

Philosophical and Empirical Foundations of the Social Sciences  
Economics 6910; Government 6122; Philosophy 6422  
Fall 2018

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Monday, 5:00-7:00  
 Room: White 114

There are four questions that have shaped almost all explorations of the theoretical foundations of the social sciences. These questions involve: (a) the connection between individual experience and a general theory; (b) the role of individual comprehension and intent in human behavior; (c) the link between the individual and social collectives; and (d) the relationship between mathematics and the construction of theoretical systems.

The first question is shared with the philosophy of science generally in that individual experience (personal perception) must somehow give rise to general theories (knowledge shared with others). Although this question has been addressed in many different ways, the most fruitful approach involves the study of language as a means of constructing reality and communicating experience. The second question involves the relationship between structure (the frame within which individual action takes on meaning for other individuals) and agency (the ability of the individual to choose what meaning to communicate to other individuals). This question is, perhaps, the most important problem distinguishing the natural from the social sciences. The third question asks how explanations of individual behavior can be integrated with understandings of the ontological status of social collectives (such as the nation, a political party, the international economy, the family, and a religion). As in the natural sciences, a satisfactory answer would provide much of the basis for a unified theory. The last question asks how the language in which social science theories are communicated and understood is related to the statistical analyses in which data are presented and analyzed. This question is best addressed by understanding this relationship as the intersection of an interpretive and communicative system (language) and pure logic (the reduction of experience to well-bounded categories of data so as to enable the application of statistical analysis).

These four questions provide the backbone to this course and we will take them up in roughly that order. However, the philosophical and empirical problems that these questions address overlap quite a bit both in the abstract and in their treatment in the literature. As a result, we also both anticipate some of the later discussions as we proceed and backtrack from time to time as we reconsider issues raised in earlier sessions. Although there are better and worse ways of understanding the philosophical and empirical commitments that necessarily ground social science practice, there is no single, correct foundation to the social sciences. This course is only intended to survey the field in such a way that the student better understands just how he or she is constructing reality in their professional research and writing.

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Course Requirements:

Because this course is designed as a general survey of the vast literature on the philosophy of social science, a research paper will not be required. Instead, seventy-five percent of the course grade will be based on a take-home final conducted as if it were a small version of a doctoral qualifying examination. An additional ten percent will be allocated according to the amount and quality of individual contributions to class discussion. The remainder of the course requirements will be satisfied in the form of weekly papers on the readings (described below).

However, a student can choose to prepare a research paper of (to be negotiated) length in place of the take-home exam. This research paper should be intended for presentation in a professional forum outside of Cornell and/or publication in a professional journal.

Weekly paper assignments:

There will be weekly paper assignments which will be due by midnight on the Saturday before the class session on Monday. These papers should address five primary questions concerning that week's reading:

1) In a few sentences, briefly summarize the central argument of each of the readings.

2) At what level and in what way can these arguments be reconciled? By "reconciled," I mean integrated into a unified theoretical framework.

3) At what level and in what way do these arguments diverge? By "diverge," I mean where do they begin to rely on different assumptions with respect to, for example, the direction of causality, the relationship between perception and language, and/or how a framework for understanding individual behavior can underpin the theoretical conception of social collectives (such as the state, the family, or religion).

4) Which of the theoretical frameworks you have now described is most compatible with your own approach to the study of human behavior? Why? You may not have adopted a theoretical approach yet. If that is the case, just explain which of the readings is most intuitively appealing to you.

5) What question would you like to pose to the class? For example, were there passages in the text that seemed particularly ambiguous, confusing, or controversial?

These weekly papers should not be more than four hundred words (single-spaced, two pages at most). You can, of course, write more than that but you will also have an opportunity to bring up things in class discussion as well.

Final exam:

The final exam will have seven questions divided into two parts. Students will answer two questions from each part. The exam will last seventy-two hours with the expectation that students will write for no more than twenty-four hours (roughly the format of the doctoral examinations in the Government Department). There is no minimum or maximum page limit on this exam. Students are expected to draw upon all the readings for the course in answering these questions but are not permitted to bring outside readings into their discussions.

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Part I  
The Theoretical Foundations of the Natural and Social Sciences

First Session (August 27): Introduction.

"Philosophy of the Social Sciences," in Robert Audi, ed., The Cambridge Dictionary of Philosophy (New York: Cambridge University Press, 2001: second edition), pp. 704-706.

Recommended:

Henry E. Brady and David Collier, ed's., Rethinking Social Inquiry: Diverse Tools, Shared Standards (Lanham, Md.: Rowman & Littlefield, 2004).

Martin Hollis, The Philosophy of Social Science: An Introduction (New York: Cambridge University Press, 2011: revised and updated).

Harold Kincaid, Philosophical Foundations of the Social Sciences: Analyzing Controversies in Social Research (New York: Cambridge University Press, 1996).

Samir Okasha, Philosophy of Science: a very short introduction (New York: Oxford University Press, 2002).

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Second Session (September 10): The Common Foundation of the Natural and Social Sciences.

