Political Science 410C, 420C, and 440C
Stanford University Spring 2015
Professors Gary Cox, David Laitin, and Phillip Lipscy
Tuesdays 2:15PM – 5:05PM; GSL

Seminar: Research Design in Political Science

I. COURSE SUMMARY

This seminar has two purposes. First, it introduces graduate students to current standards in research design. Second, it requires students to develop their own research design that meets those standards.

For the first time, the research design course for American Politics (410C), International Relations (420C), and Comparative Politics (440C) will be taught conjointly. This change is based on consultations with faculty and graduate students who believe the standards for good research design transcend these sub-fields. Students can get credit for any one of these three courses to fulfill field requirements.

II. REQUIREMENTS

Students are required to write a research prospectus (one in the mode of a 15-page description of research that is standard for NSF proposals) which sums up the work done throughout the quarter on their research question as well as their theoretical intuition and their strategy for answering it. It will be due at the end of exam week. The prospectus will be evaluated on the basis of the appropriateness of the research design and tools for answering your research question, and the quality of the rationale you provide for each component (narrative; formalization; statistics) of your analysis. You will not be evaluated on the substantive or statistical significance of your results.

Before handing in your final assignment, students will have an opportunity to present their prospectus, and defend it, before a group of advanced graduate students. Details of assignments are included below. Memos, slides, etc., should be posted on the Coursework website by 6PM on the Monday before each meeting to give your fellow students time to read your work and to prepare comments and questions. The success of the seminar will depend on each student's preparedness to discuss the assigned readings and to offer comments and feedback on each other's work, as well as the amount of effort each student invests in advancing his/her own research agenda. The reading load is intentionally light so that: (1) students can take the time to look back at readings from the core seminars in their sub-field to identify material that can illuminate methodological issues through references to research papers already published in their field; and (2) students can commit to advancing their own work and supporting the work of others with thoughtful comments and criticisms.

III. BOOKS RECOMMENDED FOR PURCHASE

Geddes, Barbara (2003; hereafter "Geddes"). <u>Paradigms and Sand Castles: Theory Building and Research Design in Comparative Politics</u>. Ann Arbor: University of Michigan Press.
ISBN-10: 0472068350
ISBN-13: 978-0472068357

Shepsle, Kenneth (2010). <u>Analyzing Politics</u>. New York: Norton.
ISBN 978-0-393-93507-3

Johnson, Steven (2006). <u>The Ghost Map: The Story of London's Most Terrifying Epidemic and How It Changed Science, Cities, and the Modern World</u>. New York: Riverhead.

Avinash K. Dixit, Susan Skeath, and David H. Reiley Jr., <u>Games of Strategy</u> (Fourth Edition)
ISBN-13: 978-0393124446 ISBN-10: 0393124444 [This book is a very useful reference for future work in game theory; it is also very expensive]

IV. STUDENTS WITH DOCUMENTED DISABILITIES

Students who may need an academic accommodation based on the impact of a disability must initiate the request with the Student Disability Resource Center (SDRC) located within the Office of Accessible Education (OAE). SDRC staff will evaluate the request with required documentation, recommend reasonable accommodations, and prepare an Accommodation Letter for faculty dated in the current quarter in which the request is being made. Students should contact the SDRC as soon as possible since timely notice is needed to coordinate accommodations. The OAE is located at 563 Salvatierra Walk (phone: 723-1066, 723-1067 TTY).

V. WEEKLY MEETINGS AND ASSIGNMENTS

Preparation During Spring Break

A. Readings

The first reading introduces the themes of Week 1:

Johnson, Steven (2006). <u>The Ghost Map: The Story of London's Most Terrifying Epidemic and How It Changed Science, Cities, and the Modern World</u>. New York: Riverhead.

The second and third readings are for those students with limited background in formal theory:

Shepsle, pp. 90-148 (spatial analysis; median voter theorem).

Dixit et al., al pp. 17-41 (How to think about strategic games); 47-62 (extensive form games with backwards induction); and 91-108 (normal form games with Nash concept)

B. Thinking

Students should be doing preliminary thinking about the assignment due in Week 3 which is the foundation for the entire course, as soon as possible, and surely before the course begins. As an innovation to this course for spring 2014, students are encouraged to think of joint projects with fellow students taking the course to create a collaborative project.

