

BOSTON COLLEGE
Economics 312 - Winter 1997
Quasi-Rational Economics

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Office Hours: Tuesdays 1:30 pm - 3:00 pm or by appointment.

Economics is concerned with understanding the production and exchange of goods and services, that in turn depends on sophisticated planning and decision making by people. The *homo-economus* of introductory microeconomics is an individual who chooses a bundle of goods that maximizes utility subject to a budget constraint. Beginning with this model of human behavior, one may derive supply and demand curves, whose intersection determines market prices and quantities. This model has been very useful in helping us understanding many of the broad changes that occur in an economy, however newspapers are also filled daily with examples of human folly, including civil wars, strikes, medical malpractice cases, oversights in the regulation of airlines or banks, break downs federal government budget negotiations, labor strife, phenomena that seem inconsistent with the simple model of *homo-economus*. Moreover these behaviors may have a profound effect upon the performance of the economy as a whole, and hence understanding them is of some important to economics.

The objective of this course is to explore these and related issues using recent research from a number of fields, including cognitive psychology, game theory, anthropology and the theory of evolution. The lectures shall provide an overview of some of this literature, while students are encouraged to explore in greater depth a single issue that can form the basis for a class presentation and term paper.

Course performance is evaluated as follows:

1. 30% - Three tests based on the lecture material.
2. 20% - Evaluation of a 45 minute class presentation. Photocopies of the slides for the presentation are to be handed in the week before the class presentation.
3. 30% - Final paper to be handed in last day of class. 10% of the mark is base on the outline handed in the first class after the midterm break. The class presentation and essay may be on the same topic.

4. 20% - Final Exam. The exam is two hours, and consists of a single question:

- Discuss the relationship between rational choice, human behavior and social organization.

Outline for the Lectures

1. Introduction

1.1. Evolution versus Utility Theory

This section reviews utility theory and discusses how utility functions may be formed by evolutionary processes.

Alchian (1950)

Dawkins (1995) and Dawkins (1976).

Chapter 1 of Wright (1994).

Chapter 2 of Richards (1987).

Part one Sulloway (1996)

1.2. Complexity

Why is it so hard to make a good decision?

Tenner (1996)

MacLeod (1996)

2. The Psychology of Decision Making

2.1. Review of Utility Theory

Review the utility theory in your micro-economics textbook.

Chapter 2 of Green and Shapiro (1994)

2.2. Some Evidence

A great deal of evidence suggests that while individuals respond to incentives, utility theory is rejected by the data.

Chapter 3 of Green and Shapiro (1994).

Pages 67-86 of Kagel and Roth, eds (1995).

Smith (1994).
MacLeod (1995).

2.3. Language and Mental Models

Language is the tool of decision making. Where does it come from?

Chapters 1-4, 9 Pinker (1995).
Smith (1995).
Chapters 4 and 5 Johnson-Laird (1983).
Afran (1995).

2.4. Induction

Decisions are informed by models, requiring the use of *inductive reasoning*.

Skinner (1948)
Osherson (1995)
Chapter 1, 7 Holland, Holyoak, Nisbett and Thagard (1986)

2.5. From Models to Action and the Role of Emotion

Emotions play an important role for decision making in complex environments.

Baron-Cohen (1995)
Shafir and Tversky (1995)
Damasio (1995)

2.6. Computer Models of Human Decision Making

The process of thought is informed by attempts to program machines to think.

Newell, Shaw and Simon (1995 (originally published 1963))
Newell and Simon (1995 (originally published 1963))
Chapter 2 and 3 Churchland and Sejnowski (1993).

3. Strategic Interaction

3.1. Thinking Strategically

How do we make decisions when they also depend on the decision of others?

Parts I and II of Schelling (1980)
Part I of Dixit and Nalebuff (1991)

3.2. Conflict and Property Rights

Property rights are one of the important ingredients for the reduction of conflict.

Ellickson (1991)

Hirshleifer (1995)

Chapter 9 Frank (1988).

Yellen (1990)

3.3. Cooperation

Cooperation between selfish individuals is possible when relationships are long lived.

Axelrod (1984).

Chapter 4 Dixit and Nalebuff (1991).

Chapters 4-8 Frank (1988)

Mauss (1990)

4. Social Organization

4.1. The Organization of Groups

What are the characteristics of a stable social group?

Hirschman (1971)

Olson (1971).

Jankowski (1991)

4.2. Efficient Institutions

These studies examine factors that can help us understand the rise and fall of complex societies based on economic and cultural institutions.

North (1990).

Greif (1994).

MacMullen (1988).

North and Thomas (1973).

Tainter (1988).

