

DISSERTATION

METAETHICS, ONTOLOGY, AND EPISTEMOLOGY IN AMERICAN
SOCIOLOGY: EMILE DURKHEIM AND GILLES DELEUZE

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ABSTRACT

METAETHICS, ONTOLOGY, AND EPISTEMOLOGY IN AMERICAN SOCIOLOGY: EMILE DURKHEIM AND GILLES DELEUZE

For over one hundred years, leading sociologists have criticized their own discipline for its “moralistic identity” and its “scientistic rationale.” These markers directly reflect the first principles of the modern institutions of sociology. Metaethical commitments to moral realism, ontological commitments to transcendental forms, and epistemological commitments to a deductive-nomological logic, all first articulated by Emile Durkheim, became the foundation of American sociology. These commitments informed our answers to the intellectual, organizational, and sociocultural requirements for the institutionalization of a new academic science. Gilles Deleuze offers a different set of commitments. His metaethics suggests a new approach to our identity as interventionists. His ontology and epistemology supports an enhancement and expansion of our quantitative warrants.

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CHAPTER 1 - INTRODUCTION

For over one hundred years, leading sociologists have criticized their own discipline for what I will call its “moralistic identity” and its “scientistic rationale.” These markers directly reflect the first principles of the early institutions of sociology. Metaethical commitments to moral realism, ontological commitments to transcendental forms, and epistemological commitments to a deductive-nomological logic, all first articulated by Durkheim, became the foundation of American sociology. These commitments informed our answers to the intellectual, organizational, and sociocultural requirements for the institutionalization of a new academic science. However, these same commitments also led to a field that has never been able to shed charges of moralism and scientism.

Gilles Deleuze offers a different set of commitments which, I will argue, can expand and enhance sociological theory and practice. First, Deleuze’s metaethical commitments can lead to moral interventions that are less moralistic. Second, his ontological and epistemological commitments support a methodology designed to simulate complex social systems. The combination of our traditional linear methods and the new methods of agent-based modeling offer new insights into non-linear social systems.

The tradition of crisis literature in sociology

There is a tradition of crisis literature in sociology; a tradition of internal criticism of scientism and/or moralism in our discipline. I begin with these problems as defined by some of the leading sociologists of the past one hundred years. My claim is that an examination of our foundational philosophical tenets reveals problems of inconsistency

and inaccuracy, the historical source of these problems, and their prevalence in sociology today.

Sociology in the United States has a grand tradition of the letting of blood, but in our case we bleed the doctor. Sociology often calls for either the purge of some impurity or the grafting of new appendages to the body sociological. Many bemoan what they see as the splintering of sociology into subfields that become blurred with other fields, such as psychology, social work, or economics. Some might say that there is scarcely a coherent body to be found in our discipline today; we are all limbs and no trunk.

A review of the major books in the “Crisis of Sociology” tradition of the last 100 years reveals two recurring concerns, one cardiometric, and the other alimentary. The first problem is that we have either too much heart or no heart at all. We have not found the Aristotelian mean of virtuous action. Instead, depending upon the observer’s standpoint, our actions are vicious because we are at one end of the continuum (amoral, apolitical, or supporters of the status quo) or the other (moralizing and ideologically self-righteous). The alimentary problem is the perception of an ideological hold of a quantitative methodology that chokes off our ability to ingest any revolutionary approaches.

As we will see, the authors in this tradition have addressed one or the other of these concerns, and sometimes both. These authors are not knife-wielding radicals or barbarians at the gates. They include some of the most successful and respected sociologists in our discipline. For example, many were American Sociological Association (ASA) Presidents. I will focus on a short list of major books in this tradition.

We begin with those who argued, pro and con, for sociology’s moral duty. In *Liberation Sociology*, Joseph Feagin and Hernan Vera prescribed an overt moral stance that required

an identification and empathy with the victims of oppression, and a moral duty to liberate them from misery and inequality (2001:25). In an ASA Presidential Address, Michael Burawoy called for a public sociology that should make public issues out of private troubles, “thus regenerating sociology’s moral fiber” (2005:260).

There were those who questioned our ability to meet this moral duty. C. Wright Mills saw an abstracted empiricism that forestalled the practice of a liberation sociology. He suggested that we should be armed with some level of warranted moral expertise before we “take the next plane to the scene of the current crisis, run for Congress, buy a newspaper plant, go among the poor, or set up a soap box” (2000:192). Robert S. Lynd was concerned with the moral dilemma of the social scientist who found himself caught between the perceived need for moral interventionism and a sociology that was not to be subversive (1939:7).

At the other end of the continuum, there were those who questioned a sociology that adopted this moral duty. Irving Horowitz criticized what he saw as a sociology enmeshed in the “politics of advocacy and the ideology of self-righteousness.” He argued that sociology had largely become a repository of discontent and a gathering of special agendas. Instead of a *study* of ideology, sociology was now an ideology itself (1993:2-23).

There were also questions about the ethics of a sociology which used its scientific rationale to validate moral interventionism; the immoral position of claiming scientific integrity in order to serve their constituency’s programs. Alvin Gouldner argued that the positivist social scientist was, knowingly or unknowingly, a propaganda instrument for

the status quo.¹ “Truth” and “scientific objectivity” are not things to be “packaged for the tastes and services of ‘important’ denizens of the worlds of commerce and politics” (Lee 1976:925). There was also a complaint that whatever “truth” our research might warrant, there are those for whom the social and political consequences of results determined whether they would accept them (Lieberson 1992).

In addition to critiques of our “moralistic identity” there was a second focus on what was seen as a problem of “scientism” in our methodology which led to a paucity of research results. Robert A. Scott argued that our research results were inconsequential. Alan Wolfe is even harsher in his analysis. He criticizes what he sees as the “sheer amount of work that lacks interest and serves no political cause whatsoever” (1994:86). It was claimed that policy makers generally used our research to match plausible rationales and chunks of evidence to conclusions that had already been reached, or to reduce disquieting complexity and uncertainty to reassuring simplicities (MacInnes 2004:543).

There were different reasons given for the weaknesses of our research. Some criticized our excessive use of jargon and sham scientific slang; pretentious mathematical notation; the slavish imitation of the physical sciences; platitudes passed off as significant discoveries; and undue emphasis on predictive statements (Sorokin 1976). Feagin and Hernan Vera claim that our attachment to an instrumental positivism led to knowledge that was fragmented, divorced from its historical and social context, and therefore of less use to critical theory and praxis.

¹ Jacques Ellul argued that the essential task of propaganda is to reproduce “*innocence* from generation to generation (in both meanings of the word: *ignorance* and *non-moral culpability*)” Ellul, Jacques. 1965. *Propaganda (Vintage)*. Vintage.

Many argued that the paucity of meaningful research findings is the result of our methodology's inability to recognize the "enormous complexity of social life" (Phillips 1971: xix). Scott noted the inability of detached empiricism to say anything meaningful about the complexity of social interactions (1979:12). Feagin and Vera also raise the issues of the complexity of our subject of study and the inadequacy of simple linear statistical mathematics and detached empiricist methods (2001:32).

There are many more works I could add to this list. Some express a general concern about the state of sociology (Berger 1992; Berger and Huntington 2002). Others point to our lack of cumulative results (Gans 1992). There is criticism of our continued practice of a barren positivist methodology (Bleicher 1982; Francis 1983; Gamberg 1969; Porter 2004; Shapiro 2005).

In summary, the crisis thinkers criticize the morality of our behavior and the strength of our warrants. My claim is that these are all valid criticisms and that they point to problems that can benefit from an investigation of the philosophical commitments that lie beneath our discipline.

Clarifications

This paper has a limited scope of subjects and claims. First, I will not address qualitative or interpretive approaches. Second, I do not claim that sociology should disengage from all humanitarian projects tomorrow. My claim is that an appropriate reflection on our metaethics raises questions and offers new visions of our moral and ethical responsibilities. Third, I do not suggest that we should completely abandon our traditional quantitative methodology in the social sciences. A reflection on our ontology and

epistemology will lead to a consideration of the advantages of the introduction of additional components into our suite of traditional quantitative methods.

On another point, Durkheim was selected from the usual suspects (those whom we call the classical theorists) not because he should be seen as the primary villain, but a number of other reasons. There is the issue of scope. If, say, Tarde and Simmel were added the paper would extend beyond the reader's patience. To paraphrase Marvell, "Had we but world enough and time, these extra theorists were no crime." I also chose Durkheim because of his early success in institutionalization and his widespread influence on the evolution of sociology. His reach, in his own time, was significant. He was the first to establish sociology as a departmental science in the academy and as the primary source of expertise in government policy. In many ways, his approach helps us to understand the path of institutionalization in American sociology.

However, the primary reason Durkheim was chosen was because he provided the first clear articulation of first principles which underwrote modern sociology. It is difficult to track this development in early American sociology because the process of institutionalization in America did not begin with one clear leader or even one widely accepted theoretical foundation.

Plan of the dissertation

The second chapter establishes the concepts of philosophical foundations as they will be used in this paper and argues for the value of a deeper reflection on our commitments to first principles. These commitments are to foundational beliefs about how the world is, what right action is, and how we know. In this regard, we make commitments to first

principles in ontology, metaethics, and epistemology. Mitch Rose argues that, as social scientists, we are inextricably intertwined with metaphysics and that we should simply accept the responsibility of a more adequate self-reflection in our primitive ontological beliefs (2004:462).

William Connolly, noting that we may not want to “get technical,” characterizes these commitments as our “existential faith,” a term he offers in case we react unfavorably to the cold term “metaphysic”.² In this case, I do want to take us a little deeper into the “technical” in order to explore the dynamism of the interrelationships of first principles in these three areas (Williams 2005:2-3).

Some argue that an examination of such first principles is not within the purview of sociology. Our brief does not include the philosophical investigation of ontology or epistemology as subjects in themselves. We are not expected to adjudicate between opposing philosophical positions in foundational ontological and epistemological debates. “Insofar as it is not clear how these controversies will turn out, sociological theories should be cautious and not commit themselves to one or another view” (Abend 2008:195). However, we have already committed ourselves to a view. How else could we organize our theory and practice?

While the advancement of the more specialized discourses in the discipline of philosophy

² “An existential faith is a hot, committed view of the world layered into the affective dispositions, habits and institutional priorities of its confessors. The intensity of commitment to it typically exceeds the power of the arguments and evidence advanced” Connolly, William. 2004. “Method, Problem, Faith.” Pp. 332-49 in *Problems and Methods in the Study of Politics*, edited by I. Shapiro, R. M. Smith, and T. E. Masoud. Cambridge University Press.

is not part of our portfolio, it does behoove us to examine our own assumptions and beliefs in these areas. A slightly more technical grasp of the discourse and its major debates makes for informed choices on our part and a more fruitful scrutiny of our foundational beliefs.

For example, an understanding of the pros and cons of the different theories of warrants and justification puts our own epistemological claims on more solid ground. An examination of development of different principles of causation, their virtues and weaknesses as warrants, and the criticisms against each, informs our claims for the truth and certainty of our research results. An understanding of foundational notions of metaethics help us consider our commitment to a particular normative ethics and helps us defend our stance on moral activism.

However, it is not only our commitments in each of the three areas, that call for a deeper reflection. There are also the problems and effects of a set of commitments that is internally inconsistent. These can lead to a practice of sociology that lacks reliability. If these commitments are to inauthentic notions of the social world, they lead to an invalid description of the state of affairs. Infelicitous fits weaken a theory's descriptive, explanatory, and predictive powers.

The third chapter investigates the scholarly career of Emile Durkheim, his commitment set, and how inconsistencies in these principles and their interrelations led to problems in his work. This chapter begins with an examination of the forces acting on the development of the first sociological institutions as departmental sciences and the interdependence of these forces with commitments to specific first principles. Emile Durkheim's metaethical, ontological, and epistemological commitments are examined for

their strengths, weaknesses, and relationships to the demands of institutionalization in his time.

Chapter 4 traces the genealogy of a moralistic identity and scientific rationale in the context of the process of institutionalization of American sociology. It reviews how the Progressive Era influenced the moralistic identity of American sociology. There is also an examination of the long tradition of quantitative methodology in sociology and how the introduction of statistics contributed to our scientific rationale. The underlying problems in our metaethical, ontological and epistemological commitments are explicated throughout this chapter. It is shown how these first principles contributed to the problems addressed by the crisis tradition. The chapter concludes with a discussion of potential new directions based on a different set of commitments. The focus here is on alternative ontological and epistemological commitments. The discussion of alternative metaethical commitments is taken up in chapter 7.

The fifth chapter investigates the scholarly work of Gilles Deleuze. Deleuze began with a different problem than Durkheim. Deleuze was interested in what he saw as the failure of representation. He followed an alternate tradition in Western philosophy, one that ran through Heraclitus, the Stoics, Duns Scotus, Spinoza, Leibniz, Nietzsche, Whitehead, and Bergson. He developed a set of revisionary first principles which rejected representation and the One, offering instead an ontology of process and difference. His metaethics was built on the propositions of the stoics and Nietzsche's *amor fati*. His epistemology employed a different interpretation of mereology and warrants. His constituency was made up of philosophers; only in his later work did he offer a practical approach to politics. The summary section of the chapter shows how Deleuze's commitment set

supports the theory of complex social systems.

Chapter 6 begins with a discussion of the mereology of the third wave of systems theory and its relationships to complexity studies. This leads to the introduction of the methodology of agent-based modeling along with a review of its problems, its benefits for the study of complex social systems, and its early applications in sociology and other social sciences. I claim that this methodology, once it is combined with our traditional quantitative practices, will provide a new suite of tools that is better suited to the complexity and mereological issues of social systems. I suggest that Deleuze's philosophy offers a more viable set of first principles in support of complexity studies and third-wave systems theory in sociology.

The concluding chapter revisits the problems that led to our crisis literature. It begins with a deeper look at the metaethical foundations of our moralistic identity and a consideration of the metaethics of Deleuze. Examples of arguments for a "just war" are used to explore how the positions of morality and principlism fare when called upon to warrant moral interventions. The warrants of ethics and particularism are then considered in the same context. There is an examination of Deleuze's concepts of jurisprudence, minoritarian politics, and deterritorialization. While any significant change to our moral identity faces resistance, an expansion of our metaethical discourse and possible changes to our curricula can help us examine our penchant for interventionism from a Deleuzean standpoint. There is a brief comment on the previous chapter's examination of the effect a Deleuzean ontology and epistemology might have on the quantitative rationale for sociology. The paper concludes with a short coda.

CHAPTER 2 - METAPHYSICAL COMMITMENTS

This chapter serves as a modest propaedeutic. The goal is to come to a shared understanding of particular aspects of the philosophical discourse of ontology, metaethics, and epistemology. The discussion will be limited to topics and debates that are critical to our investigation of the philosophical foundations of Durkheim and Deleuze. The focus is on the notions of social facts and social processes, transcendence and immanence in social theory, theoretical propositions regarding individualism and holism, the strength of moral judgments, the epistemological support for theoretical and practical sociological claims, and the relation between epistemic warrants and methodologies. Durkheim and Deleuze have very different approaches to these topics. Armed with a shared lexicon and understanding of these philosophical terms, issues and discourses, the philosophical foundations of the two theorists can be delineated.

Metaphysics

In the twentieth century it was common to talk about the end of metaphysics, which meant the abandonment of the transcendental in favor of the immanent. In one sense, metaphysics can be narrowly defined as the study of the relationship between the transcendent and the immanent (Smith 2009a:55-6). Or, metaphysics can be thought of as the study of all that is beyond experience. Hume famously denounced this form of metaphysics when he said that any text of metaphysics should “be committed to the flames, for it can contain nothing but sophistry and illusion” (Hume and Hendel 1955:Bk. Xii, Pt. 3). Here, use of the term metaphysics is limited to the *Oxford English Dictionary*

definition: “the branch of philosophy that deals with the first principles of things or reality.” This emphasis on first principles is basic to my argument throughout.

Metaphysical commitments, commitments sets, and philosophical foundations all describe the sets of commitments we make to first principles. Our commitment set is the overarching structure and the interrelationships of these commitments. Our commitment set thus includes not only a separate order or set of concepts and ideas. It is rather the “genetic core of a philosophical system in its ongoing transformative relation to the worlds it draws up and that, in return, feed into it” (Williams 2005:2). A simple glossary clarifies how the terms will be used in this paper:

Metaphysics: the study of first principles, our most basic beliefs and primitive tenets. In this case, we will look to first principles in ontology, metaethics, and epistemology.

Ontology: the study of reality, what types of entities exist, problems of uniformity and regularity, universals and particulars, and mereology.

Metaethics: the study of the logic of ethical discourse, the analysis of the nature of moral reasoning, and the meaning of moral terms.

Epistemology: the study of how we know, the nature of knowledge as justified, true beliefs. Under this heading, principles of causation and methodology are also included.

Philosophers have characterized metaphysics in different ways. Heidegger proposed *special* and *general* types of metaphysics. A *general* metaphysics concerns itself with being, and the most general ontological, metaethical, or epistemological concepts that can be predicated of any possible being. *Special* metaphysics, or *regional* metaphysics, deals

with the independent sciences. Thus biology examines the being of living organisms, theology focuses on the nature of God as the highest being, and so on (Smith 2009a:58-9). In the philosophy of sociology we focus on a special or regional commitment set of ontological, metaethical, and epistemological first principles concerning the social world. On another axis, P. F. Strawson made a distinction between *descriptive* and *revisionary* metaphysics. A *descriptive* metaphysics captures the deepest presuppositions of our current set of commitments to first principles, the “common sense” philosophy of the times. In *revisionary* metaphysics we advance a theory to replace our basilar language and doxastic thinking. The metaphysics of Durkheim was largely descriptive, while Deleuze was concerned with revisionary metaphysics.

Ontology

The *Oxford English Dictionary* distinguishes ontology as “the science or study of being; that branch of metaphysics concerned with the nature or essence of being or existence.” Our ontological commitment begins with what we take to be self-evident or *prima facie* propositions about ontological simples or primitives which cannot be further reduced. Thus the field of ontology seeks a category theory, an inventory of existents.

It is common to speak of a philosopher’s ontology, meaning the kinds of things they take to exist, or the ontology of a theory, meaning the things that would have to exist for that theory to be true. Are there universals, or only particulars? Is there mind or spirit, or is there only matter? Our ontological commitment is to the set of beliefs, latent or well considered, we hold in these matters.

The disputes regarding the ontological status of representations is at the center of the differences between the first principles of Durkheim and Deleuze. Durkheim adopted the classical paradigm of Plato, that is, that the particular is a distorted representation of a universal Ideal. Durkheim privileges representations as our best gauge of the noumenal world. Deleuze, on the other hand, regards Western philosophy as a history of the failure of representation. When we consider representations and the noumenal we take up the study of reality, where it resides, and how it can be accessed. The most generally held answers to this topic are associated with the positions of *realism*, *antirealism*, and *irrealism*.

Realists claim there is a suprasensible realm of objects and concepts that would continue to exist in a mind-denuded world. Naïve or commonsense realism holds that external things exist exactly as we know them; that we directly perceive the objects of the external world. Scientific realism, in addition to the ontological and epistemological postulates of realism, makes the methodological commitment to scientific research as the most advanced mode of inquiry into any matters of fact, holding that “scientific research can yield increasingly true representations of the world” (Bunge 1996:353, 356).

Anti-realists hold that, whether or not the noumenal world exists, knowledge of these mind-independent objects is not possible.³ Absent warranted beliefs regarding a transcendental realm, anti-realists hold that reality is mind-coordinated, that the mind spreads itself onto the external world. Berkeley held a form of antirealist belief that

³ *Irrealists* go one step further and categorically deny the existence of an objective, independent world Goodman, Nelson. 1978. *Ways of Worldmaking*. Hackett Publishing Company.

things exist only when perceived. A limerick by Ronald Knox, with a reply, sets forth Berkeley's theory of material objects (Russell 2009:648):

There was a young man who said "God
Must think it exceedingly odd
If he finds that this tree
Continues to be
When there's no one about in the Quad"

REPLY

Dear sir:
Your astonishment's odd:
I am always about in the Quad
So that's why the tree
Will continue to be,
Since observed by,
Yours faithfully,
God

We warrant a claim of reality, such as that of a particular tree, if it is the subject of a convergence of opinions. For example, if everyone, or most everyone, agrees that unicorns are real, then unicorns are real by agreement. An argument to objective reality

based on agreement can be defeated, in this case, by pointing out that, at some later date, most everyone agrees unicorns are not real.