One of the most basic issues in the social sciences concerns the extent to which research practices and theory construction in the natural sciences should guide the study of human behavior. Although there are exceptions, most scholars would not maintain that the units and events studied by social scientists are "just like" those analyzed by natural scientists. Some social scientists would, in fact, reject the notion that the natural sciences and the social sciences share anything at all in terms of their respective orientations toward physical and social reality. There is also a somewhat muddled middle ground in this contentious terrain in which much of what the philosophy of science has produced by way of prescribing and understanding scientific practice is considered at least metaphorically useful in the social sciences but that the study of human behavior nonetheless raises issues and problems that must be separately addressed through different logics and understandings. These issues will resurface throughout the semester.

One of terrains in which these issues are both most contentious and unsettled is linguistics. Noam Chomsky, for example, seeks universal structure and principles (rules) through the study of language. Genetically determined predispositions play a central role in his theory of language, both its initial acquisition and its universal "deep structure." His approach is most akin to the natural sciences. At the other end is a more historical approach to language that emphasizes incremental change and the diversity of trajectories that languages have taken over time. Physiology plays a role in this interpretive framework but only in the determination of the range of sounds that humans may utter. Somewhere in the middle is a somewhat eclectic combination of the genetic and historical approaches that emphasizes the intertwined importance of biological and social evolution. How would you design investigations within the set of assumptions that distinguish each of these frameworks? How would you design investigations

that might enable you to select one of these frameworks as superior to the others? And, perhaps most importantly, can they be integrated in such a way that we might have a "unified" theory of linguistics or, alternatively, are they destined to go their own way forever (or at least the foreseeable future)?

Required:

Noam Chomsky, On Language (New York: New Press, 1977), pp. 103-197.  
 Guy Deutscher, The Unfolding of Language: An Evolutionary Tour of Mankind's Greatest Invention (New York: Picador, 2005), pp. 1-114, 210-59.  
 Terrence W. Deacon, The Symbolic Species: The Co-evolution of Language and the Brain (New York: W.W. Norton, 1998), pp. 11-46, 69-142.

Recommended:

Emile Benveniste, Indo-European Language and Society, Trans. Elizabeth Palmer (Coral Gables, Fla.: University of Miami Press, 1973).  
 Michael Tomasello, Origins of Human Communication (Cambridge, Mass.: MIT Press, 2008).

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Third Session (September 17): Logical Positivism.

Language is again the central theme this week. However, our orientation will not be whether and how language might be subject of scientific study but, instead, the relationship between language, on the one hand, and material and social reality, on the other. Our focus will be on logical positivism for which the central tenets are: (a) that we perceive the world through our senses; (b) that our sensory perception of the world and knowledge of that world are inextricably bound up with each other; and (c) that nothing exists apart from the world that we perceive (or can plausibly imagine that we could perceive if we had the necessary instruments and were otherwise appropriately situated). Given these tenets, science becomes a process through which the nature and principles governing the world are discovered and apprehended.

This perspective is almost irresistibly appealing for a number of reasons. For one thing, all of us organize most of our lives around its central tenets. We are, in daily practice, logical positivists. For another, most scientific research more or less presumes the same perspective (which is one of the reasons we call research results "findings," a term that implies discovery of something that already exists but was previously unknown to us). While there are serious problems with how logical positivists conceive of induction (the accumulation of perceptions and their transmutation into categories and statements) and deduction (the relationship between those categories and statements and the empirical world), these problems are more or less manageable in the natural sciences. As we shall see later in the course, they are less tractable in the social sciences...if only because the individuals and societies we study often subscribe to very different notions of empirical reality than do the social scientists who study them. But that comes later...this week we are only interested in the construction of a thoroughly logical and knowable world. This construction, among other things, carries profound implications for the way in which we use language to assert, recognize, and record facts about the world and, thus,

for the way in which language, evidence, and statistics are (or should be) mutually translatable, one into the other.

We begin with very short extracts from the work of logical positivists and a couple of their leading critics. Among other things, you should pay close attention to their conception of the correspondence between propositions (stated in language) and material reality (objects and their relations to one another). In those readings, the construction of categories and terms are often taken as "given" in the sense that our senses unambiguously present the "facts" of reality and our categories and terms, when properly formed, unambiguously align with those facts. Emile Durkheim gives us a similar understanding of categories and terms. For him, a "social fact" such as "manners of acting, thinking and feeling external to the individual" are as real as boulders in a streambed. Religious belief, for example, can and must be the object of scientific study even though we cannot locate it as a material object in empirical reality. However, as Daston and Galison illustrate, the "givenness" of taxonomic categories are, in fact, highly problematic. While they mostly focus on the natural sciences, we might apply their typology of "truth-to-nature," "objectivity," and "trained judgment" as distinct approaches to the doing of social science research and, as such, alternative methods of constructing the social world which we study.

#### Required:

Gerard Delanty and Piet Strydom, ed's, Philosophies of Social Science: The Classics and Contemporary Readings, (Maidenhead, Eng.: Open University Press, 2003), pp. 13-25, 31-69.

Peter Godfrey-Smith, Theory and Reality: An Introduction to the Philosophy of Science (Chicago: University of Chicago Press, 2003), pp. 19-56.

Steven Lukes, "Preface" and "Introduction" and Emile Durkheim, both prefaces, introduction, and chapter 1, in Emile Durkheim, The Rules of Sociological Method (New York: Free Press, 2013), pp. vii-xxxii, 3-28.

Lorraine Daston and Peter Galison, Objectivity (New York: Zone Books, 2007), pp. 3-53.

