

Sociology 271D – Methods of Sociological Research:
Imperative and Emerging Technical and Epistemological Issues
Fall 2021 – Tuesday 12noon-2:00pm – 402 Social Science Building

Professor Samuel R. Lucas
Office: 438 Barrows Hall
Phone: 642-4765 or 642-4766
E-mail addresses:

To submit assignments: SocPost@gmail.com

For all other purposes: lucas@berkeley.edu

Web-site: <http://www.samuelroundfieldlucas.com/>

Office hours: By Appointment

In this graduate-level research methods course we will revisit and extend many of the issues with which you have dealt in conducting your MA and possibly other research. Further, some issues that bear on your (and everyone's) research will be brought into our discussion. As we revisit, extend, and broaden the material of methods, you will be enabled to use your research experience to interrogate the conflicting ideas of the course, and use various conflicting ideas of the course to interrogate (and enhance the quality of) your research.

Of course, some teach methods purely as a set of practices, implying that their reasoning is either irrelevant, irretrievable, or so obvious as to obviate articulation. This course sees methods as practices ground in contestable logics. It sees methods as applied epistemology. Consequently, in this class we work to become conscious of the deeper epistemological concerns that bear on the moments of problem formulation, data collection, and analysis.

Course Aim

Gaining such consciousness and bringing it to bear in one's research is a life-long task. The course cannot convey a set of "answers" as the final word on many of these issues because the dialogue on these issues continues such that there is no final word to give. Thus, our aim is to deepen your engagement with these issues, to provide an opportunity for deepened reflection on your work and the myriad complexities embedded within.

Attendance

Attendance at every class is expected. Please do not make travel plans that interfere with class.

Assignments and Grading

There are three types of writing assignments: 1) weekly explorations, 2) a reflective analysis, and, 3) a final paper.

Weekly Explorations

Each week students are to write a 1,000-word (max) exploration of one or more aspects of the assigned readings of the week. The pdf file should be e-mailed to socpost@gmail.com by 5:00pm the Monday before class. **Place the label "Grad Methods" in the subject field.**

Reflective Analysis (due November 23)

All work is finite, so all work has limitations. For this short (1500 words or less) paper you are asked to take your own work, select two opposed positions covered in the course, and assess your own work critically from the perspective of those two positions. What strengths and what weaknesses does each perspective see in your work? What could you do (or could you have done) to address at least one of the most serious of those weaknesses, if anything? Could you have done so without weakening your work? This assignment is graded P/NP. A passing Reflective Analysis will be submitted on time, and will critique some important aspects of one's own work with integrity. The weekly exploration is canceled for November 23.

Final Paper (due December 14)

I will say more about the paper in class but, briefly, there are 2 options for the final paper.

Critical Literature Review – A critical analysis of empirical works (a small set of published papers or 2 books) using material from the course. Whatever else the analysis does, it will critically address the epistemological and ontological assumptions of the works.

Theoretical Exegesis – A theoretical analysis of two ostensibly conflicting positions on a substantive or methodological issue using material from the course. Whatever else the analysis does, it will critically address the epistemological and ontological assumptions of the positions.

Two documents, graded P/NP, related to your final project are due earlier in the term: 1) A 500-word statement of the question/problem that identifies which option you plan to use as well as some focal works and issues for your paper (due October 19) and 2) an outline of the paper (due November 2). A passing question/problem statement will be submitted on time and will convey what the question or problem is *and* will convey at least one reason why the question or problem is or should be of interest to others. A passing paper outline will be submitted on time and will use the outline form to display the planned (i.e., draft) narrative structure of the paper. Because of these written assignments, the weekly explorations for October 19 and November 2 are canceled.

