

SOCIOLOGY 655: MICROFOUNDATIONS OF ECONOMIC SOCIOLOGY

Spring 2014, Wednesdays 9:30-12:00

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Office Hours: Fridays 9:30-11:30 AM in SS 2436.

Overview

Although its history may be traced back to the classical sociological theorists, economic sociology has experienced a rebirth over the past several decades as sociologists have expanded their study of economic behavior, organizations, and institutions. Given this encroachment onto terrain long held by economists, economic sociologists have been forced to consider how their subfield should relate to economics. While some economic sociologists define themselves as opponents of economics, others argue that greater understanding will emerge through closer engagement with economics. In any case, whether one wishes to engage and extend economics or to critique and replace it, all economic sociologists need to understand contemporary economic theory. Thus, the present course will review some of the central concepts of economics such as rationality, exchange, strategic interaction, and information. Along the way, we will also consider various critiques and alternatives offered by sociologists, economists, and other social scientists.

This course is intended primarily for graduate students, though undergraduates may enroll with permission of the instructor. The course is quite demanding, both in terms of the amount of weekly reading and the intellectual difficulty of some of the material. It is designed to provide students specializing in economic sociology with a stronger understanding and better appreciation of microeconomic perspectives. Students interested in sociological perspectives on economic actors and institutions should consider Soc 652 (The Sociology of Economic Institutions) as an alternative.

Readings

While some previous exposure to economic theory would be helpful (allowing us to reallocate time from review to critique), the course is intended to be self-contained for students who have no background in (but are willing to learn some) economics. It would be useful to purchase an intermediate microeconomics textbook for reference. If you don't already own one, I would recommend Pindyck and Rubinfeld, *Microeconomics* (Prentice Hall), which is available from the University Bookstore. Key readings from this book are denoted by a plus (+) on the reading list below. (Chapter and page numbers correspond to the 7th edition, though you can use any edition of the book. Indeed, any intermediate micro textbook will contain essentially the same material, so feel free to substitute another text.) The other key readings for the course, denoted by a star (*), have been posted at the course site on Learn@UW.

While I realize that it is unrealistic for every student to read every key reading (denoted by + or *) in preparation for each class, please recognize that the material in the course is at times difficult. The lectures will make much more sense and you will be better prepared to participate in discussions if you have grappled with the ideas beforehand. Further note that the (very long) reading list is intended as a guide and resource for the nascent economic sociologist. While it would be impossible to read everything listed during a single semester, the list will hopefully provide some direction for those who wish to further explore some of these topics later. Note that many of the readings are drawn from the *Journal of Economic Literature* and the *Journal of Economic Perspectives*. Both of these journals are excellent resources for economic sociologists who wish to continue to follow new developments in economics.

Written Requirement: producing a personal handbook of economic sociology

The assignment for this course is to write a personal handbook of economic sociology. This project should quickly become part of your on-going work during the semester. ***If you leave this until the end of the semester it will be impossible to complete the task on schedule.***

Detailed instructions

1. *Topics.* Your handbook should include 14 entries. At least 10 topics must come from the following list:

1. rationality, rational choice
2. altruism
3. identity
4. status
5. endogenous preferences, preference formation
6. risk, uncertainty
7. behavioral economics, psychological critiques of economics
8. neuroeconomics
9. sociological critiques of economics
10. transaction cost economics
11. bounded rationality, organization-theory critiques of economics
12. Walrasian equilibrium, invisible hand, welfare theorems
13. Coase Theorem
14. Nash equilibrium, subgame perfection
15. industrial organization applications of game theory
16. repeated games
17. embeddedness
18. experimental economics
19. behavioral economics applications of game theory
20. sociological applications of game theory
21. evolutionary game theory
22. asymmetric information (adverse selection, moral hazard, etc)
23. networks
24. institutions
25. norms