#### Recommended:

A.J. Ayer, ed., Logical Positivism (New York: Free Press, 1959).

Emile Durkheim, The Division of Labor in Society (New York: Free Press, 2014).

W.V.O. Quine, "Two Dogmas of Empiricism," Philosophical Review 60:1 (January 1951): 20-43.

W.V.O. Quine, Word and Object (Mansfield Centre, Conn.: Martino Publishing, 2013).

Alan Richardson and Thomas Uebel, ed's., The Cambridge Companion to Logical Empiricism (New York: Cambridge University Press, 2007).

Bertrand Russell, Logic and Knowledge: Essays, 1901-1950 (New York: G.P. Putnam, 1971).

Richard Bensel, "Lost in Translation: An Epistemological Exploration of the Relation between Historical Analysis and the NOMINATE Algorithm," Studies in American Political Development 30:2 (October 2016): 185-201.

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Fourth Session (September 24): Kinship, Magic, and Culture.

When reading The Elementary Structures of Kinship, you might note how the author: (1) posits the reproduction of the species through marriage as the irreducible foundation for empirical research; (2) relies on functional explanations of how marriage rules both enable alliances between groups and regulates internal stress within the group; and (3) presents the rules prohibiting incest as both negative restrictions on marriage possibility and the onset (universal opening) through which the group originally presses claims on organizing the social relations of its members. Durkheim thus concludes that the "incest taboo" is a universal characteristic of all societies, although there is variation in the specific forms in which it is expressed. Evans-Pritchard demonstrates how a belief in "magic" can organize the personal relations and organization of much of a particular society. In what way, if any, can this belief be viewed as a universal characteristic of social behavior? Referring back to last week's readings, would Durkheim classify the Azande belief in magic as a "social fact"? How would Geertz differ, if at all, with both Durkheim and Evans-Pritchard?

Required:

Claude Levi-Strauss, The Elementary Structures of Kinship (Boston: Beacon Press, 1969), read pp. 1-51, then the Prefaces to the first and second editions, and skim pp. 221-9.

Claude Levi-Strauss, "Structural Analysis in Linguistics and in Anthropology"; Lucien Goldmann, "The Human Sciences and Philosophy"; and Clifford Geertz, "The Thick Description of Culture" in Philosophies of Social Science: The Classics and Contemporary Readings, Gerard Delanty and Piet Strydom, ed's. (Maidenhead, Eng.: Open University Press, 2003), pp. 187-90, 330-41.

E.E. Evans-Pritchard, Witchcraft, Oracles, and Magic among the Azande (Oxford: Oxford University Press, 1976: abridged), Introduction (Eva Gillies) and pp. 1-64, 221-229.

Recommended:

C. Jarvie and Joseph Agassi, "The Problem of the Rationality of Magic," British Journal of Sociology 18 (1967): 55-74.

Steven Lukes, "Different Cultures, Different Rationalities?," History of the Human Sciences, 13:1 (2000): 3-18.

Todd Jones, "Interpretive Social Science and the `Native's Point of View': A Closer Look," Philosophy of the Social Sciences 28 (March 1998): 32-68.

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Fifth Session (October 1): The Nature of Hypothetical Propositions.

All social science theories must be stated in the concepts, relations, and syntax that characterize language. For that reason alone, the foundation of any social science theory rests upon the word choices the theorist makes at the very beginning of theory construction. Each of those choices, even the most apparently banal, entails theoretical commitments that restrict or enable deductive implications and empirical application. By requiring that a theory be susceptible to empirical perception, logical positivism insists that a theory be empirically grounded. This insistence, in turn, presumes (sometimes explicitly provides for) a means of translating individual perception into theoretical concepts and back again. These translations

necessarily involve language, both in terms of its underlying logical and structural possibilities and its common practice and usage.

One of the most important theorists of the relationship between language and empirical reality was Ludwig Wittgenstein. His early work provided much of theoretical foundation for logical positivism. Although he never belonged to the Vienna Circle, they readily modified their views in order to accommodate his "picture theory" of language. In his later work, however, Wittgenstein himself became a persuasive critic of that theory as he developed an alternative model which he called "language games." Perhaps the most important and widely shared principle guiding the selection of conceptual commitments in the process of theory construction is the necessity of "falsification" (that a hypothetical proposition be susceptible to disproof by way of empirical demonstration). Karl Popper gives us a strong form of the "falsification" requirement as it applies (primarily) to the natural sciences. We can thus compare three different interpretations of "statements" as representations of empirical reality this week. What are the relative implications of each one for the possibility of a social science?

Required:

A.C. Grayling, Wittgenstein: A Very Short Introduction (New York: Oxford University Press, 2001), pp. 16-134.

Karl Popper, Conjectures and Refutations: The Growth of Scientific Knowledge (New York: Harper and Row, 1968), Prefaces to the first and second editions and pp. 3-59.

Peter Godfrey-Smith, Theory and Reality: An Introduction to the Philosophy of Science (Chicago: University of Chicago Press, 2003), pp. 57-74.

Recommended:

G.E.M. Anscombe, An Introduction to Wittgenstein's Tractatus (South Bend, Ind.: St. Augustine Press, 2001).

Marie McGinn, Elucidating the Tractatus: Wittgenstein's Early Philosophy of Logic and Language (Oxford, U.K.: Oxford University Press, 2009).