Grading

Although the final paper is given the greatest weight, the final course grade is also based on attendance, class participation, weekly submitted explorations, and other written work. The grading formula is as follows (on the 4.0 scale):

Course grade = Paper grade - (the number of missed classes × .1)
 - (the number of classes without meaningful participation × .1)
 - (the number of unsubmitted or late weekly explorations × .1)
 - (an NP Problem/Question statement × .1)
 - (an NP final paper outline × .1)
 - (an NP Reflective Analysis × .5)

Specifically, the paper will be graded on the 4.0 scale. The course grade will be the paper grade

reduced by .1 grade points for every missed class, every class without meaningful verbal participation, every late or unsubmitted weekly exploration, an NP on the Problem/Question statement, and an NP on the final paper outline, as well as .5 grade points for an NP on the Reflective Analysis.

The grading formula reflects the expectation that every member of the class will attend every class, speak meaningfully in class every class without prompting from others, and successfully complete all of the weekly explorations. Late work will not be accepted. No Incompletes will be given in this course (except as allowed by University rules).

Reading Materials

Most of the reading is available via JSTOR or Google Scholar. Articles on JSTOR are noted in the syllabus with a bold **JSTOR** after the citation; those available via Google Scholar have a bold **Google Scholar** after the citation. A few articles are available at one or more other sites if accessed from a machine on the UC-Berkeley network; in such cases either a correct web-site for the journal will appear in bold after the citation, or the word **OskiCat** will appear in bold after the citation, signifying that you need to call up the journal on OskiCat, find the issue and then obtain the paper. Other article-length material can be found in a Reader you may purchase at Copy Central, 2411 Telegraph Avenue; such work is labeled **READER** below.

In addition, the following nine books are required. Those marked **OskiCat** were available (the last time I checked) in electronic form through the library web-site. The others can be ordered at local bookstores, through amazon.com, some other online vendor, or directly from the publisher:

Allison, Paul D. 2002. *Missing Data*. Beverly Hills, CA: Sage Publications. **OskiCat**

Cox, D.R. 1992. *Planning of Experiments*. New York, NY: Wiley Classics.

Eliason, Scott R. 1993. *Maximum Likelihood Estimation: Logic and Practice*. Beverly Hills, CA: Sage Publications. **OskiCat**

Hambleton, Ronald K., Hariharan Swaminathan, and H. Jane Rogers. 1991. *Fundamentals of Item Response Theory*. Newbury Park, CA: Sage Publications.

Hedstrom, Peter. 2005. *Dissecting the Social: On the Principles of Analytical Sociology*. New York, NY: Cambridge University Press.

Kuhn, Thomas S. 2012. *The Structure of Scientific Revolutions: 50th Anniversary Edition*. Chicago, IL: University of Chicago Press.

Lieberson, Stanley. 1985. *Making It Count: The Improvement of Social Research and Theory*. Berkeley, CA: University of California Press. **OskiCat**

Mill, John Stuart. 1882. *A System of Logic, Ratiocinative and Inductive, Being a Connected View of the Principles of Evidence, and the Methods of Scientific Investigation, Eighth Edition*. New York: Harper & Brothers, Publishers, Franklin Square. **OskiCat**

Popper, Karl. 1968. *The Logic of Scientific Discovery*. New York, NY: Harper Torchbooks

READING and ASSIGNMENT SCHEDULE

PART I – PROBLEM FORMULATION

>>Week 1, Aug 31 – Introduction: Basics and Purposes of Research

Sutton, Robert I., and Barry M. Staw. 1995. "What Theory is Not." *Administrative Science Quarterly* 40: 371-384. **JSTOR**

DiMaggio, Paul J. 1995. "Comments on 'What Theory is Not'." *Administrative Science Quarterly* 40: 391-397. **JSTOR**

Abend, Gabriel. 2008. "The Meaning of 'Theory'." *Sociological Theory* 26: 173-199. **JSTOR**

Manski, Charles F. 1995. "Introduction," pp. 1-9 in *Identification Problems in the Social Sciences*, by Charles F. Manski. Cambridge, MA: Harvard University Press. **READER**

>>Week 2, Sep 7 – Casing

Laumann, Edward O., Peter V. Marsden, and David Prensky. 1983. "The Boundary Specification Problem in Network Analysis," pp. 18-34 in *Applied Network Analysis: A Methodological Introduction*, edited by Ronald S. Burt and Michael Minor. Beverly Hills, CA: Sage. **READER**

