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Skidmore College

Michael Griffiths
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Advisors:
Clinton Cooper
Roy Rotheim

[EPISTEMOLOGY OF THE SOCIAL SCIENCES]

A proposed self-determined major studying the methods of knowledge acquisition, theory building, and the basis for knowledge in the social science by focusing on economics, psychology, and sociology.

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MAJOR PROPOSAL

I am proposing a self-determined major in the Epistemology of the Social Sciences. I would like to study the methods of knowledge acquisition and theory-building in the social sciences; especially, economics, psychology, and sociology, as these three disciplines encompass a wide variety of different methods of knowing.

I am motivated by a desire to understand both the sources of knowledge in the social sciences, and also the 'quality' – insofar as that can be determined – of that resulting knowledge. I believe that any study of the social sciences must begin with an investigation into the attributes and limitations of knowledge; in a word, its epistemology.

My goal is to be capable of keying into the limitations of knowledge in all aspects of the social sciences, to locate and criticize unjustified conclusions, and to be able to determine what methods are necessary to justify a given conclusion.

HISTORY

My decision to study the epistemology of the social sciences has evolved over the course of my college career. I arrived at college with one goal: to learn how to think. I thought that a liberal arts background would give me the solid foundation necessary to begin understanding the world. I began with the hypothesis that economics was a useful discipline in pursuit of that goal; however, I found that while my first economics class at Skidmore did a good job of instructing me in the basic idea of economics, that the class avoided the very topic I was interested in: how to approach thinking about the world. Instead, "Introduction to Microeconomics" seemed to entail imposing a pre-determined framework on the world and seeing what the framework told us about how the world worked. Even though we were informed that the idealized framework never occurred in reality--and thus it was mainly a study of exceptions--the assumption that the idealized framework was true seemed to remain the basis for the discipline.

I took this niggling worm of concern with me to my second semester, where I was exposed to two things that further stimulated my thinking. The first was during my Survey of Philosophy class, where we read Descartes' *Meditations*. I found myself compelled by Descartes' radical skepticism over his accumulated knowledge; as an introduction to his First Meditation, Descartes' explains that:

IT IS NOW SOME YEARS SINCE I DETECTED HOW MANY WERE THE FALSE BELIEFS THAT I HAD FROM MY EARLIEST YOUTH ADMITTED AS TRUE, AND HOW DOUBTFUL WAS EVERYTHING I HAD SINCE CONSTRUCTED ON THIS BASIS; AND FROM THAT TIME I WAS CONVINCED THAT I MUST ONCE FOR ALL SERIOUSLY UNDERTAKE TO RID MYSELF OF ALL THE OPINIONS WHICH I HAD FORMERLY ACCEPTED, AND COMMENCE TO BUILD ANEW FROM THE FOUNDATION, IF I WANTED TO ESTABLISH ANY FIRM AND PERMANENT STRUCTURE IN THE SCIENCES.

The idea of questioning all one's accumulated knowledge, and creating a solid foundation from which to construct a towering edifice of knowledge is one that has substantially influenced the construction of my major. I wish, in essence, to do just that; but unlike Descartes, I do not have faith in my ability, without further study, to distinguish between what is true and what is false across different contexts and to determine the boundaries of what I can know based upon how that knowledge was generated.

While I began to seriously consider the boundaries of what I could know personally, it was not until later in the semester that I began to question, in the same way, the accumulated knowledge of the academic disciplines. By happenstance, I had acquired a book written forty years ago called **THE SOCIAL CONSTRUCTION OF REALITY** written by sociologists Peter Berger and Thomas Luckmann. I picked the book up while shopping for books for my Sociological Perspectives class and, as the material seemed related, tried to read it during the semester. Berger and Luckmann make a point that has stuck with me since then: all institutions, after their creation, appear to new members as complete and immutable. I found the conclusion pertinent to myself if I interpreted each academic discipline that I was studying as an institution. If academic disciplines appeared as complete and immutable to students such as myself, then I could not rely on the accumulated bodies of knowledge – and the status quo – to determine what I studied and how I thought because I would be influenced by the seeming completeness and clarity of knowledge and attitudes within the discipline; and not the underlying reality. I would have to do my own investigation into the sources of that accumulated knowledge to successfully approach the truth.