2. *What to do in your entries.*

a. There is no set format for entries in the handbook, and no rigid specification for length. The general expectation is that each entry will be around 4-5 pages (double-spaced, not counting bibliographic citations), but these are only rough guidelines. Completed handbooks are generally around 60 pages. Entries can vary in complexity and length. Some of them can be short, crisp discussions of some narrow issue; others can be more extended mini-essays over theoretical issues. Section headings are recommended for longer essays.

b. Generally, entries should take the form of critical literature reviews: you should attempt to summarize, compare, integrate, evaluate, and extend what you've read. While most entries will use the starred readings as a springboard, you are encouraged to do some additional reading, perhaps drawing on the unstarred articles or references contained in the starred readings. The best handbooks consistently make use of diverse, multiple sources.

c. Given that the entries are to be *critical* reviews, they should not merely summarize the articles or recapitulate the lecture notes. You can, of course, draw on the ideas in the lectures, but the handbook should reflect your own intellectual engagement with the ideas presented.

- d. In the process of reviewing and evaluating the existing literature, you are encouraged to identify and discuss real-world applications that illustrate the problems and/or potential of the economic approach. Graduate students are encouraged to address their own research interests in their entries, explaining why the economic approach may or may not be helpful.
- e. Your grade will not depend on your stance toward economics – whether you oppose or endorse the economic approach – but on the clarity, sophistication, and novelty of your arguments.
- f. Each entry should conclude with a reference list. You can also include a supplementary bibliography of works dealing with the topic which you do not directly discuss, but this is less important.
- g. As the course proceeds, you may need to revise earlier entries to reflect your growing understanding of the economic approach and to make connections to topics covered later in the course. Indeed, the reason for requiring a complete handbook at the end of the semester (rather than a single entry every week) is to allow time for reflection and integration across the course.
3. *Suggested strategy.* I suggest that you create a folder on your computer for this class and then create a separate file for each of the entries. As you do the reading for the semester, you can then easily add ideas, summaries, or commentaries to each of these. Typically, you will need to rewrite and edit these entries in order to turn them into coherent pieces. To repeat: This project should quickly become part of your on-going work during the semester. ***If you leave this until the end of the semester it will be impossible to complete the task on schedule.***
4. *Due dates.* In order to be sure that you are on track on this assignment, students are required to submit a minimum of **three handbook entries** by **Friday, February 14**. (It is okay if these entries are in preliminary form; they may be revised further before you submit the complete handbook.) The **complete handbook** is due by **Monday, May 12**. Students may be penalized for missing either deadline.

Grading in the Course

There will be no examinations in the course. Grades will be based on the handbook, though grades may also be influenced by classroom participation and attendance in borderline cases. I will read all handbook entries, but encourage you to identify the (three or four) entries that you feel are strongest.

Attendance at all class sessions is required and participation is appreciated. If you have to miss a session, please inform me of the reasons by e-mail.

Course Outline

Lecture Date

1. Economic Sociology: Supplement or Challenge to Economics?	1/22
2. The Economic Approach	1/29
3. Some Applications of the Economic Approach	2/5
4. Risk and Time: Standard Approaches and Critiques from Behavioral Economics	2/12
5. Further Critiques of the Economic Approach	2/19
6. Firms	2/26
7. Critiques of Economics from Organization Theory	3/5
8. Exchange	3/12
9. Game Theory I: Basics	3/26
10. Game Theory II: Repeated Games and Embeddedness	4/2
11. Game Theory III: Anomalies, Applications, Reflections	4/9
12. Game Theory IV: Evolutionary Game Theory	4/16
13. Topics in Information Economics	4/23
14. Networks I: Coalitions, Network Exchange Theory	4/30
15. Networks II: Game-Theoretic Models of Network Formation	5/7

1. Economic Sociology: Supplement or Challenge to Economics?

Programmatic statements for economic sociology

*Richard Swedberg and Mark Granovetter (1992) "Introduction," in *The Sociology of Economic Life*, ed. by M Granovetter and R Swedberg (Boulder: Westview Press), pp. 1-26.