Karl Popper, The Logic of Scientific Discovery (New York: Basic Books, 1959).

Karl Popper, Objective Knowledge: An Evolutionary Approach (New York: Oxford University Press, 1972).

Thomas Ricketts, "Pictures, Logic, and the Limits of Sense in Wittgenstein's Tractatus," in Hans Sluga and David Stern, ed's., The Cambridge Companion to Wittgenstein (New York: Cambridge University Press, 1997), pp. 59-99.

Ludwig Wittgenstein, Tractatus Logico-Philosophicus, trans. D.F. Pears and B.F. McGuinness, (London: Routledge & Kegan Paul, 1961).

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Sixth Session (October 15): The Interdependence of Theory Construction and the Construction of Social Reality.

Many scholars maintain that the purpose of constructing theoretical systems of social behavior is either to "understand" why people do what they do or, what often seems to amount in practice to the same thing, to "predict" what they will do in similar situations in the future. Here we want to focus

on the relation between understanding and prediction. For example, by studying the rise of absolutist monarchies and their relations with urban commercial elites, we can better understand the transition from feudalism to capitalism in early modern Europe. But we cannot predict when and where future transitions in Europe might occur because the subcontinent no longer contains a feudal society. However, we might still contend that a better understanding of the transition would improve our ability to predict similarly massive transformations in the future. In order to do that we must construct categories utilizing generalizable properties that unambiguously distinguish between actors, institutions, and events that both apply in specific historical situations (e.g., early modern Europe) and yet logically correspond to ostensibly equivalent categories in very different historical situations (such as the modern world). Very similar challenges are associated with cross-cultural analysis within the same historical period. When we do not believe that we can meet such challenges, we often say that we are setting "boundary or scope conditions" for a system. The question is whether we can set such conditions without knowing (and knowing rather exactly) what is on the other side of the boundary and thus outside the scope. If so, what we need to know is how human behavior can be explained on the other side of the boundary (an otherwise arbitrary declaration that it is "off-limits" should not be viewed as particularly satisfactory). We should also be aware that, at one extreme, we could always set boundary or scope conditions in such a way as to encompass only one, particular situation (which would thereby be designated as unique). At the other extreme, we might set no conditions on a theoretical system and thereby invite universal application both historically and cross-culturally. The construction of analytical units thus simultaneously and unavoidably implies (by extension and restriction) the definition of a "comparative field" (within which the theoretical expectations would be relevant).

This all returns us back to language because, as we have already recognized, we cannot perceive and interpret reality in the absence of language. Language, in turn, cannot organize reality without presuming both the construction of entities (such as individual people), assigning those entities properties (such as life and wills), and then inferring causal connections between those entities and social action (in the form, for example, of verbs such as winked, spoke, and prayed). Language, in other words, both contains and operates through a rudimentary social theory (actually, many partially developed, often imprecise, and sometimes inconsistent social theories). An important part of scientific practice in both the natural and social sciences involves distinguishing the language of research from everyday language by formalizing the definition of entities, establishing mutually-exclusive and exhaustive typologies of properties, and proposing empirically falsifiable causal connections. In the process, the reality we have theorized becomes socially constructed in a way that should not be confused with an "objective reality" that is independent of the perceiver. In fact, we might even say that theoretical systems often become a filter through which we perceive social reality by identifying the relevant entities and the causal relations that link them. Everything else becomes irrelevant "noise."

In the readings this week, we pay special attention to the construction and deployment of social collectives and institutions in social science theory. When you read States and Social Revolutions, pay close attention to the way Skocpol constructs, among other things, concepts such as "states" and "social revolutions." For her, these are what Durkheim considers to be "social facts" and are thus as real, as I put it earlier, boulders in a streambed. However, they also entail theoretical commitments that preclude other ways of seeing social reality. What are these commitments and how do



they preclude alternative ways of seeing? From another angle, Skocpol's conception of a "social revolution" implies a taxonomy of revolutions, some of which are "social" and others which are not. In order to construct such a taxonomy, we must first identify how the units that it classifies are defined. For example, a taxonomy of butterflies must first define what a "butterfly" is in general and only then can it specify the characteristics that distinguish one butterfly from another. William Riker takes up one of the most difficult taxonomies in the social sciences when he attempts to define an "event" so that the term can be deployed in the construction of hypotheses. Riker would, for example, consider a "social revolution" to be such an "event." Does Skocpol's conception satisfy Riker's criteria? Hempel, like Riker, believes that there are "general laws" within which we can interpret history. Does Riker's conception of an "event" satisfy Hempel's criteria for such general laws? Would Skocpol's theory of social revolutions be considered to be a (possible) general law of history?

Required:

Theda Skocpol, States and Social Revolutions: A Comparative Analysis of France, Russia, and China (New York: Cambridge University Press, 1979), Preface and pp. 3-43, 284-93.

William H. Riker, "Events and Situations," Journal of Philosophy 54:3 (January 31, 1957): 57-70.

Carl G. Hempel, "The Function of General Laws in History," in Michael Martin and Lee C. McIntyre, ed's., Readings in the Philosophy of Social Science (Cambridge, Mass.: MIT Press, 1994, pp. 43-53.

