous studies) [...]' (Strauss 1987: 12).

At first reading this sounds like pragmatist epistemology proper. However, there are two aspects that do not really line up: grounded theory in general, particularly the Straussian variant thereof, emphasizes the creative aspect in the generation of theory (Strauss 1987: 9f). This emphasis is, furthermore, perfectly in line with the general claim of sciences and humanities on their ability to develop innovative ideas and new knowledge.[7] It is also in keeping with the pragmatist emphasis on creativity. Nevertheless, abduction is completely ignored in Strauss and Corbin's texts. When abduction can be seen as the predominant epistemological mode of creating new ideas for practical problems, this non-emphasis in the writings of Strauss and Corbin in relation to this point becomes hard to reconcile with pragmatists' more salient treatment of creativity in theory generation.[8]

As discussed at greater length elsewhere (Haig 1995; Kelle 2005; Reichertz 2003, Chapter 10; Strübing 2004), the research process outlined especially in Strauss's later works on grounded theory methodology is necessarily of an abductive nature; or, more precisely, it relies heavily on abductive processes in its analytic mode. It was the pragmatist Charles S. Peirce who, in his early works on the logic of inference, found out that neither deductive nor inductive inference is logically capable of producing new knowledge. In order to solve this problem, he defined a third form of logical inference, which he claimed to be a viable means of achieving this purpose (Peirce 1878). He at first called this form 'hypothesis'. Later, he found that, when considered as logical inference, not even the formulation of a hypothesis would produce new knowledge and, moreover, that logical inferences are altogether incapable of resulting in or leaving room for creative acts. Pursuing this thought further, Peirce began to conceive of hypotheses or (his revised designation) 'abduction' as a certain practical habit instead of a form of logic. He found that creative processes have their point of departure in the early phase of perception, where we sometimes need to literally 'make sense' of that material which does not 'fit' into our pre-established (learned) perceptual categories. This is the moment, Peirce contends, when a non-intentional, non-forcible, spontaneous insight comes upon the actor 'like lightning' (Peirce 1931–1935/1960: CP 1.181).[9] This spontaneous insight links current perceptions with new organizing principles but in doing so it still remains based on or adapted to previous knowledge.

Similar to abduction, but different in its epistemological basis, Peirce views 'qualitative induction' as enabling the recognition of already experienced

categories of perceptual material within the contents of 'current' perceptions in problem-solving situations. In this way we might infer the existence of further qualities attributable to phenomena being deciphered, based on the resemblance of certain perceived qualities to a previously known term or concept. These qualities are inferred because they are additional qualities belonging to the previously known perceptual entity.

Obviously, both of these modes of non-logical, probabilistic inference are important components of the analytical reasoning in grounded theory's constant comparative analysis. They rely heavily, at the same time, on the researcher's previous knowledge. However imprecise Strauss's notion of the induction-deduction-verification triad might be with respect to providing a grasp on the creative part of analytic reasoning, it does nonetheless have a point in its emphasis on the importance of both deductive and verificational operations within grounded theory. This is crucial to understanding grounded theory because it clarifies the widespread (though mistaken) notion that grounded theory as an inductive approach fails to encompass the full circle of the analytic process required to arrive at a relevant and sound grounded theory from an empirical research question. The Straussian variant of grounded theory definitely is a verificational method, however, this is inseparably intertwined with its method of creating theory. The next section will shed some light on both this iterative-cyclical form of the research process in grounded theory and on its roots in the pragmatist notion of problem-solving.

