

CDSS Core Course: Methods of Social Sciences (Fall 2007)

Lecture series by CDSS Faculty and Thomas Gschwend (organized by Thomas Gschwend)

Tuesday (weekly): 13:45-15:15 Seminar room: A5,6 B318

<u>Description:</u> This interdisciplinary lecture course provides an overview on current methods in the Social and Behavioral Sciences. The first six weeks faculty members will present in a lecture (one hour) modern methods of social and behavioral research. Students discuss the lecture and readings with the lecturer during the remaining time (30 minutes). The remaining seven weeks are more like a workshop, where students are introduced to more specialized methods especially relevant for their own work.

There will be potentially two lists of readings provided every week: *required* readings for all CDSS students that provide introductory level articles or text book chapters; an *additional* advanced reading list will provide students who are planning to apply a particular method with more detailed information about it. The reading list will be available on CDSS web pages.

PART ONE: VARIETIES OF METHODS (CDSS Faculty)

04.09.:	Introductory	Session	(Thomas	Gschwend)
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11.09.: Comparative Methods: Between small and large N (Bernhard Ebbinghaus)

18.09.: Qualitative Methods: Case studies (Berthold Rittberger)

25.09.: Quantifying Legislative Analysis (Thomas König)

02.10.: An introduction to meta-analysis, a tool to synthesize quantitative empirical research (Werner Wittmann)

09.10.: Longitudinal Data Analysis (Josef Brüderl)

16.10.: Multinomial modeling in the social, behavioral, and biomedical sciences (Edgar Erdfelder)

PART TWO: METHOD WORKSHOP (Thomas Gschwend)

23.10., 30.10., 6.11., 13.11., 20.11., 27.11., and 04.12.: Methods Workshop (Thomas Gschwend)

Topics and Readings: TBA

PART ONE: VARIETIES OF METHODS (CDSS Faculty)

04.09.: Introductory Session (*Thomas Gschwend*)

11.09.: Comparative Methods: Between small and large N (*Bernhard Ebbinghaus*) Required readings:

- Ebbinghaus, Bernhard (2005) 'When Less is More: Selection Problems in Large-N and Small-N Cross-National Comparison', *International Sociology* 20, 2: 133-52.
- Ragin, C.C. (1989) 'New Directions in Comparative Research', in M.L. Kohn (ed.) *Cross-National Research in Sociology*, Newbury Park: Sage, 57-76.
- Pennings, P. (2003) 'The Methodology of the Fuzzy-Set Logic', in S. Pickel, G. Pickel, H.-J. Lauth and D. Jahn (eds) Vergleichende Politikwissenschaftliche Methoden, Opladen: Westdeutscher Verlag, 87-104.

Advanced readings:

- Ragin, Charles C. (1987): *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies*. Berkeley, CA: University of California Press.
- Ragin, Charles C. (2000). *Fuzzy-Set Social Science*. Chicago: University of Chicago Press.
- Brady, Henry E., & David Collier (Hrsg.) (2004) *Rethinking Social Inquiry: Diverse Tools, Shared Standards*, Lanham, MD: Rowman & Littlefield.

18.09.: Qualitative Methods: Case studies (*Berthold Rittberger*) Required readings

- Bennett, Andrew and Colin Elman (2006): 'Qualitative Research: Recent Developments in Case Study Methods', *Annual Review of Political Science*, 9: 455–476.
- George, Alexander L. and Andrew Bennett (2004): *Case Studies and Theory Development in the Social Sciences*, Cambridge: MIT Press (3-36; 67-124, 205-262).
- Brady, Henry E. and David Collier (Hg.) (2004): *Rethinking Social Inquiry: Diverse Tools, Shared Standards*, Lanham: Rowman & Littlefield (chapter 1).

Advanced readings

- Behnke, Joachim et al. (Hg.) (2006): *Methoden der Politikwissenschaft. Neuere qualitative und quantitative Analyseverfahren*, Baden-Baden: Nomos (11-26; 263-272)
- King, Gary et al. (1994): *Designing Social Inquiry. Scientific Inference in Qualitative Research*, Princeton: Princeton University Press (chapter 3).
- Brady, Henry E. and David Collier (Hg.) (2004): *Rethinking Social Inquiry: Diverse Tools, Shared Standards*, Lanham: Rowman & Littlefield.
- Bennett, Andrew and Colin Elman (2007): 'Qualitative Methods: The View from the Subfields', *Comparative Political Studies* 40, 2: 111-121.
- James Mahoney (2007): 'Qualitative Methodology and Comparative Politics', *Comparative Political Studies* 40, 2: 122-144.