Recommended:

Peter L. Berger and Thomas Luckmann, The Social Construction of Reality (Garden City, N.Y.: Doubleday, 1966).

Louis O. Mink, "The Autonomy of Historical Understanding," History and Theory 5:1 (1966): 24-47.

William H. Sewell, Jr., "A Theory of Structure: Duality, Agency and Transformation," American Journal of Sociology 98:1 (July 1992): 1-29.

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Seventh Session (October 22): The Unity of Knowledge.

Seventy-odd years ago many scholars enthusiastically embraced the idea that all scientific knowledge could be "reduced" and "translated" (using those terms very carefully) so that it rested on a common foundation. That foundation was considered both to provide: (a) a true understanding of the real world and how it could be interrogated and (b) a mutually productive exchange of ideas and concepts as the various academic disciplines and research communities agreed on a common lexicon which, in turn, embedded a shared agreement on how the scientist related to that real world. It is almost impossible to understate the enthusiasm and fervor with which logical positivists embraced this project. In constructing their Foundations of the Unity of Science, many of them felt that they were on the verge of a sweeping revolution in the way that science and humankind interpreted and interacted with the world. From the perspective of the social sciences, however, the major problems with this project involved the reduction and translation of human behavior into this universal lexicon. Their project remains unfinished. However, the potential unification of all of the natural and

social sciences still remains a very powerful vision. One of the most ambitious and articulate descriptions of that vision is Edward O. Wilson's Consilience. Herbert Gintis has also proposed a theoretic framework for unifying the behavioral sciences. How does his approach compare with Wilson's? Some of those problems facing both approaches is the absence of empirical evidence. Consider, for example, the challenges facing archaeologists as they try to reconstruct the past. Is at least some of the necessary evidence forever lost to us? Or, alternatively, will the collection and interpretation of social evidence from our own time enable a detailed construction of past by allowing us to "fill in the gaps" in the archaeological record? As it stands now, archaeologists must often adopt a "behaviorist" stance (e.g. drawing on evidence and patterns from our own time) while simultaneously realizing that such a stance is theoretically indefensible.

Required:

Edward O. Wilson, Consilience: The Unity of Knowledge (New York: Vintage Books, 1998), pp. 3-71, 136-228.

Herbert Gintis, The Bounds of Reason: Game Theory and the Unification of the Behavioral Sciences (Princeton, N.J.: Princeton University Press, 2009), Preface and pp. 221-49.

Merrilee H. Salmon, "On the Possibility of Lawful Explanation in Archaeology" and Alison Wylie, "Evidential Constraints: Pragmatic Objectivism in Archaeology," in Michael Martin and Lee C. McIntyre, ed's., Readings in the Philosophy of Social Science (Cambridge, Mass.: MIT Press, 1994, pp. 733-746, 747-765.

Recommended:

Rudolf Carnap, trans. by Rolf A. George, The Logical Structure of the World & Pseudoproblems in Philosophy (Berkeley: University of California Press, 1967).

Russell D. Gray, Simon J. Greenhill, and Robert M. Ross, "The Pleasures and Perils of Darwinizing Culture (with phylogenies)," Biological Theory 2:4.

Otto Neurath, Rudolf Carnap, and Charles Morris, ed's., Foundations of the Unity of Science: Toward an International Encyclopedia, Vol. 1 (Chicago: University of Chicago Press, 1955), pp. vii, ix-xii, 1-27, 39-41, 42-62.

Oskar Morgenstern, On the Accuracy of Economic Observation (Princeton, N.J.: Princeton University Press, 1991: 2<sup>nd</sup> revised edition), pp. 3-39, 62-87, 137-163.

Karl Sigmund, Exact Thinking in Demented Times: The Vienna Circle and the Epic Quest for the Foundations of Science (New York: Basic Books, 2017).

Brian Fay, "General Laws and Explaining Human Behavior;" Harold Kincaid, "Defending Laws in the Social Sciences;" G.A. Cohen, "Functional Explanation: in Marxism" in Michael Martin and Lee C. McIntyre, ed's., Readings in the Philosophy of Social Science (Cambridge, Mass.: MIT Press, 1994, pp. 91-110, 111-130, 391-402,.

Paul Humphreys, The Chances of Explanation: Causal Explanation in the Social, Medical, and Physical Sciences (Princeton, N.J.: Princeton University Press, 1989).

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Part II  
Individual Comprehension, Social Relations, and the Social Sciences

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Eighth Session (October 29): Intersubjective Consensus and Science.

The very notion of a "science" (as a research-oriented community of scholars) would seem to rest upon a fundamental intersubjective consensus among practitioners with respect to what constitutes evidence, including units of analysis, the theoretical meaning of an event, and, thus, whether and how a proposed hypothesis might be falsified. But that consensus also includes a shared confidence that there is something to be discovered through research as well as what that something might be. As Kuhn suggests, these preconditions for the collective pursuit of knowledge must be relaxed lest science turn into dogmatic ritual. One of the questions that we ask this week is how far and in what ways this intersubjective consensus can be relaxed before the research endeavor becomes a metaphorical "Tower of Babel." The second question is whether there is enough intersubjective consensus in the social sciences to even say that paradigms are possible. If so, what might they look like? If not, what should we be doing if we do not construct paradigms?

