

Workshop ‘Analytical Social Science Theory’
Department of Political and Social Sciences, European University Institute

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Syllabus

Workshop description

The workshop familiarizes EUI researchers with:

- (a) Basic features of analytical problem-driven and systematic theory construction, model building, and explanation in social science, with a focus on macro- and micro-features of explanatory models as well as macro-micro-macro transitions.
- (b) The relation between analytical social science theory and empirical research: how to generate (‘derive’) testable hypotheses from analytical social science theory; testing such hypotheses employing complementary research designs, including observational and experimental designs.
- (c) Examples of theory and empirical research along these lines.

To this end, the workshop will be roughly structured as follows:

- Theory and explanation in social science – by way of toy examples
- Theory and explanation in social science – tools
- An example in detail: collective action and group size effects on collective action
- Another example in detail: how cooperation and trust in social and economic exchange depend on durable relations, networks and other macro-conditions
- ‘Do it yourself’: focus on researchers’ own projects

Throughout the workshop, we focus on ‘*social theory in action.*’ This means that the workshop is designed *neither* to provide a broad overview of history of ideas in social theory *nor* to provide a broad comparison and discussion of different social science theories, ‘approaches,’ or ‘traditions.’ The course focuses on how to use and apply theory in social science explanations and in social science research, including a careful discussion of quite some examples of social science explanations and social science research. The workshop combines lectures by the workshop leader, researchers’ work on assignments and discussion of those assignments, and presentations of own projects of researchers that employ ideas and tools from the workshop, including discussions of

these presentations. The workshop thus includes lectures as well as a serious ‘do it yourself’-component.

Workshop schedule

2021	
24 November - 11:00-17:00	<i>Refectory</i>
26 November - 11:00-17:00	<i>Refectory</i>
2022	
28 February - 11:00-16:00	<i>Sala Europa, Villa Schifanoia</i>
1 March - 10:00-15:00	<i>Sala Europa, Villa Schifanoia</i>

(including a one-hour lunch break).

Examples of readings that provide an idea of the kind of workshop envisaged

Coleman, J.S. (1990) *Foundations of Social Theory*. Cambridge, MA: Belknap Press of Harvard University Press, Part I.

Elster, J. (2007) *Explaining Social Behavior*. Cambridge: Cambridge University Press.

Gërzhani, K., N.D de Graaf, and W. Raub (forthcoming) *Handbook of Sociological Science. Contributions to Rigorous Sociology*, Cheltenham: Edward Elgar (relevant chapters will be made available).

Goldthorpe, J. (2016) *Sociology as a Population Science*, Cambridge: Cambridge University Press.

Hedström, P. (2005) *Dissecting the Social. On the Principles of Analytical Sociology*, Cambridge: Cambridge University Press.

Requirements

Workshop participants should have a background in sociology on the level of a state of the art undergraduate program.

An introduction to sociology in line with the ‘spirit’ of the workshop:

Van Tubergen, F. (2020) *Introduction to Sociology*. London: Routledge.

A complementary textbook focusing on how sociology can contribute to addressing pressing societal problems:

De Graaf, N.D. and D. Wiertz (2019) *Societal Problems as Public Bads*. London: Routledge.

On ‘history of ideas’ related to analytical social science theory:

Goldthorpe, J. (2021) *Pioneers of Sociological Science. Statistical Foundations and the Theory of Action*. Cambridge: Cambridge University Press.

Voss, Thomas (2022) Roots of sociology as a science: Some history of ideas, Chapter 25 in K. Gërkhani, N.D. de Graaf, and W. Raub (forthcoming) *Handbook of Sociological Science. Contributions to Rigorous Sociology*. Cheltenham: Edward Elgar.