References

- Afran, Scott**, “Classifying Nature Across Cultures.” In Smith and Osherson, eds (1995) pp. 131–174.
- Alchian, Armen A.**, “Uncertainty, Evolution and Economic Theory,” *Journal of Political Economy*, June 1950, 58 (3), 211–21.
- Axelrod, Robert**, *The Evolution of Cooperation*, New York: Basic Books, 1984.
- Baron-Cohen, Simon**, *Mindblindness: An Essay on Autism and Theory of Mind*, Cambridge, MA: MIT Press, 1995.
- Churchland, Patricia S. and Terrence J. Sejnowski**, *The Computational Brain*, Cambridge, MA: MIT Press, 1993.
- Damasio, Antonio R.**, *Descartes’ Error*, New York, NY: Avon Books, 1995.
- Dawkins, R.**, *The Selfish Gene*, Oxford: Oxford University Press, 1976.
- Dawkins, Richard**, “God’s Utility Function,” *Scientific American*, November 1995, 273 (5), 80–85.
- Dixit, Avinash and Barry Nalebuff**, *Thinking Strategically*, New York, NY: W. W. Norton, 1991.
- Ellickson, Robert C.**, *Order Without Law: How Neighbors Settle Disputes*, Cambridge, MA: Harvard University Press, 1991.
- Feigenbaum, Edward A. and Julian Feldman, eds**, in Edward A. Feigenbaum and Julian Feldman, eds., *Computers and Thought*, Menlo Park, CA: AAAI Press/The MIT Press, 1995 (originally published 1963).
- Frank, Robert H.**, *Passions within Reason*, New York, NY, U.S.A.: W. W. Norton & Company, 1988.
- Green, Donald P. and Ian Shapiro**, *Pathologies of Rational Choice Theory*, New Haven, Ct.: Yale University Press, 1994.

- Greif, Avner**, “Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on Collectivist and Individualist Societies,” *Journal of Political Economy*, October 1994, 102 (5), 912–950.
- Hirschman, Albert**, *Exit, Voice and Loyalty*, Cambridge, Mass.: Harvard University Press, 1971.
- Hirshleifer, Jack**, “Anarchy and its Breakdown,” *Journal of Political Economy*, February 1995, 103 (1), 26–52.
- Holland, John H., Keith J. Holyoak, Richard E. Nisbett, and Paul R. Thagard**, *Induction*, Cambridge, MA: The MIT Press, 1986.
- Jankowski, Martín Sánchez**, *Islands in the Street*, Berkeley, CA, U.S.A.: University of California Press, 1991.
- Johnson-Laird, Philip N.**, *Mental Models*, Cambridge, MA: Harvard University Press, 1983.
- Kagel, John H. and Alvin E. Roth, eds**, in John H. Kagel and Alvin E. Roth, eds., *The Handbook of Experimental Economics*, Princeton, NJ, U.S.A.: Princeton University Press, 1995.
- MacLeod, W. Bentley**, “Incentives in Organizations: An Overview of Some of the Evidence and Theory,” in Horst Siebert, ed., *Trends in Business Organization*, Tübingen, Germany: J.C.B. Mohr, 1995, pp. 3–32.
- , “Decision, Contract and Emotion,” *Canadian Journal of Economics*, November 1996, 28.
- MacMullen, Ramsay**, *Corruption and the Decline of Rome*, New Haven, CN: Yale University Press, 1988.
- Mauss, Marcel**, *The Gift*, New York: W. W. Norton, 1990.
- Newall, Allen and Herbert A. Simon**, “GPS, A Program that Simulates Human Thought.” In Feigenbaum and Feldman, eds (1995 (originally published 1963)) pp. 279–293.
- Newell, Allen, J. C. Shaw, and Herbert A. Simon**, “Chess-Playing Programs and the Problem of Complexity.” In Feigenbaum and Feldman, eds (1995 (originally published 1963)) pp. 39–70.

- North, Douglas C. and Robert Paul Thomas**, *The Rise of the Western World: A New Economic History*, New York, NY: Cambridge University Press, 1973.
- North, Douglass C.**, *Institutions, Institutional Change and Economic Performance*, New York, NY: Cambridge University Press, 1990.
- Olson, Mancur**, *The Logic of Collective Action*, Cambridge, MA: Harvard University Press, 1971.
- Osherson, Daniel N.**, “Probability Judgement.” In Smith and Osherson, eds (1995) pp. 35–76.
- Pinker, Steven**, *The Language Instinct*, New York, N.Y.: HarperPerennial, 1995.
- Richards, Robert J.**, *Darwin and the Emergence of Evolutionary Theories of Mind and Behavior*, Chicago, IL: University of Chicago Press, 1987.
- Schelling, Thomas C.**, *The Strategy of Conflict*, Cambridge, MA: Harvard University Press, 1980.
- Shafir, Eldar and Amos Tversky**, “Decision Making.” In Smith and Osherson, eds (1995) pp. 77–100.
- Skinner, B. F.**, “‘Superstition’ in the Pigeon,” *Journal of Experimental Psychology*, 1948, 38, 168–172.
- Smith, Edward E.**, “Concepts and Categorization.” In Smith and Osherson, eds (1995) pp. 3–34.
- and **Daniel N. Osherson**, eds, in Edward E. Smith and Daniel N. Osherson, eds., *Thinking*, Cambridge, MA: The MIT Press, 1995.
- Smith, Vernon L.**, “Economics in the Laboratory,” *Journal of Economics Perspectives*, Winter 1994, 8 (1), 113–131.
- Sulloway, Frank J.**, *Born to Rebel*, New York, NY: Pantheon Books, 1996.
- Tainter, Joseph A.**, *The Collapse of Complex Societies*, New York, NY: Cambridge University Press, 1988.

Tenner, Edward, *Why Things Bite Back*, New York, NY: Alfred A. Knopf, 1996.

Wright, Robert, *The Moral Animal*, New York, NY: Vintage Books, 1994.

Yellen, John E., “The Transformation of the Kalahari !Kung,” *Scientific American*, April 1990, 262 (4), 96–105.