*Neil Smelser and Richard Swedberg (1994) "The Sociological Perspective on the Economy," in *The Handbook of Economic Sociology* [1st ed], ed. by N Smelser and R Swedberg (Princeton), pp. 3-26.

*Michael Piore (1996) "Review of *The Handbook of Economic Sociology*," *Journal of Economic Literature* 34:741-754.

Victor Nee (1998) "Sources of the New Institutionalism," in *The New Institutionalism in Sociology*, ed. by M Brinton and V Nee (Russell Sage), pp. 1-16.

Mark Granovetter (2005) "The Impact of Social Structure on Economic Outcomes," *Journal of Economic Perspectives* 19:33-50.

Additional sources

Richard Swedberg and Mark Granovetter, eds. (1992) *The Sociology of Economic Life* (Boulder: Westview Press).

Neil J Smelser and Richard Swedberg, eds. (1994) *The Handbook of Economic Sociology* (Russell Sage). [See also the second edition – with different articles – published in 2005]

George Farkas and Paula England, eds. (1994) *Industries, Firms, and Jobs: Sociological and Economic Approaches* (Plenum Press).

John Lie (1997) "Sociology of Markets," *Annual Review of Sociology* 23:341-360.

Richard Swedberg (1998) *Max Weber and The Idea of Economic Sociology* (Princeton).

Bruce G Carruthers and Sarah L Babb (2000) *Economy/Society: Markets, Meanings, and Social Structure* (Pine Forge).

Mauro Guillen, Randall Collins, Paula England, Marshall Meyer, eds., (2002) *The New Economic Sociology* (Russell Sage).

Richard Swedberg (2003) *Principles of Economic Sociology* (Princeton).

Neil Fligstein and L Dauter (2007) "The Sociology of Markets," *Annual Review of Sociology* 33:105-128.

2. The Economic Approach

*Gary Becker (1976) "The Economic Approach to Human Behavior," in *The Economic Approach to Human Behavior* (Chicago), pp. 3-14.

Gary Becker (1993) "Nobel Lecture – The Economic Way of Looking at Behavior," *Journal of Political Economy* 101:385-409.

Jack Hirshleifer (1985) "The Expanding Domain of Economics," *American Economic Review* 75: 53-68.

James S Coleman (1990) "Metatheory: Explanation in Social Science," in *Foundations of Social Theory* (Chicago), Ch 1, pp. 1-23.

*James S Coleman (1994) "A Rational Choice Perspective on Economic Sociology," in *Handbook of Economic Sociology* [1st edition], ed. by N Smelser and R Swedberg (Princeton), Ch 7, pp. 166-80.

Roger E. Backhouse and Steven G. Medema (2009) "On the Definition of Economics," *Journal of Economic Perspectives* 23(1):221-233.

Standard analysis of consumer choice

+Robert S Pindyck and Daniel L Rubinfeld (2009) *Microeconomics*, 7th ed., Ch 2 ("The Basics of Supply and Demand"), pp 21-61, and Ch 3 ("Consumer Behavior"), pp 67-105.

3. Some Applications of the Economic Approach

Altruism

*Gary Becker (1981) "Altruism in the Family," in *A Treatise on the Family* (Harvard), Ch 8, pp. 172-201.

Status

Robert Frank (1985) "Choosing the Right Pond," in *Choosing the Right Pond* (Oxford), Ch 3, pp. 35-57.

Endogenous preferences

George Stigler and Gary Becker (1977) "De Gustibus Non Est Disputandum," *American Economic Review* 67:76-90.

Gary Becker (1996) *Accounting for Tastes* (Harvard).

Identity

George A Akerlof and Rachel Kranton (2000) "Economics and Identity," *Quarterly Journal of Economics* 115: 715-753.