INQUIRY AS ITERATIVE-CYCLICAL PROBLEM-SOLVING

When John Dewey published *Logic: The Theory of Inquiry* in 1938, his aim was a critique of the then dominant view of inquiry processes as logic-based endeavors driven by general doubt and the will to abstract reasoning. His position, as well as that of other classical pragmatists, was that the process of reasoning is a means towards the end of improving one's ability to act. He begins with the key concept of pragmatist thinking: 'If inquiry begins in doubt, it terminates in the institution of conditions that remove need for doubt. The latter state of affairs may be designated by the words belief or knowledge' (Dewey 1938: 7). Routine actions are not likely to require much reasoning in order to run smoothly and successfully. It is only when our routines start failing to achieve their desired or expected end or when we are somehow hindered from acting in the way in which we are accustomed, that we become uneasy. In his social psychology, Mead termed this an 'arrest of action under inhibition' (Mead 1932/1959: 172). This is the source of practical doubt that gives rise to activities of reasoning or problem-solving.

Departing from this basic concept, Dewey develops a circular model of problem-solving processes that he terms 'inquiry'. His definition of inquiry reflects the idea of resolving a tension which arises between the states of doubt and

belief: 'Inquiry is the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the element of the original situation into a unified whole' (Dewey 1938: 104). It is important to note, however, that Dewey thought of his model as a general model, suitable for the conceptualization of both the everyday handling of smaller or larger breaks in the flow of activity as well as those more comprehensive reasoning processes employed predominantly in the sciences and humanities, that is, in research. The pragmatist argument of continuity here results in the statement that sciences, as compared to everyday life, do not hold a privileged account of truth.

Dewey distinguishes five steps in this model (see Figure 27.1) beginning with the '*indeterminate situation*' (1938: 105). Indeterminacy denotes a state of 'unique doubtfulness' of the situation that is to be distinguished from 'uncertainty at large'. In order to evoke inquiry, the situation needs to be designated as a specific situation of uncertainty 'about' something. Emphasizing the uncertainty pertaining to the situation is meant here in contrast to 'personal states of doubt [...] not relative to some existential situation' (1938: 106). It is the situation, the activity-driven relation between actors and environment, which is experienced as uncertain by actors, and not a mental state of doubt within the actors themselves.
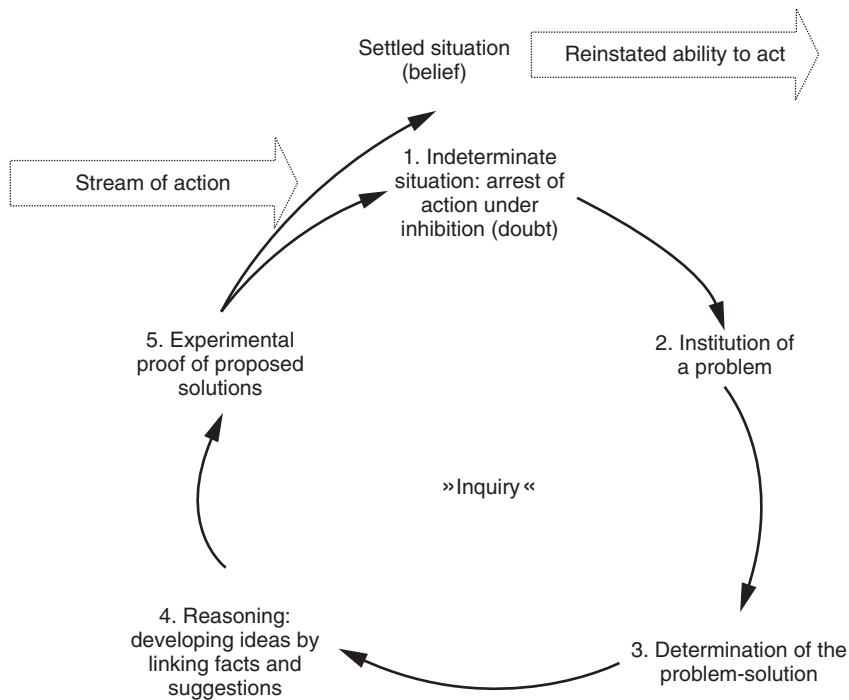

Figure 27.1

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Dewey.

