

PSC 490
Research Design
Winter 2015
Thursday 3:00 - 5:50 pm, Scott Hall 212

Instructor: Ana Arjona

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Office hours: Wednesday 11:00 am - 1:00 pm

Scott Hall 237, 601 University Place

Course Description

This course examines the key components of research design, from theory building to causal inference. We will discuss different views on how to develop arguments and how to test them empirically. We will then rely on current research in political science to closely analyze the trade-offs between different approaches when investigating specific research questions. Developing the capacity to identify the strengths and flaws of both theoretical and empirical research is crucial for scholars. Reading and thinking about theory building and research design will help you to become a more critical consumer of existing research as well as to improve the quality of your own work.

The first part of the course is devoted to the methodological foundations (and debates) that we rely on to assess the quality of academic work. We start by asking key questions about political science: What are the goals of political science? What is explanation? What is causation? In the second week we turn to the building blocks of theory: concepts. We then devote two weeks to leading debates on the tools at our disposal to identify causality. The fifth week is devoted to case selection.

In the second part of the course we will assess the quality of different kinds of articles and books. We will dissect the theories and research designs of these selected works. This exercise is of great importance as you acquire the skills needed to spot inconsistencies in theories, flaws in measurement, problems with case selection, and challenges to causal inference.

There are several current debates on methodology in political science. This course can neither cover them all, nor provide an in-depth training on specific methods. However, you will be introduced to the leading discussions on methodology in political science today, and will gain an understanding of the logic behind several tools. Given that many of the students enrolled in the course are planning to take Professor Mahoney's course on qualitative methods in the spring, we will have a limited discussion of within case analysis, process tracing and historical analysis—topics that will be extensively covered in that course. We will not cover interpretative methods.

Requirements

The reading load for this course is heavy. You should be prepared to do all the readings, think carefully about them, and comment on them. All students are expected to actively participate in class.

Instead of a final exam or a research paper, you will work on 6 short assignments: 5 memos and a take-home final exam. Working on producing high-quality memos is essential to this course. These assignments will give you the opportunity to apply the ideas we discuss in the first weeks of the course, and will help you learn how to critically engage each work you read and, eventually, your own work. The final assignment will provide you with the opportunity to propose a better research design for a given research project.

Grades

(i) 1 Memo on methodology (15%)

You will submit your first memo on week 2, 3, 4 or 5. This memo should assess and compare the arguments advanced in the readings assigned for that week regarding one methodological issue. Select a specific issue or topic discussed in the readings, and assess the strengths and shortcomings of the arguments presented in the sources assigned for that week. You should upload your memo on Canvas on the Wednesday of your assigned week by 10:00 pm.

*You should email me with your preferred week by Friday, January 9th at noon. I will announce week assignments on Friday afternoon by email.

(ii) 4 Memos on research papers and books (60%, 15% each)

During weeks 6 to 9 (February 5 to March 5), you should write a 1 to 2-page (500 to 1,000-word) memo on the book or articles assigned for that week. Memos on a book should summarize the reading in no more than two paragraphs, and offer a rigorous assessment of the quality of the theory and research design. Memos on journal articles should discuss each article. The discussion of each article should include a summary of no more than one paragraph, followed by an assessment of the quality of the theoretical proposition and the research design. Memos should be uploaded to Canvas on Wednesday by 10 pm.

(ii) Take home final assignment (25%)

There will be a take home final assignment that will be announced in the last week of class. When writing your final assignment, you will have to rely on one of your memos. Hence, writing excellent memos throughout the quarter will help you in the final assignment. You should send me your assignment by email and upload it to Canvas on Monday, March 16th, by 10:00 pm.

Readings

All readings will be available on Canvas except the following:

- Brady, Henry and David Collier (Ed), 2010. *Rethinking Social Inquiry. Diverse tools, shared standards*. Rowman and Littlefield publishers.
- Slater, Dan. *Ordering power: Contentious politics and authoritarian leviathans in Southeast Asia*. Cambridge University Press, 2010.
- Chenowetz, Erica and Maria J. Stephan, 2011. *Why Civil Resistance Works: The Strategic Logic of Nonviolent Conflict*. New York: Columbia University Press.