*Akerlof and Kranton (2002) "Identity and Schooling: Some Lessons for the Economics of Education," *Journal of Economic Literature* 40:1167-1201.

Akerlof and Kranton (2005) "Identity and the Economics of Organizations," *Journal of Economic Perspectives* 19(1):9-32.

Akerlof and Kranton (2010) *Identity Economics* (Princeton).

David Austen-Smith and Roland G Fryer Jr (2005) "An Economic Analysis of 'Acting White'," *Quarterly Journal of Economics* 120:551-583.

Norms

George A Akerlof (1980) "A Theory of Social Custom, of Which Unemployment May Be One Consequence," *Quarterly Journal of Economics* 94:749-75.

Robert Moffitt (1983) "An Economic Model of Welfare Stigma," *American Economic Review* 73:1023-1035.

Interdependent preferences

Thomas Schelling (1978) "Thermostats, Lemons, and Other Families of Models," *Micromotives and Macrobehavior* (Norton), Ch 3, pp. 83-133.

Charles F Manski (2000) "Economic Analysis of Social Interactions," *Journal of Economic Perspectives* 14:115-136.

Steven N Durlauf (2001) "A Framework for the Study of Individual Behavior and Social Interactions," *Sociological Methodology* 31:47-87. [also see comments and response]

Additional sources

Gary S Becker (1976) *The Economic Approach to Human Behavior* (Chicago).

Mariano Tommasi and Kathryn Ierulli, eds. (1995) *The New Economics of Human Behavior* (Cambridge).

Gary S Becker and Kevin M Murphy (2000) *Social Economics: Market Behavior in a Social Environment* (Harvard).

Steven D Levitt and Stephen J Dubner (2005) *Freakonomics: A Rogue Economist Explores the Hidden Side of Everything* (William Morrow).

4. Risk and Time: Standard Approaches and Critiques from Behavioral Economics

Choice under uncertainty

+Pindyck and Rubinfeld (2009) *Microeconomics*, 7th ed., Ch 5 ("Choice Under Uncertainty"), esp Chs 5.1-5.2 (pp 159-170) and Ch 5.5 (pp 185-190).

*Amos Tversky and Daniel Kahneman (1981) "The Framing of Decisions and the Psychology of Choice," *Science* 211:453-8.

*Daniel Kahneman, Jack L Knetsch, and Richard Thaler (1991) "The Endowment Effect, Loss Aversion, and Status Quo Bias," *Journal of Economic Perspectives* 5(1):193-206.

Chris Starmer (2000) "Developments in Non-Expected Utility Theory: The Hunt for A Descriptive Theory of Choice under Risk," *Journal of Economic Literature* 38:332-382.

Eddie Dekel, Barton Lipman, Aldo Rustichini (1998) "Recent Developments in Modeling Unforeseen Contingencies," *European Economic Review* 42:523-542.

Itzhak Gilboa, Andrew W. Postlewaite, and David Schmeidler (2008) "Probability and Uncertainty in Economic Modeling," *Journal of Economic Perspectives* 22(3):173-188

Choice over time

+Pindyck and Rubinfeld (2009) *Microeconomics*, 7th ed., Ch 15 ("Investment, Time, and Capital Markets"), esp Chs 15.1-15.4 (pp 551-563)

*George Loewenstein and Richard Thaler (1989) "Anomalies: Intertemporal Choice," *Journal of Economic Perspectives* 3(4):181-193.

George-Marios Angeletos, David Laibson, Andrea Repetto, Jeremy Tobacman and Stephen Weinberg (2001) "The Hyperbolic Consumption Model: Calibration, Simulation, and Empirical Evaluation," *Journal of Economic Perspectives* 15:47-68.

Shane Frederick, George Loewenstein, and Ted O'Donoghue (2002) "Time Discounting and Time Preference: A Critical Review," *Journal of Economic Literature* 40:351-401.