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Transferring the idea of the indeterminate situation to empirical research based on grounded theory methodologies, this type of situation can be identified on various levels and in many instances throughout the research process. Entering a new field of empirical research and being stunned by the amount of difficulties one has in comprehending one's surroundings, or stumbling through the initial reading of a section in an interview transcript, without being able to make sense of the interviewee's statements are but two of a number of indeterminate situations we are commonly confronted with in research.

It is important, however, to distinguish the situation of uncertainty, the 'arrest of action under inhibition', from a second phase of problem-solving, which Dewey labels the '*institution of a problem*' (1938: 107). The indeterminate situation is not yet problematic. Indeterminacy comes about due to 'existential causes' (1938: 107); there is nothing cognitive involved at this first stage. It is only when a situation is actively qualified as being problematic that a problem is constituted. Even though a problem, once stated as such, is still far from representing the solution, 'to mistake the problem involved is to cause subsequent inquiry to be irrelevant or to go astray' (1938: 108). In terms of empirical research, we might draw parallels relating this stage to the task of defining a research question that appropriately addresses the cause of our state of unsettledness. Thus, the problem defined has to fit the situation that we have experienced as uncertain, otherwise the answer to the ill-structured question will not contribute to settling the situation, that is, to bringing our practical concerns to rest.

This concept of problem-constitution as being existentially attached to the actor-environment relation or, for that matter, to the relation between the researcher and their empirical field sounds unspectacular; we might even have thought this anyway. However, if we compare Dewey's notion of problem-definition with Hans Reichenbach's (1938/1983) distinction between a 'context of discovery' (as merely inner-psychic processes) and a 'context of justification' as a fully rational fact-related process, the importance of Dewey's point becomes obvious: in light of the situation we are very well able to make sound judgments concerning the proper constitution of a (research) problem.

But how to proceed to its solution? According to Dewey 'first we have to recognize that no situation which is completely indeterminate can possibly be converted into a problem having definite constituents' (1938: 108). Thus in the third phase, the '*determination of the problem-solution*', we start determining 'the constituents of a given situation which, as constituents, are settled' (1938: 108). This is where empirical observation comes into play. Through empirical investigation we come to identify 'the facts of the case', that is, those aspects of the problem that need to be taken into account in order to reach a relevant solution. For Dewey, it is on the basis of these 'factual conditions' that 'possible solutions' are tentatively stated as *ideas*. Here we have the initial interplay between data and conceptual thinking that in grounded theory (and not only there) is called theorizing: 'Ideas are anticipated consequences (forecasts) of

what will happen, when certain operations are executed under and with respect to observed conditions' (Dewey 1938: 109).

The most lucid example of how these cognitive acts proceed can be seen in those early line-by-line analyses where we try to figure out the possible consequences of certain available interpretations of the data at hand: do our tentative interpretations make sense with respect to our problem of understanding the social phenomena under scrutiny? The formation of ideas is an iterative process: because ideas at first tend to be vague, they require further refinement and logical grounding. The source of every idea for Dewey lies in '*suggestions*' which 'just spring up, flash upon us, occur to us' (Dewey 1938: 110, my italics). Dewey's characterization of suggestions here parallels Peirce's notion of how abductive inferences come to us 'like lightning'. Ideas can obviously not be induced from the facts of the case because the facts, even though they are known and thus conceptualized, do not carry the concept of a problem solution in and of themselves. Likewise, they cannot be deduced from conceptual knowledge, at least not as long as the problem determined *is* a problem to the actor/researcher.