As I struggled to articulate the doubts my first two semesters at Skidmore had left me, I took two classes in my third semester that expanded my thinking about knowledge and its acquisition. Introduction to Psychology reintroduced me to the scientific method as a way of slowly constructing a body of knowledge according to a standardized methodology. I found this concept to be a different way of thinking about difficult to measure phenomena than intro classes in economics, sociology, and philosophy that seemed to rely on grand theories to explain the world – never mind how one goes about proving them. I was also exposed to possibly the least scientific method possible: qualitative data analysis through participant observation. During my class Studying Student Worlds, I participated in research that relied on using one's own limited perception and biases to acquire knowledge; a methodology that creates very deep, but also very narrow (in that it cannot be generalized) data. My direct exposure to these two methods of acquiring knowledge moved my thinking towards studying those methods as a way of determining the quality of the resulting knowledge; in other words, to what extent can one generalize, explain, or predict things – and in what contexts.

I had developed an idea of what I was actually interested in studying as I entered my fourth semester. However, it was not until the end of the semester that I made the jump to attempting a self-determined major; I thought I could study my area of interest within the boundaries of two traditional majors. I was influenced by both Professor Rotheim, and a class he presided over: Citizen Studentship. The Citizen Studentship class was forcefully unstructured – a class designed to allow students to approach the concept of what it means to be a citizen and how being a student influences and drives that citizenship. I found that the class helped me focus on what I needed to do as a student; as a citizen, I have a

responsibility to use my judgment to contribute to society, and as a student, I have the obligation to ensure that my judgment is the best I can make it. For me, that involves determining what I can know.

DESCRIPTION

This self-determined major is concerned with the nature and scope of knowledge in the social sciences. The primary purpose of this major is to enable me to understand, evaluate, and criticize the methods of acquiring and building knowledge in the social sciences.

EPISTEMOLOGY

The epistemology of the social sciences is a sub-topic of the philosophy of social science; an area of study with a substantial amount of literature available. By a study of epistemology, I mean the study of what is knowledge in social science, how knowledge is acquired in social science, how knowledge is justified, and how social scientists come to know what they know.

My major will necessarily entail a basic study of ontology, which is how people classify reality. In the social sciences, ontology covers the assumptions social scientists hold about reality: how they see the world. Nonetheless, while I believe that an examination of the assumptions about reality in social science is essential for a study of epistemology, my primary focus is on that epistemology – given assumptions, the methods scientists use, and their limitations.

My focus on epistemology means that I will concentrate on the methods employed in the social sciences, the history of those methods, and the knowledge resulting from those methods.

SOCIAL SCIENCES

The social sciences are disciplines that study individual and group behavior, and include anthropology, economics, geography, history, political sciences, psychology, social studies, and sociology. I have chosen to focus on the disciplines of economics, psychology, and sociology for two reasons. First, because each employs different ways of knowing and together they are largely representative of all social science. Second, because within social sciences these three disciplines have the most crossover in area of study. While each discipline within social science customizes its methodologies, the epistemological basis for each methodology remains largely unchanged. I hope that by studying three disciplines, I can determine how to criticize each method independent of its theoretical framework, and furthermore why each discipline customizes its methodology and what impact that has on theory in that discipline.

The diagram on the next page (Figure 1) is a simple approximation of the relationships between the disciplines within social science in light of the three disciplines I selected, using a “nearest neighbor” approach. A more exhaustive diagram would be considerably more complicated, as methods are not strictly limited by discipline; political science, for example, uses methods present in multiple disciplines, not just economics. In addition, single thinkers have developed methods used across multiple

disciplines; for example, Karl Marx is claimed as an economist, a historian, a political scientist, and a sociologist depending on the discipline.