Before proceeding with this section it will be helpful to agree on the meanings of the terms *general*, *universal*, and *necessary*. In considering groups of uniform or like members, there is a distinction to be made between generality, universality, and necessity. We may hold that all swans are white but we can only claim that swans are *generally* white. The claim recognizes that we have yet to see all swans, now or in the future (just as we have, perhaps unfortunately, yet to see all social revolutions). If we hold that all swans are *universally* white, then we claim that there can be no contradictory instance. Yet the fact that all swans are universally white remains contingent. It might just as well have been that all swans are black. To argue that all swans are white by necessity, means that there could be no case of a non-white swan at any time in our world or any other. These concepts are used when we consider the problems of uniformity and regularity.

Our quotidian world confronts us with what seem to be groups of uniform objects and regular causal relationships. How do we explain these patterns, and what lies beneath them? One answer to the problem of ontological uniformity can be a commitment to notions of types, as universals, categories, natural kinds, and so forth. The problem of regularity has produced various solutions, many of which propose general, universal, or necessary covering laws.

We observe that certain particulars coalesce into sets, or groups of likes. Philosophers refer to this as *attribute agreement* (Loux 1997). This may reflect the power of ideal forms and the essential properties of particulars, or it may be the result of sinks or attractors in dynamic, contingent flows. The appearance of uniformity could also be the

result of the nature of our faculties of perception, a parsing reflex that disposes us to determinate judgments which assign things we perceive to a type.

The problem of *regularity* addresses the regular repetition of relations, causal or otherwise, over time. However, laws of regularity require uniform entities. It is logically impossible to warrant a causal law if the variables lack unit homogeneity. Otherwise, “inductive reasoning, based on the belief that like things behave alike, would have no application” (Schlesinger 1990:529). When we observe some weak level of regularity at a gross level of processes, we must ask whether these regularities are “governing or simply phenomenal” (Cartwright 1983). Without proof of unit homogeneity in all instances of the covering law, we are unable to discern whether a regularity is the result of a law of nature, or merely accidental.⁴

One way to explain uniformity in particulars is to utilize what is known as a philosophy of identity. This approach explains uniformity by an appeal to an ontology of enduring identities possessed of, or marked, by essential properties. Identity philosophers employ the notion of types (kinds, universals, or categories)⁵ which govern and taxonomize particulars. I use the word “type” here in its simplest meaning; “. . . the general form, structure, or character distinguishing a particular kind, group, or class of beings or objects”

⁴ “Every massive body attracts every other massive body” expresses a law of nature. “Everyone in this room speaks English” is an accidental regularity.

⁵ Kant proposed a stringent notion of a *category* but today the word “category” is used by philosophers for any supposedly ultimate type. *Universals* are a property or relation that can be instantiated in a particular, as each yellow thing instantiates the universal yellow which acts as a type.

(OED.) Types, then, are what stand behind groups of likes as opposed to an arbitrary group such as the contents of a trash can.

A distinction is customarily drawn between *qualitative* and *numerical* identity or sameness. Things with qualitative identity share properties. Numerical identity requires absolute, or total, qualitative identity, and can only hold between a thing and itself (Geach 1973; Noonan 2011:2)

The notion of identity underwritten by universal ideals has become part of the *doxa* of Western philosophy. For Plato, these universals are his ontological simples, his unmoved movers, primitive and irreducible, transcendent, and *ante rem*: before things. Particulars are authentic representations to the degree they reflect the essential property associated with the universal. However, particulars are impermanent and imperfect copies of the ideals because they were perverted by their accidental properties. There have been many critics of Plato's essentialism. Bas van Fraassen, like Hume, claimed that we could have no knowledge of real essences. "Real essences are simply *metaphysical baggage*, science need only be concerned with observable entities" (1980:31). Others argue that the pursuit of certain knowledge of an ideal's essential property is a fool's errand. ". . . every term goes cloudy at its edges, . . . Every species waggles about in its definition, every tool is a little loose in its handle" (Wells 1904:386).

Unlike Plato's ideals, the nominalist argument holds that types are simply conventions based on human convenience, that universals are simply a form of linguistic expression with general applications. The Schoolmen claimed that when we award objects membership in a set of "like" things it is simply a matter of linguistic and perceptual convenience. These artifacts simply support the act of understanding itself. Roscelin

characterized these “universals” as *flatus voci* or simple vocalizations, with no real referent. Falstaff speaks to this point in *Henry IV, Part I*, “What is honor? A word. What is that word honor? Air” (V.1.133-134).

Philosophers of identity employ notions of essential properties and ideal forms to argue for the synchronic identity of entities. Plato put forward a distinction between essential and accidental properties. He distinguished between properties of a thing, or kind of thing, that are essential to it, and those that are merely accidents. Essentialists will argue that, among a set of essential properties, a person cannot exist without occupying space. A man can remove an accidental property, such as a hat, without ceasing to occupy space. But a man that ceases to occupy space has lost part of his essence. The debate regarding essentialism pivots on the claim that any essential properties points to a universal and immutable Idea, thus like entities all share at least one essential property which is numerically identical in each entity (see p. 18).

Diachronic identity, or the persistence of identity over time, is a more difficult problem, one addressed by *endurantism* or *perdurantism*. Platonists support endurance theory, which holds that when a material object exists at different times, it is wholly present at those times. It has no temporal parts, but only spatial parts, which likewise are wholly present at the different times they exist – material objects endure (Loux 1997:230-255; Noonan 2011). The other alternative, perdurantism, offers support to philosophies of immanence and particularism. Perdurantists claim that a physically continuous individual which persists through time has distinct parts existing at each distinct time in its existence – material objects *perdure*. The perdurable entity is just an aggregate of timeslices.

A philosophy of immanence, as opposed to identity, is a commitment to the unique, observable entity as all that is real. The commitment is to particulars as ontological simples and a rejection of representations as imitations of universals. It does not completely reject essentialism, but argues that each unique entity has a set of essential properties that do not exist in any other entity. Nominalists, proposed that we could recognize sets of likes without recourse to transcendental forms. They argued that these names of likes, such as “cats,” “mats,” “tables,” and “chairs,” are simply linguistic conveniences (see p. 20). These signifiers represent patterns of formations whose boundaries are essentially contested; it is impossible to set conditions for a membership based on a rigid set of properties. We group similar entities together based on what Wittgenstein called their family resemblance.

like Duns Scotus, believed all existing things are “bare” particulars that do not have essential properties as Plato used the term. Imagine coldness as a typical property. In one reading the coldness of one block of ice is different from the coldness of another block of ice. This is not the simple degree of coldness, but two separate instances. This is called a *property instance* or a “trope” (Williams 1953). Thus a particular can be a bundle of unique tropes (Goodman 1951). Yet another alternative is to view each particular as having one simple essential property called a “haecceity.”⁶ Haecceitism is the view that simple individuals have individual essences, properties which are not only essential but

⁶ The quality implied in the use of *this*, as *this* man; “thisness”; “hereness and nowness”; that quality or mode of being in virtue of which a thing is or becomes a definite individual; individuality – OED.

also unique to the objects which possess them. There is no numerical identity to haecceities, they can not be counted (see p. 18).

Philosophers of difference, or immanence, often hold that the world is best understood in terms of relational processes rather than things — of modes of change rather than fixed stabilities. “What exists in nature is not just originated and sustained by processes but is in fact ongoingly and inexorably characterized by them” (Rescher 2009). Clearly, storms and heat-waves are every bit as real as tables and mats. The focus moves from enduring identities to perduring processes as the ontological simple or primitive. The shift from identity to relational processes requires a revisionary metaphysics.

The key question confronting sociologists in the present day is not “material versus ideal,” “structure versus agency,” “individual versus society,” or any of the other dualisms so often noted; rather, it is the choice between substantialism and relationalism (Emirbayer 1997:281).

Mereology, a subfield of ontology, is the study of the relationships between parts and wholes. Our mereological commitment is a set of beliefs regarding the characteristics of the two levels and their interactions. Mereology asks whether a level exhibits causal, ontological, or explanatory independence. The major approaches to the problems of mereology are reductionism and emergentism. (I expand on these concepts and their implications for complex systems in chapter 6.)

Reductionists claim that properties of a whole are completely determined by the properties and relations of its proper parts. Thus no matter how complex an object may be, the assembling of indistinguishable parts in numerically identical relationships will produce an exact duplicate upper level property. Reductionism relies on the same claims

of unit homogeneity and simple causal relationships that were required for subsumptive laws.

One of the most powerful attacks on reductionism is based on the Duhem-Quine thesis, which claims that domain A is reducible to domain B, if and only if there is a direct and unique connection between each member of A to a single member of B. Thus reductionism can be defeated by the multiple realization argument (Heil 1999:189). The claim is that systems with the same functional state or causal effectiveness, for example “acting as a church,” may be multiply realized by a wide range of independent variables.⁷

Ontological, or strong, emergence holds that emergent properties are ontologically and causally independent (Kim 1999:33; Vrba 1989:7). There is a strong link between ontological emergence, complexity studies, and chaos theories. Strong emergence necessarily produces complex open systems which are inherently unpredictable, even given full knowledge of the constituents of the system (Newman 1996:247).

Metaethics

Metaethics is the study of the study of the logic of ethical discourse, the analysis of the nature and warrants of moral judgments. Metaethics does not address normative ethics (for example, deontology or utilitarianism) nor applied ethics (environmental or medical ethics). Metaethics investigates the notion of basic moral principles, primitive

⁷ In this example, they could include a variety of organizational structures, cultural practices, interactional patterns, and individual beliefs and dispositions. Thus “acting as a church” could be realized in one token instance by one set of independent variables and realized on another occasion by a radically different set. In other words, similar effects can be realized by wildly disjunctive component sets Fodor, Jerry A. 1974. "Special Sciences (Or: The Disunity of Science as a Working Hypothesis)." *Synthese* 28:97-115.

propositions of moral laws or ethical behavior, and the sources of authority for these claims. It includes the study of moral realism, moral judgments, moral expertise, moral duty, the nature of ethical behavior, and similar matters.

Debates about realism, antirealism, and irrealism are most prominent now in moral theory. For example, moral realists hold that the proposition or moral judgment “gratuitous cruelty is wrong” exists as a real and necessary law whether or not it is generally held in any given social group at this time (Sayre-McCord 1988). Antirealists hold that the proof of such a real, independent law, residing in some transcendental realm (should one exist), is inaccessible (Ayer 1953). Irrealists hold that there is no objective, independent real world to access. Rather there are multiple “world-versions”, which are useful in different circumstances (Goodman 1978). Antirealists and irrealists may support the “Boo/Hurray” metaethical theory in which a “true” moral judgment is simply “warranted” by a personal expression of emotional support or preference.

Moral relativism claims that the truth of moral judgments is relative to the conventions of the social group, and that these conventions are not themselves subject to any further criterion of adequacy. In this view, there are no rational constraints on what can count as moral values. However the abandonment of moral realism “in no way requires the adoption of private, solipsistic signalling into the void” (Chaloupka 1990:350). Moral Pluralism argues that moral values, norms, ideals, duties and virtues are diverse, but not infinite (Berlin 1968; Gowans 1994).

Metaethics explores the nature of moral judgments as evaluative claims concerning the viability of specific moral laws or ethical behavior. This implies an ability to warrant moral propositions as true through a process of epistemic justification. A key point in this

debate is whether or not moral judgments are truth-apt, that is, they can be warranted by some method and measured against a particular truth theory. Generally truth-aptness implies a truth theory and warrants of correspondence to some real state of affairs. Moral realism claims that moral laws are supported by reality, or what is the case, and thus moral judgments are truth-apt. Anti-realism in metaethics holds that moral precepts are not truth-apt, that they do not have the support of universal moral laws as eternal ideas in the mind of God, and thus can not be warranted as true, as corresponding to what is the case.

If moral judgments are truth-apt and warranted by transcendent moral laws, the moral realists can claim that one can have expert knowledge of a moral or ethical state of affairs. Moral expertise involves more than merely knowing what moral views are prevalent within a profession or a society. Social scientists who gather statistical data on the moral judgments of a collective are census experts, not moral experts in the sense of metaethics. Moral experts are sometimes defined as those who have studied moral questions carefully, know the main theories developed in response to such questions, and are able to offer arguments that would convince reasonable people.

If one makes metaethical commitments to moral realism and moral expertise, it is but a short step to a commitment to moral duty, a duty to set the world right (Bennett 2002a; Bennett 2002b; Bennett 1984; Chaloupka 2002; Curthoys 2002). Consider these propositions:

P1 Certain social and physical conditions are morally imperative.

P2 It is our moral duty to act to restrict attempts to harm these conditions.

P3 It is our moral duty to act to convert others to believe P1 and P2.

P4 The nonhuman world is morally considerable.

It seems to me that P2 may easily follow from P1 and, further, that the pair are easily warranted on the basis of a deontological ethics that prescribes actions that respect the rights of others (Cafaro 2001). If a moral realist held that P4 is a truth-apt example of a P1, then moral duty toward the environment and flora and fauna could be supported if P1 through P3 are held to be binding. However, it is not clear to me that the move from P2 to P3 is warranted by any ethical theory. A moral anti-realist or moral relativist would consider the jump to P3 as the vice of moralism or cultural chauvinism. Even a moral realist could ethically decline P3. In the terms of virtue ethics, “a reluctance to move from spirited dialogue to an ardent, passionate, or zealous engagement in a moral cause is a virtue” (Bennett 2002a). More on this will be found in the concluding chapter.

Epistemology⁸

Epistemology is concerned with how we know and the nature of knowledge as justified, true beliefs. It investigates different methods of warranting beliefs as true. True beliefs by themselves do not qualify as knowledge but require reliable justification (Alston 1963; Pollock 1987). Knowledge claims can be justified through intuition, direct observation, reliable testimony, reflective equilibrium, and other methods. Each method in a coherent

⁸ As an aside, when we talk about the epistemological commitments of a sociological theory this is very different from the recent school of social epistemology. Social epistemology is an empirical science that investigates the social constraints imposed on the pursuit of knowledge claims. It is interested in explaining the origins and warrants of certain beliefs or values concerning the knowledge process, such as the belief that science is objective Schmaus, Warren. 1991. "Social Epistemology - Fuller, S." *Philosophy of the Social Sciences* 21(1):121-125.

epistemological commitment aligns with a theory of truth that provides the most felicitous fit. For example, the scientific method of warranting truth claims is associated with the correspondence theory of truth. This theory holds that we can warrant a statement to be true if it corresponds to some state of affairs in the real world.

Foundationalism simply posits fundamental beliefs as indisputably true, without themselves needing support; the unproved provers. We accept them as *prima facie* or intuitive. Wittgenstein commented that no matter how deeply he followed his reason, there is a point at which he reached “bedrock, and my spade is turned” (1949:486). Secondary beliefs thus act as axioms, relying on these foundational beliefs for their justification. The coherentist theory of truth argues that all beliefs are justified to the extent that they stand in relationships of mutual support. Thus every belief is at least partly justified by its fit with other accepted beliefs. However, these warrants lead to knowledge claims that may be corrigible, open to empirical refutations, or a change in *doxa*.

There are propositions which we hold to be true although we can not prove them. Problems of religion and the mathematics of prime numbers come to mind. Knowledge claims gain epistemic power to the extent we are able to explain them or define their causal relationships. This is a widely accepted axiom of the scientific method. Thus one’s commitment to a particular principle of causation is an important component of her epistemology and methodology.

We often invoke a deductive-nomological logic, the “covering law” model. We claim that we explain something when an event is subsumed under a causal law, “if x, then y, always”. That is, its occurrence is deducible from the law and a set of initial conditions.

Sociology's linear principle of causation is based on this logic, on a nomothetic approach that is concerned with establishing and applying covering laws. Anthropology, for example, relies more on an idiographic approach, that is, explanation by recourse to individual matters of fact.

Many principles of causation have been proposed. Aristotle proposed four types of causal relationships. Consider a table. The *material* cause is the wood; the *formal* cause is the ideal form of table; the carpenter is the *efficient* cause; the *teleological* or *final* cause is the future and final purpose of the table. Followers of Hume claimed that causality must be ascertained by regular associations between putative causes and effects. Mill had a different opinion of causality. He recognized that there are causal laws, but held that they are "tendency" laws; they tell what the cause "tends to do" but not what actually occurs in any complex causal situation. While it is widely held that correlation is not causality, the social sciences generally award explanatory power to correlation coefficients. There is also the problem of recognizing the difference between governing and accidental regularities.

There is an additional parameter to a principle of causation that was developed by the Scholastics in what they called the "divine names" problem. Broadly speaking, medieval philosophy distinguished between three types of causes: a transitive cause, an emanative cause, and an immanent cause. A transitive cause is a cause that leaves itself in order to produce, and what it produces is outside of itself. Christianity held to the idea of a real distinction between God and the world: if God created the world, and the world is exterior to God, then God must come out of himself in order to create the world; it therefore needed to see God as a purely transitive cause. An emanative cause, by contrast,

is a cause whose effect is exterior to it, but which nonetheless remains within itself in order to produce its effect. The sun, for example, remains within itself in order to produce, but what it produces (light) comes out of it. An immanent cause, finally, is a cause that not only remains within itself in order to produce, but one whose produced effect also remains within it. This is the conception of causality developed by Spinoza and we will see its utilization in Deleuze's principle of causation.

The commitments we make to specific principles of causation and epistemic justification inform the practical applications of *methodology*. Methodology is most effective when it coheres with one's full set of first principles. "The appropriateness of a given set of methods turns on the assumptions about the nature of the causal relations they are meant to discover" (Hall 2003:374). If there is a dissonance between other commitments in one's philosophical foundations, methods can be rendered dysfunctional. An ontological commitment to linear mechanistic causation and realism is logically coherent with a commitment to the scientific method and the logic of covering laws. On the other hand, it might be the case that the social world is a collection of open dynamic systems with chaotic, discontinuous processes. If this were so, then commitments to an ontology of identity, enduring stable entities, a linear principle of causation, and a methodology focused on radical decontextualization, would produce misaligned warrants and trivial and meager results.

Conclusion

Theories are built on metaphysical structures composed of ontological, epistemological, and metaethical commitments. There is a sequence of dependencies that determine the internal coherence of first principles.

Metaphysics guides tacit epistemology, that is, beliefs about what is important to know and how knowledge can be obtained ... tacit epistemology in turn dictates the cognitive procedure [method] that people use for solving particular problems (Nisbett, Peng, Choi, and Norenzayan 2001:291-2, 306).

The coherence and authenticity of these sets of commitments determine the limits and viability of a theory's descriptive, explanatory, and predictive powers. Internal coherence is achieved when commitments fit, one to another, in a felicitous manner. Metaphysical structures that are logically inconsistent are self-contradictory; upon analysis they sound Nietzsche's "hollow tone" (1997:3). External validity is achieved when a set of commitments provides an authentic view of the external state of affairs, of what is the case.

Chapters 3 and 5 describe the philosophies of Emile Durkheim and Gilles Deleuze, respectively. They look to each theorist's situation and the problem he chose to address. They examine each scholar's philosophical infrastructure and his respective commitments to first principles in ontology, metaethics and epistemology, and investigate the logical relationships between levels of commitments. Certain relations will be shown to be infelicitous if not illogical. These "grindings" of articulations had significant effects on either theory's ability to gain an institutional status.

CHAPTER 3 - THE PHILOSOPHICAL COMMITMENTS OF EMILE DURKHEIM

Unfortunately, Durkheim's body of work has not produced one clear and authoritative interpretation. Some claim Durkheim's project was the search for the source of the moral. Others, that " . . . all of Durkheim's work reflects his attempt to account for both the emergence of the social from the individual and downward causation from the social to the individual" (Sawyer 2005). Yet another perspective claims " . . . basically, Durkheim was interested in the many aspects of a single problem: to set epistemology on a scientific basis" (Bohannon 1960:80). Lukes claims that "Durkheim's central interest was in the ways in which social and cultural factors influence, indeed largely constitute, individuals" (1982:13). Many scholars see the central influence on all of his work as the desire to establish sociology as an institution. It is this last reading that I will use to examine the development, content, and internal coherence of his metaphysical commitments.

This chapter begins with a look into how departmental sciences achieved institutional status. There is a review of Durkheim's historical situation and his path through the institutionalization process. *The Rules of Sociological Method* (Durkheim 1982[1895]) (hereafter *Rules*), including the important *Preface to the Second Edition* (Durkheim 1982[1901]), can be seen as a response to the requirements of the process. It also reflects Durkheim's first principles in philosophy. This chapter concludes with an analysis of his metaethical, ontological, and epistemological positions, and their internal fit.

The establishment of academic disciplines

Each field or school of thought or discipline reflects its metaphysical commitments. This is the set of first principles that drives normative stances and methodologies. These

commitments stand prior to specific theories, and can remain virtually impervious to refutation. Disciplines gain institutional status by generating a dominant discourse which is a response to particular intellectual and political contexts (Burke III 1984:649). The study of crises in authority shows us how certain discourses, such as sociology, are selected and institutionalized (Burke III 1984:654).

