

Sociology 507: Logics and Strategies of Social Research

Class Meeting: Fall, 2007: M W 9:30-11:00, 3242 LS&A

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Office Hours: Tuesday 2-5pm in Dennison 721 or by Appt.

Overview:

This class is designed to offer a general overview of the issues and approaches that dominate the contemporary practice of sociological research. The readings and discussions will proceed from dual assumptions: (1) all methods for empirically examining social phenomena encounter the same general set of problems; and (2) individual methods address these challenges in different fashions with attendant strengths and weaknesses. Thus, a strong approach to sociological inquiry is one that draws knowledgeably upon multiple methods. The purpose of this course is to provide a basic language and conceptual framework that will allow you to pursue your own research with a clear view of the tradeoffs involved in making (necessary) methodological choices.

To that end, this class is organized into four 'modules' each of which lasts several weeks. The general topics are as follows

- I. The Grounds of Debate (Ontology, Epistemology, and Sociology)
- II. General Problems in Research Design
- III. Methods for Empirical Inquiry
- IV. Life as a Sociologist

Requirements

Readings

Readings available online via ctools

Assignments

Evaluation in this course is based upon six primary assignments (below) and upon class participation. The assignments follow. Please do not hesitate to contact me with any questions you might have. All written assignments must be double spaced in a 12 point font of your choice. **I will accept hard copies of your assignments but prefer that you submit them via the Drop Box feature in ctools.**

Assignment 1 “First Formulation of a Research Project” (CONDUCTED IN CLASS ON THE FIRST DAY)

One of our biggest challenges as social scientists is transforming a general topic of interest into a concrete research problem. This exercise is designed to help you do that by taking you through a series of steps that refine and elaborate a topic that interests you.

The topic you select and work on today should provide the basis for future assignments. This is a first pass, and it will not be graded. Going through a series of steps to formulate a research problem is an essential component of your learning in this class and of sociological research more generally. We will return to your topics and questions in assignments and discussion throughout the course.

Formulating a question

Step 1: Select a topic. Begin with a broad topic or subject area that is of particular interest to you and that you are interested in pursuing further. You’ve probably considered several possible research projects already, now pick one to develop. I, for instance, am interested in the broad topic of novelty and innovation. Write down your general topic area.

Step 2: Add modifiers and key terms. General formulations and topic statements don’t get you very far down the road to a doable and interesting sociological research question. In order to more clearly specify your interests add a set of modifiers and key terms to your topic statement. I for instance am interested in the “organizational and institutional contexts for innovation and novelty in science and technology.” Write down one or more modified topic sentences.

Step 3: Ask questions about causes and effects. Adding modifiers and key terms moves you toward a more specific topic, but doesn’t necessarily require you to think about causes and effects. Sociological research that uncovers causal relationships among phenomena is among the most powerful. Continue modifying your topic sentence to specify potential causal relationships between your key terms. I might, for instance, reformulate my topic to ask “how does the organization of scientific work influence the quality and type of findings produced by a research group?” Of course you could also turn the causal arrow around by asking “how does the type of research a group does drive the organization of its work?” Whichever causal direction you chose, you are a step closer to a testable formulation. Write down at least one cause and effect question for your topic.

Step 4: Operationalizing your key terms. So far so good. The next step is to identify the key concepts in the formulation you are developing and to operationalize them by generating specific definitions that point toward things you can empirically measure or document. Both of my causal questions link

the “organization of work” to the “character of science.” This step asks me to define those two concepts in a fashion that allows them to be observed in the world.

I might define the ‘organization of scientific work’ in terms of (1) Size: the number of researchers in a group, (2) diversity: the number of disciplines they represent, and (3) hierarchy: the degree of direct control senior group members exercise over junior researchers.

Likewise, the ‘character of science’ might be represented by (1) Outputs: the type of outcomes a group produces, patents? publications? both?, (2) volume: number of publications/patents, and (3) impact: citations to patents and publications.