Course outline

Part I. Foundations

January 8

1. The study of politics

- Almond, Gabriel and Stephen Genco, 2007. "Clouds, Clocks, and the Study of Politics." *World Politics* 29:4, pp. 489-522.
- Eidlin, Fred. "The Method of Problems versus the Method of Topics." *PS: Political Science and Politics* 44:04 (2011): 758-761.
- Elster, Jon, 2007. *Explaining Social Behavior: More Nuts and Bolts for the Social Sciences*. Cambridge University Press. Chapters 1-3, pp. 6-66.
- Geddes, Barbara, 2006. *Paradigms and Sand Castles*, The University of Michigan Press. Pp. 1-26.

Recommended:

- Gerring, John, 2010. "Causal Mechanisms: Yes, But . . ." *Comparative Political Studies* 43(11): 1499-1526.
- Fearon, James, 1991. "Counterfactuals and Hypothesis Testing in Political Science," *World Politics* 43: pp. 169-195.
- Knight, Jack, 2009. "Comment: Causal Mechanisms and Generalizations". In C. Mantzavinos (Ed.), *Philosophy of the Social Sciences. Philosophical Theory and Scientific Practice*. Pp. 179-184.
- Little, Daniel, 2009. "The Heterogenous Social: New thinking About the Foundations of the Social Sciences". In C. Mantzavinos (Ed.), *Philosophy of the Social Sciences. Philosophical Theory and Scientific Practice*. Pp. 154-178.
- Rosenberg, Alexander, 2012. "The Methodological Divide: Naturalism versus Interpretation". In *Philosophy of Social Science*, pp. 11-33.
- Ian Shapiro. 2002. "Problems, Methods, and Theories in the Study of Politics, or: What's Wrong with Political Science and What to do About it." *Political Theory* 30, 4:588-611.
- Weick, Karl E., 1989. "Theory Construction as Disciplined Imagination." *The Academy of Management Review*, Vol. 14, No. 4, pp. 516-531
- Weingast, Barry, 1996. "Off-the-Path Behavior: A Game-Theoretic Approach to Counterfactuals and its Implications for Political and Historical Analysis." In Philip E. Tetlock and Aaron Belkin (eds.), *Counterfactual Thought Experiments in World Politics: Logical, Methodological, and Psychological Perspectives*. Princeton: Princeton University Press.

January 15

2. Concept formation and measurement

- Sartori, Giovanni. "Concept Misformation in Comparative Politics." *American Political Science Review* 64:4 (1970): 1033-1053.
- Gerring, John, 1999. "What makes a concept good? A criterial framework for understanding concept formation in the social sciences." *Polity*: 357-393.
- Geddes, Barbara, 2006. *Paradigms and Sand Castles*, The University of Michigan Press. Pp. 142-173.

- Adcock, Robert N., and David Collier, "Measurement Validity: A Shared Standard for Qualitative and Quantitative Research," *American Political Science Review* 95:3 (September 2001), pp. 529-46.

Recommended:

- Collier, David, Fernando Daniel Hidalgo, and Andra Olivia Maciuceanu. 2006. "Essentially Contested Concepts: Debates and Applications." *Journal of Political Ideologies* 11 (3): 211–246.
- Elkins, Zachary. 2000. "Gradations of Democracy? Empirical Tests of Alternative Conceptualizations," *AJPS* 44:2, 293-300.
- Gerring, John, "Concepts," in *Social Science Methodology: A Unified Framework* (Cambridge: Cambridge University Press, 2012), pp. 107-140.
- Goertz, Gary, and James Mahoney, 2010. "Concepts: Definitions, Indicators, and Error" and "Meaning and Measurement" in *A Tale of Two Cultures: Qualitative and Quantitative Research in the Social Sciences*. Princeton: Princeton University Press.
- Locke, Richard and Kathleen Thelen, 1996. "Problems of Equivalence in Comparative Politics: Apples and Oranges, Again." *American Political Science Association-CP Newsletter*: 9-12.