- Bennett, Andrew and Colin Elman (2007): 'Case Study Methods in the International Relations Subfield', *Comparative Political Studies* 40, 2: 170-195
- Levy, Jack S. (2007): 'Qualitative Methods and Cross-Method Dialogue in Political Science', *Comparative Political Studies* 40, 2: 196-214.

25.09.: Quantifying Legislative Analysis (*Thomas König*)

Required readings

- Tsebelis, George (2002) *Veto Players: How Political Institutions Work*, Princeton: Princeton University Press, Chapter 1 and 2.
- Thomson et al. (2006) *The European Union Decides*, Cambridge: Cambridge University Press, Chapter 1, 2, 3 and 10.
- Junge, Dirk and Thomas König (2007) 'What's wrong with Spatial Analysis?' *Journal of Theoretical Politics* 19(4): 467-490.

Advanced readings

- Morton, Rebecca (1999) Models and Methods. A Guide to the Empirical Analysis of Formal Models in Political Science, Cambridge: Cambridge University Press.
- König, Thomas, Brooke Luetgert and Tanja Dannwolf (2006) 'Quantifying European Legislative Research: Using CELEX and PreLex in EU Legislative Studies', *European Union Politics* 7(4): 553-574.

02.10.: An introduction to meta-analysis, a tool to synthesize quantitative empirical research

(Werner Wittmann)

Required readings

- Glass,G.V.(2000) *Meta-Analysis at 25*. You can download that paper here: http://glass.ed.asu.edu/gene/papers/meta25.html
- Lipsey, M. B., & Wilson, D. B. (1993). The efficacy of psychological, educational, and behavioral treatment. Confirmation from meta-analysis. *American Psychologist*, 48, 1181-1209.

Advanced readings

• Lipsey, M. W., & Wilson, D. B. (2001). *Practical meta-analysis*. Thousand Oaks: Sage.

09.10.: Longitudinal Data Analysis (Josef Brüderl)

Required readings

• Allison, P.D. (1994) Using Panel Data to Estimate the Effects of Events. *Sociological Methods & Research* 23: 174-199.

Advanced readings

- Josef Brüderl (2005) Panel Data Analysis. www.sowi.uni-mannheim.de/lessm/lehre.html.
- Wooldridge, J. (2003) *Introductory Econometrics: A Modern Approach*. Thomson. Chap. 13, 14.
- Halaby, C. (2004) Panel Models in Sociological Research. *Annual Rev. of Sociology* 30: 507-544.

16.10.: Multinomial modeling in the social, behavioral, and biomedical sciences (*Edgar Erdfelder*)

Required Readings:

- Batchelder, W. H., & Riefer, D. M. (1999). Theoretical and empirical review of multinomial process tree modeling. *Psychonomic Bulletin & Review*, 6, 57-86.
- Riefer, D. M., & Batchelder, W. H. (1988). Multinomial modeling and the measurement of cognitive processes. *Psychological Review*, *95*, 318-339.

Optional readings (recommended for those familiar with German):

• Erdfelder, E., Cüpper, L. & Auer, T. S. (2006). Multinomiale Verarbeitungsbaummodelle. In J. Funke & P. Frensch (Hrsg.), *Handbuch der Allgemeinen Psychologie: Kognition* (S. 760-768). Göttingen: Hogrefe.

Advanced Readings:

- Buchner, A. & Erdfelder, E. (2005). Word frequency of irrelevant speech distractors affects serial recall. *Memory & Cognition*, *33*, 86-97.
- Erdfelder, E., Cüpper, L., Auer, T.-S., & Undorf, M. (2007). The fourstates model of memory retrieval experiences. *Zeitschrift für Psychologie/Journal of Psychology*, 215, 61-71
- Klauer, K.C., Stahl, C. & Erdfelder, E. (2007). The abstract selection task: New data and an almost comprehensive model. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 33*, 680-703.

