

Causal Case Studies

Dr. Derek Beach derek@ps.au.dk

Associate Professor, Aarhus University, Denmark

June 2-4, 2014

9:00am-4:30pm

Causal case study methods – comparing, matching and tracing

The aim of this course is to provide students with a set of methodological tools that enable the use of case study methods in your own research. A constant theme throughout the course will be on debating the strengths and limitations of different small-n methods, illustrating the types and scopes of inferences that are possible, and whether and how they can be nested into mixed-methods research designs. The core text is a forthcoming book on causal case study methods co-authored by the instructor – the text will be distributed to participants prior to the course.

The course starts by introducing the debate on whether there is divide between quantitative, large-n, regression-based and qualitative case study methods. This is followed by sessions on working with concepts and theories and discussions about causal inferences and causal relationships in small-n methods. In particular, the comparative and Bayesian logics of inference are introduced, showing how they differ from the frequentist logic used in large-n research.

The course then turns to individual case study methods on days 2 and 3, including cross-case, comparative research designs (Mill's methods, structured-focused comparisons and typological theorization) and within-case methods (congruence/pattern-matching, and process tracing).

In the final part of the course, we discuss different case selection strategies and debate and when and how small-n studies can be nested into mixed-methods designs.

Course prerequisites: Students are expected to be have encountered basic qualitative, case study research methods in their graduate-level education (e.g. King, Keohane and Verba's *Designing Social Inquiry* (1994) is a good starting point).

Day 1 – Monday, June 2

Session 1 - Introduction – is there a divide?

Schedule

9.30 – 10.45 Introductory lecture and discussion

- King, Gary, Robert O. Keohane & Sidney Verba (1994), *Designing Social Inquiry. Scientific Inference in Qualitative Research*, Princeton, New Jersey: Princeton University press, Chapter 3, pp. 75-114 (SKIM)
- Mahoney, James and Gary Goertz (2006), "A Tale of Two Cultures", *Political Analysis*, vol. 14, no. 3, p. 227-249.
- Beach and Pedersen (forthcoming) *Causal Case Studies*. Under contract at the University of Michigan Press, Chapter 1.

Session 2 – Working with concepts.

Key terms: set-theory and set-theoretical understandings of concepts, differences in kind versus differences of degree, unimportant variation and concepts, population of theoretical phenomenon.

Schedule

11.00 – 12.00

- Beach and Pedersen (forthcoming) *Causal Case Studies*. Under contract at the University of Michigan Press, Chapter 3.

Session 3 - Working with theories – X:Y theories and causal mechanisms.

Key terms: causal theories, causal mechanisms, parts of a mechanism (entities and activities), probabilistic theories, deterministic theories, regularity, counterfactuals, manipulation and mechanistic accounts of causality, asymmetric causation, types of causal claims.

Schedule

1.30 – 2.30 Lecture

2.30 – 2.45 Coffee break

2.45 – 4.30 Group work on exercise #1 and class discussion

Readings

- Beach and Pedersen (2012) *Process-tracing Methods: Foundations and Guidelines*. Ann Arbor: University of Michigan Press, chapter 4.

- Beach and Pedersen (forthcoming) *Causal Case Studies*. Under contract at the University of Michigan Press, Chapter 2.

Class exercise #1 - mechanisms

1. Using Principal-Agent theories, formulate a plausible causal mechanism between:

X (delegation of powers to an agent) -> Y (agency loss / delegation costs)

Day 2 – Tuesday, June 3

Session 1 - Causality and inference in case study methods

Key terms: cross-case inferences, within-case inferences, frequentist logic of inference, comparative logic of elimination, Bayesian logic of inference, prior, Bayesian updating, empirical tests.