Required:

Thomas Kuhn, The Structure of Scientific Revolutions (Chicago: University of Chicago Press, 1962), Preface and pp. 1-210.

Gerard Delanty and Piet Strydom, ed's, Philosophies of Social Science: The Classics and Contemporary Readings (Maidenhead, Eng.: Open University Press, 2003), pp. 70-1, 78-84.

Peter Godfrey-Smith, Theory and Reality: An Introduction to the Philosophy of Science (Chicago: University of Chicago Press, 2003), pp. 102-21.

Recommended:

Jurgen Habermas, trans. S.W. Nicholson and J.A. Stark, On the Logic of the Social Sciences (Cambridge, Mass.: MIT Press, 1967).

Imre Lakatos, The Methodology of Scientific Research Programmes (Cambridge, Eng.: Cambridge University Press, 1978).

Judea Pearl and Dana Mackenzie, The Book of Why: The New Science of Cause and Effect (New York: Basic Books, 2018).

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Ninth Session (November 5): The Self-understanding of Individuals and Interpretation of Their Behavior.

We usually assume that individuals have reasons that justify and guide their decisions and, thus, their behavior. These reasons, as a first approximation, can be revealed by asking them: "why did you do that?" However, that question frequently only provokes further questions of the same sort, rather like the three-year old who asks a parent an endless series of questions about what seems, to the parent and to the person the three-year old is curious about, to be perfectly prosaic behavior (such as waving to a

cab driver on a public street). The child's questions and the parent's answers, of course, constitute a socialization into a particular culture's social reality which we take for granted once we are properly socialized. Other cultures, including enclaves within what we consider our own, similarly socialize individuals into their own, distinctive social realities. The question this week is: How do we come to understand what is "taken for granted" in a social reality different from our own and how much must we understand of that distinctive social reality before we can interpret the behavior in such a community? In many ways, social science research often implies the cultivation of "empathy" as an interpretive technique, a technique that produces knowledge that must then somehow be transmitted to other analysts through a common language and logic. But just as empathy is not the same thing as self-understanding, the translation into a common language and logic is not the same thing as empathy.

Required:

Peter Winch, The Idea of a Social Science and Its Relation to Philosophy (London: Routledge, 2008).

Recommended:

Pierre Bourdieu, Outline of a Theory of Practice, Trans. Richard Nice (New York: Cambridge University Press, 2002).

Erving Goffman, The Presentation of Self in Everyday Life (New York: Penguin, 1990).

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Tenth Session (November 12: Micro-foundations for Macro-theories.

The micro-foundation of a theory is composed of the smallest unit of analysis and its logical relations to other units. For example, a "social act" involving at least two individuals might be such a unit. One important question is whether or not all social science theories that construct and utilize macro-concepts (e.g., the "state," "society," "religion") must have micro-foundations. "Must" in this case refers to the requirement (at least as a logical possibility) that macro-concepts can be disaggregated into smaller components that can then, after identification and analysis, be reassembled once again into these macro-concepts.

There are at least two possible ways of interpreting this possibility. On the one hand, we might require that all macro-concepts must have micro-foundations and that these can be identified (logically deduced) even if the analyst who initially created these macro-concepts failed to posit those foundations. We might thus require that we can logically deduce (and thus impute) micro-foundations for any system in which they are initially lacking. This requirement might even allow that those micro-foundations change significantly as we move up the scale from, for example, small groups in which everyone knows the others to large communities in which individuals know only a very small proportion of the others. In that case, the problem is to specify that change and work it into the larger scheme. From this perspective, to say that a system "lacks micro-foundations" indicates that the system is incomplete but does not rule out the possibility that these might be provided.

On the other hand, we might concede that some theories contain macro-concepts that logically preclude the possibility of micro-foundations. That

possibility might be precluded either because the abstract concepts in the theory actually assume that the analysis of things like "state" and "society" are not the direct product of, for example, individual acts or that the micro-foundations that are implied by the system are, in fact, contradicted by social reality (e.g., are not tenable as explanations of individual behavior). The former possibility might interpret, for example, the formation of macro-concepts (such as the "state") as the unintended consequence of individual acts in conjunction with random environmental effects. But once the state is formed, it then exhibits behavioral regularities that can be generalized into a theoretical system. The latter possibility might entail the construction of macro-concepts logically deduced from admittedly unrealistic (i.e. false) micro-foundations. In that case, only the macro-concepts enter into empirically testable propositions. In the former case, micro-foundations are dismissed as irrelevant because they cannot be connected to (produce) macro-concepts through intentional action. In the latter case, micro-foundations are invoked as idealistic extensions of the system with little or no bearing on the actual behavior of individuals. All of this is admittedly a large topic for one weekly session..

Required:

Avner Greif, Institutions and the Path to the Modern Economy: Lessons from Medieval Trade (New York: Cambridge University Press, 2006), Preface and pp. 3-57.

James D. Fearon, "Rationalist Explanations for War," International Organization 49:3 (1995) 379-414.

Paul K. MacDonald, "Useful Fiction or Miracle Maker: The Competing Epistemological Foundations of Rational Choice Theory," American Political Science Review 97:4 (November 2003): 551-565.

John F. Padgett and Walter W. Powell, "The Problem of Emergence," in John F. Padgett and Walter W. Powell, ed's., The Emergence of Organizations and Markets (Princeton, N.J.: Princeton University Press, 2012), pp. 1-29.