Walton, John. 1992. "Making the theoretical case," pp. 121-137 in *What is a Case? Exploring the Foundations of Social Inquiry*, edited by Charles C. Ragin and Howard S. Becker. New York, NY: Cambridge University Press. **READER**

Vaughan, Diane. 1992. "Theory elaboration: the heuristics of case analysis," pp. 173-202 in *What is a Case? Exploring the Foundations of Social Inquiry*, edited by Charles C. Ragin and Howard S. Becker. New York, NY: Cambridge University Press. **READER**

>> Week 3, Sep 14 – The Logic of Inquiry

Mill, John Stuart. 1882. *A System of Logic, Ratiocinative and Inductive, Being a Connected View of the Principles of Evidence, and the Methods of Scientific Investigation, Eighth Edition*. New York: Harper & Brothers, Publishers, Franklin Square. **OskiCat (multiple editions exist–be sure to use Project Gutenberg Ebook # 27942, released January 31, 2009) and at <https://www.gutenberg.org/ebooks/27942>**

>> Week 4, Sep 21 – Falsification

Popper, Karl. 1990. "A World of Propensities-Two new views on causality." **Google Scholar**

Popper, Karl. 1968. *The Logic of Scientific Discovery*. New York, NY: Harper Torchbooks.
(Chapters 1 and 2)

>> Week 5, Sep 28 – The Structure of Scientific Knowledge Production

Kuhn, Thomas S. 2012. *The Structure of Scientific Revolutions: 50th Anniversary Edition*.
 Chicago, IL.: University of Chicago Press

Peacock, Mark S. 2009. "Path Dependence in the Production of Scientific Knowledge." *Social Epistemology* 23: 105-124. **Google Scholar**

>> Week 6, Oct 5 – Programmes and Anarchy

Lakatos, Imre. 1976. "Falsification and the Methodology of Scientific Research Programmes," pp. 205-259 in *The Methodology of Scientific Research Programmes*, edited by John Worrall and Gregory Currie. New York, NY: Cambridge University Press. **Google Scholar**

Motterlini, Matteo. 1999. "Introduction: A Dialogue," pp. 1-18 in *For and Against Method: including Lakatos's lectures on scientific method and the Lakatos-Feyerabend correspondence*, edited by Matteo Motterlini. Chicago, IL: University of Chicago Press.

Tibbetts, Paul. 1977. "I Feyerabend's 'Against Method': The Case for Methodological Pluralism." *Philosophy of the Social Sciences* 7: 265-275. **Google Scholar**

Kulka, Thomas. 1977. "II How Far Does Anything Go? Comments on Feyerabend's Epistemological Anarchism." *Philosophy of the Social Sciences* 7: 277-287. **Google Scholar**

Harriangadi, J.N. 1977. "III The Crisis in Methodology: Feyerabend." *Philosophy of the Social Sciences* 7: 289-302. **Google Scholar**

>> Week 7, Oct 12 – Contemporary Considerations of The Nature of The (Social) World and (Social) Analysis

Gorski, Philip S. 2016. "The Matter of Emergence: Material Artifacts and Social Structure." *Qualitative Sociology* 39: 211-215.

Hedstrom, Peter. 2005. *Dissecting the Social: On the Principles of Analytical Sociology*. New York, NY: Cambridge University Press.