Suggestions as derived from abductive processes in Dewey's model are far from being logically well-structured and worked out, rather they are seen as the primary conceptual material for logical ideas. The formation of ideas (Dewey terms this fourth step of his problem-solving model '*reasoning*') consists of correlating the observed facts of the situation with suggestions. There is logic involved here. Suggestions are checked logically for their fit with perceptual material from the perspective of a possible problem-solution. The process of developing ideas is conceived of by Dewey as a rational, discursive act that aims at the progressive stabilization of ideas through the testing of their practical consequences as would-be valid solutions. We can think of reasoning as an iterative series of thought-experiments: nothing in existence is actually manipulated, but rather the practical consequences, seen as likely outcomes were the idea to be realized, are symbolically determined and used as criteria for making a decision on the appropriateness of the idea as (part of) the solution. 'In other words, the idea or meaning when developed in discourse directs the activities which, when executed, provide needed evidential material' (Dewey 1938: 112). Dewey compares this step with the elaboration of a 'hypothesis' in 'scientific reasoning'. This is not only another hint at the procedural continuity of scientific reasoning and common sense problem-solving; it is at once an indicator for the place of reasoning in grounded theory and further encourages a pendular movement between data-collection, data-analysis, and theory-building. When data-analysis, as it repeatedly does, reaches stages where a decision is required on whether a certain category or a relation between categories is sufficiently developed in order to become a settled part of the theory under construction, we return (by way of theoretical sampling) to the data in order to gather empirical evidence for the validity and appropriateness of the conceptual item under scrutiny. In those stages (that occur at various times and on different conceptual levels of the study) we build ad hoc hypotheses that basically read: if our current ideas

actually hold water, then we should be able to find data supporting one or the other category within a certain domain of cases.

Consequently, in Dewey's model, the final step can be termed *experiment*. Here, existential facts and non-existential, ideational subject matter are brought together in reality. Dewey stresses, 'that both observed facts and entertained ideas, are operational' (1938: 112). Ideas are operational in that they lead to and direct further observations, while the operational character of facts consists of their organized interaction:

> When the problematic situation is such as to require extensive inquiries to effect its resolution, a series of interactions intervenes. Some observed facts point to an idea that stands for a possible solution. This idea evokes more observations. Some of the newly observed facts link up with those previously observed and are such as to rule out other observed things with respect to their evidential function. The new order of facts suggests a modified idea (or hypothesis) which occasions new observations whose result again determines a new order of facts, and so on until the existing order is both unified and complete. In the course of this serial process, the ideas that represent possible solutions are tested or 'proved' (Dewey 1938: 113).

Dewey's statement underlines once again the iterative-cyclical character of the problem-solving endeavor. It is only when a problem is settled that belief is reinstated and our activity, previously on unstable ground, can be resumed. And since our suggestions are not strictly logical inferences built upon fully known facts and rules, but rather probabilistic conclusions, they are also fallible and thus require repeated inquiry circles in order to approximate the problem-solution.

All this discussion of pragmatist problem solving corresponds nicely with the general model of the research process employed in grounded theory. As shown in Figure 27.2, the grounded theory-oriented research process can be seen as moving in a series of loops between the empirical process under scrutiny and the stream of conceptual thinking or theorizing about it. The link between the two is enacted on the base of a general abductive attitude of researchers. They conduct repeated steps of posing questions at the empirical data (which itself is generated in this process) and interpret this material in abductive and qualitative-inductive, probabilistic inferences that, in turn, lead to provisional theoretical concepts, the validation of which is experimentally proofed by deducing expectable consequences and retesting them on the data. In this process, the conceptual level and density of the theory under construction grows—at least if all goes well. It is this repeated looping that Strauss addresses with his notion of 'induction, deduction, and verification' (Strauss 1987: 11) as signifying the analytical process in grounded theory.