Recommended:

Kevin A. Clarke and David M. Primo, A Model Discipline: Political Science and the Logic of Representations (New York: Oxford University Press, 2012).

Steven Lukes, "Methodological Individualism Reconsidered," British Journal of Sociology 19:2 (June 1968): 119-29.

Karl Popper, The Poverty of Historicism (London: Routledge and Kegan Paul, 1960).

Charles Taylor, "Neutrality in Political Science;" in Michael Martin and Lee C. McIntyre, ed's., Readings in the Philosophy of Social Science (Cambridge, Mass.: MIT Press, 1994, pp. 547-570.

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Eleventh Session (November 19): The Inter-translation of Social Reality and Language.

The way in which we distinguish between different objects and actions in social reality (taxonomies and categories) is contingently related to the theoretical systems that we construct. While it is possible to create taxonomies and categories that lack a theoretical rationale (in the sense that they do not anticipate use in theoretical propositions), all theories

create taxonomies and categories. One of the major questions in the study of social behavior is whether the individuals who are studied must recognize and understand the taxonomies and categories with which the analyst constructs a theory in the same way as the analyst. This would be the case, for example, in systems in which individual (or collective) intention and meaning played a central role because the analyst would insist that the actor's intention and meaning constituted the empirical material addressed by the theory. However, those systems that downplayed individual (or collective) intention and meaning might very well construct taxonomies and categories that the individuals and societies do not rely upon in their organization of social reality in everyday life. There are, of course, many possible variations between these two extremes. This week we are thus primarily concerned with the way "social reality" as empirical data is categorized and classified by language both from the perspective of the individuals who are analysed and by the analyst. We will also discuss Wittgenstein's attempt to provide a non-idealistic grounding for mathematics and logic. The question in this reading is: What is mathematics and logic in relation to social reality?

A brief note on this last question: Many, if not most, social scientists distinguish between: mathematics (e.g., statistics) as an instrument for discerning patterns in human behavior and language as the form in which those patterns and relationships are articulated, summarized, and interpreted. In some instances (e.g., game theory), research primarily uses language to define symbols, categories, and concepts and the logical relationships between them. While this research may offer real world examples as illustrations as to how the findings might entail empirical applications, these examples normally use language sparingly and, in addition, do not constitute "tests" of what the research has produced. Instead, the abstractions and logical deductions employ theorems and assumptions that are similar to those in mathematics in that they are basically tautological and self-contained as a logical system. If the analysis does not produce empirical implications, the only conclusions that are produced are other logical statements entirely composed of symbols that bear no clear (meaning possibly falsifiable) relation to social reality. The logical manipulation of symbols thus constitutes the primary form of data analysis. If the analysis does produce empirical predictions, those implications must be "retranslated" into ordinary (academic) language that relate the prediction and its logical derivation to empirical evidence.

By contrast, most social science research interactively engages empirical evidence. In this engagement, induction and deduction are almost seamlessly interwoven into research. As "pure types," neither induction nor deduction alone can give rise to a scientific theory. However, in practice, they do combine in a process that produces categories and concepts that "strip" social reality of unnecessary complexity (e.g., both irrelevant general properties and idiosyncratic detail). This process necessarily turns thick description into a lexicon of abstract concepts. These abstract concepts both generate and are subsequently deployed within their own logical system. That deployment produces propositions that can be "tested" against social reality. In those tests, the concepts are made empirically relevant (i.e., turned into language in the ordinary sense) through rules of application (e.g., formal definitions that describe what characteristics a social situation must display in order to count as a case of something). Colloquially, this retranslation of "abstract concepts" into "ordinary language" is often referred to as "operationalization."

The important thing to note is that both approaches (the first involving the manipulation of symbols with "pure logic" and the other interactively producing categories and concepts by observing actual behavior)

move between forms of ordinary language and more or less formal logics composed of abstract concepts, categories, and relations. But it is also important to note that the way in which we analyse these moves differs in significant ways depending on: (a) what kind of system it is; and (b) what the analyst states as his or her intention. In some (and perhaps most) cases, we must distinguish between the analyst actually does in making these moves and what they say they are intending to do.

Required:

John R. Searle, The Construction of Social Reality (New York: Free Press, 1995), Introduction, chapters 1-6 (skim 7-9), and conclusion.

Steve Gerrard, "A Philosophy of Mathematics between Two Camps," in Hans Sluga and David Stern, ed's., The Cambridge Companion to Wittgenstein (New York: Cambridge University Press, 1997), pp. 171-197.

Recommended:

John R. Searle, Making the Social World: The Structure of Human Civilization (N.Y.: Oxford University Press, 2010).

Richard Swedberg, Max Weber and the Idea of Economic Sociology (Princeton, N.J.: Princeton University Press, 1998), pp. 3-107.

Brian Epstein, The Ant Trap: Rebuilding the Foundations of the Social Sciences (New York: Oxford University Press, 2015).

Michael Dummett, "Wittgenstein's Philosophy of Mathematics," Charles S. Chihara, "Mathematical Discovery and Concept Formation," and Charles S. Chihara, "Wittgenstein and Logical Compulsion," in George Pitcher, ed., Wittgenstein: The Philosophical Investigations (Garden City, N.Y.: Anchor Books, 1966), pp. 420-76.