January 22

3. Causal inference I

- King, Gary, Keohane, Robert and Sidney Verba, 1994. *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton: Princeton University Press. Pp: 75-114.
- In Brady, Henry and David Collier (Ed), 2010. *Rethinking Social Inquiry. Diverse tools, shared standards*. Rowman and Littlefield publishers.
 - Henry Brady, David Collier and Jason Seawright, "Refocusing the Discussion of Methodology", pp. 15-31.
 - David Collier, Jason Seawright and Gerardo Munk, "The Quest for Standards: King, Keohane, and Verba's Designing Social Inquiry", pp. 33-64.
 - Andrew Bennett, "Process Tracing and Causal Inference", pp. 207-220.
 - David Freedman, "On Types of Scientific Inquiry: The Role of Qualitative Reasoning", pp. 221-236.

Recommended

General

- Brady, Henry and David Collier, eds., 2010. *Rethinking Social Inquiry: Diverse Tools, Shared Standards*. (Entire book).
- Gerring, John, 2001. "Methods." In *Social Science Methodology: A Criterial Framework*, 200-230. Cambridge: Cambridge University Press.
- Goertz, Gary and James Mahoney, 2012. *A Tale of Two Cultures: Qualitative and Quantitative Research in the Social Sciences*. Princeton University Press.
- Goertz, Gary and Harvey Starr, eds., 2003. *Necessary Conditions: Theory, Methodology, and Applications*. Lanham: Roman and Littlefield. (Entire book)
- Goldthorpe, John, 2001. "Causation, statistics, and sociology." *European Sociological Review* 17 (1): 1-20.
- King, Gary, Keohane, Robert and Sidney Verba. *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton: Princeton University Press, 1994. (Entire book)
- Lieberman, Evan, 2001, "Causal Inference in Historical Institutional Analysis: A Specification of Periodization Strategies," *Comparative Political Studies* 34:9, 1011-1034.

- Mahoney, James, 2010. "After KKV: The New Methodology of Qualitative Research," *World Politics* 62:1, pp. 120-247.

Mixed methods

- Ahmed, Amel and Rudra Sil, 2012. "When Multi-Method Research Subverts Methodological Pluralism—or, Why We Still Need Single-Method Research." *Perspectives on Politics* 10,4: 935-953.
- Humphreys, Macartan and Alan Jacobs, 2014. "Mixing Methods: A Bayesian Integration of Qualitative and Quantitative Approaches to Causal Inference". Working paper.

Process tracing

- Bennett, Andrew, and Jeffrey T. Checkel, eds. *Process tracing*. Cambridge University Press, 2014.
- Collier, David. 2011. "Understanding Process Tracing." *PS: Political Science and Politics* 44 (4): 823.

January 29

4. Causal inference II

- Dunning, Thad, 2012. *Natural experiments in the social sciences*. Introduction, natural experiments, regression-discontinuity designs and instrumental variables. Pp 1-34, 39-61, 63-84, 87-102.
- Deaton, Angus, 2014. "Instruments, Randomization, and Learning about Development." *Journal of Economic Literature* 48: 424–455.
- Huber, John, 2013. "Is theory getting lost in the "identification revolution"?" (pp. 1-2) <http://themonkeycage.org/2013/06/14/is-theory-getting-lost-in-the-identification-revolution/>

Recommended:

- Duflo, Esther, Rachel Glennerster, and Michael Kremer. 2006. "Using Randomization in Development Economics Research: A Toolkit." MIT Department of Economics Working Paper No. 06-36.
- Glasziou, Paul, I Chalmers, M Rawlins, and P McCulloch. 2007. "When are randomised trials unnecessary? Picking signal from noise." *BMJ* 334 (7589): 349–351
- Humphreys, Macartan and Jeremy Weinstein. 2009. "Field Experiments and the Political Economy of Development." *Annual Review of Political Science* 12: 367-78.
- Imbens, Guido W., and Thomas Lemieux. 2008. "Regression discontinuity designs: A guide to practice." *Journal of Econometrics* 142 (2):615-35.
- Sovey, Allison J., and Donald P. Green, 2011. "Instrumental variables estimation in political science: A readers' guide." *American Journal of Political Science* 55.1: 188-200.
- Teele, Dawn (Ed), 2014. *Field Experiments and Their Critics. Essays on the Uses and Abuses of Experimentation in the Social Sciences*. Yale University Press.