CONCLUSIONS

In concluding, I shall summarize the core arguments elaborated throughout the foregoing sections. First of all, numerous traits of the pragmatist legacy can be
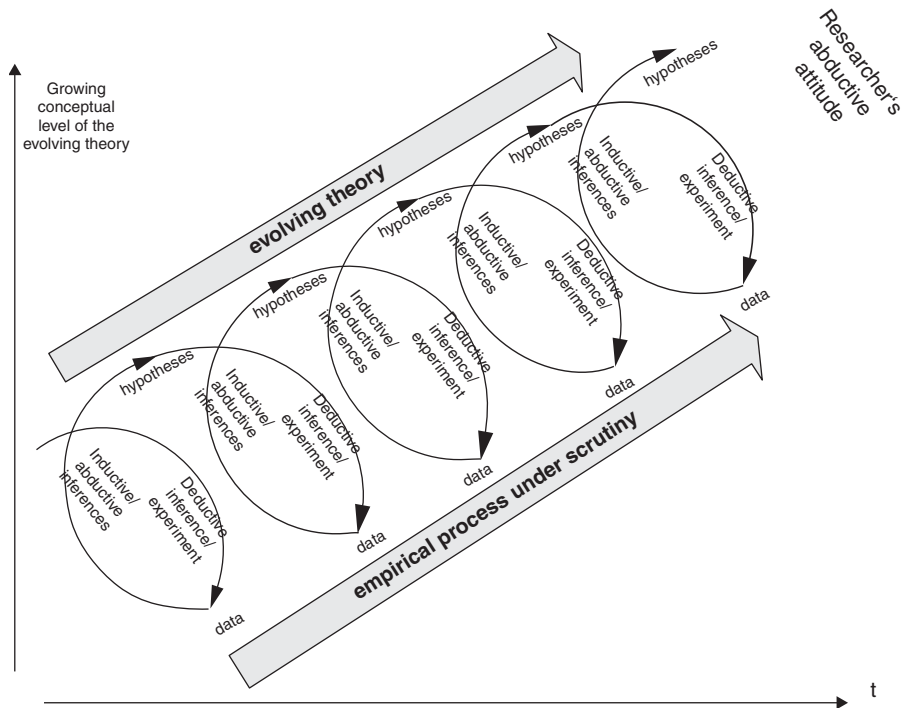
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JS: legend 27.2 reads: Logic of inquiry in grounded theory.

found in both the theoretical and the methodological works of Anselm Strauss, despite the fact that he and Corbin are sometimes not overly explicit in their referencing of these epistemological foundations in their methodological writing. It is mainly due to those pragmatist roots that the interpretation of the basic methodological procedures developed by Strauss and Corbin in their approach to grounded theory differs from the position adamantly held by Glaser.

The core argument with regard to methodological issues is the pragmatist claim that reality is a process enacted by intelligible organisms. In their acting, actors bring to mind the 'world out there' by 'carving out' objects in relation to their relevance for the ongoing activity. While actors act towards their environment they are also both socially and materially a part of their surroundings. The common subject-object divide—like all other dualisms established in the rationalist philosophical tradition—is rejected by pragmatist epistemology. Because reality is never a once-and-for-all completed substance existing externally and in opposition to an encapsulated individual subject, cognition, knowledge, and theory all need to be conceptualized as a dynamic process resulting from activity relating actors with environment. Theory is always oriented towards practical problems, where 'practical' instead of being confined to manual operations with physical objects, rather aims at a more all-encompassing

concept of action, expanded to include processes such as understanding objects and relations between them. Moreover, theory is a gradualized concept, knowledge can be more or less theoretical, when seen as a quality that refers to the levels of abstraction and generality in the theory's propositions.

Knowledge (and that includes theoretical knowledge) results from processes of problem solving; its proof thus lies in its potential to solve these problems. The pragmatist view is that of a tension between states of doubt and states of belief: the uneasiness resulting from an 'arrest of action', caused by whatever obduracy blocking our pre-conscious routine activity, becomes doubt in that we become aware of the situation and experience it as such. The consequent problem-solving activity draws on previous knowledge (i.e. the 'facts of the situation'), creative (abductive and inductive) guesswork, and logical inference in order to make sense out of perceptual contents unknown to that point. These processes of reasoning result in a type of 'probationary' solutions: only if they prove capable of providing a solution for the situation are they then accepted, in an experimental step, as new knowledge and the actors experience the situation as settled. With respect to this problem-solving model of knowledge generation, no categorical difference is made between everyday problem solving based on common sense knowledge and scientific inquiries. A researcher's 'arrest of action' lies in not having an answer to a certain empirical research problem. Doubt results from not properly understanding the empirical phenomena dealt with by the researcher. An explanatory theory on the phenomena dissipates the tension, to the extent and point that the theory stands up to continual tests of its validity, for example by successfully predicting further occurrences of the phenomena or its further development.