It is usually a good idea to use multiple, converging definitions to operationalize complex concepts. For the purpose of this exercise, though, focus on specifying a single definition for (1) a dependent variable (the thing you want to explain) and (2) an independent variable (the thing you think explains your dependent variable). Write down at least one set of operational definitions of independent and dependent variables.

Step 5: Thinking about data and research sites. Now that you know what you want to observe, it’s time to reflect on how you might actually go about collecting data that can provide insight into your topic. Ask yourself “what kinds of settings might lend themselves to my research question? Where could I go to observe my problem in action? Has someone else already collected data that will serve my purposes?” Write your ideas about settings and types of data here. I might pursue my question, for instance, by selecting a set of scientific laboratories that vary on one or more of my organizational definitions. I might proceed by collecting the publication records of the group and interviewing scientists about their work. Write down some thoughts about settings and types of data here.

Mediating and Moderating Influences

Now it’s time to stretch our brains a little bit by addressing two of the complications that commonly arise in social scientific research. Conceptual models that only specify simple cause relationships often seem less than realistic and may miss the interesting, though complex, features of social systems. One way to elaborate your research question to take such factors into account is to formulate statements about the processes that mediate your conceptualization. Another approach focuses more on identifying moderating influences.

Step 6: Thinking about mediators. Mediators are factors or processes that intervene between an independent and dependent variable. Such factors and processes can be difficult to stretch your brain around, but start by asking yourself whether you can think of an intermediate stage in the causal process you sketched above. For instance, I might wonder how the ethnic and gender diversity of laboratory groups affects work organization and research outputs,

which might lead me to specify the mediating influences scientific recruitment and retention efforts have on the relationship between organization and innovation in research. Write down an idea about possible mediating processes in your research question. Try to move from general ideas (e.g. demographic diversity may mediate between organization and innovation) to more specific concern with processes (e.g. recruitment and retention processes mediate between . . .). This is not easy, so don't worry if you have trouble making the leap at this point. Regardless, give it a try.

Step 7: Thinking about moderators. You might also choose to elaborate your question by thinking about influences that modify the strength or causal direction of the relationship between your independent and dependent variables. For instance, I might wonder how the degree of competition in a field (operationalized as, for instance, the number of different research groups working on the same problem) might affect the *relationship* between work organization and scientific innovation. One possible hypothesis would suggest that organization is more tightly linked to innovative outcomes in highly competitive fields because competition increases the speed with which research must be conducted and evaluated. Write down your first thoughts about the moderators that might be important to your research problem here.

Audience and Impact

You've now done a lot of work to help turn a general topic of interest into a doable sociological research question. That's an essential component of any effort to develop a project or write a proposal. There are, however, other concerns. Notably, you need to think through the features of your project that might interest other people; people who will often have little intrinsic interest in the topic that fascinates you.

Step 8: Why should people care about your topic? Now that you know something about what you plan to study, step back for a moment and ask yourself why your research topic might be seen as important by the world at large. What significance might it have for society? This might seem obvious to you, but specifying the breadth and character of a topic's importance is a good way to strengthen both research proposals and articles or books. Ask yourself "What groups have an interest in my topic? What kind of interest? Why? How might interested groups use my findings? To what end?" Write down some thoughts about the significance of your problem. As we shall see, this sort of 'interest and use' test can also help you think about ethical questions raised by your project.

Step 9: Why should other *sociologists* care about your topic? The question of why other scholars should be interested in your question is equally important. This question is particularly challenging in our field. Sociologists study all manner of things. For instance, I doubt any of you are developing questions similar to the ones I've used as an example. It's even likely that none of you

are addressing related questions about the organization of work or scientific innovation. Why should you care about my findings? The answer is complex and will be a focus of our attention throughout the class, but it hinges on the relationship of theory to particular problems and to generalization. Write down your preliminary ideas about why sociologists might find your problem interesting.