PART TWO: METHOD WORKSHOP (Thomas Gschwend)

23.10., 30.10., 6.11., 13.11., 20.11., 27.11., and 04.12.: Methods Workshop (*Thomas Gschwend*)

Readings: TBA

Requirements: The requirements for this course are simple – prepare the readings in advance so that you can come to class with particular questions in mind. You will learn primarily by reading and then discussing that material with your instructor and classmates. The more active you participate in the discussions the easier it will be to comprehend the new material and the more fun we will have working on this together. Besides reading and discussing the material, usually the best way to learn new methods is by using them. Therefore I expect you to write a research paper in journal article style through which you can demonstrate your competence in rigorously applying at least one method that was taken up in this course. The paper should be in the format of a journal article. (That is, fully ready to be sent for submission, needing only a cover letter) Because this is a methods course, it will often make sense to choose a project that is ongoing in another course or even a paper already written which could use a methodologically sophisticated reanalysis. It should be written exactly as it would be for iournal submission. That entails two things in particular, (1) that it be written for a journal audience and not for the professor of a methods course, and (2) that it not concentrate unduly on methodological issues. The burden of (1) is to explain what needs to be explained to a professional audience in your field and to decide what is not needed, often a pretty tough call. On (2) I recommend a relatively low tech paper, which often will display little explicit knowledge about the methods you employ, while you might want to add a technical appendix full of geek talk to impress the professor. The purpose, of course, is that journal readers will not want to read an excess of geek talk just because you need to prove in such an appendix that you can speak it (a lesson usually learned after several painful rejections). If you lack a substantive paper on which you wish to work, you might start out with a replication analysis of a recent paper that caught your interest and potentially fit your research program.

The paper together with a self-explainable documentation that allows me to easily replicate your analysis is due on **January 15, 2008**.

23.10.: How to talk to Grandpa about it: Substantive Interpretation of Statistical Results

 King, Gary, Tomz, Michael and Jason Wittenberg. 2000. "Making the Most of Statistical Analyses: Improving Interpretation and Presentation" American Journal of Political Science 44(2): 341–355.

30.10.: Stata Lab Session on Substantive Interpretation of Statistical Results

- Xu, Jun and J. Scott Long. 2005. "Confidence intervals for predicted outcomes in regression models for categorical outcomes" *The Stata Journal* 5(4): 537-559.
- Tomz, Michael, Wittenberg, Jason and Gary King. 2001. "Clarify: Software for Interpreting and Presenting Statistical Results" Typescript Harvard University (June 1, 2001).

6.11.: Improving Interpretation: Graphs vs. Tables?

- Gelman, Andrew, Cristian Pasarica and Rahul Dodhia. 2002. "Let's practice what we preach: turning tables into graphs." *The American Statistician* 56(2):121–30.
- Kastellec, Jonathan P. and Eduardo L. Leoni. 2007. "Using Graphs Instead of Tables in Political Science." *Perspectives on Politics*, forthcoming.

13.11.: Interpreting Interaction Effects

- Brambor, Thomas, Clark, William Roberts and Matt Golder. 2005.
 "Understanding Interaction Models: Improving Empirical Analyses" Political Analysis 14:63–82.
- Braumoeller, Bear F. 2004. "Hypothesis Testing and Multiplicative Interaction Terms" *International Organization* 58 (Fall): 807–820.

20.11.: Stata Lab Session on Interpreting Interaction Effects

TBA

27.11.: no class (will meet on the 29th instead)

29.11.: Cognitive Psychometrics: Combining Two Psychological Traditions Guest Lecture: Prof. William H. Batchelder, UC Irvine

Note: We will meet 18:00-19.30 at room No. EO 150 (Castle Ehrenhof East)

04.12.: Replication, Publication and Semester Wrap-Up

- Freese, Jeremy. In Press. "Reproducibility Standards in Quantitative Social Science: Why Not Sociology?" *Sociological Methods and Research*, forthcoming.
- King, Gary. 1995. "Replication, Replication," *PS: Political Science and Politics* 28(3): 443-452.
- King, Gary. 2006. "Publication, Publication" *PS: Political Science and Politics* 39(1): 119-125.