The pragmatist influence on grounded theory has been shown throughout the preceding sections. Though it might not be obvious in all of its techniques and heuristics, once we focus on the logic of research, the shared understanding of the research situation, the procedural components of inquiry and, finally, on the epistemic status of its proposed results, we can hardly refrain from noticing the import of pragmatist thinking in the methodological contributions of Anselm Strauss.

What has been entirely left out of the picture in this chapter is a second important legacy grounded theory draws on, which is the Chicago School of sociology with its established sociological ethnographies as well as its theoretical impact on the development of symbolic interactionism. Anselm Strauss is not only known for having profoundly contributed to the reconstruction of the Chicago school's history (see for instance Fisher and Strauss 1978). He also received his academic education at Chicago with Blumer and Burgess. Moreover, he began his professional fieldwork under the guidance of Everett C. Hughes, who had a serious influence on the development of both Strauss's theories on professional medical work and on his methodological approach. We might very well assume that the pragmatist influence on grounded theory is also largely due to the Chicago-style interactionism that Strauss picked up in his formative years.

In particular, Mead's impact on Strauss is not to be underestimated. Not only did Strauss contribute to the further development of Mead's social psychology already in the 1950s, he even reformulated the interactionist approach as inherited from Blumer, his mentor, into a proper pragmatist interactionist social theory in his later years (see Strübing 2007) by drawing on Mead's philosophical and epistemological contributions (see Strauss 1991).

With the mention of interactionist social theory, however, we might as well expand on the link between theory and methods. In the case of grounded theory, at least in the variant that Strauss and Corbin propagate, there is ample evidence for the close relation with interactionism. While it is true that with grounded theory we can develop and integrate various different theoretical approaches (as long as they are oriented towards action as the central movers of society), the relation to interactionism is a special one; we might call it a 'Wahlverwandtschaft'.[10] Both grounded theory and interactionism are based on the pragmatist conception of reality as interacting perspectives and on all of the consequences this anti-dualistic, processual understanding had for further theoretical and methodological thinking. Indeed, the most valuable extensions and developments of pragmatist-interactionist social theory in the last decades have been brought about by grounded theory-based empirical theorizing.[11] Not only is interactionism an important intellectual point of departure for the development of grounded theory, the latter, in its part, played a great role in developing interactionism proper. It is this mutual shaping of theory and method that Dewey addressed in the notion of means and ends as a dynamic interrelation of two epistemic entities.

What then is the virtue of reconstructing the epistemological underpinnings of grounded theory? Why not simply follow Glaser's emphatic advice: 'Trust grounded theory, it works! Just do it, use it, and publish' (Glaser 1998: 254)? Because we are not in church but in academia. It is as simple as that. In sciences and humanities we are not only asked to justify our claims but also the theoretical and methodological means by which we reached our conclusions. As far as empirical sciences such as sociology or psychology are concerned, we even need to spell out the epistemological grounds on which our inquiry treads. As we have seen, for instance, the pragmatist notions of reality and action exhibit a degree of singularity when compared to the respective concepts in analytic philosophy and critical rationalism. Furthermore, when it comes to evaluative criteria, we need to choose the appropriate yardstick. Conventional evaluative criteria such as representativness, validity, or objectivity are based on critical rationalism's dualistic concept of reality and subjectivity; neither the inherent qualities nor the pitfalls of processual, grounded theories are adequately accounted for in this perspective (Strübing 2002). Moreover, in thoroughly reviewing the pragmatist traits in both grounded theory and current interactionism, we can avoid the unproductive dichotomy of choosing between 'constructivist and objectivist grounded theory' (see Bryant 2003; Charmaz 2000, 2006: 131; Glaser 2002). While I would subscribe to the constructivist critique of what Charmaz terms