Week 1: Question Selection and Research Design

The purpose of the readings for this week will be to develop criteria for a good research question and a roadmap on a strategy for answering it.

A. In pursuit of a Research Question

Geddes. Chapter 1 and pp. 27-35.

Kuhn, Thomas (1996). The Structure of Scientific Revolutions. Chicago: University of Chicago Press. Chapters IV, VI, and IX.

Farr, William (1855). "The Thames, the Water Supply, and the Cholera Epidemic" in Noel Humphreys (ed.), Vital Statistics: A Memorial Volume of Selections from the Reports and Writings of William Farr. London: Offices of the Sanitary Institute.

Snow, John (1856). "Cholera and the Water Supply in the South Districts of London in 1854." *Journal of Public Health and Sanitary Review* 2: 239-257.

Freedman, David (2009). Statistical Models. Cambridge: Cambridge UP. Chapter 1.

Angrist, Joshua and Jorn-Steffen Pischke (2009). Mostly Harmless Econometrics. Princeton: Princeton UP. Chapter 1.

B. A Roadmap for Answering It

Laitin, David (2002). "Comparative Politics: The State of the Subdiscipline," In Ira Katznelson and Helen Milner (eds.) State of the Discipline New York: Norton.

C. Research Proposal Guidelines in Political Science

D. Discussion of possible collaborative projects suggested by instructors

Week 2: Tutorial with Instructors on Developing Student Research Questions

Students (individually or in groups) will sign up for half-hour consultations in which both instructors will be present to help develop student research questions. You should come to the meeting with one or more proposed research question(s) that you think could satisfy Assignment 1 (see below).

There will be no formal class meeting in Week 2. In preparation for that meeting, students should consult the following for thinking about the end product (a credible research design):

Przeworski, Adam and Frank Salomon (1988, 1995). "The Art of Writing Proposals: Some Candid Suggestions for Applicants to Social Science Research Council Competitions." Memo published by the Social Science Research Council.

Jens Hainmueller and Laitin, David (2014) "Immigrant Integration in Europe" [NSF proposal submitted January 2015].

Week 3: Political Theory and Comparative Politics

Assignment 1:
Based on the discussions from the week 2 tutorial, choose a research question from a theory that

- a) you read for your sub-field core seminar or another course;
- b) you think is important for outcomes you care about;
- c) you think is inadequate in explaining variance;
- d) you have an intuition on how to improve it;
- e) you can imagine a theoretical logic linking the factors you see as consequential to the outcomes of interest; and
- f) you can provide some basic empirical support (e.g. a relevant data set) to show that you will get some empirical leverage.

Prepare a brief in-class presentation of this research question and circulate a memo addressing (a)-(f) above.

Week 4: Narrative

Read the narratives below, and then write a preliminary narrative illustrating your perspective on the research question as described in Assignment 2.

Bates, Robert, Avner Greif, Margaret Levi, Jean-Laurent Rosenthal, and Barry Weingast (1998). Analytic Narratives. Princeton University Press. "Introduction" (pp. 3-22), and Weingast's "Political Stability and Civil War: Institutions, Commitment, and American Democracy" (pp. 148-193).

Ferejohn, John (1991). "Rationality and Interpretation: Parliamentary Elections in Early Stuart England" in Kristen Monroe (ed.), The Economic Approach to Politics: A Critical Reassessment of the Theory of Rational Action. New York: Harper Collins.

Assignment 2:
Read about a particular case (or a small set of cases) that is (or are) an instantiation (or are instantiations) of your motivating intuition. Drawing on books, articles, archives, newspapers, biographies, etc., write a five-page narrative (conscious of the narrative style in Weingast's chapter and Ferejohn's essay and the way the narratives are connected with a strategic logic) in a way that reveals your conjecture about the mechanism at work and demonstrates to the reader the inadequacy of previous theorizing about the phenomenon that you have highlighted. In class, your narrative will be presented by a partner, who will emphasize the following features of your narrative:

a) Who are the key actors?
b) What are their goals?
c) Which strategies are available to them?
d) What are their beliefs about the state of the world?
e) Especially, what mechanism structures their interactions?