Type up your notes from this exercise but do not try to turn them into a coherent narrative. Try to resist the urge to change or tinker with the work you've done today. Submit those typed notes to me via the ctools dropbox by **5pm on Friday 09/07/06**. I will read and comment on them, but **will not grade them**. Research topics are always works in progress and this is your first pass. You will have numerous chances to work on your formulation, and you may (in fact should) revise and adapt your thinking as you develop your research project through class assignments. The write up of this in class exercise is meant to familiarize me with your interests and to provide a record of your initial ideas about research topics and questions. As research projects develop it is often useful to return to early formulations. Your final assignment in this class will ask you to retrace these steps to generate a formal research proposal.

Assignment 2 “Scholarly inquiry or scientific research?” (DUE Monday 09/24/06 by 5pm) 3-5pp paper

Drawing on the readings thus far and your knowledge of the topic area you developed in Assignment 1, write a brief paper that compares and contrasts more interpretive (or ‘humanist’) and more explanatory (or ‘scientific’) approaches to your topic. You should spend equal time on each approach and should focus explicitly on the particularly strengths and weaknesses of each general approach for your particular topic.

DEBATE: What kind of inquiry is sociological research?

I will randomly divide the class into two groups. One will argue that sociology is and should be a science, the other that sociological questions and theories are more properly addressed by ‘scholarly’ approaches that emphasize interpretation. Draw on the readings thus far and on your arguments and examples from Assignment 2 to conduct the debate.

Assignment 3 “Case Proposal” (DUE Friday 10/12/06 by 5pm) 3-5 pp paper.

Propose two case-based research projects that address one or more of the questions you developed in Assignment 1. Cases can be of any type and draw on any method but one proposal should emphasize multiple case comparisons, the other a single, preferably unique, case. Draw on readings regarding generalization and readings regarding cases as well as your knowledge of your topic to complete the assignment. Discuss the strengths and weaknesses of single case and comparative case research for your topic.

Assignment 4 “Quantitative Proposal” (DUE Friday 11/02/06 by 5pm) 3-5 pp paper.

Go the ICPSR website (<http://www.icpsr.umich.edu/access/index.html>). Select a dataset that is available for download and that relates to some aspect of your topic. Available

data-sets may not directly address the questions you have raised. This is one of the challenges of research conducted using data that collected by others (and such data encompass everything from historical and archival records to the contemporary U.S. Census). Developing creative ways to approach new questions with well-used and well-understood data is a challenge common to much sociological research.

Drawing on the readings and discussions thus far in class, use the *codebook* for the dataset you have selected to outline a multivariate study that addresses questions related to your topic. Describe the strengths and weaknesses of the data you have selected for operationalizing concepts. Derive a set of hypotheses that could be tested with these data. Describe the data in terms of generalizability and usefulness for addressing your question. Do not concern yourself with the technical details of statistical tests at this point, instead focus your attention on developing logical and theoretical connections that link these particular data to interesting questions related to your research topic. Discuss the strengths and weaknesses of using existing data for your analyses.

Assignment 5 “Evaluating an Issue of ASR” (DUE TUESDAY 12/04/06 by 5pm)

In addition to conducting sociological research, you will routinely have to make informed judgments about the validity and sociological significance of others’ research. This happens formally in the peer review and tenure processes and more informally as you make daily decisions about what ideas, theories, and published research to attend to. This assignment is intended to hone your critical impulses and to spark discussion about the various dimensions and standards that once can reasonably use to make judgments about quality and significance of sociological research. This assignment will be the basis of **one full week** of class discussion.

I have placed a single, recent issue of the *American Sociological Review* [68(2), April 2003] online. Carefully read every research article in the review (disregard comments and replies, editorial discussions). Your assignment is to rate the articles in order of significance. There are 6 articles and you must decide which ones you think are the best. You must assign each a ranking (us a 1-6 scale with 1 being the highest quality article in the issue and 6 being the lowest quality article). **You cannot have any ties. If you do not rank order the articles, I will consider your assignment incomplete and return it to you for revision.** None of the articles in the issue I assign are authored by current faculty in this university.