The disciplines of the social sciences were born during a time of crises. The Reformation and Counter-Reformation in Europe, and the Progressive Era in America, both created crises of moral authority. Thoreau captured the tenor of the crisis of moral authority when he wrote, “despite Christianity and candles, we sit in the dark.” French anticlericalism preferred a new authority for policy making and moral education (Vidich and Lyman 1985:2-3).

This new moral authority had to be underwritten by scientific warrants as opposed to a reliance on divine authority. 19th-century thinkers, such as Comte, had proposed the idea of a social science that would be organized around the concepts of the natural sciences (Giddens 1976:727). The early social sciences were certain that social processes were available to scientific study. The knowledge of the social was imagined as accessible to explanations by way of subsumption under covering laws (Fararo 1987; Turner 2003:21-22). It was thought that the process of institutionalization of new academic sciences would establish and warrant this moral authority.

Components of academic disciplines

The institutionalization of sociology in the French and American academies involved intellectual, organizational, and socio-cultural requirements. Candidates for institutionalization began with an innovation and were then required to *a)* develop a

theory with a distinct subject matter and a research exemplar, *b*) assemble an auxiliary of scholars with a shared commitment to the candidate's theory, and *c*) attract a constituency with significant resources (Geiger 1975; Oberschall 1972). In both France and America, sociology emerged as a departmental science because it was able to respond to their constituency's sense of the most critical needs of the time. In both countries, these needs were the same; development of scientific proof for social policies, and rational, if not empirical, support for moral governance.

In France at the turn of the last century there were several "clusters of researchers" that all sought to establish the new science of sociology as an academic and research institution, or field (Clark 1968b). Many were unsuccessful. The Le Playists lacked a coherent and tightly shared intellectual concept of "sociology." The social statisticians never developed professional status, or academic acceptance (Clark 1968b:37; Desrosières 1998). Rene Worms was only partially successful in his bid to attract and maintain a vital auxiliary of scholars dedicated to a shared theory (Clark 1968b). Gabriel Tarde had an aversion to an auxiliary of scholars rehearsing static axioms. Thus he did not offer certainty to a constituency who sought scientific legitimization of its policy agenda (Jones and Roffe 2009; Latour 2005; Tarde 1899).⁹

⁹ Ironically there are aspects of Tarde's work, and Simmel's, that align with the alternate tradition of philosophy taken up by Deleuze Cederman, Lars-Erik. 2005. "Computational Models of Social Forms: Advancing Generative Process Theory." *American Journal Of Sociology* 110(4):864-893, Alliez, Eric. 2009. "Gabriel Tarde." Pp. 209-218 in *Deleuze's Philosophical Lineage*, edited by A. Jones and R. Joffe. Edinburgh University Press, Deleuze, Gilles. 1994[1968]. *Difference and Repetition*. Columbia University Press.

In contrast to these other pretenders to the throne, Durkheim achieved success as the result of his emphasis on creating a discipline. He recognized that in order to guarantee that his intellectual model did not become a “. . . dead letter . . . it had to be made the basis of an entire discipline. . . . It was to establish that discipline that we have devoted our work” (Durkheim 1982[1895]:161). Durkheim alone was able to fulfill the intellectual, organizational, and political conditions necessary to institutionalize sociology as an academic discipline (Geiger 1975:237-238).

The foundational *intellectual* component was established in three steps. First, he had to distinguish a *unique subject* of sociology. Second, his new department had to establish that the object of his discipline could be studied by the same *scientific* methods that legitimized other sciences. Third, he had to produce a Kuhnian *exemplar*, a pilot study which would serve as a model for all future studies that used his theory and methodology.

The first practical order of business was to establish a unique subject (Collins 2005:106). “For sociology to be possible it must above all have an object all of its own – a reality which is not in the domain of the other sciences” (Durkheim 1951[1897]:38). He needed an object that claimed its own level of reality; “a space in reality of a science yet to come into being, a vacant space awaiting its science” (Hirst 1975:81).

His unique subject matter had to be an “order of facts which other sciences do not study” (Durkheim 1982[1895]:162). In *Rules* he claimed he had found a subject all his own; the *sui generis* social fact.¹⁰ “We have therefore succeeded in delineating for ourselves the

¹⁰ Although Durkheim’s references to these concepts were varied and ambiguous in his work, this paper will use the following definitions. Social facts will refer to material and immaterial phenomena. Material social facts will be referred to as institutions; immaterial

exact field of sociology. It embraces one single, well defined group of phenomena” (1982[1895]:56).

He carefully distanced his nascent sociology from psychology and philosophy throughout *Rules* (1982[1901]:38-43). For example, “In no way can sociology borrow purely and simply from psychology this or that proposition” (1982[1901]:42). His definition of a social fact “. . . was intended to mark out the field of research as clearly as possible, and not for philosophy and sociology to embrace each other in some kind of comprehensive intuition” (1982[1901]:43).

The second aspect of the intellectual component required that sociology’s unique subject be available to the scientific method. For a new field seeking academic legitimacy, the lack of scientific method made it a non-starter. This included a commitment to a deductive-nomological logic.

As the sociologist penetrates into the social world, he must feel himself in the presence of facts governed by laws as unsuspected as those of life before the science of biology was evolved (1982[1901]:37).

The third component of the intellectual requirement for institutionalization was the existence of an exemplar, a “common master scheme that could integrate the individual disciplines comprising the social sciences” (Clark 1968a:78). *Rules* became this basic guide for individual specialists. *Suicide: a study in sociology* acted as both a *locus classicus* and, after a fashion, a proof text for the legitimacy of the analytic statistical

social facts as collective representations. Collective representations are instances of individual beliefs which make up the collective consciousness. Individual representations are individual facts whose relationship to collective representations are never completely defined by Durkheim.

method in social research as espoused in *Rules* (Lemert 2003). At the time, this study was thought to provide a clear application of his proposed method from *Rules*. It was expected to serve as the model of future studies by Durkheim and his auxiliary of scholars, and the model was oft replicated in his journal.

After the first requirement for intellectual components was met, candidates had to develop the second component to meet the organizational requirements for institutionalization. This included an auxiliary of scholars and a research institute and journal which enabled recruitment, training, social integration, and the exercise and legitimization of authority (Clark 1968a). In this process, amateurs were replaced with professionals, advanced specialized vocabularies were developed, and boundaries were established and maintained (Clark 1968b). The organization validated the expertise of its members through its control of specialized training. “The sense of the specific nature of social reality is even so essential to the sociologist that only a purely sociological culture can prepare him for the understanding of social facts” (Durkheim 1982[1895]:162).

However important the intellectual and organizational requirements were, the *sine qua non* for institutionalization was a metaparadigm’s ability to attract a substantive constituency, that is, a clientele who use your services because “you and others belonging to your guild are certified experts” (Said 2002:175). An academic science is expected to provide “an assortment of facts . . . or predictions with regard to social reality that a constituency finds of sufficient value” (Geiger 1975:237).

Durkheim understood, and genuinely shared, the interests of the patrons of his time. He saw that the timing was right for the development of the discipline of sociology. It was a

period of educational reform that favored that discipline which could generate the most programmatic enthusiasm in the intellectual politics of the time (Collins 2005:103).

This educational reform movement was at bottom a project of moral reform. Durkheim was intent upon offering a course of moral guidelines discovered through the scientific study of the social; a science of morality (Schoenfeld 1991:79). As one outcome of his success with this patronage, Durkheim's school was awarded not only legitimization as a source of policy, but also the control and guidance of the moral education of the nation's students.

Many of the claims in *Rules* were direct responses to the three requirements of institutionalization. His set of metaphysical commitments was strongly influenced by ideologies he shared with his constituency. Although Durkheim wanted to deny it, *Rules* was through and through, a collection of philosophical claims; claims of ontology and mereology, metaethics and morals, and epistemology and causation. In order to gain a constituency he began with metaethics. In order to gain the status of a science, he moved next to epistemology. In order to sustain his claims in these two areas, he developed an ontology. As we will see, problems in his metaethical propositions were magnified as he moved through this order of first principles.

Metaethics

In a period of moral reform, Durkheim adopted a set of metaethical commitments to moral realism and transcendent moral codes, truth-apt moral judgments, moral expertise, and a binding moral duty (Varga 2006). Durkheim made a case for moral governance

based on the “moral supremacy that society exerts over its members,” for social facts are like “moulds into which we are forced to cast our actions” (1982[1895]:70).

In Chapter III of *Rules*, Durkheim claims that the normal and the pathological can be objectively studied and that they will thus produce a moral realism of objective laws. He begins by suggesting that a healthy organism is one that is most ethologically capable; it is better suited to adapt to different aspects of its environment. He makes the assumption that a Darwinian model of survival will produce a final utopian and stable taxonomy of types, and that the blind variation, so important to rhizomatic evolution, is objectively wrong. From there he proposes that “Those facts which appear in the most common forms we shall call normal, and the rest morbid or pathological” (1982[1895]:91). In *Rules*, Durkheim claims that sociology’s unique contribution and capacity is the ability to document the norm, and then valorize it. “We need only to work steadily and persistently to maintain the normal state” (1982[1895]:104).

With this move, sociology becomes a study of morality. Sociology proceeds from a problem of the moral health of a society. . . . and takes on a moral instrumentalism (Hirst 1975:111).

“Durkheim's whole program for ethics was to ground it on an empirical and relativistic basis” (Hinkle 1960:281; Levine 1973:429). His analysis seems to imply that a study of “what is” can divulge “what ought to be.” There were claims that empirical studies of religious codes in “developing” cultures would uncover traces of universal and necessary moral laws.

But only certain individuals, those who underwent rigorous training in the science of sociology, could uncover these laws and provide moral expertise. Once certified, these experts would know what was abnormal or pathological and be able to prescribe the

correct moral policies and education as suitable constraints. “Only that constraint which corresponds to some social superiority, intellectual or moral, merits that designation” (Durkheim 1982[1895]:146).

However, once this moral expertise is established it can easily lead to “. . . a moral imperative for anyone who wished to educate individuals and engineer societies” (Challenger 1994:152). It is "absolutely necessary that there be an authority whose superiority they [the mass of men] acknowledge and which tells them what is right” (Durkheim 1958[1898]:200). This requires a moral authority that “. . . constrains us and to which we defer with a feeling of religious respect” (Durkheim 2002:92-93). He proposes that sociologists, as moral experts, take on the alb.

All of this led to a belief that sociology had a duty to scientifically warrant a curriculum for moral education (Durkheim 1979[1917]). Fortunately, this curriculum would not be a hard sell. In order “. . . to induce the individual to submit to it absolutely of his own free will, there is no need to resort to deception. It is sufficient to make him aware of his natural state of dependence and inferiority” (Durkheim 1982[1895]:143).

Epistemology

Having established moral realism, moral expertise, and moral duty, Durkheim’s next task was to establish an epistemology and scientific methodology that could warrant, describe, and explain moral facts. Durkheim adopted an epistemology of empiricism, a scientific method, a truth of correspondence, a simplistic one-to-one causal relationship, and a deductive-nomological logic of covering laws (see p. 26).

Durkheim's principle of causation served as his primary warrant for truth claims and explanation (Lukes 1982:7). "Sociological explanation consists exclusively in establishing relationships of causality" (Durkheim 1982[1895]:147). He claimed that by describing causality through his comparative method we had "explained" and warranted knowledge claims about social laws. "As soon as we have proved that in a certain number of cases two phenomena vary with each other, we may be certain that we are confronted with a law" (Durkheim 1982[1895]:153). However, the concept of causation is an epistemological assumption, a matter of imputation and not of observation (Hinkle 1960:283).

Durkheim refuted Mill's principle of causality, which held that the same consequence does not always result from the same antecedent. Durkheim argues that Mill's "conception of the causal link, by removing from it all determining power, renders it almost inaccessible to scientific analysis, for it introduces such complications into the tangle of causes and effects that the mind is irredeemably confused" (1982[1895]:148). Since his sociology would fail if this were true, it must not be. To "... allow that the same phenomena can be due first to one cause and then to another ... is to deny the principle of causality" (1982[1895]:79). He argued that if sociology were practiced in this spirit, "... we shall collect together a considerable number of facts to no avail, because we shall never be able to obtain precise laws or clear-cut relationships of causality" (1982[1895]:149-150). Durkheim's claim was clearly refuted by the argument from multiple realizability.

His principle of simple one-to-one causation presented two serious problems for his epistemology. The first was mereological, covered in this section; the second ontological,

covered in the next. The mereological problem had two parts. First there was the problem of causation across two different ontological realms of moral facts and individuals. His ontological commitment to social facts as *sui generis*, necessary to his need for a unique subject, led to a claim that there was an “underlying ontological distinction between levels of reality” (Lukes 1982:19). Between these two qualitatively distinct realms of reality is an “ . . . untraversable space of difference between the elements and the whole. This space only serves to indicate an essential difference in quality in these two forms of existence” (Hirst 1975:159).

Durkheim so strongly privileged the upper domain, he had to deny backward or reciprocal causation from the individual. But how do social facts causally effect change on the individual, how do they cross the ontological divide? Durkheim’s mereological and metaphysical commitments left him with the concept of an emanative cause; a cause that leaves its initiator in order to produce an effect on a body outside the initiator (see p. 27). However, an emanative cause can move from either domain to the other. Durkheim interpreted human experience “as if society was the basic reality and all other aspects of culture were derivative or secondary manifestations” (LaCapra 1972:281).

In addition to the problem of causation from one domain to the other, there was the second problem of causation within the higher domain of *sui generis* social facts. For Durkheim, the etiology of a social fact can only be another social fact. “The determining cause of a social fact should be sought among the social facts preceding it and not among the states of the individual consciousness” (1982[1895]:134).

But he was vague on this causal relationship between social facts. How can *sui generis* social facts cause change in other *sui generis* social facts which are held to be the

unmoved mover? This is one of the few problems of sociology that Durkheim was content to assign to philosophy. A law of association provides no prime mover because the whole creates this effect, but the whole is an uncreated essence, the most idealist of concepts (Hirst 1975). In any case, an indeterminate emergence was not a promising argument for his principle of monocausality. Thus Durkheim's task of completing the nomological structure of sociology "was unattainable as was the task of drawing a solid line between the social facts and the individual" (Turner 1986:151).

Methodology

The next chapter will take up the question of traditional quantitative methodology, its wider history, and its genealogy in American sociology. This section focuses on the relation of Durkheim's methodology to his metaphysical commitment set.

Durkheim made an epistemological commitment to a scientific method of discovery of social facts. This methodology rested on his essentialist ontological and epistemological commitments to scientific realism, transcendental types, absolute laws, and a truth of correspondence. This led to a process of justification of truth claims which combined positivism, empiricism, and scientism. "The common denominator [in Durkheim's epistemology] was the orientation to regularity determinism or covering laws" (Steinmetz 2005:285). As we saw in Chapter 2, deductive-nomological logic required uniform objects. Durkheim's concept of essentialism as a formal cause was underwritten by the transcendentalism of Plato. "To conceive a thing is simultaneously to grasp more adequately its essential elements and to situate it within a whole" - Durkheim, quoted in (LaCapra 1972:576).

He claimed that with empirical studies of a series of facts taken from just one unique society “ . . . we can succeed in establishing real laws without enlarging the scope of our research” (1982[1895]:155). While it is not clear how one might be required to adjust one’s method or sample size, it is claimed that we can discover other moral laws that

. . . are higher and less ephemeral because they are not bound to the special conditions in which particular political groups find themselves and are not tied to the destinies of such groups. . . . And it is evident that these more general and more constant ends are also higher ideals. (1958[1898]:72-73).

He thought that the more we reduced these “special conditions,” the more our research moved from relative to universal claims, from the idiographic to the nomothetic (see p. 27). This commitment to decontextualization was an important aspect of Durkheim’s epistemology. “In principle it may be postulated that social facts are more liable to be objectively represented the more completely they are detached from the individual facts by which they are manifested” (1982[1895]:82). Thus, when seeking the essences of moral facts as collective representations, all aspects of individual representations should be excised. The truth of essential properties becomes clearer when accidental properties are removed from consideration (see p.19). Durkheim created a methodology that discarded variations in temporal and geographic contexts as imperfections or noise; muddled images of transcendental social facts marred by the “trembling hand” of nature.

Durkheim developed an uneasy blend of a methodological positivism and a neopositivist metaphysics that supported a neonaturalism in which social facts were immaterial yet available to scientific observation. Durkheim was “positivist” in the earliest sense of that term, which held that truth claims were “posited” by an authoritative source, in his case, society. But Durkheim’s epistemology was non-positivist, or perhaps more precisely

neopositivist, in its admittance of immaterial elements that were not available to direct observation.

He used Mill's argument from concomitance to develop a methodology to scientifically warrant claims of laws as derived from quantitative causal relations. This method assumed the existence of essential social types and utilized the argument from residues.

The method [of concomitant variation] shows us the facts connecting with each other in a continuous fashion. . . . The manner in which a phenomenon develops expresses its nature. Constant concomitance is therefore by itself a law, regardless of the state of the phenomena left out of the comparison. Thus to invalidate the method it is not sufficient to show that it is inoperative in a few particular applications (1982[1895]:151).

However, his argument from constant concomitance is specious because “. . . he does not prove that these laws demonstrate anything other than the fact of concomitance itself” (Hirst 1975:105). He cannot give this proof, for the very possibility of his method rests on the supposition that “. . . for two developments to correspond there must also be a correspondence in the natures manifested to them” (1982[1895]:151). Thus he assumes an ontological essentialism which was never well argued in his work.

His model of sociological explanation was not only radically at variance with its own subject matter, applying causal analysis, on a supposed natural science analogy, through comparative correlational analysis or strategic case studies, within morphologically defined typologies, in a broadly evolutionary framework. It was also radically incomplete, vainly pursuing macro-laws without micro-underpinnings (Lukes 1982:18).

Ontology

We have seen the epistemological problems with his mereology; there were also ontological problems. In a reductionist approach the properties of the higher domain are merely epiphenomenal and lose all ontological and causal independence; they can do no

work. This would have been a debilitating blow to Durkheim's metaparadigm. He had to establish an ontology that would support upper domain entities as ontologically emergent. However, emergence relies on the parts and relationships of a lower domain (see p. 21). This caused Durkheim problems with his insistence on one-way mereological causation, the insistence that individuals do not have a causal effect on social facts. It led to contradictory statements.

On one hand, he claimed that “. . . what is most essential in the notion of social constraint is that collective ways of acting and thinking possess a reality existing outside individuals” (1982[1901]:45). However, these emergent properties, “. . . come into existence through a process of fusion or synthesis of individual representations” (1953[1924]:27). Also, “By aggregating together, by interpenetrating, by fusing together, individuals give birth to a being, psychical if you will, but one which constitutes a psychical individuality of a new kind” (1982[1895]:129).

Thus, collective representations had to be more than reductionist epiphenomena, they had to be strongly emergent in order to act as an independent causal force (Durkheim and Wolff 1960[1858-1917]:335). Collective representations, as immaterial social facts, gain their own reality as they emerge from this interaction. Many interpreters of Durkheim characterize his ontological commitment as a "relational social realism" in which the association or network was real, although immaterial, and causally independent (Alpert 1966:151-157; Challenger 1994:139-149; Emirbayer 1996:124-125; Wallwork 1972:5-26).

In the social sciences, idealists held that social phenomena were transcendent and unavailable to empiricist scientific methods. On the other side, scientifically minded

naturalists contended that human phenomena were indeed part of nature and available to scientific observation, yet causally reducible to materialistic and mechanistic entities, processes and events. Durkheim postulated a neonaturalism in which social facts were irreducible, immaterial, and yet available to scientific observation through their traces or indices. This was his mediating response to the debate between idealists and naturalists regarding epistemic access to social facts (Challenger 1994:149-153; Wallwork 1972:9-16).

We can see how his claims of relational realism and neonaturalism were critical to his arguments for the institutionalization of sociology. A scientific realism or physicalism made social facts supervenient with no causal efficacy, and defeated his claim of social facts as *sui generis*. His response was a relational realism that underwrote the social fact as an ontological simple, immaterial yet real, and supported his argument of reality from coercive effect. He had to reject the idealist notions of social facts, or his claim of an empirical science built on observation would have been defeated. He also had to avoid the naturalist position that held for social facts as supervenient on individual representations.

However, simply establishing immaterial social facts as real and available to empirical observation was not enough. Departmental sciences, such as physics, exhibited the power of prediction and transposition across cultures and time. Prediction and claims of transferable expert knowledge required a system that exhibited some level of reliable consistency. In order to provide laws, he needed some sort of anchor. He began by assuming that there actually were ontological uniformity and regular causal laws in social reality, just as in the natural sciences. He followed in the tradition of François Quesnay

who claimed “All social facts are held together by eternal, immutable, ineluctable, inevitable laws which individuals and governments would obey if they were once known to them” quoted in (Randall 1940:323).