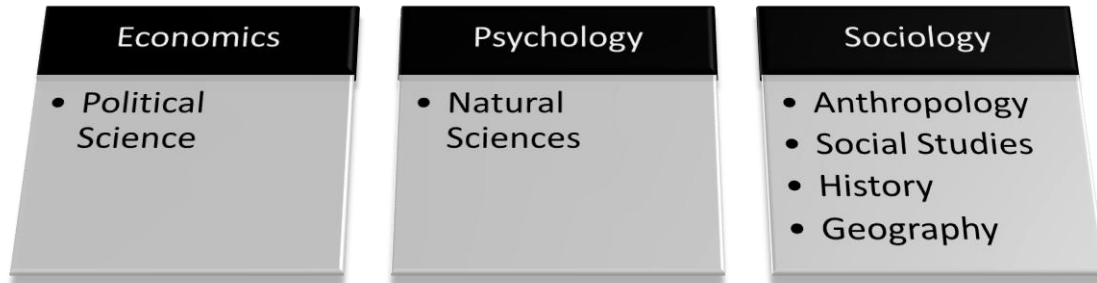


FIGURE 1: SUMMARY OF HOW DISCIPLINES RELATE

Political Science shares methods with economics, such as the use of models and statistical analysis. Psychology, unlike most social sciences, has a foundation in laboratory experiments thanks to the Behaviorist movement in the early 20th century. Sociology shares methods with most of the other social sciences; it is very close to, and has borrowed methods from, anthropology; shares some theoretical perspectives with history, and geography, and covers much of the same ground as social studies.

METHODS IN SOCIAL SCIENCE

I have included a matrix of the different methods each chosen of my chosen disciplines uses, in general, to acquire evidence and from there create theories and construct knowledge (Table 1). There are certainly exceptions to this framework within each discipline, but the focus, particularly on undergraduate work, remains confined within the traditional boundaries of the discipline.

TABLE 1: SUMMARY OF METHODS OF COLLECTING EVIDENCE ACROSS THE DISCIPLINES

Type	Method	Psychology	Sociology	Economics
Observation	Naturalistic (Passive)	Yes	No	No
	Participant (Active)	No	Yes	No
Testing	Correlation (Statistical)	No (some, exploratory)	Yes	Yes
	Cause (Laboratory)	Yes	No	No (some recent)
	Modeling	No (some)	No (some)	Yes
Interactive	Interview (Structured)	Yes	Yes	No
	Interview (Unstructured)	No (not serious)	Yes	No

I believe that having an in-depth understanding of how each method influences the collection of evidence and the creation of theories is essential to understanding the scope, or limitations, of those theories; in essence, what knowledge is justifiable given the limitations of the core method of acquiring knowledge. One pertinent example of this error is the fallacy in naming the Fundamental Attribution Error. The term was coined in 1967 in a psychological paper that found people tend to over-attribute

observed behaviors to people's personality instead of their situation: for example, calling drunk students idiots instead of considering them normal, but merely intoxicated. This error was thought to be fundamental to humans for over a decade; however, that conclusion was not justified based on the methods the psychologists used to arrive at that conclusion. The research participants were from exclusively Western cultures, and when researchers began testing Asian cultures, they not only failed to find the Fundamental Attribution Error, but in some cases found that people over-attributed in the other direction. The initial conclusion was an over-generalization not justified by the methods the scientists employed.

My goal is to be capable of keying into the limitations of knowledge in all aspects of the social sciences, to locate and criticize unjustified conclusions such as overgeneralizations, and to be able to determine what methods should be employed to arrive at a desired conclusion.