Schedule

9.30 – 10.45 Lecture on Bayesian inference

10.45 – 11.00 Coffee break

11.00 – 12.00 Group work on class exercise #2

(review KKV pp. 75-97 from day 1)

- Beach and Pedersen (forthcoming) *Causal Case Studies*. Under contract at the University of Michigan Press, Draft chapter 4.
- Doyle, Arthur Conan (1894) *Silver Blaze* can be downloaded free at:
<http://www.wesjones.com/doyle1.htm>

Class exercise #2 – Bayesian inference

1. Describe an empirical test used by Holmes in the Silver Blaze story. Describe what hypothesis is being tested, and then provide justifications for the value of the prior and the likelihood ratio of the test.
2. What type of test have you described? A straw-in-the-wind, hoop or smoking gun?

Session 2 - Cross-case, comparative small-n research designs.

Key terms: Method of agreement, Method of difference, Most-similar-systems design, Most-different-systems design.

Schedule

1.30 – 2.30 Lecture on comparative designs

2.30 – 2.45 Coffee break

2.45 – 3.30 Group work on class exercise #3

- Beach and Pedersen (forthcoming) *Causal Case Studies*. Under contract at the University of Michigan Press, Chapter 6.
- Risse-Kappen, Thomas (1991) 'Public Opinion, Domestic Structure, and Foreign Policy in Liberal Democracies.', *World Politics*, Vol. 43, No. 4, pp. 479-512. (focus on first part of article)

Class exercise #3 – comparative designs

1. Describe Risse-Kappen's theoretical model.
2. Describe his research design (briefly). Is the study a most-similar or most-different systems design?
3. What role does process-tracing play in his analysis? In your opinion, does Risse-Kappen's research shed light on the causal mechanism(s) linking public opinion and foreign policy?

Session 3 – Within-case methods - congruence case studies

Key terms: Congruence / matching, Empirical tests, Empirical predictions, Certain predictions, Unique predictions.

Schedule

3.30 – 4.30 Group work and class discussion of class exercise #4

- Tannenwald (1999) 'The Nuclear Taboo: The United States and the Normative Basis of Nuclear Non-Use', *International Organization*, 53(3): 433-468. (focus on first 20 pages)

Class exercise #4 - congruence

1. Discuss the empirical test described by Tannenwald for norms about the non-use of nuclear weapons. Does it discriminate between h and ~h? Describe the likelihood ratio and the probability of observing e – is it a certain test?:

Day 3 – Wednesday, June 4

Session 1 - Within-case methods – Process-tracing.

Key terms: Theory-testing PT, Theory-building PT, Explaining outcome PT, evidence versus observations, accuracy of observations, content of observations.

Schedule

9.30 – 10.45 Lecture on process-tracing

10.45 – 11.00 Coffee break

11.00 – 12.00 Group work and discussion of class exercise #4

- Beach and Pedersen (2013) *Process Tracing methods: Foundations and Guidelines*. Ann Arbor: University of Michigan Press, Chapter 2.
- Owen, John M. 1994. How Liberalism Produces Democratic Peace. *International Security* 19(2): 87-125. (skim theory review in first 20 pages – focus on figures and case studies)

Class exercise #5 – PT

1. Describe Owen's research design.
2. In Owen's article, what is the relationship between what he describes as 'causal pathways' in figure 1 (p. 102) and his hypotheses (p. 103-104)? In your opinion, are they both causal mechanisms? Why or why not?

Session 2 - Case selection techniques and mixed methods designs

Key terms: selection bias, extreme case, typical case, diverse case, deviant case, crucial case, nested analysis, regression-based analysis, case-based designs, scope of inference

Schedule

1.30 – 2.30 Lecture on mixed-methods designs and case selection

2.30 – 2.45 Coffee break

2.45 – 4.30 Group work and discussion of case selection

- Gerring and Seawright (2008) 'Case Selection Techniques in Case Study Research.', *Political Research Quarterly*, Vol. 61, No. 2, pp. 294-308. (SKIM)
- Lieberman (2005) 'Nested Analysis as a Mixed-Method Strategy for Comparative Research.', *American Political Science Review*, Vol. 99, No. 3, pp. 435-451.
- Beach and Pedersen (forthcoming) Paper on case selection.