Covering laws require unit homogeneity (see p. 17). Durkheim made an ontological commitment to determining, transcendental social universals (Steinmetz 2005:281). A key factor of these universals is their manifestation as stable and objective. He sought to provide these characteristics by an appeal to essentialism. “[T]he physical manifestation does not define the essence of the social fact, but it does provide a guide, which we then use to ascertain this essence” (1982[1901]:42). Thus the essence of social “things” is only available through a study of their representations in observable, given, material, and real objective “things.”

However, in a practical sense, social facts are rarely, if ever, uniform or the the results of representations of essential types. “There may be universal types such as representations of time and the person, but the actual content of the representations varies a great deal from society to society, and with time” (Pickering 2000:18). Over his life’s work we find varied claims regarding the “throw” of uniform social facts; sometimes they “are higher and less ephemeral ... something more universal and more durable” and traceable across all cultures. At other times they are mutable and restricted to local cultures.

Whatever the status of these universal forms, we could only know them through some sort of objective entity. In a practical sense, for a social fact to be objective, it helps if it will stand still for a suitable period of capture. But Durkheim’s relational realism included a stress on the dynamic nature of social facts as flows or currents. “Social life consists of free-ranging forces which are in a constant process of change”

(1982[1895]:82). This caused a problem with his claims of the effectiveness of sociologists as expert advisors to government policy. If social facts changed too quickly, their rhythm would make them unsuitable for the rhythm of social policy. He had two strategies to argue for his relational, dynamic flows as warrants for more stable social policies.

First, he argued for a relative stability of institutions as the traces and residues of the currents of social facts. In this claim we can objectify the dynamic flows of immaterial social facts since they move slowly and deliberately, “as tomatoes do.” This is evidenced in their relatively stable material manifestations as crystallizations, the syntheses of individual interactions into institutions. “Law is enshrined in legal codes, the events of daily life are registered in statistical figures and historical monuments, fashions are preserved in dress, taste in works of art” (1982[1895]:71-72). To the degree that these institutions moved at a glacial pace, their ability to validate long-term policies was increased. But the state of institutions is still a trailing indicator, useful only if one believes social change is linear and progressive. Otherwise it offers little predictive power.

What is the source of this formal or teleological cause of the putative uniformity in institutions? Durkheim proposed different answers to this question. In a neo-Kantian move he attempted to find *a priori* categories, given to us not by a Kantian apparatus, but by the categories idealized in the social realm. “Durkheim joined forces with neo-Kantian discourse, suggesting that the *a priori* categories of knowledge are not supplied by the individual mind [as Kant would have it] but by the collective conscience of a social group” (Breslau 2000:260; Lukes 1985:440-441). “Sociology moved from Kant’s

epistemological *a priori* to the social *a priori*” (Lash 2009:175). Parsons suggested that Durkheim used functionalism as formal cause. His references to the constraining power of morphologies could be construed as a formal cause.¹¹

If Durkheim’s basic project was pursuit of institutional status, his attainment of a scientific authority for the practical policy of his constituency required the discovery and validation of social laws. “In order to warrant sociological expertise, Durkheim had to claim that social forces represented transcendental laws and essences” (Lehmann 1993:51).

Conclusion

Durkheim’s work has been described as rich and fecund. Others have characterized it as self-contradictory, logically flawed, and linguistically, epistemically, and inherently vague. He owes his longevity in the sociological canon to the first description, while his critics note the latter.

Durkheim’s social metaphysic . . . presented a truncated and impoverished notion of reality which identified adequate analysis with the sacrifice of the richness and diversity of human experience on the altar of a unilateral fixation (LaCapra 1972:281).

¹¹ For the argument of uniformity as a result of morphology and social environment see Durkheim, Emile. 1982[1895]. *The Rules of Sociological Method and Selected Texts on Sociology and Its Method*. Free Press, Hirst, Paul Quentin. 1975. *Durkheim. Bernard and Epistemology*. Routledge. For functionalism, see Parsons. The theories relying on functionalism or morphologies as proposed by Durkheim are generally discounted today as structural-functional, but there are other reasons to leave them aside here.

Among the many characterizations of Durkheim's overarching project I have focused on the institutionalization of sociology as a departmental science, the effects of that project on his first principles, and the interrelations within these metaphysical commitments.

We can see the extent to which his philosophical infrastructure undergirds his body of work. His metaethical commitments were those of a moral realist who saw the abnormal as pathological, and claimed a moral expertise for his discipline, as required by his constituency.

His epistemological and methodological commitments were intertwined. His epistemological commitments relied on a scientific approach to the traces of the transcendental in collective representations which were held to be real, yet immaterial, social entities. His commitment to explanation was based on a severely limited principle of causality. His methodology was based on empirical, though not completely positivist, procedures of observation. He developed at least the veneer of a scientific approach promising a taxonomy and meaningful description of social entities and properties. Following Comte's "*Savoir pour prévoir et prévoir pour pouvoir*" - roughly, "Know in order to foresee and foresee in order to act," he saw a future of explanation and prediction, if not control, of social behaviors. His entire program folded smoothly into the needs of the power base of his time and place.

His ontological commitments to representations and categories were fundamental to his other first principles. Durkheim's relational social realism and neonaturalism were motivated by his attempt to delineate for sociology a field of study all its own. This depended on showing that this new science dealt with a unique level of reality. His

mereological commitments to emergent entities were necessary to the establishment of social facts as ontological simples.

Durkheim tried to establish the domain of sociology, not through a logically argued appeal to philosophical foundations, but with a weakly supported logic of the necessary character of social data, often based on the fallacy *petitio principii* and Mill's argument from residues. His logic of explanation and proof was strongly influenced by the ideology of practical social intervention. In his moral fervor, he rejected as mysticism the notion that science cannot establish norms and goals. He rejected the primacy of individual agency, while at the same time providing sociology with a practical aim (Gane 1994). The fault lines in his set of metaphysical commitments were most evident in the failure of his methodology in the short run. In the long run, his methodology never achieved the success he envisioned. Even his methodological exemplar has fallen into disrepute.

Durkheim was able to perform the analytic magic of *Suicide* just once. The book *Suicide* itself went into a 'purgatory' soon after its publication. The promise of social laws from *The Rules* was never realized, this remains the most telling blow against Durkheim's philosophy (Turner 1986:160).

CHAPTER 4 – A GENEALOGY OF AMERICAN SOCIOLOGY

Early American sociology reflected a set of first principles similar to those of Durkheim. This is partly explained by the similarity in the process of institutionalization and the interests of the American constituency. In America, the climate of the Progressive Era gave birth to a sociology marked by a moralistic identity and supported by a scientific rationale. This chapter begins with a review of the institutionalization of American sociology. We will see that the sociocultural component made up for early problems in the intellectual and organizational components. It then explicates the nature of the metaethics that supported the moralistic identity, and the ontology and epistemology that underwrote the scientific rationale. Along the way these first principles are evaluated for their validity and interrelationships. Finally, the chapter speaks to the resistance to new first principles.

From 1890 to about 1930 American sociology had not established a clear intellectual component. It was without one clear leader, exemplar, or intellectual model.¹² In 1904 Karl Pearson confessed that, until that leader was found, he was skeptical of the American Sociological Society's power to do effective work. "I believe it must be done by some one man who by force of knowledge, of method, and of enthusiasm hews out a new block and creates a school to carve out its details" (Galton 1904:6).

¹² Durkheim's intellectual model did not appeal to early American sociology. His reified social facts did not align with the commitments to individualism and voluntarism by the American sociologists of the era. However, by the 1930's *Suicide* was taken up by the statisticians and Durkheim's metaethics were seen as a rationale for the theme of moral interventionism in American sociology Hinkle, Roscoe C. 1960. "Durkheim in American Sociology." Pp. 267-295 in *Emile Durkheim, 1858-1917*, edited by K. H. Wolff. The Ohio State University Press.

Oddly enough, American sociology was institutionalized before it found this leader, a “distinctive intellectual content, a distinctive method, or even a point of view” (Small 1916). The leading departments in early sociology did not share one standard intellectual approach (Camic 1995). As George Vincent confessed in 1906, warring factions each claimed exclusive title to the field. Albion Small complained that sociology’s embattled state within and without the population labeled “sociologists” made the field’s various stalwarts more concerned for their occupational security than for the disinterested pursuit of truth (Kuklick 1980a:205). The earliest programs of sociology in America thus faced the charge of intellectual irrelevance.

Despite these incomplete and scattered intellectual models, sociology was able to gain public and private support based on its perceived instrumentalist value. It was thought that sociology could develop scientific recommendations for social policies, and rational, if not empirical, support for moral reform. Thus, the power of its constituency trumped the problems of intellectual and organizational solidarity.

This constituency was based on the Progressive movement, a loosely bound coalition of religious groups, private charities, research institutes, and municipal and state reformers. They pursued social reforms that would repair what they saw as the damage done by *laissez-faire* economics and the exploitation of the common man by big business. The Progressive Era sought a science that would lead and validate the group’s meliorist and interventionist attitudes toward social problems. The Progressives believed that sociologists would “employ science in the amelioration of social evils” (Hinkle and Hinkle 1954:2) and produce grand syntheses of principles that would “accelerate social evolution” through rational social management (Kuklick 1980a:205). Its constituency

required not just a moralist identity, but also the validation of the reformer as scientist. It was believed that, because of his scientism, the “sociologist is one of the ablest men to make decisions concerning social policy” (O’Kelly and Petras 1970:334).

Moralistic identity

The leadership of early sociology in America recognized the advantages of establishing its identity as moral interventionists. Albion Small saw that if the sociologist did not accept this role, then other institutions would emerge that would make the decisions. “Sociology’s true end lies not in the gathering of knowledge on social processes, but in putting this knowledge to work for the guiding of these processes to more rational ends” (1914:445). He argued that sociology should confine its attentions to “social problems such as race relations, collective behavior, urban disorder, and the like” (Kuklick 1980a:205). Franklin H. Giddings also directed sociology to enter the fields of public policy, education, missions, and social work. Edward A. Ross believed that “Christianity was the highest stage of religion in a civilization that had already reached the highest stage of development . . . ” (Vidich and Lyman 1982:1058, 1060). In his mind the moral duty of sociology was to unite society under this moral paradigm. “Attack upon the maladjustments among men is an inevitable consequence of the development of social science” (Ross 1920:545).

In order to mount these attacks, the social sciences stepped up their recruitment and training. The Progressive Era required a large group of newly-trained, upper middle-class graduates who were able to pull together disparate reformist groups to present a united front as policy claims-makers (Chambers 2000:138). The new departmental science increased academic positions and produced a greater number of graduates (Geiger 2000).

The early undergraduate curriculum was focused on preparation for the general evangelistic vision of moral interventionism. As C. H. Cooley wrote in 1911, "I think of the introductory sociology class as a nursery of social workers who are to go out over the land and build up a better democracy, and I try to impart this idea to the students" (Kuklick 1980b:43).

The adoption of a moralistic identity reveals a set of metaethical first principles that were not that much different from those of Durkheim. The meliorist and interventionist role was based on a belief in moral realism and truth-apt moral knowledge claims (see p. 24). Although not all early sociologists had an agenda as specific as that of Ross, the Progressive Era provided its own set of moral codes¹³ which were held to be universal and immutable transcendental ideals.

Scientistic rationale

Marching in step with the moralistic identity of sociology was the second subtext; that of scientism. A moralistic identity was necessary but not sufficient for the establishment of sociology as a departmental science. As we saw earlier, the claim of a connection with the pure sciences was also a political move in the quest for a unique subject and territory.

A departmental science required a scientific methodology. Sociology's adoption of a scientistic rationale began with the evolution of five disciplines in the nineteenth century: anthropology, economics, history, political science, and sociology (Wallerstein 1988). Each discipline developed distinct methods of collecting data in order to claim scientific

¹³ The Progressives' moral leadership included clergy from Protestantism and its Social Gospel wing, Puritanism from the North, and Presbyterianism from the South.

authority. Those who took the idiographic approach relied on the value of narrative. History was predominant here while anthropology straddled the fence. Economics, sociology, and political science took up the nomothetic approach by utilizing the methods of the “pure” sciences (see p. 27).

By 1909, it was argued that any body of knowledge gained its scientific rank based on its methodology. Sociology had its own methodological scheme and “to that extent its pretensions to rank as a science are well founded (Ford 1909:246). This nomothetic guarantee was necessary regardless of any moral agenda. “The point at issue is not whether sociology means well, but whether it is true - true in the sense that it has a vision of reality and is not misled by appearances” (Ford 1909:245).

Representative figures in early American sociology, among them Ward, Small, and William Sumner sought objective evidence to scientifically warrant the moral reform they desired.¹⁴ Sociology associated quantitative results with objective warrants as the foundation of its claims to the scientific proofs of moral policy. Advocates of quantitative methods appealed to mathematics as a precise, unambiguous language which could extend our powers of deductive reasoning far beyond those of purely verbal methods. As with logic, the validity of mathematical reasoning was held to be a “black-and-white” affair.

¹⁴ As Bannister puts it, by gaining "control over self and others," the objectivist had "the exquisite pleasure of playing God while denying His existence" Bannister, Robert C. 1987. *Sociology and Scientism: The American Quest for Objectivity, 1880-1940*. University of North Carolina Press.

This claim of the justificatory power of numbers was not without its critics. In 1902 the philosopher Charles S. Peirce attacked the assumption that quantitative methods made sociology more rigorous. When the sociologist employed "the phraseology of mathematics," asked Peirce, did he "imagine that he thereby render[ed] vague ideas precise?" (Bannister 1987:76-77). Wittgenstein would later say, "(I)n life . . . we use mathematics only to infer from propositions which do not belong to mathematics, to others which equally do not belong to mathematics" quoted in (Sayer 1992:176).

Sociology took up the mathematics of European statistical methods because they were expected to offer the sought-after scientific rigor (Camic and Xie 1994). Among the natural sciences, the methodology of statistics had enjoyed the early support of the science of astronomy¹⁵. However, it should be recognized that astronomy used statistics to offset problems of measurement due to imprecise technology of the telescopes of the time, and not because of some inherent mysterious random behavior in the paths described by celestial bodies.

Whatever its strengths and failures, statistics was used by early departments of sociology to do boundary work that would identify their new discipline as an objective science (Oberschall 1972). Statistics was associated with objectivity in two ways. First, because it purported to provide an unbiased objective look at its subject, it was held to be impartial. Second, it was claimed to be the process of discovery of objective, or transcendental, facts. "Both sets of claims now ring hollow" (Schweber 2001:547).

¹⁵ The astronomer Adolphe Quetelet was attracted to statistics for this reason. Once the technology of telescopes improved there was little use for statistics in that field, but by then Quetelet had moved to a *statistique morale*.

Over its history, statistics developed as both a mathematical science and as an applied, instrumentalist source of government policy. A distinction arose between the mathematics of statistical theory and the administration and instrumental use of applied statistical studies. In the latter case, statistics began as a bureaucratic tool before it found its way into academia. Alain Desrosières describes the evolution of modern administrative statistics as inextricably bound up with the state's need for warrants for policy and establishment of their power. State policies were based on the ability of statistics to produce mathematical artifacts that were used to both dictate the duties of the state and measure its successes (1998). Censuses were connected to programs aimed at managing populations, which began to be seen as capital assets of the state. Soldiers were measured for strength, while statistics of births, disease and death indicated inventory turnover.

Early administrative statisticians such as Adolphe Quetelet injected these uses of descriptive statistics into modern sociology. Quetelet's first study dealt with the size of men, the second with criminal tendencies. Like Durkheim, he also assumed an equivalence between the natural, the "right," and the normal. He applied this concept to his study on the size of men. He thought that "Nature, like the marksman, kept trying to hit a perfect size." Karl Pearson noted that Quetelet actually took this concept from Newton's theology, and that its adoption by Quetelet and others was more theological and sociological than mathematical (Hacking 1984:171-172).

Based on his statistical studies, Quetelet claimed to have first discovered immutable social laws. This was one of the earliest moves from association to law. "The notion of

‘law’ was now extended: the distributions themselves and their mathematical derivations, as well as their constancy over time and place, became laws” (Lazarsfeld 1961:297).

It was but a short jump from the discovery of social laws to their use in moral reform through social control. One of the first social statisticians, Frédéric le Play, argued that comparative analysis revealed the conditions under which people are happy or unhappy. This knowledge was to be conveyed to the elite of a country, who were supposed to take the necessary measures so that favorable conditions prevailed (Lazarsfeld 1961:303). In America, this rationale led to a new emphasis on the quantitative training, and thus the professionalization, of sociologists, by the establishment of “. . . the occupation of a distinct intellectual preserve; a standardized academic career, with formal training requirements; and occupational associations and journals” (Kuklick 1980a:203). Thus, sociology would be institutionalized once the intellectual and organizational requirements were satisfied and a unique territory was gained.

The Social Survey movement and Science of Sociology

Sociology took up the administrative applications of statistics (rather than its mathematical theory) to warrant knowledge claims from its new source of data, the social survey (Desrosières 1998). The Social Survey Movement began shortly after the turn of the last century and established the social survey as the data collection tool of choice. Thus, the survey became the foundation for scientific intervention in community affairs.

By 1911, it was thought that sociology’s science followed the “scientific method of induction of which the social survey is the comprehensive type” (Riley 1911). By 1914, papers listing and recommending the concepts and processes of descriptive statistics became more prevalent (Chapin 1914+Burgess, 1916 #11799). By 1920, courses in social

surveying were offered at many major universities. The University of Chicago offered a course in social statistics as early as 1911 (Bulmer 1981:317).

In large American cities, departments of sociology directed students who were utilizing social surveys for social problems, such as the condition of children. It was generally thought that all departments of sociology should train men and women to be expert social surveyors. “When this is done, as it surely will be done, the expert investigator will be capable of seeing beyond the immediate implications of his findings to their wider significance” (Taylor 1920:755).

Sociology as science

In many ways, the pursuit of a scientific rationale was a political project. The choice of methodological approaches revealed sociology's ontological commitment to social laws and universal types, and the epistemological commitment to a deductive-nomological logic (see p. 26). As we saw in the last chapter (see p. 46), the ontological assumptions of the method “ . . . included unit homogeneity, the validity of isolating on a few causal variables, little interaction effect between variables, and no reciprocal causation” (Hall 2003:382).

In the tradition of Francis Bacon, sociologists believed in a world that was a universal book of the inventory of homogeneous units. Shakespeare gestured to his contemporary's sentiment with the soothsayer's comment in *Antony and Cleopatra*, “In nature's infinite book of secrecy/A little I can read” (I.ii. 10-11).

Early American sociology recognized the need for “a coherent, generally accepted ground pattern on which to construct our design or plan of the new social order that must

arise out of the present world-chaos” (Bushnell 1919:41). Since 1919, sociology went through more than one “major wave of categorization, so characteristic of the history of the social sciences” (Lazarsfeld 1961:331).

Sociology’s epistemological commitment was to the belief that the essence of these categories could be isolated by ruthlessly paring away accidental properties. (Connolly 2004; Sil 2004:ch 14). The methodology was based on faith in the possibility of inducing laws from isolated, radically decontextualized cases. “With regard to social ontology, scientism led sociologists to hold that natural causal structure was not variable across time, space and interactional contexts” (Steinmetz 2005:28). However, early attempts to discover these absolute social types never yielded a reliable taxonomy of these universal types. “With little exception [our quantitative methods] are bound temporally, spatially, and culturally and are inadequately cast to serve as clear instances of generic sociological categories” (Blumer 1956). Consequently, we now take a general approach to methodology where time is instantaneous and place nonexistent.

Problems of causality

Early American sociology’s commitment to essential categories implied a principle of monocausality, a simple causal relationship whose strength could be discovered by its method’s radical decontextualization (Grusky and Di Carlo 2001). In such a causal relationship, the goal is to discover the antecedents that must necessarily cause the effect. These are always limited to a one-to-one relationship in Durkheim’s mind. Thus our methodology made a strong commitment to the principle of necessary causal relationships (Braumoeller and Goertz 2000). However, this principle has been the subject of much criticism.

J. L. Mackie argues that the usual talk of "cause" in social science research in fact refers to INUS conditions. INUS refers to an insufficient but non-redundant part of a condition which is itself unnecessary but sufficient for the occurrence of the effect. For example, imagine a collection of events: a short circuit, the proximity of flammable material, and the absence of firefighters. Together these are unnecessary but sufficient to a house's burning to the ground, since many other collections of events certainly could have led to the same result. Within this collection, the short circuit is an insufficient (since the short circuit by itself would not have caused the fire, but the fire would not have happened without it, everything else being equal) but non-redundant part of a condition which is itself unnecessary (since something else could have also caused the house to burn down) but sufficient for the occurrence of the effect. Thus, the short circuit is an INUS condition for the occurrence of the house burning down. (We will see in chapter 6 that Deleuze looks to Leibniz's principle of sufficient cause.) If the causal relationships in the social world are actually INUS conditions - and results suggest they are - then the current decontextualizing approach is even more off the mark.