Shlomo Benartzi and Richard H. Thaler (2007) "Heuristics and Biases in Retirement Savings Behavior" *Journal of Economic Perspectives* 21(3): 81-104

More behavioral economics

Richard Thaler (1992) *The Winner's Curse* (Princeton). [A collection of "Anomalies" columns from JEP]

*Matthew Rabin (1998) "Psychology and Economics" *Journal of Economic Literature* 36:11-46.

Richard Thaler (2000) "From Homo Economicus to Homo Sapiens," *Journal of Economic Perspectives* 14:133-141.

Colin Camerer, George Loewenstein, and Drazen Prelec (2005) "Neuroeconomics: How Neuroscience Can Inform Economics," *Journal of Economic Literature* 43: 9-64

*Stefano DellaVigna (2009) "Psychology and Economics: Evidence from the Field," *Journal of Economic Literature* 47(2): 315-372

5. Further Critiques of the Economic Approach

From philosophy

*Amartya K Sen (1977) "Rational Fools: A Critique of the Behavioral Assumptions of Economic Theory," *Philosophy & Public Affairs* 4: 318-44.

Jon Elster (1983) "Rationality," in *Sour Grapes: Studies in the Subversion of Rationality* (Cambridge), Ch I, pp. 1-42.

Albert O Hirschman (1985) "Against Parsimony: Three Easy Ways of Complicating Some Categories of Economic Discourse" *Economics and Philosophy* 1: 7-21.

*Amitai Etzioni (1988) *The Moral Dimension: Toward a New Economics* (New York: Free Press). "The Irreducibility of Moral Behavior," Ch 5, pp. 67-87.

Daniel Hausman (1989) "Economic Methodology in a Nutshell," *Journal of Economic Perspectives* 3(2):115-127

From sociology

*Paul Hirsch, Stuart Michaels and Ray Friedman (1987) "Dirty Hands vs. Clean Models: Is Sociology in Danger of Being Seduced by Economics?" *Theory and Society* 16:317-336.

Richard Swedberg (1990) *Economics and Sociology: Redefining their Boundaries: Conversations with Economists and Sociologists* (Princeton).

*James Baron and Michael T. Hannan (1994) "The Impact of Economics on Contemporary Sociology," *Journal of Economic Literature* 32:1111-46.

Arne L. Kalleberg (1995) "Sociology and Economics: Crossing the Boundaries," *Social Forces* 73:1207-18.

Sun-Ki Chai (2001) *Choosing an Identity: A General Model of Preference and Belief Formation* (Michigan). Esp. Ch 1 (“The Success and Failure of Rational Choice”) and Ch 2 (“Alternatives to Conventional Rational Choice: A Survey”).

6. Firms

Standard microeconomics treatment

+Pindyck and Rubinfeld (2009) *Microeconomics*, 7th ed., Ch 6 (“Production”) and Ch 7 (“Costs of Production”), pp 195-269.

Economic perspectives on the theory of the firm

Ronald Coase (1937) “The Nature of the Firm,” *Economica* 4:386-405.

*Oliver E Williamson (1981) “The Economics of Organization: The Transaction Cost Approach,” *American Journal of Sociology* 87:548-77.

Oliver E Williamson (1985) *The Economic Institutions of Capitalism* (Free Press).

Oliver E Williamson (1994) “Transaction Cost Economics and Organization Theory” in N Smelser and R Swedberg, eds, *Handbook of Economic Sociology* (Princeton), Ch 4, pp.77-107.

Oliver Hart (1989) “An Economist’s Perspective on the Theory of the Firm,” *Columbia Law Review* 89:1757-74.

David Kreps (1996) “Markets and Hierarchies and (Mathematical) Economic Theory,” *Industrial and Corporate Change* 5:561-595.

Bengt Holmstrom and John Roberts (1998) “The Boundaries of the Firm Revisited,” *Journal of Economic Perspectives* 12:73-94.