In addition to your numerical rankings, write a **single paragraph** that summarizes your reasons for ranking each article as you did. Turn your rankings and summary paragraphs in to me. I will generate a ‘class’ ranking of the articles that will start off our discussion. Over two class meetings we will discuss each and every article in the issue. The individuals who awarded each article its highest and lowest scores will start off these discussions by presenting their readings of the article to the class.

These discussions are likely to illumine many differences of opinion about the character of sociology and the standards by which sociological research should be judged. Reasonable people can disagree about these issues. In fact the success of our field as a whole is dependent on reasoned skepticism and debate about the quality and significance of empirical research. Please take the time to develop well reasoned responses to each article and feel free to stick to your guns if your colleagues challenge your opinions. Both challenges and responses, though, should be respectively framed and

professionally delivered. While the discussion may occasionally get heated, I will step in only to facilitate, clarify or, if necessary, referee.

Assignment 6 “Final proposal” (DUE FRIDAY 12/14/06 by 5pm) 10pp proposal

We have spent the entire semester discussing research design issues and evaluating each others research as well as working and reworking our own research questions. Now it is time to pull the various strands of that effort together. Prepare a complete research proposal no more than 10 **double spaced** pages in length. This, by the way, is the maximum length for research proposals submitted to internal grant competitions at the University of Michigan. It is possible to successfully describe and propose a doable research project within these limits. Many sociologists accomplish the trick routinely, but such writing is almost never effortless.

The project you propose must, in principle, be one that you alone could conduct over a period of one to two years. You may propose research that uses any type of data and any mix of methods for its analysis, but your proposal must: (1) describe the conceptual underpinnings of your research. You may find it helpful to return to our assignment one as you formulate your project; (2) contain a discussion of the reasons both general and sociological audiences might find your project interesting; (3) a brief consideration of any ethical or human subjects implications of your project; and (4) a specific description of the data and or research sites you plan to use to conduct the research.

It will be easier to develop a proposal that is related to the topic you have been polishing all semester. **You may re-use pieces of prior assignments in this proposal provided that you revise them to fit nicely with this narrative. Your final proposal should stand alone and should assume that I have no prior knowledge of your topic or your thinking about it.** You may certainly choose to propose a project unrelated to the topic you have been working with during the semester, but I urge you to think about the work you have put into developing and revising your thinking before jettisoning the questions that you have been working with.

Class participation.

In addition to the primary assignments described above preparation and participation are integral components of this course. Throughout the course of your sociological career you will learn as much or more from colleagues and rivals than you do from mentors or teachers. Start now. This course, your learning, and that of your colleagues depends on your preparation and participation. For this reason I consider engagement with the class to be approximately as important as all of the formal assignments combined.

Other Stuff.

Our university and department are exceptional environments for scholarly discussion and debate. Take advantage of them. In any given week there will be numerous seminars, presentations and discussion groups that might interest you. Attend the ones that do when you have time. You may wish to make particular efforts to attend job talks and colloquia scheduled by our department. The former are particularly important. The issues we have been discussing are rarely more transparently displayed

than in the question and answer portions of job talks. Going to these will show you what it takes to get a research job in sociology, offer more insight into methodological quandries and evaluation standards and, perhaps most importantly, allow you to weigh in on these issues in departmental discussions of job candidates. I will often reference these talks and will be happy to talk about them in class discussion, but I cannot and will not require that you attend them.

Evaluation

Grades play a relatively small role in graduate school. When you enter the academic job market no one will ask to see your transcripts. I have no desire to worry over-much about the details of grading and hope that you will not either. As such, the meat of your evaluation in this class will be found in my comments upon your written work and my (and your colleagues) reactions to your contributions in the classroom. Accordingly, I will grade assignments qualitatively on a four step scale (Accept, conditional accept, revise and resubmit, reject).

You may re-write and re-submit any assignment that receives an R&R or a Reject **within two weeks of the date the paper is returned to you.** Late revisions will not be accepted. Such revisions must represent substantive changes to the original assignment and must take my comments into account. My evaluation of your revisions will replace your initial 'grade' and will stand. Please feel free to speak with me about my comments and reactions to your work. I am more than happy to discuss possible directions and ideas for revision.