A methodology that is unable to provide precise specifications of like causal links weakens any commitment to causal relationships as warrants for explanatory power. Yet our commitment to constant conjunction and concomitant variation as warrants of explanatory power remains a standard in our field.

Aside from the logical problems of our assumptions, there is also the problem of sociology's highly mutable phenomena (Cole 1994). This mutability further confounds our claims of precise causal links. As we saw above, in order to deal with stochastic behavior, sociology turned to statistical methods. However, it should be recognized that

formal statistical inference is, by its nature, conditional. If we hope to make causal inferences from patterns of association through the use of statistics, our lack of certainty in our “causal” hypotheses points to the limits of this approach (Freedman 1999). There is also no reliable way to measure counterfactuals — that is, to know what would have happened had we not, say, executed some policy — because so many other factors influence the outcome.

Since the hypotheses of the social sciences are untested by true experiments, sociology remains limited to quasi-experimental techniques and this limitation “reflects the operation of happenstance” (Cook and Campbell 1986; Manzi 2010). Quasi-experimental methodology relies on statistical control specifying a “smaller number of variables that have to be ‘somehow’ combined to ‘sometimes’ produce a desired effect” (Cook and Campbell 1986:172).

Some critics charge that statistical methods have yet to resolve any non-trivial problems (Edling 2002). Part of the blame is attributed to what are seen as disconnects between the actual social world and the basic regression model. It is claimed that this model is built on the assumption of a social world in which phenomena are related to one another in a way that describes a straight line on a two-dimensional graph. Critics argued that there is little evidence that this is the case in the social world. “The domination of the regression model has led us down a blind alley, causing us . . . to overlook true relationships because, not being linear and additive, they cannot be revealed by the regression model” (McGregor 1993:802).

Sociology believed that its methodology would provide membership in the pure sciences. The claim was that “the materialist and extensionalist methodology fitted to the physical

sciences should fit the human sciences as well, if we intend to count them as proper sciences” (Margolis 2002:1). Even though the “proper sciences” such as physics have developed new ontological and methodological first principles, sociology has continued with its early assumptions. We continue to apply perspectives developed in the early physical and natural sciences to social phenomena today “with little, if any, attention to the context within which they were originally developed” (Mathews, White, and Long 1999b:457). Over the history of the departmental science of sociology, the physical sciences have moved away from that context. They have developed tools better suited to physical systems as flows, such as the methodology of thermodynamics. I will argue that these approaches are much better models for the social and other dynamic open systems.

Unlike the physical sciences, sociology has not evolved in its ontological commitments to identity and its epistemological commitments to positivism. Methodological positivism became the dominant position within “sociology, psychology, and political science in the US after WWII. . . . Whether positivism is still dominant is an open question” (Steinmetz 2004:380).

Many argue that it is far from an open question, that positivism is alive and well in sociology to the extent that it is committed to regularity determinism, concomitant variation, and constant conjunction (Steinmetz 2005; Van Den Berg 2006). While it may be difficult to find a contemporary sociologist who would defend the philosophy of logical positivism, aspects of methodological positivism remain pervasive elements in our curriculum and our practices.

Sociology as activist

As part of sociology's moralistic identity, there is a long history of supporting social activism by providing a "social narrative with a moral intent" (Seidman 1991:136). There are also criticisms of what is seen as a type of unethical behavior in our scientism; the practice of claiming objective support for claims based on our own political or moral principles. Horowitz argues that our disingenuous claim of epistemic objectivity is belied by the moralism of sociologists who are driven by the "politics of advocacy and the ideology of self-righteousness" (1993:5). There is a widespread suspicion that results of scientific methods are often used to support normative agendas in the social sciences. This is an "ideological delirium that finally, while considering itself to be thoroughly scientific, also assumed that most everyone else was running around afflicted with false consciousness" (Berger 1992:10).

When we claim scientific support for moralistic interventions we can easily use the claim of scientism to sway policy decisions toward our own normative agendas. Frances Fox Piven refers to this as "research as political performance," a metaphor that is similar to Alasdair MacIntyre's characterization of quantitative methodology:

I have sometimes been tempted to think of it as essentially a histrionic subject: how to act the part of a natural scientist on the stage of the social sciences with the more technical parts of the discipline functioning as do greasepaint, false beards, and costumes in the theater (1998[1979]:61)

Piven questions whether orthodox quantitative methods in sociology produce any useful findings to support policy. We produce scientific results, based on linear cause-and-effect relationships, which are seldom accurate reflections of social reality. A government's "attempt to build policies on such fictive foundations are thus doomed to failure. The

usefulness of social science to government is not as a guide to crafting policy, but as a means of providing scientific justification to partisan initiatives” (2004:85).

Conclusions

We cut up nature, organize it into concepts, and ascribe significances as we do largely because we are parties to an agreement to organize it this way (Whorf 1956:213).

This section has examined the development of early sociology in America; the evolution of the institution and its constituency, the contents of our metaethical, ontological and epistemological principles, and the development of traditional quantitative methods and their components. Our identity as moralists and as scientists are both intertwined with the political needs of institutionalization and our choice of methodology. Although these methods

. . . have contributed scarcely anything to our understanding of social phenomena . . . demands for further attempts in this direction are still presented to us as the latest revolutionary innovations which, if adopted, will secure rapid undreamed of progress (Hayek 1942:268).

Unlike physics or biology, the social sciences have not demonstrated the capacity to produce a substantial body of reliable predictive rules about what they study. Perhaps “we live within a view of social reality that we ourselves do not really believe. Our theoretical hearts are one place, our empirical heads another” (Manzo 2007:149). But our inherited methodology is our most rigid panoply, the site of our deepest investments, and, to some extent, constitutes the identity of American sociology.

The methods and techniques of the sciences have exercised a tyranny over sociology, one which we are unlikely to overturn. At this point the investment in this tradition may be too deep. For example, methodological articles published in our major journals have

significantly higher citation rates (Peritz 1983); quantitative research skills are a leading source of income for our graduates (Lyon 1995); and our pride of place in policy science relies on quantitative results.

However, a dogmatic commitment to any particular method can lead to proselytizing, coercive assimilation, and the religious intractability of the moralist. “Methodological debates are akin to religious ones, and like religious ones, conversions are possible, but faith is often durable even in the face of disconfirming evidence” (Shapiro, Smith, and Masoud 2004:10). Some of the critics, resigned to the futility of a new *Methodenstreit*, simply hunker down and speak in “grammatical voices so passive as to suggest a drug problem” (Davis 1994:180).

New ontologies?

Where might sociology go from here? If our methods of inquiry fail to cut the world at its joints, then we should reinvestigate our principles of ontology (Katz 2002). This practice of criticizing the significance of our ontological commitments is becoming more acceptable (Hall 2003:374).

Wendy Brown criticized the ontology and epistemology of political groups. She argues that many “contemporary political formations ostensibly concerned with emancipation” retain an “ungrounded persistence in ontological essentialism and epistemological foundationalism” which results in undercutting any liberating effects they might hope to have (Brown 1995:36-37). In another example, Elisabeth Ellis argues for a methodological commitment that encompasses fallibilism, a sensitivity to a wide variety of explanators, and an openness to the proposition that significant factors may not be measurable in any ordinary sense (2004).

Ian Shapiro proposes a different ontology of immanent naturalism, which eschews the notion that the world is a well-ordered place governed by laws that can be determined by social scientists (2004:11). He suggests an ontology of a social world which is in a state of constant and unpredictable flux.

Sociologists today are faced with a fundamental dilemma: whether to conceive of the social world as consisting primarily in substances or in processes, in static “things” or in dynamic, unfolding relations. Large segments of the sociological community continue implicitly or explicitly to prefer the former point of view. . . . But increasingly, researchers are searching for viable analytic alternatives, approaches that reverse these basic assumptions and depict social reality instead in dynamic, continuous, and processual terms (Emirbayer 1997:281).

The next chapter considers an alternative commitment set in philosophy, one which rejects identity and representations. It is a view of the world as immanent and dynamic. This is a tradition developed through Scotus, Spinoza, Nietzsche, Bergson, and Whitehead as developed by Gilles Deleuze. The ontological commitment is to ontological primitives that are not ideal forms traced in imperfect copies but to immanent haecceities, and to dynamic causal chains. The most practical benefit of a Deleuzean sociology would follow from an expansion of our quantitative methods.

CHAPTER 5 - DELEUZE'S PHILOSOPHICAL FOUNDATIONS

Unabashedly systemic, Deleuze and Guattari's philosophy is not by that token doctrinal, in the sense it would allow itself to be reduced or represented by a set of conveniently enumerable theses (Toscano 2004:xiv).

The writings of poststructuralist philosopher Gilles Deleuze are intentionally designed to defy summary. . . . They are nevertheless highly ordered and produce concrete effects, including situated meanings and verifiable propositions (Massumi 1996:395).

Deleuze aimed to develop a coherent and logically sound philosophical infrastructure. His metaethics was a type of virtue ethics modeled on the Stoics and Nietzsche, his ontology was one of immanence (see p. 20), and his epistemology rested on a principle of immanent causation (see p. 27). He used a number of original concepts (the event, assemblage, univocity, and others) to give his work coherence. His commitment set provides a rich potential for the theory and practice of sociology.

Deleuze took as his problem the long history of the failure of representation, and what he saw as the mistaken notion of the immanent as an imperfect copy of a transcendent absolute. He sought to unearth and critically examine the presuppositions he had absorbed in his education, especially the deep-seated privileging of identity and equivalence. He recognized how the traditional teaching of the history of philosophy worked to constrain a revisionary metaphysics. Deleuze commented that the traditional history of philosophy had “. . . always been the agent of power in philosophy, and even in thought. It has played the role of a repressor: A formidable school of intimidation” (2002[1977]:12-14).

Plato, Kant, and Hegel were significant actors in what he thought of as the “official” tradition, or what he came to call a “state” philosophy (Deleuze 1990a[1969]:157-58;

Deleuze 1997[1990]:135-36; Deleuze and Guattari 1994[1991]:28). He explored a different lineage, what he would call a “minor” tradition. “I liked writers who seemed to be part of the history of philosophy, but who escaped from it in one respect, or altogether: Lucretius, Spinoza, Hume, Nietzsche, Bergson” (2002[1977]:14-15). This alternate history of philosophy “unsettled the transcendental subject at its origins” (Neil 1998:429; Smith 2009b).

Deleuze asked, “What is the best way of following the great philosophers, to repeat what they have said, or to do what they have done, that is, to create concepts for problems that are necessarily changing?” (1994[1991]:28). His approach was similar to the practice of the medieval commentary as an

. . . effort to revitalize a philosophy, by a judicious combination of detailed excavation, on the one hand, and the potentially catalytic adjunction of new components, on the other (Toscano 2004:xiv).

Preferring the toolbox over the hymnal, Deleuze “inhabited” the philosophers of this alternate tradition. In an oft-quoted passage he presented his approach to other philosophers as a kind of “buggery” that would produce “monsters”. Deleuze sought monsters that would provide a new decentering of the traditional readings of the philosopher at hand (1997[1990]:6). However, his energy was not solely aimed at the destruction of the traditional metaphysics of his day in the sense that America tended to read postmodernism and poststructuralism.

Deleuze was actually puzzled by the fact that his texts, along with those of other French philosophers, had been characterized as postmodern in America. He believed that it was a result of a highly complex set of misunderstandings, misinterpretations, and investments that were political and historical. For Deleuze, postmodernism was

. . . a shameful advertising and selling of concepts like products where critique is replaced by sales promotion. Like marketing, the claims regarding the end of philosophy, end of metaphysics, and so forth, are what Deleuze calls pointless idle incoherencies (Robinson 2005:167-68).

Poststructuralism did not fare much better in America. It was thought to be limited to a *pars destruens*, a total destruction, which left us nowhere to go. However, *pars destruens* simply cleared the stage so that “thinking can engage with *pars construens*, a creation, or invention, and thus a praxis and poetics without guarantee” (Negri 1991:xv). Deleuze did not announce the cliché of “the end of metaphysics”, but sought a more lucid approach to a general and revisionary metaphysics. He suggested that “. . . the philosophical task is not to attempt to ‘overcome’ metaphysics, but rather to actively construct *a different metaphysics*” (Smith 2007:49-50).

Therefore, it is more productive to read Deleuze not as a dismissal of Western metaphysical tradition, but as an affirmation of a new metaphysics (Hardt 1993). This new metaphysics would be more sensitive to discoveries in the new physics, as opposed to the 19th century physics extant during the development of early American sociology.

I feel myself to be a pure metaphysician. Bergson says that modern science hasn't found its metaphysics, the metaphysics it would need. It is this metaphysics that interests me, Deleuze cited in (Smith 2009b).

Ontology

Unlike Durkheim, Deleuze began with ontology, and so shall we. The important aspects of Deleuze's ontological infrastructure are an immanent reality; univocity of being; events as forces and assemblages; a transcendental empiricism; the virtual and the actual;

and a mereology of dynamic, open systems. Throughout his work he was intent upon defeating the traditional logic of the philosophy of identity; the final authority of the One.

In so-called rationalist philosophies, the abstract is given the task of explaining, and it is the abstract that is realized in the concrete. One starts with abstractions such as the One, the Whole, the Subject, and one looks for the process by which they are embodied in a world (2002[1977]:vii).

Deleuze argued that the primacy of the transcendent or the abstract was based on an early hope for order. Its most celebrated proponent was Plato. “The poisoned gift of Platonism is to have introduced transcendence into philosophy, to have given transcendence a plausible philosophical meaning” (1997[1993]:137).

For Deleuze, the essential Platonic distinction was more profound than the distinction between model and copy, original and image. In Deleuze’s reading, the aim of Platonism was to deprive nature of the being that is immanent to it, to reduce nature to a representation of “ . . . a transcendent Idea capable of imposing its likeness upon a rebellious matter” (1994[1968]:128). Platonic instantiations gave the mere illusion of the identity of the Idea, however, for Deleuze the only illusion “is that of unmasking something or someone” (1994[1968]:106).

Deleuze read Plato’s work as an attempt to solve the problems of *simulacra* (Widder 2001). Plato’s representation was an image endowed with resemblance. His bane was the *simulacrum* as an image *without* resemblance (1990a[1969]:257). The danger of the *simulacrum*, for Plato, was that it did away with the illusion of the face behind the mask, his hierarchy of Idea, and representation as imitation (1994[1968]:69).

Plato hoped to discredit *simulacra* as perversions of the form, false claimants, essential perversions or deviations from the Idea (1990a[1969]:253-265). Deleuze argued that

simulacra were not some imperfect copies added secondarily “over and above” the original term. On the contrary, they were “. . . the internal genetic elements of repetition itself, its integral and constituent parts” (1994[1968]:17; Smith 2005:112).

Deleuze dismissed the Ideas of Plato in favor of an immanent ontology that “. . . would deny the existence of anything beyond, higher than, superior to Being” (Smith 2003:46). Thus, his revisionary metaphysics of immanence was a critique of the philosophy of representation which has dominated Western philosophy since Plato.

Modern thought was born out of the failure of representation, as the loss of identities, and the discovery of all the forces that were acting under the representation of the identical (1994[1968]:117).

Another target of his revisionary metaphysics was the traditional commitment to equivocal and analogical Being. The question is, “Given that Being is said of beings, ‘*x is*’, in what sense is it said?” Duns Scotus developed three concepts of this “saying”: equivocity, univocity and analogy. When Being is said of God and man in an equivocal or analogical sense, it implies that there are qualitatively different levels of being. We can think of the representations and Ideas of Plato, or the social fact and individual of Durkheim. In both cases “What you are disconnects you from other things, once and for all, and positions you in a hierarchy of distinct sets of categories” (Williams 2003:62-63). On the other hand, when Being is said in the univocal sense it is said of every being and in the same sense (1990a[1969]:177-80; Smith 2009a), and thus defeats transcendent

categories of levels of reality. However, when Being is said in the same sense of all, this univocal ontology must somehow account for differences between beings.¹⁶

Deleuze had to explain this difference between beings without recourse to Plato's Ideas, Aristotle's accidental properties, or what he saw as the sedentary distribution of Kantian categories.¹⁷ Deleuze chose to employ Spinoza's claim of one univocal substance differentiated in individual beings based on modes of intensity. In *Difference and Repetition*, Deleuze replaced general laws, universals, and essences with multiplicities, or differences in intensity, that constituted individuations. It is important to recognize that difference in intensity is a non-categorical difference; it does not rely on the One. "A typological difference between substantive multiplicities, in short, is substituted for the dialectical opposition of the one and the multiple" (Smith 2009b). We do not ask to know the essence of a thing, but its intensities in the sense of its affective capacities (Smith 2001:175).

From this concept, Deleuze was able to develop a realist ontology that redefined the universal as individuals, particular things, or actual entities produced by processes of individuation. Without any need for transcendent or external productive principles (traditional views of self, cause, God, etc.) the actual is the product of nothing but the

¹⁶ "If we say that Being is univocal, then we seem to fall into the thought of infamy: the thought of the inessential, the formless, the non-specific, the non-generic, the noncategorical" Smith, Daniel W. 2001. "The Doctrine of Univocity: Deleuze's Ontology of Immanence." *Filozofski Vestnik* 22(1):163-179.

¹⁷ "Kant balanced his world on thought – oblivious to the scanty supply of thinking" Whitehead, Alfred North. 1979[1929]. *Process and Reality (Gifford Lectures Delivered in the University of Edinburgh During the Session 1927-28)*. Free Press.

internal difference of its own self-realizing occurrences; occurrences which create ever new and more complex combinations. (Robinson 2005:159). Thus, in Deleuze's ontology, universals do not precede multiples, but a process of difference produces multiplicities. "The first principle of philosophy is that Universals explain nothing but must themselves be explained" (1994[1968]:7).

Aristotle, relying on Plato's Ideas, had suggested that uniformity and individuation were explained by essential and accidental properties, respectively (see p. 19). In response, Deleuze employed Spinoza's distinction between *propria* and properties. Spinoza had argued that the attributes that have traditionally been ascribed to God are not attributes but mere *propria*, that is, the non-essential peculiarities of a species. For example the ability to laugh is said to be a *proprium* of man; it is not essential to the definition of man as a rational animal. Spinoza held that the *propria* of God told us nothing of the divine essence (Smith 2001:172).

Deleuze was able to solve the problem of individuation by valorizing immanence and difference, but he was still left with the problem of uniformity, that is, how sets of entities could be seen as likes. Deleuze argued that sets of likes were the product of contingent, yet occasionally similar genetic processes; dynamic processes that were often marked by attractors and phase states as we will discuss in the next chapter. For now, it is enough to recognize that, in a Deleuzean ontology, likes are not the result of formal causes. On the contrary ". . . resemblance and identity must be treated not as fundamental but as derivative concepts" (DeLanda 2002b).

The Problem of Regularity

Deleuze constantly critiqued the “tracing” operation by which particulars in real experience were said to be conditioned by identities in the transcendental. Thus, he could not appeal to the traditional explanation of regularity based on transcendental types. As we have seen, the deductive-nomological logic dismissed non-uniform effects as imperfect copies. Deleuze shifted the ontological emphasis to these immanent, non-uniform effects as the emergence of the “new”.

Deleuze was interested in the ontological conditions under which something new can appear in the world. “The aim is not to rediscover the eternal or the universal, but to find the conditions under which something new is produced (creativity)” (2002[1977]:vii). He pursued this goal by developing his concepts of the virtual/actual and the possible/real (Goodchild 1996:4-5; Massumi 1992:167-170).

Deleuze argued that the real cannot explain or produce the new. In his view, the real is nothing more than the working-out of what was already prefigured and envisioned as possible. When a possibility is realized - when it does come into existence - no actual creation has taken place. “Mere possibility is not generative or productive; it is not enough to make anything happen” (Shaviro 2009:34-35).

In opposition to the principle of causation built on the possible/real, Deleuze employed a concept of the virtual as a transcendental field or structure, conditioning and generating the actual. According to this system, the virtual “possesses a full reality by itself” (1994[1968]:211). It is just that this reality is not actual. The virtual is like a field of energies that have not yet been expended, or a reservoir of potentialities that have not yet been tapped. His argument for the virtual/actual contradicted a metaphysics of presence,

for when the virtual is actualized it “ . . . breaks with resemblance as a process no less than it does with identity as a principle” (1994[1968]:211-12). Actualization is a part of the process of differentiation and, unlike the causal link between the possible and the real, is always a creation.