Hedström, Peter, and Petri Ylikoski. 2010. "Causal Mechanisms in the Social Sciences." *Annual Review of Sociology* 36: 49-67. **JSTOR**

Gross, Neil. 2009. "A Pragmatist Theory of Social Mechanisms." *American Sociological Review* 74: 358-379. **JSTOR**

>> Week 8, Oct 19 – Additional Logics of Causality

Hofer, Carl. 2004. "Causality and determinism: Tension, or outright conflict?" *Revista de Filosofia* 29: 99-115 **Google Scholar**

Holland, Paul W. 1986. "Statistics and Causal Inference." *Journal of the American Statistical Association* 396: 940-970. **JSTOR**

Lieberson, Stanley. 1985. *Making It Count: The Improvement of Social Research and Theory*. Berkeley, CA: University of California Press. **OskiCat**

Mahoney, James. 2008. "Toward a Unified Theory of Causality." *Comparative Political Studies* 41: 412-436. **Google Scholar**

PROBLEM/QUESTION STATEMENT DUE OCTOBER 19 (P/NP)

>> Week 9, Oct 26 – The Graphical Causal Model

Pearl, Judea. 2010. "An Introduction to Causal Inference." *The International Journal of Biostatistics*, 6(2). **Google Scholar**

George, Alexander L., and Andrew Bennett. 2005. "Process-Tracing and Historical Explanation," pp. 205-233 in *Case Studies and Theory Development in the Social Sciences*. Cambridge, MA: MIT Press. **READER**

PART II – DATA COLLECTION

>> Week 10, Nov 2 – Design of Experiments and Causal Analysis

Cox, D.R. 1992. *Planning of Experiments*. New York, NY: Wiley Classics.

OUTLINE DUE NOVEMBER 2 (P/NP)

>> Week 11, Nov 9 – Complexities of Measurement

Bollen, Kenneth, and Richard Lennox. 1991. "Conventional Wisdom on Measurement: A Structural Equation Perspective." *Psychological Bulletin* 110: 305-314. **Google Scholar**

Derksen, Linda. 2000. "Towards a Sociology of Measurement: The Meaning of Measurement Error in the Case of DNA Profiling." *Social Studies of Science* 30: 803-845. **Google**

Scholar

Hambleton, Ronald K., Hariharan Swaminathan, and H. Jane Rogers. 1991. *Fundamentals of Item Response Theory*. Newbury Park, CA: Sage Publications.

Von Hippel, Paul T., and Caitlin Hamrock. 2019. "Do Test Score Gaps Grow Before, During, or Between the School Years? Measurement Artifacts and What We Can Know in Spite of Them." *Sociological Science* 6: 43-80.

Lucas, Samuel R. 2000. "Hope, Anguish, and the Problem of Our Time: An Essay on Publication of *The Black-White Test Score Gap*." *Teachers College Record* 102: 463-475.

<http://www.samuelroundfieldlucas.com/lucas2000tcr.pdf>

Lucas, Samuel Roundfield. 1999. "Appendix A: Measuring Track Location," pp. 150-171 in *Tracking Inequality: Stratification and Mobility in American High Schools*, by Samuel Roundfield Lucas. New York, NY: Teachers College Press. **READER**

>> Week 12, Nov 16 – Models

Xie, Yu. 2007. "Otis Dudley Duncan's legacy: The demographic approach to quantitative reasoning in social science." *Research in Social Stratification and Mobility* 25: 141-156.

Google Scholar

Di Paolo, Ezequiel A., Jason Noble, and Seth Bullock. 2000. "Simulation models as opaque thought experiments." (2000): 497-506. **Google Scholar**

Anderson, Chris. 2008. "The End of Theory: The Data Deluge Makes the Scientific Method Obsolete." *Wired Magazine* 16, no. 7 (2008): 16-07. **Google Scholar**

Dardashti, Radin, Karim PY Thébault, and Eric Winsberg. 2015. "Confirmation via Analogue Simulation: What Dumb Holes Could Tell Us about Gravity." *British Journal for the Philosophy of Science* 68: 55-89. **Google Scholar**

PART III – ANALYSIS

>> Week 13, Nov 23 – Bayesianism/Frequentism

Eliason, Scott R. 1993. *Maximum Likelihood Estimation: Logic and Practice*. Beverly Hills, CA: Sage Publications. **OskiCat**

Lucas, Samuel R. 2012. "The Road to Hell . . . : The *Statistics Proposal* as Final Solution to the Sovereign's Human Rights Question." *Wisconsin International Law Journal* 30: 259-343. **Google Scholar**