COURSE SCHEDULE

MODULE 1: THE GROUNDS OF DEBATE

Core Question: What kind of science is Sociology?

Introduction

Wed. 09/05 Introduction

Review syllabus, assignments, policies

In Class exercise: Assignment # 1

Mon. 09/10 Are social phenomena things? (Classical Perspectives)

Read: Durkheim, *Rules of Sociological Method*, Pp. 51-84

Weber, *Economy & Society*, Pp. 3-62

Marx, "Theses on Feuerbach"

Realism & Positivism

Wed. 09/12 Realisms

Read: Hall "Epistemology and Sociohistorical Inquiry"

Bhakshar, *A Realist Theory of Science*, Pp. 12-62

Latour, "Do you believe in reality?"

Mon. 09/17 What is positivism anyway?

Read: Hempel, "Reason and Covering Laws in Historical Explanation"

Neurath *Empiricism & Sociology*, Pp. 319-332 & 358-371

Giddens, *New Rules of Sociological Method*, Pp. 1-37

Wed. 09/19 Constructivism, Phenomenology, Standpoints

Read: Berger & Luckman, *Social Construction of Reality*, Pp. 1-43

Schutz, *On Phenomenology and Social Relations*, Pp. 79-110

Harding, *Whose Science, Whose Knowledge?*, Ch. 6

DEBATE GROUPS ANNOUNCED

Mon. 09/24: Is Sociology more like a scientific or humanities discipline?

Read: Zald, "Progress and Cumulation in the Human Sciences After the Fall"
Mills, Ch 1-3 in *The Sociological Imagination*

**DEBATE/DISCUSSION BASED ON ASSIGNMENT 2
ASSIGNMENT 2 DUE BY 5PM**

II: GENERAL PROBLEMS IN RESEARCH DESIGN

Core Questions:

What goes into research design?

Which problems are common to all methods?

Wed. 09/26, Causality, Correlation & Skepticism

Read: Hume, *An Enquiry Concerning Human Understanding*, Selections
Marini & Singer "Causality in the Social Sciences"
Abbott *Time Matters* Ch. 3

Mon. 10/01 Representation and Generalization

Read: Kish "Representation, Randomization, and Realism"
Stolte, Fine, & Cook "Seeing the Big in the Little"

Wed. 10/03 Cases and Comparisons

Read: Abbott "What do cases do?"
Heimer "Cases & Biographies"
Lieberson "Smalls Ns & Big Conclusions"

Mon. 10/08 Cases without Comparisons

Read: Vaughan "Theory Analysis"
Steinmetz, "Odious Comparisons"
March & Sproull, "Learning from Samples of One or Fewer"

ASSIGNMENT 3 DUE NO LATER THAN 5PM FRIDAY 10/12/06.

Wed. 10/10 Time, Sequence, & Order

Read: Abbott *Time Matters*, Ch. 5
Stolzenberg, Review of *Time Matters*
Tuma & Hannan, *Social Dynamics: Models & Methods*, Pp. 3-40
Isaac & Griffin "Ahistoricism in Time Series Analysis of Historical Process"

Mon 10/15/06 – NO CLASS, FALL BREAK

MODULE III: METHODS FOR EMPIRICAL INQUIRY

Core Questions:

What are the strengths of different methods? Their weaknesses?

What assumptions about research design issues are built into each method?
What assumptions about the scientific status of sociology are built into each method?
How can different methods be combined so that their strengths and weaknesses balance one another?

Wed. 10/17 Field and observational Methods (approaches)

Read: Glaser & Strauss, *The Discovery of Grounded theory*, Pp. 1-43
Burawoy, "The Extended Case Method"
Schweder "True Ethnography: The Lore, the Law and the Lure"

Mon. 10/22 Field & Observational Methods (exemplars/debates)

Read: Young "The (Non)Accumulation of Capital"
Gowan "Excavating 'Globalization' From the Street"
Discussion: What do these exemplars do well? What do they miss? How do they handle the research design problems we discussed in module II?