The Event

Having established individuation based on modes of intensity, Deleuze needed an ontological simple that was dynamic as opposed to static. He proposed events, or singularities, as flows marked by ever-shifting capacities, not beholden to transcendental forms. Deleuze expanded Spinoza’s notion of relatively stable modes of existence into active modes of expression, the expression of difference (1990[1968]). This was a critical shift from the static entities associated with a metaphysics of presence.¹⁸

Deleuze wrote extensively on his concept of the event (1988[1966]; 1994[1968]:136; 1990b[1969]; 1986[1983]:3; 1993a[1988]). “I’ve tried in all of my books to discover the nature of events” (1997[1990]:141). Events are an important part of Deleuze’s commitment set; his metaethics and epistemology rest upon them; his ontology passes through them.

Deleuze developed his ontological simple from the Stoics’ distinction of two kinds of entities, corporeal and incorporeal beings. The Stoics held that, on the one hand, there are bodies which exist in space and in time with their corresponding “states of affairs,” while

¹⁸ In the sense that Heidegger used the term, presence, the emphasis was on the present as the source of knowledge, but always a knowledge of the eternal, the absolute as it is revealed in the now Derrida, Jacques. 1967. *Of Grammatology*. Johns Hopkins University Press.

on the other there are incorporeal beings or transformations. These incorporeal beings “are not things or facts, but events. We cannot say that they exist, but rather that they subsist or inhere” (1990a[1969]:7). For Deleuze the event rides above the occurrence like a modulation of a wave.

The event is a vibration with an infinity of harmonics or submultiples, such as an audible wave, a luminous wave, or even an increasingly smaller part of space over the course of an increasingly shorter duration (1993a[1988]:77).

These forces, which included societies as well as persons, were not hierarchal, in the sense of Durkheim’s unidirectional social forces. They were not dominating but multi-directional and enabling. The intensive power of these modes was not cancelled out or weakened through the imposition of constraining forces; on the contrary, they enter into ever more complex and heterogeneous assemblages. For Deleuze events are not “owned” by some transcendental subject. “There are no private or collective events, no more than there are individuals and universals, particularities and generalities” (1990a[1969]:152).

Assemblages

Assemblages are not particular members of a general category but unique and singular individuals, every actual assemblage is an individual singularity, defined by its properties, its tendencies, and its capacities at each point in time. An assemblage is always the product of a historical process. It is always contingent and is not guaranteed by the existence of a necessary set of properties constituting an unchanging essence. We can create an experimental space of an entire population of assemblages each possessing a slightly different unique immanent identity depending on the settings of the parameters. This population itself is also its own assemblage.

To the extent that a population is marked by homogeneity, it is territorialized. The more coded or territorialized individual assemblages are, the more they will tend to resemble one another. This is at the bottom of our tendency to develop categories and then to reify that category. Heterogeneity is achieved through a process of deterritorialization, which is what Deleuze would see as a process of removing the blockages of flows associated with political interventions based on principlism. Assemblages are overcoded when their range of properties are rigidly limited, decoded when these properties develop in a rhizomatic fashion in a more complete interaction between assemblage of individual modes and the assemblages of their environment.

Mereology

Deleuze's mereological commitment was to an open system that resisted nomothetic control and formal cause. Such a system would never achieve "closure" since closure implied transcendence and teleology, the limits of the possible and the real. Deleuze had to reject " . . . simple reductionism while also abandoning the idea of abstract classes as eternal archetypes" (DeLanda 2002a).

In response, Deleuze did not limit his mereology to any one pair of domains, but imagined multiple levels of wholes and parts in a "flat" ontology. A flat ontology is one in which entities on different scales multiply act and react in complex relationships. No one level is privileged. Deleuze took up Whitehead's idea of *societies* as complex open systems that operated in many mereological pairings and interacted at many levels and intensities. Thus, instead of a hierarchical reductionist or strongly emergent mereology, Deleuze saw events as modes of intensity that interacted with on each other, in all directions, in a type of multi-directional strong emergence.

Metaethics

Deleuze's metaethical commitments were a felicitous fit with his ontology. He incorporated concepts from Nietzsche's will to power, not as *pouvoir*, a power of domination over another, but as *puissance*; "the ability to affect and to be affected, to form assemblages or consistencies, that is, to form emergent unities that nonetheless respect the heterogeneity of their components" (Smith 2009b). This ability to affect and be affected has obvious ties to his ontological simple and his mereology. However, the key shift in his revisionary metaethics was a move from morality to ethics (see p. 22).

Morality presents us with a set of constraining rules of a special sort, ones that judge actions and intentions by considering them in relation to transcendent values (this is good, that's evil); ethics is a set of optional rules that assess what we do, what we say, in relation to the ways of existing involved (1997[1990]:100).

Deleuze agreed with Foucault that "morality" should be understood as a series of restrictive rules and regulations that judge a person's actions with reference to the transcendent or objective norms which he had abandoned (1997[1990]:94-101). By "ethics," in contrast, Deleuze understood a series of modes of behavior that form an immanent mode of existing or way of life. "Ethics, which is to say, a typology of immanent modes of existence, replaces Morality, which always refers existence to transcendent values" (1988[1970]:23).

A metaethical commitment to moral realism and absolute laws would have been inconsistent with Deleuze's ontology (see p. 24). For example, he could not take up Aristotle's notion of morality as "the effort of man to rejoin his essence" (1997[1993]:127). Deleuze held that an acceptance of a transcendent morality represented a Nietzschean slavery and impotence reduced to its lowest point

(1990a[1969]:152). However, Deleuze recognized the problems of relativism and nihilism associated with a rejection of moral principlism (Smith 1998:252, 259, 265). He was disturbed that “. . . in renouncing judgment we had the impression of depriving ourselves of any means of assessing the differences between existing beings, between modes of existence, as if from now on everything were equally valid (1997[1993]:168).

In response to the danger of relativism, Deleuze proposed that we could evaluate ethical choices in three ways; their expansion of extension and intension of capabilities, their use in self-formation, or their degree of willing an affirmation.

Ethical worth can be evaluated by the individual's expansions of capabilities as “. . . an amplification, an intensification, an elevation of power, an increase in dimensions, a gain in distinction" (1993b[1988]:73). A mode of existence can be evaluated, apart from transcendental or universal values, by the purely immanent criteria of its power or capacity (*puissance*), that is, by the manner in which it actively deploys its power by going to the limit of what it can do (or, on the contrary, by the manner in which it is cut off from its power to act and is reduced to impotence). If modes of existence are defined as a degree of power (the capacity to affect and to be affected), then they can be evaluated in terms of the manner in which they come into possession of their power.

Modes are no longer "judged" in terms of their degree of proximity to or distance from an external principle but are "evaluated" in terms of the manner by which they "occupy" their existence: the intensity of their power, their "tenor" of life (Deleuze and Guattari 1994[1991]:74).

A Deleuzian ethics asks, "What can you do, what are you capable of doing?" Deleuze and Guattari took up this notion of an ethics of immanence in their political works. Political power is about effectuating these capabilities, these powers. Under what

conditions, they asked, “. . . can we be separated from our powers, or allow or actually desire that our powers be diminished?” (Smith 2009a:67).

Ethical behavior can also be assessed by considering how we develop ourselves in what Foucault called the project of the life as a work of art. Foucault developed this concept from the early Stoics for whom “Ethics was not yet a business of calculation or logic” (Colebrook 2000:51). As Foucault found in his study of the Stoics, ethics was a practiced way of life; not a subservience to moral laws, but a project of self-formation. He saw this as an ascetic practice, not in the sense of a morality of renunciation but as “. . . an exercise of the self on the self by which one attempts to develop and transform oneself, and to attain to a certain mode of being” (Foucault and Rabinow 1997:282).

The third evaluative approach, that of willing an affirmation, was developed from the Stoics’ and Nietzsche’s idea of ethics as *amor fati*. For Deleuze, the principal lesson of Stoic ethics was that of affirmation: Stoic ethics “. . . consists of willing the event as such, that is, of willing that which occurs insofar as it does occur” (1990a[1969]:143). “There is a dignity of the event that has always been inseparable from philosophy as *amor fati*: being equal to the event, or becoming the offspring of one’s own events” (1994[1991]:158).

Being equal to the event means willing the event in a way that involves neither resignation nor *ressentiment*; that is affirmative; that transforms the quality of the will itself. His notion of an “ethics without morality” had as its central question “how to be worthy of the event” (1990[1968]:148-53). Deleuze did not suggest that we acquiesce without demurring to whatever comes our way. This was the stoicism of Lipsius, one of

resignation or *constantia*.¹⁹ Deleuze embraced a stoicism closer to that of Epictetus, a stoicism of affirmation.

Moral Duty

He did not hold for a transcendent moral realism, the prospect of moral expertise, or a commitment to a codified moral duty. These would have been inconsistent with his ontology. He took up Foucault's argument that moral realism and moral expertise led to an "ethics of knowledge [whereby] we imagine that if we get the facts about the outside world right, then we will know what to do" (Foucault 1969:203). Without expertise concerning transcendent truth-apt moral propositions, a belief in moral duty is hubristic.

On the matter of the content or programs of moral activism or reform projects Deleuze was generally silent, at least in his philosophical texts (Blakley 2005). Foucault commented that "Deleuze and Guattari care so little for power that they have tried to neutralize the effects of their own discourse" (Deleuze 1994[1968]:xx). Their style had a Nietzschean ethical function; as if to say "we must think, but we are not asked to follow any authority except to think for ourselves." Like Zarathustra, they did not want followers.

¹⁹ "It would be a mistake to characterize Deleuze's Stoic ethic as *constantia*, which we might translate as 'steadfastness' or 'constancy.' This notion of constance is the direct descendent of Lipsius's *constantia* . . . Deleuze's Stoicism is neither the Stoicism of Lipsius nor that of Hegel; it is rather a Nietzschean and Bousquetian Stoicism. This is not *constantia*; it is *amor fati*" Sellars, John. 2006. "An Ethics of the Event - Deleuze's Stoicism." *Angelaki-Journal Of The Theoretical Humanities* 11(3):157-171.

Epistemology

Deleuze's epistemology followed neatly from his ontology and metaethics (Shaviro 2009:30-31). However, Deleuze's epistemological commitment was not without its challenges. Once he had abandoned the orthodox concept of the subject as a fixed identity with essential and accidental properties, the standpoint of traditional epistemology came into question. An ontology of univocal Being and the event as primitive denies the traditional subject of knowing, thus ". . . epistemology must be demoted from the central role that it generally holds in post-Cartesian thought" (Shaviro 2009:30-31). In response, Deleuze argued that it was the event as an immanent subject which put forward knowledge claims of other events as momentary constellations.

As to a method of inquiry that would warrant propositions, Deleuze took up empiricism, a choice that may seem odd at first glance. The traditional concept of empiricism was that of a method for discovering transcendent laws or types. However, Deleuze's empiricism was not an inductive method designed to ". . . rediscover the eternal or the universal, but to find the conditions under which something new is produced" (2002[1977]:vii).

Thus he developed one of the most difficult concepts in his work, that of "transcendental empiricism." However, the only "transcendent" entity he recognized in his ontology was the immanent event; it was each unique haecceity that was transcendent. Or we might think of the primitive as transcendent. This was an empiricism that did not rely on some foundation outside experience. Instead, it was a method of empirical observation of each immanent flow of experience or event (Colebrook 2002:89).

This commitment to an empiricism of immanent events required a new concept of perception. For Deleuze it was no longer a matter of seeking to perceive essential

properties and unit homogeneity by eliminating noise and radically isolating variables (see p. 60) in an attempt to pare away accidental properties to discover the essence of the social entity. In an ontology of flows and intensities Leibniz's theory of unconscious perceptions made more sense. Leibniz claimed that we derive our perceptions, our empirical observations, not from the objects around us, but rather from the minute and unconscious perceptions of which they are composed. My conscious perception of the susurrus of the sea, for example, may be clear, but it is by nature confused, because the minute perceptions of which it is composed are not themselves clear, but remain obscure. Every one of our conscious perceptions comes to us as its components reach a certain threshold. Our perceptions emerge from the interactions of a diverse set of these components and their interactions. "Inconspicuous perceptions are thus not parts of conscious perception, but requisites or genetic elements" (Deleuze 1993b[1988]:89). This epistemology aligns with his mereological and epistemological commitments, in particular, his principle of causation.

Principle of Causation

Given Deleuze's ontological commitments, a commitment to a principle of simple, one-to-one causation based on necessary relations would have been infelicitous. Deleuze's ontology was consistent with the *efficient* cause (see p. 27), the "force that through the green fuse drives the flower" (Thomas and Jones 2003:90). On another register, he employed the medieval concept of an *immanent* cause, a cause that not only remains within itself in order to produce, but one whose produced effect also remains within it (see p. 27). This was coherent with his commitment to univocal being and his rejection of qualitatively different ontological planes (1990a[1969]:6-7, 33; Shaviro 2009:30).

Deleuze's principle of causation also had to be consistent with his ontological commitment to the virtual/actual as the conditions of the "new." As discussed above, Deleuze held that mere possibility causes nothing, while the virtual generates the actual. Considered apart from their physical causes, and independently of any bodily instantiation, incorporeal events were seen as the generative conditions for the very processes that physically give rise to them. Alongside the actual, material "connection" of physical causes to one another, there is also a virtual relation, or a "bond," linking "effects or incorporeal events" among themselves (1990a[1969]:6).

This generative cause did not rely on necessary reason, but on Leibniz's concept of sufficient reason (Shaviro 2009:34-35). The principle of sufficient reason ("everything has a reason") is not the same thing as the principle of causality ("everything has a cause"). "Everything has a cause" means that A is caused by B, B is caused by C, and so on—a series of causes and effects that stretches to infinity. The principle of causality states the necessary cause of a thing but not its sufficient reason. Sufficient reason expresses the relation of the thing with its own notion, whereas causality simply expresses the relations of the thing with something else.

The principle that "everything has a reason" means that one has to give a reason for causality itself, namely, that the relation A maintains with B must in some manner be included or comprised in the concept of A. That is, for every thing, there is a concept that gives an account both of the thing and of its relations with other things, including its causes and its effects. This means that everything that happens to something—all its "differences"—must be contained or included for all eternity in the individual notion of a thing. For example, "Caesar crossed the Rubicon" is a true proposition, one we hold to be

warranted by the method of reliable testimony. Leibniz would say that the predicate “crossed the Rubicon” must be contained in the concept of Caesar (not in Caesar himself, but in the concept of Caesar).

Deleuze’s world was " . . . a system of echoes, of resumptions and resonances, . . . and not at all a necessitating causality" (1990a[1969]:170). Thus the emergence of the “new” rested on sufficient, but not necessary, causes for the actualization of the virtual. Deleuze’s principle of causation recognized what J. L. Mackie had discovered in his explication of INUS conditions (see p. 61). This commitment, once made, is consistent with a methodology and principle of causation based on unnecessary but sufficient causes, a principle of causation that more accurately reflects the state of affairs in the social world.

Conclusions

This chapter has highlighted how Deleuze’s commitment set is consistent with Whitehead’s notion of “societies” as dynamic and complex systems. Deleuze’s work supports a theory of such systems and explores the various thresholds at which material systems self-organize (that is, reduce their degrees of freedom). The relationship between his theories of complexity and the complexity of social systems will be taken up in the next chapter, which will argue for the benefits of bringing the thought of Deleuze into the theory and practice of sociology.

At best, what we can derive from Deleuze and Guattari is a partial sociology, not in any negative sense of that term, but a montage of connections; a sociology without pretensions to unity or universality . . . Instead, we have a model of a

minor writing, subversive and subterranean, working at the molecular level, marking the forces of subjectification, identifying the social blockages to sense and desire, and mapping out lines of escape (Bogard 1998:73).

CHAPTER 6 – DELEUZE AND SOCIOLOGY

The ontology and epistemology of complex social systems

Sociology seeks to explain macroscopic social phenomena. We want to explain how the decentralized local interactions of heterogeneous autonomous agents could generate a given regularity. We approach the problem by building representations, some more simple than others. Verbal representations offer thick descriptions, but it is difficult to determine their implications. Formal quantitative representations are held to deliver more precise implications, but equations that could represent non-linear systems are too complicated to be analytically tractable. A generative approach is concerned with formation dynamics.; it grows the macroscopic regularity from relational events at all levels. The epistemic claim is: If you didn't grow it, you didn't explain its emergence. Agent-based modeling is a generative approach that employs a type of system theory.²⁰

The general discourse of systems theory is not new to the social sciences. However, many of the early instances of this theory in sociology were criticized as limited and flawed. For example, one theorist, Niklas Luhmann, is thought to have been an uninspiring ambassador of complexity theory who discouraged wider engagement in the rethinking of the concept of social systems (Walby 2007:3).

There is a third wave in systems theory in sociology, that of complex social systems. A subset of general systems theory, complex systems have an additional set of identifying

²⁰ A system is defined as a group in which "an alteration in the properties of any one member would entail alterations in the properties of all the others" Acton, H. B. 1937. "The Theory of Concrete Universals (Ii)." *Mind* XLVI(181):1-13.

characteristics. They are dynamic, non-linear, and open, not only to new events but also to the surrounding environment. Complex systems necessarily produce emergent properties that are causally and ontologically independent. Self-organizing systems have no need of transcendent organizing agents, codes.

This chapter expands on the concepts of mereology and their connections with complexity and chaos theories. It shows how the characteristics of complex social systems are best addressed by computational simulations, in particular agent-based modeling. Finally, it offers a practical guide to the components of agent-based models and examples of current applications of this method to the study of social systems.

Complex social systems

The study of sets of hierarchical domains and their interrelationships is the province of mereology. In philosophy, mereology is usually examined in mathematics and set theory. In sociology, this discourse is at the bottom of the debates between holists and individualists, in which both claim that their opponents suffer from the fallacy of misplaced concreteness. The debate turns on the concepts of reduction and emergence.

Reductionism seeks to explain macrophenomena in terms of their microstructures by reducing theories about the former to theories about the latter. This philosophical position claims that only lower level properties do any work and that upper level properties are simply epiphenomenal. Thus, no matter how complex an object may be, an assemblage of

indistinguishable parts in identical relationships will produce an exact duplicate.²¹ Reductive analysis is valued for its parsimony. It offers a conceptual economy; a reduction in ontic commitment (Ruben 1985). However, there are a number of problems with “the treacherous fallacies of reduction” (Randall 1959:362).²²

One of the most telling arguments is based on the argument that like effects can be multiply realized by wildly disjunctive sets of antecedents (see p. 22). A sociological reductionist may counter to our earlier example that each instance of “acting as a church” is unique, the outcome of a one-to-one causal relationship, and thus not multiply realized. However, this suggests that what we really study are individual, immanent causal effects, or haecceities and not identities which can be categorized under the logic of subsumptive laws (see p. 26). This defeats the argument that explanation of any given social phenomenon tells us anything about other cases (Sawyer 2004:278).

Emergentism opposes the reductionist position (Rueger 2000a). Emergent properties are said to be “novel or irreducible” with respect to the lower domain; the reductive analysis of complex systems is always left with a remainder (Rueger 2000b). An emergent property belongs to a complex as a whole and acts independently of its parts. Most importantly, complex systems are marked by a type of emergence known as “strong” or

²¹ This claim turns on one’s response to the Frankenstein question: If an artifact could be built with the exact physical components and interrelationships of a human body, would the property of life suddenly emerge?

²² C. D. Broad considers deterministic, reductionist theories too neat, and associates their explanation of upper-level properties with vitalistic theories and entelechies that are “too mysterious” even for “philosophical hierophants” Broad, C. D. 1929. *The Mind and Its Place in Nature*. Harcourt, Brace and Company.

“ontological” (Sawyer 2004:278; Silberstein and McGeever 1999:194). These systems *necessarily* produce emergent properties that endure even if the lower parts and their relationships change.²³

However, emergentism is not without its own problems (Kim 2006; Sawyer 2001:552). For example, there is no general agreement on exactly what is it that emerges. Is it properties, forms, laws, entities, or some combination? (Huneman and Humphreys 2008:426). In this regard, this paper will use the convention of emergent properties.

Agent-based modeling

Agent-based modeling is designed to address these dynamic, far-from-equilibrium complex social systems and the process of ontological emergence (Crossley 2008). It supports a shift from the study of causality between variables to the study of dynamic interactions between adaptive agents (Gilbert and Troitzsch 2005; Macy and Flache 2002). Instead of isolating variables and restricting capabilities of agents, simulations are designed to manage a large set of variables and range of behaviors (Johnson 1999). However, agent-based modeling has yet to resolve certain problems. These can be separated into problems of mistaken assumptions and the practical problems of implementation.