REQUIRES A SELF-DETERMINED MAJOR

I am unable to complete my course of study within the boundaries of a traditionally defined major because my area of focus encompasses multiple disciplines; relying on one major would bar me from the breadth of study that a study of epistemology of the social sciences demands.

While I have toyed with the idea of undertaking everything from a triple major to some combination of interdepartmental majors – all of which remain possible before I graduate – each of them involves scaling back my overarching goal of understanding, evaluating, and criticizing knowledge across the social sciences. Furthermore, the major I have outlined is substantially different in form from a traditional major, and a traditional discipline does not encapsulate my area of study, even if it involves some of it.

The flexibility of a self-determined major allows for a broad and deep interdisciplinary study of knowledge without over-emphasizing any one discipline, or shortchanging a component of my study.

SENIOR PROJECT

My study of the epistemology of the social sciences will equip me to understand, evaluate, and criticize theories in the social sciences. I believe that the best demonstration of my education would be a senior thesis that performs an in-depth dissection on an area of study shared by each of the three disciplines of economics, psychology, and sociology. I expect my thesis to involve a detailed evaluation of the methodology in at least three theories, one from each discipline, a criticism of the conclusions the researchers draw, and an analysis of which methods should be used to study the area of knowledge that would give the best justification for the conclusions the researchers are looking for. My senior thesis will be an opportunity to apply an epistemological analysis to a single area of study. It is too early for me to propose a specific area of study to examine with my senior thesis; I expect to choose an area of study at the end of my junior year after further research; I need to ensure that the area of study I choose is rich enough to warrant an in-depth epistemological analysis.

EXAMPLE

For example, if research was available, I could study the current financial crisis from an economic, psychological, or sociological perspective. The economic perspective might emphasize the breakdown of market structure due to lack of information - a fundamental requirement for a market; perfect competition is also one of four requirements for a perfectly competitive market. The less information available in the market, the less possible it is for a competitive market to form. The psychological perspective might emphasize the behavior of individual traders, and how they reacted to new information. The sociological perspective might emphasize the socio-structural form of the financial markets, and how both individual behavior was heavily influenced by that structure and the system reacted and changed over the course of the crisis. I would examine the epistemological basis for each perspective, based on the research available, isolate which conclusions were possible given the source data and methodology, and compare the actual conclusions of each perspective with the possible conclusions I would also criticize the methodology and reasoning of each perspective with the aim of isolating weaknesses and suggesting improvements.

POST-SKIDMORE

I am committed to the pursuit of knowledge beyond Skidmore, and I believe my proposed major positions me to begin a serious study of any of the social sciences. One purpose of my proposed major is to train me on how to think about knowledge; its acquisition and its quality. The focus is specific enough to transfer well to an intensive general study of one of the three disciplines, and general enough to apply to any source of knowledge I am likely to encounter.

My plans for graduate school are currently vague, as I am examining multiple possible options. A simple choice is between choosing one discipline and studying it in depth, or attempting to continue an interdisciplinary study of methods. For example, a general focus would be the Master's Program in **QUANTITATIVE METHODS IN THE SOCIAL SCIENCES** at Columbia, which would extend my studies from the foundational question of epistemology to the more specific domain of actual methods. Alternatively, I could choose to study one discipline in depth, for which I would currently lean towards Economics, and draw on the skills, knowledge, and perspective I develop at Skidmore to add depth to a Master's Program.

While my preference is for graduate school, I am spending some time ensuring that I could choose to enter the business world as well. In this case, I would most likely plan to go into the management consultant industry. My father is an ex-McKinsey management consultant; having both worked for him in the past and grown up listening to him, I have some minimal experience of what the job entails and how to approach entering the industry. Indeed, I attribute a good deal of my interest in the epistemological foundations of the social sciences from discussions and stories from my father. Most of his career involved taking assumptions about how a business worked, determining which were not justified, and inventing new assumptions that more closely resembled reality to drive the business. Furthermore, I am currently under contract by a management consultant in Atlanta and will continue to network in the industry. I believe that a likely course of action if I entered the workforce immediately after Skidmore would be to enter a Master's Program after a few years; though there remains the possibility that I would diverge and choose to obtain an MBA instead.