Wed. 10/24 Quantitative Methods (approaches)

Read: Freedman "Statistical Models & Shoe Leather"
Berk "Toward a Methodology for Mere Mortals"
Lieberman "Barking Up the Wrong Branch"

Mon. 10/29 Quantitative Methods (exemplars)

Read: Thornton et. al. "The Causes and Consequences of Sex-Role Attitudes and Attitude Change"
DiMaggio et. al. "Have Americans' Social Attitudes Become More Polarized?"

ASSIGNMENT 4 DUE NO LATER THAN FRIDAY 11/02/06 AT 5PM

Wed 10/31 Comparative and Historical Methods (approaches)

Read: Mahoney "Nominal, Ordinal, and Narrative Appraisal in Macrocausal Analysis"
Calhoun "The Rise and Domestication of Historical Sociology"
Sewell "Three Temporalities"

M 11/05 Comparative and Historical Methods(exemplars/debates)

Read: Paige, *Agrarian Revolutions*, Pp. 72-123
Somers, "Narrativity, Narrative Identity, and Social Action."

Wed. 11/07 Network/Relational Methods(approaches)

Read: Granovetter "Economic Action and Social Structure"
Emirbayer & Goodwin "Network Analysis, Culture, and the Problem of Agency"

Mon. 11/12 Network/Relational Methods(exemplars/debates)

Read: Mizuchi, "Similarity of Political Behavior Among Large American Corporations"
Padgett & Ansell "Robust Action and the Rise of The Medici"

Wed. 11/14 Combining Multiple Methods

Read: Giordano et Al. “Adolescent Romantic Relationships”

Owen-Smith & Powell “ The Expanding Role of University Patenting in the Life Sciences”

Mon. 11/19 Planning Ethical Research

Read: Sieber, “Planning Ethically Responsible Research”

In Class Exercise:

Ethical considerations are an essential part of research design. No research project should be undertaken without careful consideration of the ethical issues the project may encompass. Sieber offers a thoughtful and practical approach to thinking about these issues. The general issues at stake in conducting ethical research are common across the approaches we have discussed, but their particular instantiations may vary with the research strategy you choose.

Select a research approach (field quantitative, comparative, or relational methods) that can be applied to your problem. Generate brief comments on each of Sieber’s six dimensions: voluntariness, informed participation, consent, privacy, confidentiality, and anonymity. All dimensions may not be active in your research design but consider those that are. Who are the stakeholders for your research? What are the risks and benefits, if any, for each group of stakeholders?

Wed. 11/21. NO CLASS, THANKSGIVING

MODULE IV: LIFE AS A SOCIOLOGIST

Key Questions: What is the life of a professional sociologist like?

How do the institutional arrangements that underpin academic sociology affect our work?

What does any of this have to do with methods?

Mon. 11/26 Publication and scholarly reputation

Read: Clemens et al. “Careers in Print: Books, Journals, and Scholarly Reputation”

Merton “The Matthew Effect In Science”

Stolzenberg “Editor’s Introduction”

Wed. 11/28 The Journal Review Process

Read: Reviews and responses from *American Sociological Review*

Come to class prepared with questions about the process and the reviews and responses you have read. You may, if you wish, also read the original submission and final publication, which are also available online.

Mon. 12/03 *Is sociology in crisis?*

Read: Horowitz “Cultural Contradictions of Contemporary Sociology”
Steinmetz “Cultural Contradictions of Irving Louis Horowitz”
Xie “Methodological Contradictions of Contemporary Sociology”

ASSIGNMENT 5 DUE NO LATER THAN 5PM TUESDAY 12/04

Wed. 12/05 *Evaluating an Issue of ASR*

CLASS DISCUSSION

Mon 12/10 *Evaluating an Issue of ASR*

CLASS EVALUATIONS, DISCUSSION, WRAP-UP