²³ “Neural resonant cell assemblies cohere and then fall apart on a time scale measured in milliseconds. But during their period of resonance they can trigger simple motor responses, which can trigger further real effects when picked up by the appropriate assemblage. They can also stay around longer and guide more complex behaviors” Bonta, Mark. 2004. *Deleuze and Geophilosophy: A Guide and Glossary*. Edinburgh University Press.

Problems

The first mistaken presupposition is that any new sociological method or statistical algorithm should lead to increased certainty in our predictive power. Our culture is, on the whole, deeply preoccupied with certainty and foreknowledge (O'Connor 1994). Perhaps the most difficult task is overcome our reluctance to allow ourselves to accept “. . . the absence of prediction as a standard for evaluating the adequacy of a theory” (Lieberson and Lynn 2002:1).

While the term “science” is overdetermined, perhaps a minimal definition might include the concept of structured analysis, but there is also a widely accepted notion that science should produce predictive certainty and control. If we begin with the assumption that agent-based modeling will provide these powers, the method will never meet our expectations. However, the problem is in the nature of the complex social systems themselves, not in this method, or any other approach (Boone 2011).

Nonlinearity makes prediction, and even explanation by reduction to realizing mechanism, impossible (York and Clark 2007). Ever more elaborate methodologies, massive computing power, or an infinite number of replicative studies can not unlock the secrets of causally incompressible systems (Muller-Benedict 2006:137-138). Since the agents of these systems constantly develop new capacities and engage in new and different interactions, micro behaviors will always produce macro surprises.

Complex social systems are not the subject of laws, however they do rest in temporary states of order. These are what the mathematician, Henri Poincaré, described as chaotic attractors or basins. He went on to prove that, even though we could recognize and describe them, we could not predict when a system would pass through these basins or

how long they would stay (Baker and Gollub 1996; Baker 1993; Muller-Benedict 2006+Newman, 1996 #8932:254).

An example might be helpful, we can consider a moving fluid as a series of events which must solve the problem of how to flow at different speeds. At slow speeds the solution is simple: stick to steady-state or uniform flow. But after a critical threshold of speed is crossed that solution becomes insufficient and the moving fluid must switch to a convective or wavy flow. Finally, after another critical threshold, the fast speeds pose a flow problem to the fluid that it cannot solve by moving rhythmically and it is forced to become turbulent. In the mathematics of complex systems this is known as a “symmetry-breaking cascade”.

In the laboratory of agent-based modeling we can discover a richer population of regimes of flow, assemblages and their interaction set. Agent-based modeling produces singularities which represent attractors in real systems proving the case for ontological emergence. This is a more accurate picture of the social world which discards the facile assumptions of rational choice theory concerning information availability and rational performance.

While there is a level of prediction that is available in complex open systems, it is limited to the short-term behavior of large ensembles over localized conditions (Newman 1996:252; Silberstein and McGeever 1999:192). For example, meteorology’s ability to forecast the weather with fair accuracy only applies over the next hour or so in any one limited space (Mathews, White, and Long 1999a:25).

The second mistaken assumption is that the radical isolation of variables and their interactions is epistemically valuable (Sawyer 2004:271). This simply does not apply to

complex social systems. In these systems it is difficult to draw firm boundaries between components that are inextricably intertwined in an open environment (Bechtel and Richardson 1993:26-27; Bunge 2004:372).

There are also the very real problems of standards, skill sets, and testing. The community of agent-based modelers has not developed a shared agreement on best practices, preferred platforms, or a standard language (Muller 2009; Railsback, Lytinen, and Jackson 2006). This problem, and other issues hamper efforts at replicative studies. In addition, while agent-based modeling is well suited to interdisciplinary projects, the lack of shared concepts and terminology among the disciplines adds a second level of problems to the already problematic of interdisciplinary communication (Heemskerk, Wilson, and Pavao-Zuckerman 2003; Rossiter, Noble, and Bell 2010). There is also a lack of wide agreement on standard skills and training of agent-based modelers (Levins 1966:422-423). For example, in addition to the general knowledge and skills of a sociologist, it has been suggested that a modeler should also possess a sense of complexity theory, and past experience with software development projects and computer programming.

Finally, there is a lack of standards in the testing, verification, and validation of agent-based models. There are no formalisms that are easily rehearsed. It is simply difficult to test complex social systems which feature a heterogeneity of agents, and the unpredictable emergence of novel patterns of macro behavior (Midgley, Marks, and Kunchamwar 2007). However, agent-based modeling is developing new approaches to testing models of complex social systems (Kuppers and Lenhard 2005; Moss and

Edmonds 2005; Ormerod and Rosewell 2006; Terano 2007 +Fehler, 2005 #11399; Windrum, Fagiolo, and Moneta 2007).

Process and advantages

There is a structured process for the design and modification of an agent-based modeling project. The first step is to select a target system and define the environment, or experimental space. This is a matter of scope; for example an anthropologist may want to begin with a model of one phratry, and then expand the scope to a certain number of tribes and their interactions. The environmental sociologist may want to start with an experimental space with a certain level of renewable resources. In each case the model can be programmed to represent tendencies, capacities, or preferences of each individual and group.

Next, the modeler develops an inventory of agents for the population of the experiment. These can be animate as well as inanimate, individuals or groups. Agents are each given various cognitive and sensory capabilities, such as the ability to interact with all or some of the other agents; to reason, evaluate, remember, learn, and develop new capacities. Logical algorithms that represent these parameters are developed and implemented in software programs (Brent and Thompson 1999; Kluver, Schmidt, and Stoica 2005).

There is a valued role for sociologists in agent-based modeling, even those limited to their current level of training in mathematics and systems theory. The method is improved when it is used in combination with existing quantitative and qualitative research in sociology (Halpin 1999; Janssen and Ostrom 2006+Parunak, 1998 #2024; Johnston, Kim, and Ayyangar 2007; Matsuyama and Terano 2010). As we saw earlier, orthodox methods can drive the specification of behavior rules for agents. This, in turn,

can lead to an expanded research process in which variable analysis describes, mechanisms explain, and simulation activates (as well as tests) hypothetical mechanisms (Manzo 2007:37).

Thus the entire process benefits from the results of previous qualitative and quantitative social science research. The interpretation and selection of agent types and capabilities are important tasks for the sociologist and other social scientists in the team. These data from traditional research help the designers develop the initial capabilities and tendencies of the population of the target system. This research gives the model a running start, as it were. The body of data also serves as a form of validation of the results of the initial runs.

A widely cited example of this is the agent-based modeling study whose parameters were modified until it replicated the results of archaeological models of the process of the growth and collapse of the Kayenta Anasazi (Axtell, Epstein, Dean, Gumerman, Swedlund, Harburger, Chakravarty, Hammond, Parker, and Parker 2002). From this “validation” the model can then be used in other social and ecological systems. The parameters are modified until the model replicates the findings of traditional quantitative and qualitative research on these new systems. This leads to a stronger descriptive and explanatory powers of the interactions and attractors of both systems.

However, it is important to understand that such findings are just preambles to the model’s real power, the power of the true experimental method (Edmonds and Hales 2005). Unlike quasi-experiments, we really can change, for example, an agent’s religious preferences with no complaints from the board of ethical treatment of subjects, or even the agent herself! In addition, we can change just one aspect of the agent and the mythical *ceteris paribus* rules actually apply. The team can conduct a series of simulation runs,

evaluate the results, and perform other experiments by adjusting parameter values and developing new variables. For example, a model can be configured to produce results that align with a hypothesis developed in traditional research in one target area. Then we can investigate why that same hypothesis has not produced similar results in another target area (time, location, culture).

The capabilities, and their diminution or growth, of immanent modes of intensity can be modified through the assignment of particular parameter values. For example, a recent experiment in agent-based modeling sought to understand and explain how extremism propagated in different societies (Deffuant, Amblard, Weisbuch, and Faure 2002). The model set one parameter as the range of certainty and uncertainty of an agent's beliefs. The use of a high value of certainty represented extremist agents with higher persuasive capabilities. Depending upon the choice of other parameters, the extremists could have a very local influence or attract the whole population. Of course, the model employed many more capacities, such as persistence and preferential attachment, each with their own range of values. This ability to accept new agents and aspects of interactions allows the researcher a wide range of experimental freedom. How these findings are used is another matter, our interventionism is a function of our metaethics, as we will see below.

Another recent experiment, regarding the analysis of agricultural policy (Happe and Kellermann 2007), featured other capacities and parameter values. Agri-environmental measures are examples of policies which farmers are free to choose to adopt or not. The environmental sociologists on the team had established a relationship between the acceptance of policies and the influence of other farmers and of more or less institutionalized contacts. The experiment built capacities for the strength of

neighborhood, professional and random social networks, their frequency of interactions, and their influence. In addition, particular nodes of the social network were given different capabilities to initiate the discussions and propagate and diffuse information.

There are a number of practical uses for the results of agent-based modeling. For example, agent-based models can present counterintuitive hypotheses which can lead to new lines of research. A set of apparently bizarre, or widely disjunctive, individual agent rules may generate macrostructures that unexpectedly mimic the observed ones. It may be that these latter relationships point to what are, in fact, the operative micro-rules. On the other hand, a model based on widely accepted explanations of particular macrophenomena may actually not corroborate the expected results and lead us to new hypotheses.

For example, in the research on the propagation of extremism, the model showed that a single convergence phase state, formed around one extreme belief set, can occur after a phase of strong consensus at a moderate opinion, with an almost equal interest for both extremes. Moreover, in the case of large uncertainties, it is rather the more central agents which tend to drive the drift to the extremes, whereas the closest to the extremes tend to go to the center. Neither of these results was expected based on more widely accepted hypotheses.

However, one of the most powerful advantages of agent-based modeling experiments is their ability to produce a range of longitudinal data that far surpasses what our current methodologies are able to collect and analyze. Access to new levels of computing power allows simulation runs with a large number of agents, capabilities, and hundreds of thousands of interactions. Thus, agent-based modeling can produce results based on the interactions of agents over several years or more. This can lead to the appearance and

study of Poincaré's basins, as temporary phase states, that coalesce, diffuse, and dissipate over a long life cycle. In addition, the ability to run many simulations with the same parameters produces results that are best understood through the application of mainstream statistical methodology. There begins a synergistic iterative loop between the two methods.

As we saw in Chapter 4, sociology began with an ontology and epistemology that led to what has been criticized as a scientific rationale. In the following section we look to the metaethics that led us to adopt a moralistic identity. There is a discussion of the metaethics that act as the foundation of our moral interventionism. This chapter ends with a review of Deleuze's metaethics and questions where they might lead us.

The metaethics of interventionism

Sociology's early metaethical commitments were a response to the requirements of our constituency and its interest in scientific support of policies of moral reform. This led us to a commitment to moral principlism; the belief that there are real and absolute moral principles that "provide prescriptive action guides for moral conduct; they require that agents do certain actions when certain conditions obtain" (Davis 1995:88).

The theory of moral principlism has many flaws. The prospect of gleaning a clear prescriptive guide for moral action from a diverse set of principles that often conflict is practically impossible. Consider the sociologist who seeks guidance on requiring a change in certain moral conventions by the members of a certain culture chosen as an object of intervention. Richard B. Davis suggests a complicated process which might begin with the sociologist forming

. . . empirical beliefs about the particulars of a case, and conceptual beliefs concerning each principle's constitutive concepts. The next step, I take it, would be to attempt to bring these sets of beliefs into wide reflective equilibrium (by an alchemy that is not entirely clear) with her own considered moral principles and philosophical beliefs - an enormously difficult task. The result of this procedure, presumably, would be a particular moral judgment (susceptible of precise formulation) (Davis 1995:97).

This result determines what the agents of the sociologist's target culture ought or ought not to do, as well as what moral actions she is required to take. It is not clear to what degree moral interventionists regularly engage in this tiresome process. The interventionist is more often governed by a preference for one particular moral principle ("autonomy" is seldom the principle of choice) and characterizes her or his targets as suffering from false consciousness or misrecognition of the inaccuracies of their own moral principles. These "mistaken" beliefs and behaviors tend to appear as anecdotal artifacts in the sociologist's quantitative or qualitative analysis.

Principled interventions

Whatever principle(s) animates our meliorism, it is generally held that intervention is only warranted as a response to serious injustice. For example, there are three proposals for a logic of the "just war". In the case of "just war" theory, the subject is military intervention, but, as sociologists, we understand there is more than one kind of violence that can be visited on a target culture.

John Rawls claims that sovereignties are open to outside intervention if they violate rules that all participants would adopt in a hypothetical negotiation. It should be noted that the hypothetical negotiation is one in which no participant has a surfeit of bargaining power. It is this condition that is most often neglected in the practice of interventions at all levels.

He argues that intervention is not permitted in cultures that are “well-ordered.” States can be well-ordered in liberal terms, or well-ordered to the extent they are “decent”, in Rawls’s term, meaning in the sense that they act to advance the common good. Rawls shows his normative preferences when he defines decent states as those in which “society is the employer of last resort” and there is “public financing of elections” (1999:62). He holds that decent states do not have to provide democratic political rights. For example, a state can be decent even if it doesn’t give women the vote as long as the government consults with women’s groups.

Today the generally accepted form of moral authorization of a just intervention rests on the principle of human rights. A systematic violation of the human rights of those within its borders deprives a government “of the sovereign right to non-intervention, so that intervention, including armed intervention, is permissible” (Miller 2003:223). The Universal Declaration of Human Rights (UDHR), adopted by the United Nations in 1948, is the generally accepted standard in the West for determining violations of human rights.

24

Human rights projects rely on the central power of institutions and doctrines. Moira Gatens and Genevieve Lloyd suggest that contractualist accounts of human society are what Spinoza would call “social fictions” whose “resilience lies in their ability to stabilize institutions that, in turn, confer identities on the individuals whom they

²⁴ Yet the UDHR has not received complete international ratification. For example, the governments of Sudan, Pakistan, Iran, and Saudi Arabia criticized the UDHR for its perceived failure to take into the account the cultural and religious context of Islamic countries. In response, this group ratified the Cairo Declaration on Human Rights in Islam, which protects human rights in accordance with the Islamic Shari’ah.

ostensibly serve” (1999:5).²⁵ For example, Rosi Braidotti characterizes the current political climate as a Neo-liberal Post-feminism which leads to one type of “liberation.”

“Our women” (Western, Christian, mostly white and raised in the tradition of secular Enlightenment) are already liberated and thus do not need any more social incentives or emancipatory policies. “Their women”, however, (Non-Western, non-Christian, mostly not white, and alien to the Enlightenment tradition) are still backwards and need to be targeted for special emancipatory social actions or even more belligerent forms for enforced “liberation” (2005:171).

Principlism is based on the logic of covering laws. This, in turn, depends on the notion of absolute identities for the unit homogeneity required for its proper implementation. This is accomplished through a commitment to a metaphysics of identity that valorizes the “normal.” Nancy Fraser refers to this as the “identity model” of recognition, which, she suggests, leads to an identity politics which substitutes

. . . intrusive forms of consciousness engineering for social change, positing *group* identity as the object of recognition, and it puts moral pressure on individual members to conform to group culture (2001:24).

Identity politics treats cultures as sharply bounded, neatly separated and non-interacting. The result is often the imposition of the single, drastically simplified group *persona*, which is needed for interventions based on human rights. Such a *persona* denies the complexity and the multiplicity of individual identifications.

A Deleuzean ontology and metaethics produces a politics that is about escaping overcoded and essentialist identities and generalities. It is not aimed at the goal of

²⁵ Giorgio Agamben suggests that central institutions gain force from their ability to name the exception Agamben, Giorgio. 1998. *Homo Sacer: Sovereign Power and Bare Life*. Stanford University Press.; certain moral and cultural identities are constituted as pathological to the normal identity established by totalizing narratives.

traditional revolutions, that of gaining a seat at the table for oppressed identities. The process of establishing a new identity model aimed at constraint while the people are still “shooting at clocks”. On the contrary, in Deleuze’s term, it promotes an insurrection which can not begin until the individual refuses any form of essentialist identity. Deleuze rejects moral codes in favor of ethical becomings and suggests this achieves a more significant change in political arrangements.

Deleuze and interventionism

Deleuze is suspicious of universal and sedentary moral principles and, in this regard, questions the uses made of rights talk in the contemporary world. Deleuze is not opposed to rights as such, but only to the idea that there exists a definitive set of human rights grounded in some rights-bearing feature of human nature. Human rights “say nothing about the immanent modes of existence of people provided with rights” (Deleuze and Guattari, 1994, 107). When we speak of human rights as eternal, abstract and transcendent they end up belonging to everyone and no one in particular. He sees specifications of human rights as empty universals, useless because the codified rights are fixed and ahistorical, unable to evolve in accordance with the requirements of a particular case.

Human rights are axioms. They can coexist on the market with many other axioms, notably those concerning the security of property, which are unaware of or suspend them even more than they contradict them . . . A great deal of innocence or cunning is needed by a philosophy of communication that claims to restore the society of friends, or even of wise men, by forming a universal opinion as "consensus" able to moralize nations, States, and the market (1994[1991]:107).

He argues that universal coordinates such as “rights” explain nothing; what need to be analyzed in a concrete assemblage are the processes by which rights are both created and

critiqued. It is not a question of universal rights; it is a question of a situation, and a situation that is evolving. Deleuze takes up the concept of jurisprudence as a model for the creation of rights that are not universal, but always linked to a given assemblage and the particularity of specific cases or singularities.

Axiomatic systems of laws, once established, are fraught with undecidable cases. The law thus operates on two registers: legislators create laws and decide on axioms, rules; while the judiciary moves from case to case, from singularity to singularity. Cases that resist the imposition of axioms wind up in the courts, before a judge, who in the end must make a judgment in the absence of any rule. Jurisprudence is an ongoing and open-ended creative process that leads to the modification of existing laws and the invention of new rights. Deleuze argues that situations which are targeted for intervention must be considered as cases to be decided, rather than simply subsumed under what he sees as sedentary universal codes of laws.

To act for freedom, becoming revolutionary, is to operate in jurisprudence when one turns to the justice system . . . that's what the invention of law is. . . . It's not a question of applying "the rights of man" but rather of inventing new forms of jurisprudence (1995: G as in "Gauche").

Majoritarian, minoritarian politics

How do we engage in insurrection by jurisprudence? The answer arises from Deleuze's ontological and metaethical commitments. The key concept here is Deleuze's notion of events as processes of becoming, as employed in a minoritarian politics (Deleuze 1987[1980]:232-309). A majoritarian politics occurs when one flow blocks or constrains other flows, in such a manner that it brings the latter under the dominance of a single

flow capable of “overcoding” or “capturing” them.²⁶ Deleuze sees this as a “territorialization” in which the majoritarian politics constrains how individuals can interact with the political environment by limiting their intensive capabilities.

A Deleuzian “becoming” is always a matter of becoming something other than what is offered by the dominant conceptual categories of a given society. Deleuze’s becoming-minoritarian refers to the potential of individuals or groups to deviate from the standard, to become abnormal, perhaps to be categorized as Durkheimian pathologies. It expresses the sense in which individuals and societies never entirely conform to the majoritarian standard but exist in a process of continuous variation (1987[1980]:106). For Deleuze, “reterritorializing” forces seek to maintain order while “deterritorializing” forces work to subvert that order. Deterritorialization is a form of resistance, a continual process of change that denies essence. Deleuze sees societies as

. . . composed of various lines or vectors of territorialization and deterritorialization which need . . . to be interpreted in a given context in order to discover how to proceed (May 2001:§20).

The process of deterritorialization provides “a normative framework within which to describe and evaluate movements or processes” (Patton 2000:136). We can remember Deleuze’s method of evaluating ethical acts (see p. 79). Becoming-minoritarian is a “long labour which is aimed not merely against the state and the powers that be, but directly at ourselves” (2002[1977]:138). That is, the positive, active development of the capacities of Spinoza’s dynamic, de-centered subjects to interact, to affect and be affected. For an

²⁶ “Forms of sociability built on capture rely on the habituated world passing as the only possible world” Gatens, Moira. 2000. “Feminism as “Password”: Rethinking the “Possible” with Spinoza and Deleuze.” *Hypatia* 15(2):59-75.

individual, as a series of modes of intensity, to preserve itself and to act in an ethical manner is

. . . precisely for it to act and be acted upon in a multiplicity of ways. The more complex the individual body, the more ways in which it can be affected and affect other things (Gatens and Lloyd 1999:27).

Deleuze argues that these capacities are always a target of constraint by majoritarian politics as it seeks to expand its control and overcoding. One example is Foucault's societies of discipline with their principal techniques of enclosure (prisons, hospitals, schools, factories, barracks, families). Deleuze suggests that majoritarian politics no longer operate by enclosure alone but are now utilizing societies of control, that is, reterritorialization by continuous control and instantaneous communication. Control societies modulate the flows of bodies through open spaces, regulating the bodies as they move through the borders and thresholds of the various spaces (1990).²⁷ What may become increasingly important for deterritorializing forces is the development of capacities "to create vacuoles of noncommunication, circuit breakers, so we can elude control" (Deleuze 1997[1990]:175). But as Deleuze insists, one can never predict in advance where these loci of experimentation will occur; one can only be attentive to the unknown that is knocking at the door.