*Francine Lafontaine and Margaret Slade (2007) “Vertical Integration and Firm Boundaries: The Evidence,” *Journal of Economic Literature* 45: 629–685

Sociological critiques

Charles Perrow (1986) “Economic Theories of Organization,” *Theory and Society* 15:11-45.

Susan Helper, John Paul MacDuffie, and Charles Sabel (2000) “Pragmatic Collaborations: Advancing Knowledge While Controlling Opportunism,” *Industrial and Corporate Change* 9:443-488.

*Robert Freeland (2000) “Creating Holdup through Vertical Integration: Fisher Body Revisited,” *Journal of Law and Economics* 43:33-66.

Robert Freeland (2001) *The Struggle for Control of the Modern Corporation: Organizational Change at General Motors, 1924-1970*. Cambridge.

7. Critiques of Economics from Organization Theory

Bounded Rationality

Herbert Simon (1957) *Models of Man* (Wiley).

- *James G March (1982) "Theories of Choice and Making Decisions," *Society* 20:29-39.
- *James G March (1994) *A Primer on Decision Making* (Free Press), Ch 1 ("Limited Rationality"), pp 1-55.
- J Conlisk (1996) "Why Bounded Rationality?" *Journal of Economic Literature* 34:669-700.
- *Ronald M Harstad and Reinhard Selten (2013) "Bounded-Rationality Models: Tasks to Become Intellectually Competitive," *Journal of Economic Literature* 51:496-511.
- Vincent P Crawford (2013) "Boundedly Rational versus Optimization-Based Models of Strategic Thinking and Learning in Games," *Journal of Economic Literature* 51:512-527.
- *Matthew Rabin (2013) "Incorporating Limited Rationality into Economics," *Journal of Economic Literature* 51:528-543.

Models of Organizations

- Herbert Simon (1976 [1945]) *Administrative Behavior* (Free Press).
- James G March and Herbert A Simon (1958) *Organizations* (Wiley).
- Richard M Cyert and James G March (1963) *A Behavioral Theory of the Firm* (Prentice Hall).
- *M D Cohen, J G March, and J P Olsen (1972) "A Garbage Can Model of Organizational Choice," *Administrative Science Quarterly* 17: 1-25
- John F Padgett (1980) "Managing Garbage Can Hierarchies," *Administrative Science Quarterly* 25:583-604.
- D Levinthal and J G March (1981) "A Model of Adaptive Organizational Search," *Journal of Economic Behavior and Organization* 2:307-333.
- J G March and B Levitt (1988) "Organizational Learning," *Annual Review of Sociology* 14:319-340.
- Kathleen M Carley (1995) "Computational and Mathematical Organization Theory: Perspective and Directions," *Journal of Computational and Mathematical Organization Theory* 1:39-56.
- Jerker Denrell, Christina Fang, and Daniel Levinthal (2004) "From T-Mazes to Labyrinths: Learning from Model-Based Feedback," *Management Science* 50 (10), 1366-1378

Artificial Intelligence

- Alan Newell and Herbert A Simon (1972) *Human Problem Solving* (Prentice Hall).
- Thomas J Fararo and John Skvoretz (1984) "Institutions as Production Systems," *Journal of Mathematical Sociology* 10:117-181.
- Kathleen Carley and Allen Newell (1994) "The Nature of the Social Agent," *Journal of Mathematical Sociology* 19:221-262.
- William Sims Bainbridge, Edward E Brent, Kathleen M Carley, David R Heise, Michael W Macy, Barry Markovsky, John Skvoretz (1994) "Artificial Social Intelligence," *Annual Review of Sociology* 20: 407-436.

8. Exchange

Walrasian equilibrium and the Welfare Theorems

+Pindyck and Rubinfeld (2001) *Microeconomics*, 7th ed., Ch 16 (“General Equilibrium and Economic Efficiency”), esp Chs 16.2 and 16.3.