Wittgenstein's Lectures on the Foundations of Mathematics: Cambridge, 1939, ed., Cora Diamond (Chicago: University of Chicago Press, 1976).

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Twelfth Session (November 26): Philosophical and Methodological Diversity within Economics.

As even the most superficial survey of the various disciplines that comprise the social sciences will demonstrate, the study of human behavior proceeds along many distinctive trajectories, each of them resting upon mutually incompatible assumptions concerning the nature of social knowledge and the way in which that knowledge can be produced. We might ask how these separate and distinctive orientations toward the study of human behavior are theoretically justified and maintained. If we attempted to answer that question, we would probably start by studying how the various social science disciplines maintain and insist upon their (relative) autonomy from one another when, at least superficially, at least all but one of them (and probably that one as well) must be "wrong" in the sense that they are each grounded in a mistaken fundamental assumption concerning the primary principles governing human behavior.

That, however, is too ambitious. So we will instead focus on just one discipline, economics, which is both commonly perceived as one of the most internally coherent disciplines in terms of its foundational assumptions and, also, the closest in form to the natural sciences. We will start with Friedman's "The Methodology of Positive Economics" which proposes that

logical propositions might never do any more than suggest forms of social reality. Despite often harsh criticism, this article remains one of the most important methodological and theoretical statements in the field. We will also examine: (a) some of the issues raised by the application of economic research to policy questions; (b) whether or not macroeconomics needs micro-foundations; (c) the practical role of experiments in research and the relationship of the results of those experiments to theoretical frameworks; and (d) the theoretical implications of alternative ways of imagining the market. How compatible are the foundational assumptions in the readings this week? How would you precisely locate their differences? Are those differences theoretically irreconcilable? Are they empirically resolvable in the sense that more evidence might demonstrate that one theoretically preferable to another? Or, alternatively, are these differences generating self-perpetuating "schools of thought" that, within a somewhat more restricted range, mirror the diversity in the social sciences in general?

Required:

Daniel M. Hausman, ed., The Philosophy of Economics: An Anthology (New York: Cambridge University Press, 2008), pp. 143-87, 226-50, 315-55, 378-98, 431-53, 476-509.

Recommended:

M. Black, Perplexities: Rational Choice, the Prisoner's Dilemma and Other Puzzles (Ithaca: Cornell University Press, 1990).

Pierre Bourdieu, "Force of Law: Toward a Sociology of the Juridical Field," trans. and introduction by Richard Terdiman, Hastings Law Journal 38 (July 1987): 805-853.

Thomas F. Gieryn, "Boundary-work and the Demarcation of Science from Non-science: Strains and Interests in Professional Ideologies of Scientists," American Sociological Review 48:6 (December 1983): 781-95.

Joseph A. Schumpeter, History of Economic Analysis (New York: Oxford University Press, 1954).

Richard Swedberg, Principles of Economic Sociology (Princeton, N.J.: Princeton University Press, 2003).

Alexander Rosenberg, "If Economics Isn't Science, What Is It?"; in Michael Martin and Lee C. McIntyre, ed's., Readings in the Philosophy of Social Science (Cambridge, Mass.: MIT Press, 1994, pp. 661-674.

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Thirteenth Session (December 3): Mechanisms and Dreams.

Most of this week will be devoted to a review of the semester's readings and discussions. We will, however, begin by briefly looking at several topics that, in different ways, suggest the outer limits of what we might ever be able to state in a form that might qualify as intersubjective knowledge (in short, as a social science). For example, "social mechanisms" are, in at least some versions, a kind of half-way house between full-fledged social science theories and "local" (meaning tightly circumscribed in time and space) generalizations. Pay close attention to the metaphorical content of the term "mechanism" because it is doing a lot of work in these articles. But the concept itself appears to concede that we can never do any better than these "local" generalizations. These generalizations are still useful but their practical application would appear to be both partial (in the sense



that they may or might not be relevant in another situation and, even if they fit, the fit would be incomplete) and demand a kind of tacit knowledge on the part of the user (e.g. an expertise gained through practice, like learning to ride a bicycle, that can only be partially communicated to another person). Dreams and "social frameworks" present different kinds of problems.

Required:

Peter Hedstrom and Richard Swedberg, "Social Mechanisms: An Introductory Essay" and Thomas C. Schelling, "Social Mechanisms and Social Dynamics" in Peter Hedstrom and Richard Swedberg, ed's., Social Mechanisms: An Analytical Approach to Social Theory (Cambridge: Cambridge University Press, 1998), pp. 1-31, 32-44.

Sigmund Freud, "The Dream Work"; Erving Goffman, "Primary Frameworks" in Gerard Delanty and Piet Strydom, ed's, Philosophies of Social Science: The Classics and Contemporary Readings, (Maidenhead, Eng.: Open University Press, 2003), pp. 121-4, 202-5.

Recommended:

Stuart Glennan, "Ephemeral Mechanisms and Historical Explanation," Erkenntnis 72:2 (2010): 251-66.

Julian Reiss, "Do We Need Mechanisms in the Social Sciences?" Philosophy of the Social Sciences 37:2 (June 2007): 163-84.

Harry Collins, Tacit and Explicit Knowledge (Chicago: University of Chicago Press, 2013).