I expect my choices to become more defined over the course of my studies and after additional research.

CLASSES LIST

In choosing the classes for my proposed major, I have focused on four areas of study: (1) BACKGROUND, (2) HISTORY, (3) METHODS, and (4) EPISTEMOLOGY. I believe that I need a certain basic knowledge of theory in each discipline before I can embark on a rigorous examination of the justifications for that theory, which is my motivation for taking BACKGROUND classes. To deepen my understanding of theory, and specifically why some theories are employed and others are not, I think that it is important to understand how theories in each discipline became popular, which is my reason for studying the HISTORY. Finally, I choose to study EPISTEMOLOGY to give me the tools to criticize METHODS, and METHODS to understand and thus criticize the justifications for knowledge in each discipline.

ID	Title	Type
EC-104	Introduction to Microeconomics	Background
EC-105H	Introduction to Macroeconomics	Background
EC-339	Applied Econometrics	Methods
EC-355	History of Economic Thought	Epistemology
EC-371	Theory Building in Economics	Methods
EC-371	Ontology and Epistemology in Economics	Epistemology
ID-371	Epistemology in the Social Sciences	Epistemology
PH-207	Logic	Epistemology
PS-101	Intro to Psychology	Background
PS-306	Experimental Psychology	Methods
PS-318H	Statistical Methods in Psychology II	Methods
PS-371	History of Methodology of Psychology	History/Epistemology
SO-101	Sociological Perspectives	Background
SO-227	Social Research Design	Methods
SO-325	Contemporary Social Theory	History
SO-332	Studying Student Worlds	Methods

CLASSES BY SEMESTER

Semester	ID	Title	Credits
1	EC-104	Introduction to Microeconomics	4
	EN-105H	Sanity and Madness	4
	HF-101	First-Year Honors Colloquium (for Class 2010)	1
	MB-107	Business Organization/Management	4
	PA-119C	Strength and Aerobic Fitness	1
	SSP-100	Voting and Game Theory	4
2	AN-205	Mesoamerican Archaeology	3
	EC-103H	Honors: Introduction to Macroeconomics	4
	MA-202	Calculus III	4
	PA-112C	Beginning Weight Training	1
	PH-104	Survey of Philosophy	3
	SO-101	Sociological Perspectives	3
3	AR-132	Form and Space	4
	EC-236	Microeconomic Theory	4
	PS-101	Introduction to Psychology	3
	SO-202	Individual in Society	3
	SO-332	Studying Student Worlds	4
4	EC-361	Math for Economists	3
	EC-361	New Institutional Economics	3
	HF-203	Citizen Studentship	4
	MA-270	Differential Equations	4
	PS-210	Personality	4
5	EC-361	Applied Econometrics	3
	EC-255	History of Economic Thought	3
	PS-211	Applied Psychology	4
	PS-306	Experimental Psychology	4
	SO-325W	Contemporary Social Theory	4
6	PH-207	Logic	4
	PS-371	History and Methodology in Psychology	3
	EC-371	Ontology and Epistemology in Economics	3
	HF-371	Epistemological Dimensions	1
	GO-304H	Modern Political Thought	4
	MC-316	Numerical Algorithms	3
7	MA-303	Advanced Calculus	4
	ID-371	Epistemology in the Social Sciences	2
	ID-371	Senior Thesis	3
	PS-318H	Statistical Methods in Psychology II	3
	SO-227	Social Research Design	3
	HF-371	Epistemological Dimensions	2
8	ID-371	Senior Thesis	3
	PS-317	Psychological Testing	4
	CL-311	Seminar in Latin Prose Literature	3
	EC-371	Theory Building in Economics	3
	PH-371	Metalogic	3