Workshop topics, readings, and tentative schedule

Day 1 (WED, November 3): Theory and explanation in social science – by way of examples and some tools

Topics: We review some paradigmatic examples of theory construction in social science, with a focus on core features of theory construction and model building like those that will be discussed more systematically in week 2. We start with a set of ‘toy-examples’ from two chapters by Coleman and subsequently consider an example in somewhat more detail, namely, Schelling’s models of residential segregation. We then collect and discuss – proceeding from these examples and highlighting their common features of these examples – ‘basic ingredients’ of problem-driven theory construction and model building in social science with an emphasis on macro-micro-macro transitions. This includes (but is not restricted to): the logical structure of theories and explanations; middle range theories and ‘mechanisms’; theories and testable hypotheses; methodological individualism (Coleman’s diagram and the core elements of social science explanation according to Coleman’s diagram); unintended consequences of goal-directed behavior; different types of theoretical arguments; model building and the method of decreasing abstraction; the logic of testing theories; policy implications of theories.

Required readings

- Coleman, J.S. (1990) *Foundations of Social Theory*. Cambridge, MA: Belknap, Chapter 1: Metatheory: Explanation in Social Science (pp. 1-23).
- Coleman, J.S. (1987) Microfoundations and macrosocial behavior, in J.C. Alexander et al. (eds.), *The Micro-Macro Link*. Berkeley, CA: University of California Press, pp.153-173. *Note:* The two Coleman-readings overlap to some degree. The reading guide will help to quickly identify the overlap and to read efficiently.
- Lindenberg, S. (1992) The method of decreasing abstraction, in J.S. Coleman and T. Fararo (eds.), *Rational Choice Theory: Advocacy and Critique*, Newbury Park, CA: Sage, pp. 3-20.
- Raub, W., V. Buskens & M.A.L.M. van Assen (2011) Micro-macro links and microfoundations in sociology, *Journal of Mathematical Sociology* 35: 1-25 (selection).
- Raub, W., N.D. de Graaf and K. Gërkhani (2022) Rigorous sociology, Chapter 1 in K. Gërkhani, N.D. de Graaf, and W. Raub (forthcoming) *Handbook of Sociological Science. Contributions to Rigorous Sociology*. Cheltenham: Edward Elgar.
- Schelling, Th.C. (1969) Models of segregation, *American Economic Review* 59: 488-493.

Optional readings

- Coleman, J.S. (1994) A rational choice perspective on economic sociology, in N.J. Smelser and R. Swedberg (eds.), *The Handbook of Economic Sociology*, Princeton, NJ: Princeton University Press, pp. 166-180.
- Hedström, P. (2005) *Dissecting the Social. On the Principles of Analytical Sociology*. Cambridge: Cambridge University Press, Chapters 1 and 2 (pp. 1-33).

- Hedström, P. and P. Bearman (2009) What is analytical sociology all about? In P. Hedström and P. Bearman (eds.), *The Oxford Handbook of Analytical Sociology*, Oxford: Oxford University Press, pp. 3-16.
- Hedström, P. and L. Udehn (2009) Analytical sociology and theories of the middle range, in P. Hedström & P. Bearman (eds.), *The Oxford Handbook of Analytical Sociology*, Oxford: Oxford University Press, pp. 25-47.
- Jackson, M. (2022) Order from chaos: Sociology as a population science, Chapter 2 in K. Gërkhani, N.D. de Graaf, and W. Raub (forthcoming) *Handbook of Sociological Science. Contributions to Rigorous Sociology*. Cheltenham: Edward Elgar.
- Hempel, C.G. (1965) Aspects of scientific explanation, in: *Aspects of Scientific Explanation and other Essays in the Philosophy of Science*, New York: Free Press, pp. 331-496 (focus on pp. 333-347).
- Raub, W. and T. Voss (2017) Micro-macro models in sociology: Antecedents of Coleman's diagram, in: B. Jann and W. Przepiorka (eds.), *Social Dilemmas, Institutions and the Evolution of Cooperation*, Berlin: De Gruyter 2017, pp. 11-36.

Day 2 (FRI, November 5): Examples of problem- and theory-guided empirical studies

Topics: We review and discuss two sets of studies. First, studies on the Volunteer's Dilemma: Theory on how group size affects collective action and experimental tests of predictions. Second, studies on how cooperation and trust in social and economic exchange depend on durable relations, networks, and other macro-conditions. Some game theory is crucial for deriving predictions that are tested in both sets of studies. Therefore, the workshop will include a very short game-theory crash course.