*Allan M Feldman (1991) “Welfare Economics,” *The World of Economics*, edited by J Eatwell, M Milgate, and P Newman, pp. 713-26. [extracted from *The New Palgrave: Dictionary of Economics* (Norton)]

Vernon Smith (1994) “Economics in the Laboratory,” *Journal of Economic Perspectives* 8:113-31.

Joseph Stiglitz (1995) “Critique of the First Fundamental Theorem of Welfare Economics,” in *Whither Socialism* (MIT Press), Ch 3.

Sociological application of the Walrasian model

James Coleman (1990) “The Linear System of Action,” in *Foundations of Social Theory* (Harvard), Ch 25, pp. 667-700.

Externalities and the Coase Theorem

+Pindyck and Rubinfeld (2009) *Microeconomics*, 7th ed., Ch 18 (“Externalities and Public Goods”), esp Chs 18.1 – 18.4 (pp 645-673).

Ronald Coase (1960) “The Problem of Social Cost,” *Journal of Law and Economics* 3:1-44.

Joseph Farrell (1987) “Information and the Coase Theorem,” *Journal of Economic Perspectives* 1:113-129.

9. Game Theory I: Basics and Applications to Industrial Organization

*Robert Gibbons (1997) “An Introduction to Applicable Game Theory,” *Journal of Economic Perspectives* 11(1):127-49.

Further sources

Robert Gibbons (1992) *Game Theory for Applied Economists* (Princeton).

A Dixit and S Skeath (1999) *Games of Strategy* (Norton).

David Kreps (1990) *A Course in Microeconomic Theory* (Princeton), Chs 11-15.

Jean Tirole (1988) *The Theory of Industrial Organization* (MIT Press), Chs 5-11.

Applications to industrial organization

+Pindyck and Rubinfeld (2009) *Microeconomics*, 7th ed., Ch 12 (“Monopolistic Competition and Oligopoly”) & Ch 13 (“Game Theory and Competitive Strategy”), esp Ch 12.2-12.4 (pp 449-464) and Chs 13.1-13.7 (pp 479-509).

Critique of IO applications

Franklin M Fisher (1989) "Games Economists Play: A Noncooperative View," *Rand Journal of Economics* 20:113-124.

10. Game Theory II: Repeated Games and Embeddedness

*Robert Gibbons (2001) "Trust in Social Structures: Hobbes and Coase Meet Repeated Games," in K Cook, ed., *Trust in Society* (Russell Sage), pp. 332-353.

*Mark Granovetter (1985) "Economic Action and Social Structure: The Problem of Embeddedness," *American Journal of Sociology* 91:481-510.

Werner Raub and Jeon Weesie (1990) "Reputation and Efficiency in Social Interactions: An Example of Network Effects," *American Journal of Sociology* 96:626-54.

Oliver E Williamson (1993) "Calculativeness, Trust, and Economic Organization," *Journal of Law and Economics* 36:453-486.

*Brian Uzzi (1996) "The Sources and Consequences of Embeddedness for the Economic Performance of Organizations," *American Sociological Review* 61:674-98.

Brian Uzzi (1999) "Embeddedness in the Making of Financial Capital: How Social Relations and Networks Benefit Firms Seeking Finance," *American Sociological Review* 64:481-505.

11. Game Theory III: Experimental Evidence, Applications, Reflections

Experimental evidence

Gerald Marwell and Ruth E Ames (1981) "Economists Free Ride, Does Anyone Else?" *Journal of Public Economics* 15:295-310.

*Robyn Dawes and Richard Thaler (1988) "Anomalies: Cooperation," *Journal of Economic Perspectives* 2(3):187-97. [Also appears as Ch 2 in R Thaler (1992) *The Winner's Curse* (Princeton).]

*Colin F Camerer and Richard H Thaler (1995) "Anomalies: Ultimatums, Dictators, and Manners," *Journal of Economic Perspectives* 9(2):209-219.