There is no need to ask which is the toughest or most tolerable regime, for it's within each of them that liberating and enslaving forces confront one another. For example, in the crisis of the hospital as environment of enclosure, neighborhood clinics, hospices, and day care could at first express new freedom, but they could participate as well in mechanisms of control that are equal to the harshest of

²⁷ "Enclosures are *molds*, distinct castings, but controls are a *modulation*, like a self-deforming cast that will continuously change from one moment to the other, or like a sieve whose mesh will transmute from point to point .

confinements. There is no need to fear or hope, but only to look for new weapons (Deleuze 1990:4).

CHAPTER 7 – SUMMARY AND CONCLUSIONS

Disciplines, such as sociology, are built on philosophical frameworks composed of ontological, metaethical, and epistemological commitments. The internal coherence and external authenticity of these sets of beliefs enhance a discipline's powers of description, explanation, and even prediction (to the extent it is available). When commitments fit one to another, in a felicitous manner, the commitment set is said to be internally consistent or logically valid. A theory's external validity is a function of how well its set of commitments provides an authentic view of what is the case. The commitment set of the foundational beliefs of American sociology, influenced by the forces of its early institutionalization, are marked by infelicitous fits. This has led to a failure of our early nomothetic ambitions and an inconsistent foundation for the practice of moral interventions.

Influenced by the Progressive Era, American sociology took on a moralistic identity and a scientific rationale that continue today. It is not difficult to trace the genealogy of these characterizations of sociology. The quest for the institutionalization of sociology in America did not take place in a laboratory vacuum. These two positions reflect commitments to specific first principles in metaethics, ontology, and epistemology. Metaethical commitments to moral realism, moral expertise, and moral duty inform our moralistic identity and our particular approach to interventionism. Ontological commitments to ideal types and universal laws imagined a mechanistic social world. Epistemological commitments to unit homogeneity, simple causation, a deductive-nomological logic, and radical decontextualization led to sociology's variant of the scientific method. These ontological and epistemological commitments combined to

provide a scientific rationale for the discipline of sociology that is reflected in our methods to this day.

In this concluding chapter, my emphasis is on how a revisionary metaphysics could influence our practice, how sociological theory could gain a purchase on our methods and interventions. Although it is late in the day, this chapter tries to answer the sociologist's questions of "What is to be done?" or "What difference will all this make?" or, perhaps, for the weary reader, "Can the winged seed finally come to ground?"

In this paper I have chosen to make a Deleuzian reading of Durkheim and of Deleuze himself. This is an approach that "inhabits" its subject and creates a new event, in the Deleuzian sense of the term. Deleuze was fond of beginning his arguments and explications with the expression "following", as in "following Leibniz", and then going on to make this or that knowledge claim of his own. He followed the flow of a writer's thoughts as they moved through other events, or other modes of intensity, such as other writers, other discourses, other practices. I have "followed" Durkheim in this manner. He was chosen because he most clearly enunciated the underlying philosophical issues of metaethics, ontology and epistemology of early sociology and proposed a set of foundational beliefs in these areas that continue to influence the general practice of American sociology to this day.

This is not to say that there has been a paucity of original or revisionary thinkers in sociological theory. Throughout the development of American sociology, the discourse of theory has been rich and varied. Given more time and stamina, we could investigate the

contributions of Gabriel Tarde, Judith Butler and Bruno Latour, to name just a few. We could “follow” these writers in the same sense.

However, it has been noted that, in sociology, theory often resides closer to the tail of the dog. While our theory has developed at one pace, the ways in which we practice our research and implement our interventions have changed in a much slower rhythm. This is because these practices still embrace the foundational beliefs and first principles adopted by early sociology. In the actual practice of sociology, these commitments have been relatively unchallenged, in this regard we have followed Durkheim perhaps too closely.

In an attempt to disturb these assumptions, I have chosen to focus on Deleuze, rather than our own theorists, for three reasons. First, he began with an investigation of pure philosophy and the fundamental issues of metaethics, ontology and epistemology. He has taken a longer view toward the genealogy of Western assumptions. Second, he has created a set of principles that are logically sound, and externally valid for the state of affairs in the social world, a world of complex social systems. Finally, while other philosophers have worked in what Deleuze calls a “minor philosophy” in the alternative tradition of immanence, Deleuze has followed that discourse on to the ontology and epistemology of complex systems and the metaethics of an alternative interventionism.

Conclusions

However much sociology may want to dismiss charges of a scientistic rationale, they do not want to go away. There is a continuing belief that sociology’s quantitative methodology has not delivered on its early nomothetic promises. Critics of our status as a science claim that we are actually scientistic, that is, we have adopted the trappings of

science for the sake of science alone. This is the claim that we maintain a commitment to the logic of a particular science even while that approach continues to produce what can be seen as trivial and limited research results and warrants.

Most of sociology is not scientific in the sense in which this term is used in English-speaking countries. It contains little of importance that is rigorously demonstrated by commonly accepted procedures dealing with relatively reproducible observations. Its theories are not ineluctably bound to its data. The standards of proof are not stringent (Shils 1970:760).

Many prominent sociologists criticize the assumptions at the bottom of their discipline's methodological claims. The cogency of our methodology is ultimately evaluated by "... the accuracy with which it identifies and tracks the determinant properties and processes of the phenomena to be explicated" (Bryant 2004:451). If our methods of inquiry fail to cut the world at its joints, then we should reinvestigate our principles of ontology and epistemology (Katz 2002).

The underlying difficulty in sociology's research practices lies in its ontological and epistemological commitments to representation. There is a belief that sociology should pursue exact, certain social knowledge by developing an ever more detailed map of social representations. Such a "map" does not recognize the dynamic nature of complex social systems nor the unavailability of absolute types. Consider the short story by Jose Luis Borges, "Inexactitude in Science".

In that Empire, the Art of Cartography attained such Perfection that the map of a single Province occupied the entirety of a City, and the map of the Empire, the entirety of a Province. In time, those Unconscionable Maps no longer satisfied, and the Cartographers Guilds struck a Map of the Empire whose size was that of the Empire, and which coincided point for point with it. The following Generations, who were not so fond of the Study of Cartography as their Forebears

had been, saw that that vast Map was Useless, and not without some Pitilessness was it, that they delivered it up to the Inclemencies of Sun and Winters. In the Deserts of the West, still today, there are Tattered Ruins of that Map, inhabited by Animals and Beggars; in all the Land there is no other Relic of the Disciplines of Geography (1999:325).

Sociology could not resist the temptation of chasing the dream of Borges' Cartographers, the dream of complete and overarching representation. "People are constantly putting up an umbrella that shelters them and on the underside of which they draw a firmament and write their conventions and opinions" (Deleuze and Guattari 1994:203-4). We could take an entirely different view. Consider Lewis Carroll's story of a map similar to Borges', also on the scale of a mile to the mile. When asked if that map had been much used, a character replied:

It has never been spread out, yet: the farmers objected: they said it would cover the whole country, and shut out the sunlight! So we now use the country itself, as its own map, and I assure you it does nearly as well (2010:162-163).

We could forego the representations of a philosophy of identity and use the actual complex systems and its chaotic behavior as our research model. The concept of representation by itself is not completely at fault, rather it is the Platonic concept of representations, and their essential properties, that are held to reveal eternal Ideas and categories. Problems are introduced when we think of representations as imperfect copies of some immutable form or type. We can come to a new sense of representation when we consider alternative ontological and epistemological first principles. In Deleuze's ontology representations do not stand in for absolutes that lurk in the shadows. Each unique individual representation is its own absolute, its own Idea, each immanent event represents itself and nothing else. These are what Deleuze called haecceities (see p. 20).

We might think that a philosophy of immanence as representations as haecceities leaves us with a methodological and epistemological paradox. If all that exists are unique entities, if there are no types or categories, how can we learn anything of any lasting value? If there is no identity of sets of likes, no agreement in essential properties, what can we say about any other entity? How can we translate our knowledge to other systems and assemblages?²⁸ This goes back to the problems of uniformity and regularity, that is, how do we explain putative likes and causal patterns?

If we are to move to a science that matches the state of affairs in the social world, we should begin with a move to an ontology of events as a series of assemblages (see p. 77) operating in complex social systems. These assemblages are temporary local phenomena, and thus represent the opposite end of the temporal continuum from the (relatively) long-term congealed structures that have formed the primary subject matter of classical network analysis. The intensive differences of Deleuze and the concrescences of Whitehead offer new ontological commitments to complex social systems that are both self-organizing and self-actualizing (Robinson 2005:171). The ontological and epistemological commitments of Deleuze can help us to address the immanent relational event as a new unit of study.

If we move to a new ontology of immanence, events and assemblages, then a retention of our traditional epistemology would produce an inconsistent and illogical fit between our ontological and epistemological commitments. A more consistent epistemology would

²⁸ “The richness and necessity of translations include as many opportunities for openings as risks of closure or stoppage” Deleuze, Gilles. 1987[1980]. *A Thousand Plateaus: Capitalism and Schizophrenia*. University of Minnesota Press.

commit to a principle of dynamic and complex causation, abandoning the limited Durkheim world of necessary causes, and adopt Leibniz's notions of sufficient reason (see p. 85). We must challenge our current principle of simple linear causation, one that is recognized as outmoded even in the "hard" sciences. The mathematician Ian Stewart explains the genealogy of linear causation.

So docile are linear equations, that classical mathematicians were willing to compromise their physics to get them. . . . Linearity is a trap. The behavior of linear equations is far from typical. But if you decide that only linear equations are worthy of thinking about, self-censorship sets in. Your textbooks fill with triumphs of linear analysis, its failures buried so deep that the graves go unmarked and the existence of the graves goes unremarked (1989).

If we make these changes to our ontological and epistemological commitments, the logical methodological commitments would support approaches that recognize an ontology of complex systems and an epistemology of sufficient reason. One approach would involve the addition of tools such as agent-based modeling. Agent-based modeling simulations produces singularities which represent attractors in real systems proving the case for ontological emergence. This is a more accurate picture of the social world, a picture which denies the facile assumptions of rational choice theory concerning information availability and rational performance.

Another advantage of agent-based modeling is that, while it employs representations, it does not adopt the ontology of representation on which our traditional linear methods rest. As a model, it recognizes the practical need for representations of immanent events even though it knows these representations will always and already be incomplete. Agent-based modeling does not claim to completely do away with the problems of

representation. Rather it simply improves on our linear methods in all the ways discussed in chapter 6 (see pp. 95). It does this by its alignment with a Deleuzean ontology.

As Lewis Carroll noted, the world itself does just fine as a map of the present. However, one charter of sociology as a science is to describe and explain the behavior of social change. If our methodology is largely restricted to localized and synchronic studies, we limit our descriptive and explanatory powers. Agent-based modeling is designed to bring the diachronic into sociological research. It does this not by seeking to catalogue the infinite sets of interactions and states of immanent events, but by providing a method that expands our sets of variables, properties, interactions, and time frames. Agent-based modeling is not the complete answer and it is not meant to completely replace our traditional methods. However, it offers us a more authentic picture of complex social systems.

The study of these systems requires an investment in a new type of quantitative methodology and a new approach to mathematics.

In the physical sciences, mathematical theory and experimental investigation have always marched together. Mathematics has been less intrusive in the life sciences, possibly because they have until recently been largely descriptive, lacking the invariance principles and fundamental natural constants of physics (May 2004:790).

Agent-based modeling allows mathematics to “intrude” in the social sciences in a new manner, one that is not based on invariance and constants. It celebrates agent heterogeneity. It commits to a principle of dynamic and multirelational causation. It seeks the recognition of order rather than the establishment of predictive laws (Macy and Willer 2002). It understands that sociology’s descriptive and explanatory powers will remain limited “. . . as long as we try to understand living systems by the methods of the

familiar equilibrium statistical mechanics” (Prigogine, Nicolis, and Babloyantz 1972:23-24).

Our vision of nature is undergoing a radical change towards the multiple, the temporal and the complex. For a long time a mechanistic world view dominated western science. In this view the world appeared as a vast automaton. . . . We are [now] becoming more and more conscious of the fact that on all levels, from elementary particles to cosmology, randomness and irreversibility play an ever increasing role (Prigogine 1984:xxvii).

Our critics have noted the ethics of our interventions, but also the ethics of a science that is used to maintain the status quo. Deleuze offers a new model of science that would cause a shift in this approach. He proposes a typology of “state” or “royal”, “nomad”, and “ambulatory” sciences. These all relate to how the sciences can be used in political and moral interventions.

The Royal social sciences adopt the methodology of scientific reductionism, which is an expression of the analytic, extensive state science. State science extracts laws and constants from the variations of matter. Royal science focuses on the reductive and extensive. The state seeks to “tame” the potential turbulence of hydraulic forces. To this reductive approach, Deleuze proposes the alternative of a nomad science which rejects the science based on a philosophy of identity. “. . . what is proper to royal science is to isolate all operations from the conditions of intuition, making them true intrinsic concepts or ‘categories’” (Deleuze 1987[1980]:373).

One does not go by specific differences from a genus to its species, or by deduction from a stable essence to the properties deriving from it, but rather from a problem to the accidents that conditions it and resolve it. (Deleuze 1987[1980]:362).

Nomad science focuses on the expressive and the intensive,. Nomad science is based on a “hydraulic” model of flows of energy and matter, a vortical model. Ambulatory sciences,

such as metallurgy, surveying, stonecutting subordinate all their operations to the sensible conditions of intuition and construction, they “follow” the flow of matter. For example, geography, as an ambulatory science, wrests history from the cult of necessity in order to stress the irreducibility of contingency. It rescues it from the cult of origins in order to affirm the power of a “milieu” .

A Deleuzean ontology and epistemology can improve our methodology. His notion of royal and nomad sciences addresses the problems of a scientistic rationale driven by an individual’s moral principles. Can his metaethics offer an alternative to a our moralistic interventionism?

Sociologists do not carry guns in the front lines of military interventions, nor are they asked to participate in the executions of terrorists. This is not to say that sociology has eschewed all pretensions of moral interventionism. The work of most sociologists reflects, at some level, assertoric or even apodictical normative propositions. Bringing the metaethical foundations of these propositions forward for critical investigation has not been the general practice. However, the real problem is that sociology has chosen metaethical beliefs that are ill-suited for moral interventionism. If sociology seeks to oppose oppression, basing the campaign on a commitment to moral realism leaves one armed with universal, immutable, and thus “oppressive” codes. It can put sociologists in the role of Derrida’s

“ . . . humanitarian paratroopers, human rights combined with the right of intervention as the sole means of assistance, the full bellied Western fortress giving moral lessons to those starving the world over, the morose dictatorship of a narrow oligarchy of financiers, professional politicians and TV presenters” (Badiou 2011:3-4).

The transcendent Idea capable of imposing its likeness upon a rebellious matter (Deleuze 1994[1968]:128). Hence the contradictory nature of moral improvement by imposing Western principles such as a historical, and what we see as progressive, series of oppression of population assemblages of slaves, ethnicity, gender, the subaltern. Our adoption of normative attitudes or principles toward each of these groups rests on the concept of the oppression or the other, or the political management of the non-citizen. One aspect of this series is the awarding of moral regardability to each population in turn as it reaches a threshold of moral awareness. This series is not absolute, we do not know how it will proceed. What future populations will come to be awarded moral regardability as an absolute property? Currently arguments for the moral regardability of animals and Gaia are being put forth in the discourse of animal rights and environmentalism, respectively. One does not seek universals in order to judge but singularities that are capable of creating, of producing the new.

This is perhaps the secret, to make something exist, and not to judge. If it is so distasteful to judge, this is not because everything is equally valid, but on the contrary because everything that is worthy can only create and distinguish itself by defying judgment (Deleuze 1997[1993]:169).

What is to be done with our practice?

While our theoretical discourse has pursued a revisionary metaphysics, this has not been the case in the *practice* of sociology, that is, how we research and how we intervene. The difference between theory and methodology in our discipline is that the former has resolutely challenged its foundational beliefs, while the latter has focused on the pyrotechnics of its superstructure with its ever more complicated algorithms. Our research practices have not sought to critically examine our ontological and

epistemological commitments. Likewise, our practice of social interventionism has not exhibited an interest in a revisionary metaethics. The question is how might we make changes in the practice of research and intervention.

First, what is to be done with our methodology? The first step is to critically investigate the ontological and epistemological foundational beliefs on which our traditional approaches are built. The tactical answer is that we will be best served by adding agent-based modeling to our traditional methods. Therein is the rub. The natural sciences, since about the 17th century, tended to embrace revolutionary research technologies as opposed to refining the existing instruments. The social sciences have remained remarkable loyal to their traditional quantitative methodology. “What is fundamentally lacking in the social sciences is a genealogy of research technology, whose manipulation reliably produces new phenomena and a rapidly moving research front” (Collins 1994:155).

However, sociology’s methodology is its most rigid panoply, its identity as a science. The institutionalization of sociology in America was achieved on the establishment of a unique subject and well marked academic borders. When a

. . . community is based principally on keeping people out and on defending a tiny fiefdom (in perfect complicity with the defenders of other fiefdoms) on the basis of a mysteriously pure subject's inviolable integrity then it is a religious community (Said 2002:175).

William Connolly makes a similar observation when he says that methodological debates are “. . . akin to religious ones, and like religious ones, conversions are possible, but faith is often durable even in the face of disconfirming evidence” (Connolly 2004:10). Alasdair MacIntyre notes that in order to maintain this practice of paradigm protection

there must be a source of authority. He argues that a key element in what he calls the ideology of sociology as an organization is “. . . the conventional methodology of the social sciences. One key function of this ideology is to sustain bureaucratic authority” (1998[1979]:53).

Should we get past this resistance, there are more practical problems, such as sociology’s requirements for acceptance into our graduate programs. If computational simulations require a higher level of mathematical aptitude, our adoption of this method will raise the bar for graduate students in sociology. However, our current standards are relatively lax. Graduate students accepted into sociology departments achieve relatively low GRE scores, exceeding only those of students entering departments of education (Lipset 1994). Edward Shils is even harsher in his analysis of our standards for mathematical or scientific aptitudes, arguing that the quantitative methodology of sociology is an industrial research model, “which can be taught to persons of mediocre ability and practiced by them with apparently productive results” (Shils 1970:794).

Thus, the introduction of an additional quantitative method, such as agent-based modeling, into sociology’s curriculum will not be a simple matter. There are two possible alternatives. First, sociology could continue its strategy of certifying sociologists as independent quantitative experts by expanding their tool set. This may mean significant changes in the methods curricula for advanced degrees in the social sciences. The inclusion of specialized computational methods tracks may be required.

On the other hand, sociology could recognize that the skill set for agent-based modeling may be too broad to expect that one discipline alone could prepare independent experts. In fact, agent-based modeling is well suited for interdisciplinary projects. In this approach,

research might sometimes require sociologists to partner with experts in dynamic systems and computational modeling from the life sciences or even the hard sciences. In this approach, sociologists are valued for their expertise in the methods of traditional sociological research, as well as the sociological imagination.

What is to be done with our interventionism?

Michael R. Hill argues that adopting an activist, emancipatory ideological position obligates social scientists to, at the very least, critically review their axiological commitments and epistemological premises (1984). Unfortunately, sociology's graduate students receive little guidance in these topics, and it is not clear if they are ever asked to consider these questions.²⁹ Attention to moral reasoning is limited to short workshops in the ethical treatment of research subjects. Little attention is given to the moral reasoning that determines the ethical treatment of the objects of our interventions. If sociology wants to respond to criticisms of its moralistic identity, it should look to its metaethical commitments, and encourage this conversations in its graduate curricula.

Final comments

A belief is at fault if the state of affairs it asserts does not obtain in the world. The sedentary scientific thought of sociology rests in a settled phase which recognizes degrees of immobility and immutability in things. Deleuze's ontology and epistemology offers a way out.

²⁹ Perhaps it is thought to be invasive, or perhaps droll or facetious, to question a graduate student's guiding moral propositions, or even her moral reasoning.

. . . the overriding interest of Deleuze and Guattari's nomad thought is to understand how the immobility and immutability in things might be unhinged so that new kinds of individual and social being can emerge (Patton 2006:37).

An engagement with the metaethical first principles of Gilles Deleuze can lead us to a new understanding of sociology as

. . . a model of a minor writing, subversive and subterranean, working at the molecular level, marking the forces of subjectification, identifying the social blockages to sense and desire, and mapping out lines of escape (Bogard 1998:73).

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