Required readings

- Diekmann, A. (1985) Volunteer's Dilemma, *Journal of Conflict Resolution* 29: 605-610.
- Diekmann, A. (1986) Volunteer's Dilemma. A social trap without a dominant strategy and some empirical results, in A. Diekmann and P. Mitter (eds.), *Paradoxical Effects of Social Behavior*, Heidelberg: Physica, pp. 187-197.
- Easley, D. and J. Kleinberg (2010) *Networks, Crowds and Markets*, Cambridge: Cambridge University Press, Chapter 6 until and including Section 6.9.
- Raub, W. (2017) *Rational Models*, Utrecht: Utrecht University, selections from Chapter 2: Rational choice models of trust and cooperation in social dilemmas.
- Sokolova, A., V. Buskens, and W. Raub (2021) Cooperation through investments in repeated interactions and contractual agreements: An experimental study, *Manuscript*, Utrecht University.
- Raub, W. & J. Weesie (1992) *Sociological Applications of Game Theory*, Handout for Didactic Seminar at the Annual Meeting of the American Sociological Association, Pittsburgh, PA, August 1992 (selection).

Optional readings

- Breen, R. (2009) Game theory, in P. Hedström and P. Bearman (eds.), *The Oxford Handbook of Analytical Sociology*, Oxford: Oxford University Press, pp. 619-638.
- Buskens, V. and W. Raub (2013) Rational choice research on social dilemmas, in R. Wittek, T.A.B. Snijders, and V. Nee (eds.), *Handbook of Rational Choice Social Research*, Stanford, CA: Stanford University Press, pp. 113-150.

- Diekmann, A. (1993) Cooperation in an asymmetric Volunteer's Dilemma game, *International Journal of Game Theory* 22: 75-85.
- Macaulay, S. (1963) Non-Contractual relations in business: A preliminary study, *American Sociological Review* 28: 55-67.
- Raub, W., V. Buskens and R. Corten (2015) Social dilemmas and cooperation, in N. Braun and N.J. Saam (eds.), *Handbuch Modellbildung und Simulation in den Sozialwissenschaften*, Wiesbaden: Springer, pp. 597-608.
- Tutić, A. (2014) Procedurally rational volunteers, *Journal of Mathematical Sociology* 38: 219-232.

Day 3 (WED, November 24) and Day 4 (FRI, November 26): Do it yourself – focus on researchers' own projects

Topics: We start with 'unfinished business' (if any) from Days 1 and 2. Subsequently, we discuss own projects of workshop participants: How to 'reconstruct' such projects along the lines introduced in this workshop? Could employing tools and ideas from the workshop help to make progress with these projects? If so, how? Presumably on Day 3 (or, alternatively, on Day 4), we will also include an 'intermezzo' on how to derive testable hypotheses from theoretical models on how 'social embeddedness' in the sense of durable relations (repeated interactions) and networks of relations affects trust in economic and social exchange and on how (and why) to test the same hypotheses repeatedly with data from multiple studies employing different and complementary research designs.

Required readings

- Students will present own projects and will distribute their respective slides ahead of the presentations so that these slides can be consulted by all participants.
- Buskens, V. and W. Raub (2013) Rational choice research on social dilemmas, in R. Wittek, T.A.B. Snijders, and V. Nee (eds.), *Handbook of Rational Choice Social Research*, Stanford, CA: Stanford University Press, pp. 113-150.

Course resources

For the required readings, a *reading guide* that will help to read efficiently will be made available for workshop participants ahead of the workshop.

Slides used by the instructor will be made available for workshop participants after the respective sessions.

Participation and examination

Attendance, including studying readings ahead of the respective session and active participation in discussions, is compulsory for workshop participants. Participants are expected to be willing to present own projects and to relate own projects to the tools and ideas introduced in the workshop (this will include preparing slides for a presentation). Participants are expected to produce a concise paper (max 2.500 words) discussing if and how own projects can be 'reconstructed' along the lines introduced in the workshop and if and how tools and ideas from the workshop can help to make progress with these projects.