'objectivist', I would nevertheless be hesitant to ascribe this position broadly to the approaches of Glaser, Strauss, and Corbin. This would fail to acknowledge the grave divide between Glaser's position, for which the label 'objectivism' is largely appropriate, and Strauss and Corbin's position, which I clearly see as being based on a pragmatist epistemology.[12]

As to the constructivist alternative offered by Charmaz and Bryant, I would say that all important notions of this approach already find themselves well established in the pragmatist position (see also Maines 1996). This is especially true for the concept of knowledge as a relation between knower and environment, where both knower and environment (the known) are not existentially separate entities but rather poles in a continuum of reality that is driven and accomplished by human activity. What is missing in the pragmatist perspective is the nominalistic undercurrent that characterizes constructivist approaches. Thus, a concise résumé of my foregoing arguments would be the following: *back to the roots*. Grounded theory can do with a more thorough explication of its philosophical and socio-theoretical foundations in order to avoid the widespread misunderstanding of its practical procedures and their epistemological grounds.

ACKNOWLEDGMENTS

As a non-native speaker of English I am deeply indebted to Sarah Matthews for giving my thoughts a form that is understandable to an international audience. She is not liable, however, for any lack of consistency in my arguments

NOTES

1 See Strauss (1987: 6) in his invitation to the researcher to study both John Dewey's and E.C. Hughes' works 'for further historical understanding of the background of grounded theory'. Similar references can be found throughout the book (e.g. 1987: 9, 110, 263).

2 First steps in this direction were undertaken by Kelle (2005), Kendall (1999), and Strübing (2007).

3 This is why Hans Joas called pragmatism a 'philosophy of action' (Joas 1987).

4 The famous quote reads: 'If men define situations as real, they are real in their consequences' (Thomas and Thomas 1928: 572).

5 Strauss himself also emphasizes this processual aspect in his socio-theoretical work with concepts such as 'processual ordering' or 'trajectory' (see Strauss 1993).

6 This is not the place to pursue this matter any further. For my very critical review of Glaser's methodological position see Strübing (2007).

7 Ian Dey (1999: 35), however, made the fine observation that, in *The Discovery of Grounded Theory,* creativity is systematically devalued in favor of a discovery metaphor that is mainly presented in a passive voice, as if the researcher were not to play an active part in the discovery process.

8 With one exception: Strauss (1987: 12) mentions Peirce's concept of abduction in a footnote. The manner in which he introduces it, however, does not indicate any familiarity with its core principles.

9 Citations to Peirce follow the convention of identifying letters to indicate the published work, followed by volume number and paragraph number in which the reference appears.

10 In science and technology studies, the term 'package' has been coined by Fujimura (1992) in order to signify sets of a theory 'bundled' with certain methods that tend to enforce each other in establishing a certain scientific claim. We might very well use this concept in order to point to the special relation between grounded theory and interactionism.

11 Like, for instance, Strauss's 'negotiated order approach' (Strauss 1978); Star and Griesemer's notion of 'boundary objects' as an interactive means of heterogeneous collaboration (Star and Griesemer 1989); the 'trajectory' concept that has proved enormously helpful in analysing biographical processes in the life course (see Riemann and Schütze 1991); or the interactionist sociology of work that has been developed by a number of researchers around Strauss (see e.g. Gerson and Star 1986; Strauss et al. 1985).

12 True enough, *The Discovery of Grounded Theory* is a mixed bag of objectivist and pragmatist arguments with —on the whole—an objectivist bias, but even so we do find a persistent undercurrent of pragmatism throughout the book. *Basics of Qualitative Research*, might in some passages be mistaken for an objectivist approach because it fails to go to great lengths regarding methodological arguments and establishes at the same time a more instrumental and technical view of grounded theory procedures. In Strauss (1987) and in some further articles together with Corbin (especially Strauss and Corbin 1994; Corbin and Strauss 1990) they both make their pragmatist stance very clear.

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