February 5

5. Case selection

- King, Gary, Keohane, Robert and Sidney Verba, 1994. *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton: Princeton University Press. Pp. 128-48

- Geddes, Barbara, 2006. *Paradigms and Sand Castles*, The University of Michigan Press. Pp. 89-114.
- Seawright, Jason and John Gerring, 2008. "Case Selection Techniques in Case Study Research: A Menu of Qualitative and Quantitative Options." *Political Research Quarterly* 61:2: 294-308.
- Goertz, Gary, and James Mahoney, 2010. "Case Selection and Hypothesis Testing," in Goertz and Mahoney, *A Tale of Two Cultures: Quantitative and Qualitative Research Paradigms*, Princeton University Press. Pp. 177-191.
- Lieberman, Evan, 2005. "Nested Analysis as a Mixed-Method Strategy for Comparative Research," *American Political Science Review* 93: 3, pp. 435-52.

Recommended:

- Nielsen, Richard A. Forthcoming. "Case Selection via Matching." *Sociological Methods and Research*. <http://www.mit.edu/~rnielsen/Case%20Selection%20via%20Matching.pdf>

Part II. Applications

February 12

6. Large-n analysis of observational data

Articles proposing a new theory or hypothesis and testing its implications

- Gould, Roger V. "Revenge as sanction and solidarity display: An analysis of vendettas in nineteenth-century Corsica." *American Sociological Review* (2000): 682-704.
- Weitz-Shapiro, Rebecca, 2012. "What wins votes: Why some politicians opt out of clientelism." *American Journal of Political Science*, 56(3), 568-583.

Articles testing existing hypotheses or adjudicating a debate

- Bateson, Regina, 2012. "Crime Victimization and Political Participation." *American Political Science Review* 106:3: 570-587.
- Smith, Benjamin. "Oil wealth and regime survival in the developing world, 1960-1999." *American Journal of Political Science* 48.2 (2004): 232-246.

February 19

7. Small-n designs

- Slater, Dan, 2010. *Ordering power: Contentious politics and authoritarian leviathans in Southeast Asia*. Cambridge University Press.

February 26

8. Instrumental variables, experiments and regression discontinuity designs

Instrumental variables

- Miguel, Edward, Shanker Satyanath, and Ernest Sergenti, 2004. "Economic shocks and civil conflict: An instrumental variables approach." *Journal of political Economy* 112.4: 725-753.

Natural experiments

- Hainmueller, Jens, and Dominik Hangartner, 2013. "Who gets a Swiss passport? A natural experiment in immigrant discrimination." *American Political Science Review* 107.01: 159-187.

Field Experiments

- Wantchekon, Leonard, 2003. "Clientelism and voting behavior: Evidence from a field experiment in Benin." *World politics* 55.03: 399-422.

Regression discontinuity designs

- Boas, Taylor and Daniel Hidalgo, 2011. "Controlling the airwaves: Incumbency advantage and community radio in Brazil." *American Journal of Political Science* 55(4): 869-885.

March 5

9. Mixed methods

- Chenowetz, Erica and Maria J. Stephan, 2011. *Why Civil Resistance Works: The Strategic Logic of Nonviolent Conflict*. New York: Columbia University Press.

Final assignment due on Monday, March 16th

You will be given your final assignment in class on Thursday, March 5. You should send me your assignment by email and upload it on Canvas on Monday, March 16th, by 10:00 pm.