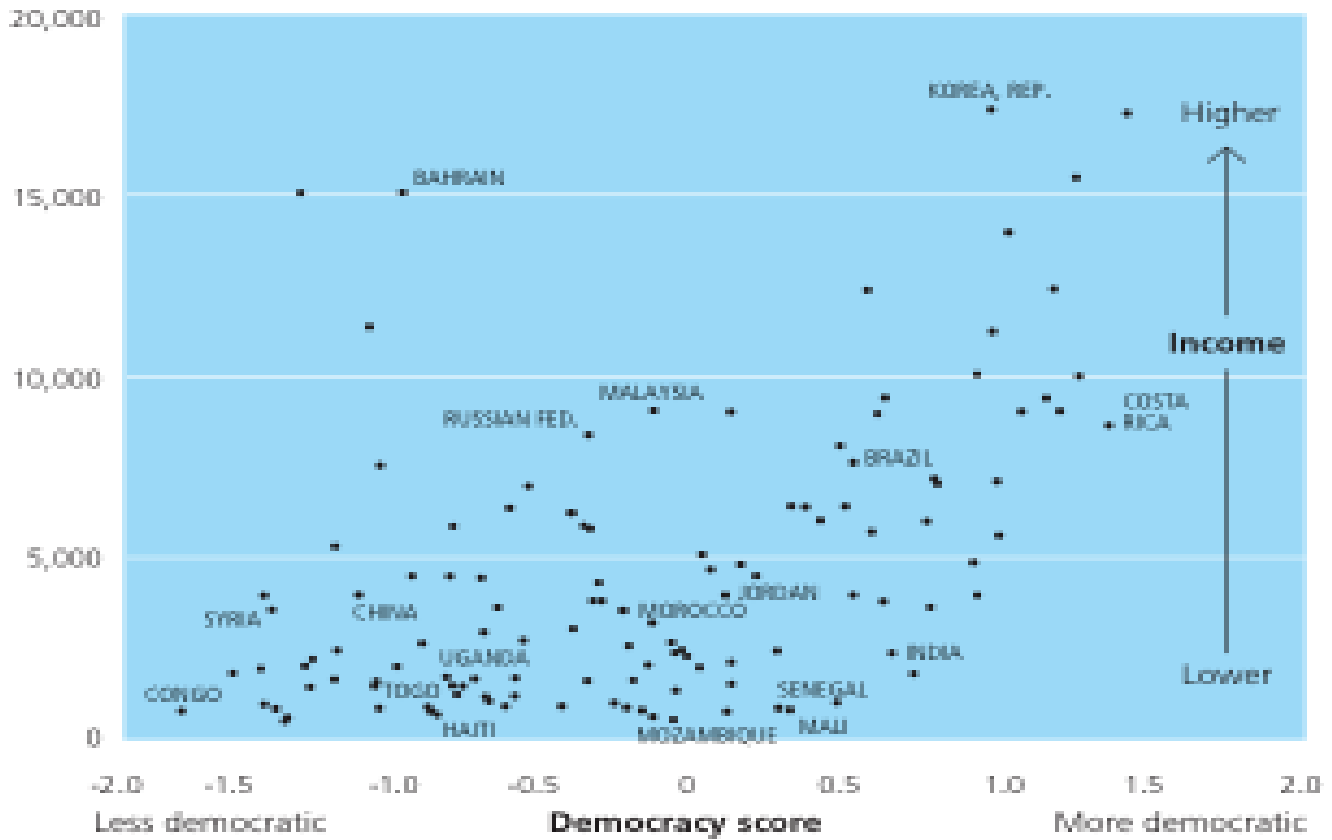
Class exercise #6 – case selection

1. Discuss what case(s) (see figure below) would be relevant for:

- a. building a causal mechanism for how democracy produces economic development
- b. finding the scope conditions required for democracy to produce economic development
- c. testing a hypothesized causal mechanism linking economic development with democracy
- d. testing theories using a positive-on-X design

Figure for case selection From UNDP (2002) *Human Development Report 2002*.

GDP per capita, 2000 (purchasing power parity U.S. dollars)



Note: Democracy score is the voice and accountability indicator from World Bank 2001c.
Source: World Bank 2001c, 2002e.