David Sally (1995) "Conversation and Cooperation in Social Dilemmas: A Meta-Analysis of Experiments from 1958 to 1992," *Rationality and Society* 7:58-92.

Colin Camerer (1997) "Progress in Behavioral Game Theory," *Journal of Econ Perspectives* 11:167-88.

Henrich J, R Boyd, S Bowles, C Camerer, E Fehr, H Gintis, R McElreath (2001) "In Search of Homo Economicus: Behavioral Experiments in 15 Small-Scale Societies," *American Economic Review* 91:73-78.

Colin Camerer (2003) *Behavioral Game Theory: Experiments in Strategic Interaction* (Princeton).

*Colin Camerer and Ernst Fehr (2006) "When Does 'Economic Man' Dominate Social Behavior?" *Science* 311:47-52.

Ernst Fehr and Herbert Gintis (2007) "Human Motivation and Social Cooperation: Experimental and Analytical Foundations," *Annual Review of Sociology* 33:43-64.

Steven D. Levitt and John A. List (2007) "What Do Laboratory Experiments Measuring Social Preferences Reveal About the Real World?" *Journal of Economic Perspectives* 21(2): 153–174

Behavioral-economics applications of game theory

Matthew Rabin (1993) "Incorporating Fairness into Game Theory and Economics," *American Economic Review* 83:1281-1302.

*Ernst Fehr and Klaus M Schmidt (1999) "A Theory of Fairness, Competition, and Cooperation," *Quarterly Journal of Economics* 114:817-868.

Botond Koszegi (2006) "Emotional Agency," *Quarterly Journal of Economics* 121:121-155.

Herbert Gintis (2009) *The Bounds of Reason: Game Theory and the Unification of the Social Sciences*. Princeton University Press.

Roland Benabou and Jean Tirole (2011) "Identity, Morals, and Taboos: Beliefs as Assets," *Quarterly Journal of Economics* 126:805-855.

Multiple-self and intertemporal models

James Montgomery (1998) "Toward a Role-Theoretic Conception of Embeddedness," *American Journal of Sociology* 104:92-125.

Ted O'Donoghue and Matthew Rabin (1999) "Doing it Now or Later" *American Economic Review* 89:103-24.

Loewenstein, George, Ted O'Donoghue, and Matthew Rabin (2003) "Projection Bias in Predicting Future Utility," *Quarterly Journal of Economics* 118:1209-1248.

Sociological reflections

Erving Goffman (1969) *Strategic Interaction*. University of Philadelphia Press.

Arthur Stinchcombe (1980) "Is the Prisoners' Dilemma all of Sociology?" *Inquiry* 23:187-192.

Richard Swedberg (2000) "Sociology and Game Theory: Contemporary and Historical Perspectives," *Theory and Society* 30:301-335.

12. Game Theory IV: Evolutionary Perspectives

Evolutionary game theory

*H Peyton Young (1996) "The Economics of Convention," *Journal of Economic Perspectives* 10(2):105-22

George J Mailath (1998) "Do People Play Nash Equilibrium? Lessons from Evolutionary Game Theory," *Journal of Economic Literature* 36:1347-74.

Herbert Gintis (2000) *Game Theory Evolving* (Princeton).

Jonathan Bendor and Piotr Swistak (2001) "The Evolution of Norms," *American Journal of Sociology* 106:1493-1545.

*Larry Samuelson (2002) "Evolution and Game Theory," *Journal of Economic Perspectives* 16(2):47-66.

Actor Based Simulation Models

Robert Axelrod (1984) *The Evolution of Cooperation* (Basic).

Robert Axelrod (1997) *Complexity and Cooperation* (Princeton).

Ken Binmore (1998) "Review of Axelrod's *The Complexity of Cooperation*," *Journal of Artificial Societies and Social Simulation* 1(1). [online journal]

J M Epstein and R Axtell (1996) *Growing Artificial Societies* (MIT Press).

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