N.B. This assignment should be prepared with Assignment 3 in mind.

Week 5: Deductive Reasoning (Modes of Theoretical Argument, both Formal and Informal)

N.B. It is assumed that most students will not yet have taken a course in game theory, one of the prominent modes of deductive reasoning in our field; we therefore emphasize it in our readings, but students should be aware that there are other forms of formal reasoning (e.g. agent-based modeling) as well as informal forms of presenting theory that are alternatives, where appropriate, for your projects.

We provide in this week a set of stylized games with political implications; you should read them with an eye for the kind of formal representation that captures the nub of the political transactions that drive outcomes in your narrative. But for whatever forms of deductive reasoning you employ, the goal is to capture the nub of the political transaction (what Max Weber called, using a railroad metaphor, the "switchpoint" in political history) that you seek to explain. We will divide the class into five groups, each to provide a summary and analysis of the formal logic from the readings in sections B-E. Students are required to read (or re-read) section

A and the reading(s) in their assigned section. They will learn about the other readings from fellow students in their class presentations.

A. A Primer in Game Theory

Consult the two readings on game theory assigned for the intersession.

B. Bargaining Theory

Jackson, Matthew O., and Massimo Morelli. 2011. "The reasons for war: an updated survey." In *The Handbook on the Political Economy of War*, ed. Richard Coyne and Rachel Mathers. Cheltenham: Edward Elgar.

Muthoo, Abhinay. 1999. *Bargaining Theory with Applications*. Cambridge: Cambridge University Press, pp. 42-46.

C. PD and other non-cooperative games

Fearon and Laitin (1996) "Explaining Ethnic Cooperation" APSR

D. Coordination Games

Weingast, Barry (1997). "The Political Foundations of Democracy and the Rule of Law." American Political Science Review 91(2):245-63.

Timur Kuran (1991) "Now out of Never: The Element of Surprise in the East European Revolution of 1989" World Politics (October 1991)

E. Capturing the Nub of a Political Transaction (different games for different structures)

Geddes. Pp. 40-69.

Week 6: Student Presentations of their Deductive Reasoning

Assignment 3:
Pick one of the styles of formalization from week 5, or an alternative form of deductive reasoning (discussed with one of the instructors) and apply it to your research project/puzzle. Your model should reflect the actors, goals, strategies, and mechanisms that were most important in the narrative you developed for Assignment 2. Your discussion should also identify why the style of formalization that you've chosen is appropriate to your case. If game theory is applied, students should specify that game, with pay-offs justified by assumption. Equilibrium solutions need not be worked out, as the core of the assignment is to highlight the actors, the political/strategic structure, and the sequence of moves. All students (or groups) will prepare a

one-slide presentation of their basic model showing theoretically how outcomes identified in the research are reached.

Week 7: Mapping Theory to Data: Measurement and Identification

All students should read the assigned reading in section "A" below. The seminar will be divided into four groups. Each group will be responsible for reading all the materials in one of the subsequent sections, and preparing a briefing to the entire seminar. The presentation should clearly identify the objective of the empirical work in terms of descriptive or causal inference and then discuss challenges and opportunities for making valid descriptive or causal inferences for each type of research design.

A. Measurement and Theory

Geddes. Pp. 69-86, 148-72 and Appendix A (pp. 225-232).

Lazarsfeld, Paul F. and Allen H. Barton (1951). "Qualitative Measurement in the Social Sciences: Classification, Typologies, and Indices," in Daniel Lerner and Harold D. Lasswell (eds.), *The Policy Sciences: Recent Developments in Scope and Method*. Stanford: Stanford University Press. Pp. 155-92.

B. Experimental design and methods

Bond, Robert M. et al. 2012. "A 61-million-person experiment in social influence and political mobilization." *Nature* 489:295-298.

Habyarimana, James, Macartan Humphreys, Daniel Posner & Jeremy Weinstein (2007). "Why Does Ethnic Diversity Undermine Public Goods Provision?" APSR 101(4):709-25.

Humphreys, Macartan, M E Sandbu and W A Masters (2007). "The Role of Leadership in Democratic Deliberations: Results from a Field Experiment in São Tomé and Príncipe" World Politics 58: 583-622.