Lilford, R. J., and D. Braunholtz. 1996. "The statistical basis of public policy: a paradigm shift is overdue." *BMJ* 313: 603. <http://www.bmj.com/content/313/7057/603.full>

Wagenmakers, Eric-Jan, and Quentin F. Gronau. 2020. "Overwhelming Evidence for Vaccine Efficacy in the Pfizer Trial: An Interim Bayesian Analysis." **Google Scholar**

Efron, Bradley. 2005. "Bayesians, Frequentists, and Scientists." *Journal of the American Statistical Association* 100: 1-5. **Google Scholar**

REFLECTIVE PAPER DUE NOVEMBER 23 (P/NP)

>>Week 14, Nov 30 – Bringing it All Together In a Way: Evaluating Proposed or Used Analytic/Methodological Innovations

Sequence Analysis

Abbott, Andrew, and Angela Tsay. 2000. "Sequence Analysis and Optimal Matching Methods in Sociology: Review and Prospect." *Sociological Methods & Research* 29: 3-33. **Google Scholar**

Wu, Lawrence L. 2000. "Some Comments on "Sequence Analysis and Optimal Matching Methods in Sociology: Review and Prospect"." *Sociological Methods & Research* 29: 41-64. **Google Scholar**

Qualitative Comparative Analysis

Lucas, Samuel R., and Alisa Szatrowski. 2014. "Qualitative Comparative Analysis in Critical Perspective." *Sociological Methodology* 44: 1-79. **Google Scholar**

Ragin, Charles C. 2014. "Comment: Lucas and Szatrowski in Critical Perspective." *Sociological Methodology* 44: 80-94. **Google Scholar**

Fiss, Peer C., Axel Marx, and Benoit Rihoux. 2014. "Comment: Getting QCA Right." *Sociological Methodology* 44: 95-100. **Google Scholar**

Olsen, Wendy. 2014. "Comment: The Usefulness of QCA Under Realist Assumptions." *Sociological Methodology* 44: 101-107. **Google Scholar**

Vaisey, Stephen. 2014. "Comment: QCA Works—When Used With Care." *Sociological Methodology* 44: 108-112. **Google Scholar**

Seawright, Jason. 2014. "Comment: Limited Diversity and the Unreliability of QCA." *Sociological Methodology* 44: 118-121. **Google Scholar**

Lucas, Samuel R. 2014. "Rejoinder: Taking Heat and Giving Light—Reflections on the Early

Reception of 'Qualitative Comparative Analysis in Critical Perspective'." *Sociological Methodology* 44: 127-158. **Google Scholar**

Propensity Scores

Rosenbaum, Paul R., and Donald B. Rubin. 1984. "Reducing Bias in Observational Studies Using Subclassification on the Propensity Score." *Journal of the American statistical Association* 79: 516-524. **Google Scholar**

Winkelmayer, Wolfgang C., and Tobias Kurth. 2004. "Propensity Scores: Help or Hype?" *Nephrology Dialysis Transplantation* 19: 1671-1673. **Google Scholar**

>> **Week 15, Dec 7 – Missing Information**

Stolzenberg, Ross M., and Daniel A. Relles. 1990. "Theory Testing in a World of Constrained Research Design: The Significance of Heckman's Censored Sampling Bias Correction for Nonexperimental Research." *Sociological Methods & Research* 18: 395-415. **Google Scholar**

Allison, Paul D. 2002. *Missing Data*. Beverly Hills, CA: Sage Publications. **OskiCat**

Lewis, Jonathan. 1991. "When We Generalize or Compare, Can We Always Rely on the 'Absence of Evidence'?: A Sociologist Looks at Historical Methodology." *The History Teacher* 24: 455-469. **JSTOR**

>>**Week 16, Dec 14 – Presentations and Exploratory Reflections**

No Reading: Student Presentations of Research Papers

FINAL PAPER DUE DECEMBER 14