Olken, Benjamin (2007) "Monitoring Corruption: Evidence from a Field Experiment in Indonesia" Journal of Political Economy 115 (2).

Angrist and Pischke (2009) Mostly Harmless Econometrics, Chapter 2.

C. Observational data and methods

Scheve, Kenneth and David Stasavage (2010). "The Conscription of Wealth: Mass Warfare and the Demand for Progressive Taxation." International Organization 64: 529-61.

Cox, Gary W, and Eric Magar. 1999. "How Much is Majority Status in the U.S. Congress Worth?" *American Political Science Review* 93(June):299-310.

Acemoglu, Daron, Simon Johnson & James A. Robinson (2002). "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution." QJE 117(4):1231-94.

Acharya, Avidit, Matthew Blackwell, and Maya Sen (2013). "The Political Legacy of American Slavery." Working paper.

D. Natural Experiments

Miguel, Edward (2004). "Tribe or Nation? Nation Building and Public Goods in Kenya versus Tanzania" World Politics 56:327-62.

Erikson, Robert, and Laura Stoker. 2011. "Caught in the Draft: The Effects of Vietnam Draft Lottery Status on Political Attitudes." *American Political Science Review* 105(2):221-237.

Ferraz, Claudio, and Frederico Finan (2008). "Exposing Corrupt Politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes" *Quarterly Journal of Economics* 123: 703-45.

Bhavnani, Rikhil (2009) "Do Electoral Quotas Work After They Are Withdrawn? Evidence from a Natural Experiment in India" *American Political Science Review* 103 (1):23-35.

Eggers, Andrew, and Jens Hainmueller. 2009. "MPs for Sale? Returns to Office in Postwar British Politics." *American Political Science Review* Vol. 103, No. 4:1-21.

Sekhon, Jasjeet and Rocio Titiunik (2012) "When Natural Experiments Are Neither Natural Nor Experiments" *American Political Science Review,* 106 (1): 35-57.

Week 8: Operationalizing an empirical project

The course instructors will identify a well-known and well-used comparative politics data-set. Review the documentation for this data-set and the distributions of key variables, and come to class prepared to discuss:
   a) the overall architecture of the dataset;
   b) how key variables are measured and specified, with emphasis on reliability and validity; and
   c) why data are missing (if any) and how are missing data are treated.
Identify an exemplary paper using this dataset and be prepared to discuss the role of the dataset in advancing knowledge.

Assignment 4:
Write a memo on how you (or your group) will operationalize your empirical project, explaining:
  a) scope conditions (i.e. cases for which your theory is relevant);
  b) measurement strategy (translating concepts into variables);
  c) data sources (whether downloaded from publicly available datasets; use of proxies; reliance on surveys or experiments, etc.), and
  d) identification. Whether the set-up of your project permits making a causal inference; and if not, what future project might permit it; here you should consider the challenges of inferring a causal relationship in your research.

This memo should be uploaded and all memos should be read, but there will be no formal presentations of it by the students. The two instructors will lead the discussion on the highlights of these memos.

Week 9: Statistical Examination of Student Hypotheses

Assignment 5:
Build a data set that would produce descriptive statistics of your independent and dependent variables and/or variables that serve as an observable implication of your own theory. Address for this data issues listed in Assignment 4. Revisit the analysis you prepared for Assignment 1: What were its main limitations? How can you improve your analysis? Focus on statistical and graphical descriptions of the dependent, and principal independent variables; and on analysis of basic correlations. Presentation of complex models (with controls, or with attempts to provide a causal analysis) is optional, and will only be allowed after these basic descriptive statistics have been fully explored. Prepare a 15-minute presentation describing your (or your group's) statistical exploits to present in seminar.

Week 10 and Exam Week: Final Presentations to Outside Panel

Each student (or group) should prepare a 20-minute presentation of his/her research question, preliminary findings, and research strategy for the future. In week 10, a practice session will be held in front of fellow students. In exam week, students will present a revised version of their presentation to a panel of advanced graduate students qua "outside evaluators" (as if a talk at a professional meeting). Students should then be prepared to answer questions for 25 minutes. Outside evaluators will provide written feedback on the presentations to accompany instructors' comments on the final research prospectus.

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