

Rationality

Tilburg University, 2010-2011

General Overview

What does it mean to be rational? Are we rational if we improve our own well-being at the expense of others, or will we end up as *rational fools* who cease to trust each other? Which constraints on rational action can we derive from applying our reasoning capacities? Questions like these are of great significance in an era where apparently rational behavior leads to wasteful labor disputes, collapse of the stock market, and sometimes even wars. This course introduces philosophical accounts of rational action and belief, and examines the role of rationality in modern scientific theories, especially in economics and psychology. An important theme throughout this course is which conception of rationality is most appropriate for socio-economic sciences that want to give a faithful and comprehensive account of human agency.

The course will roughly be divided into five modules. A more detailed syllabus is provided below. The course will be a lecture course with plenty of time scheduled for discussion. Students will be expected to attend the lectures and actively participate in the discussions.

Reading Material

Primary Texts

1. [OPPE] Gerald Gaus, *On Philosophy, Politics and Economics*, Wadsworth Philosophical Topics, 2008 (chapters 1,2,4 & 5).
2. [HR] Alfred Mele and Piers Rawling (editors), *The Oxford Handbook of Rationality*, Oxford University Press, 2004 (a selection of papers).
3. A selection of contemporary research papers (see the syllabus below).

Supplementary Texts

- Jonathan Adler and Lance Rips (editors), *Reasoning: Studies of Human Inference and its Foundations*, Cambridge University Press, 2008.
- Ken Binmore, *Rational Decisions*, Princeton University Press, 2009.
- Jon Elster, *Reason and Rationality*, Princeton University Press, 2008.
- Robert Nozick, *The Nature of Rationality*, Princeton University Press, 1993.

Grades

1. (30%) Participation & attendance: Students are required to attend all lectures and actively participate in the discussions. In order to facilitate discussion, students will be required to submit a short (at most 1 page) reaction to the readings each week.
2. (30%) Short paper: Roughly half-way through the semester there will be a short take-home exam consisting to 2-3 essay questions based on the material covered.
3. (40%) Final paper & presentation: Students will be required to write a final paper on a topic of their choosing (under consultation with the instructor). Depending on the number of students in the class, students will give short presentations (15 - 20 minutes) on their paper at the end of the semester.

Syllabus (Tentative)

1. *Reasons, Rationality and Reasoning* (2 Lectures). The first module will introduce different notions of rationality found in the philosophical literature. We will examine two diametrically opposed views of what reason can tell us about (rational) action, exemplified by two great philosophers of the Enlightenment. David Hume asserted that reason is a “slave of the passions” and unable to determine more than appropriate means to a given end, thus anticipating the modern instrumental conception. Immanuel Kant, however, argued that reason is able to provide us with a universal law of rational action, the categorical imperative. This dichotomy is important in recent debates as well, and will accompany us throughout the course.

Core Readings

- Gilbert Harman, “Rationality” in: *Reasoning, Meaning and Mind*, Clarendon Press, Oxford, 1999.
- Michael Smith, “Humean rationality” in [HR].
- Onora O’Neill, “Kant: Rationality as Practical Reason” in [HR].

Supplementary Readings

- Robert Audi, “Theoretical Rationality: Its Sources, Structure, and Scope” in [HR].
- John Broome, Does Rationality Give us Reasons?, *Philosophical Issues*, 15:1, pgs. 321 - 337, 2005.
- Donald Davidson, “Paradoxes of Irrationality” in: *Problems of Rationality*, Oxford University Press, 1982.

- Donald Davidson, “Incoherence and Irrationality” in: *Problems of Rationality*, Oxford University Press, 1985.

2. *Practical and Theoretical Rationality* (3 - 4 Lectures). This module will examine basic questions about the nature of practical and theoretical rationality. Should a rational agent always adopt the necessary means to achieve a desired goal? Why should rational (graded) beliefs conform to the laws of probability? What is the relationship between the laws of (classical) logic and rational belief? It is clearly not rational to hold the belief that p and that not- p , but what about deductive closure: if an agent believes p and that p implies q (and is interested in whether q is true), should the agent then believe q ?

Core Readings

- Gerald Gaus, Chapter 1: “Instrumental and Economic Rationality” in [OPPE]
- Joseph Raz, The Myth of Instrumental Rationality, *Journal of Ethics and Social Philosophy*, 1:1, 2005.
- James M. Joyce, “Bayesianism” in [HR].
- David Christensen, *Putting Logic in its Place*, Oxford University Press, 2004 (Chapter 1: “Logic and Rational Belief” & Chapter 2: “Two Models of Belief”).
- Robert Stalnaker, “The Problem of Deduction”, in: *Reasoning: Studies of Human Inference and its Foundations*, Jonathan Adler and Lance Rips (editors), Cambridge University Press, 2008.
- Amos Tversky and Daniel Kahnemann, “Extensional Versus Intuitive Reasoning: The Conjunction Fallacy in Probability Judgment”, in: *Reasoning: Studies of Human Inference and its Foundations*, Jonathan Adler and Lance Rips (editors), Cambridge University Press, 2008.

Supplementary Readings

- Lawrence Blume and David Easley, “Rationality” in: *The New Palgrave Dictionary of Economics*, Second Edition, Steven Durlauf and Lawrence Blume (eds), 2008.
- John Broome, Have we Reason to do as Rationality Requires? A Comment on Raz, *Journal of Ethics and Social Philosophy*, 2005
- Niko Kolodny, Why be Rational?, *Mind*, Vol. 114, pgs. 509 - 563, 2005.
- Robert Nozick, “Chapter 4: Instrumental Rationality and its Limits”, in: *The Nature of Rationality*, Princeton University Press, 1993.

3. *Rational Choice Theory* (2-3 Lectures). Rational choice theory, the core of the economic approach to human behavior, has become an influential approach in all of the social sciences. What makes individual actions rational? Rational choice theory offers a very simple answer: actions are rational if they reflect the maximizing of a consistent preference ordering. Is this a plausible account of human behavior? How can it be defended? One measure of the success of rational choice theory, perhaps, is for how long it has been able to withstand criticism. Recent developments, especially in behavioral economics, however, have succeeded in putting the standard model under pressure. We will also examine different objections to the standard model of rational choice.

Core Readings

- Gerald Gaus, Chapter 2: “Utility Theory” in [OPPE]
- Wlodek Rabinowicz, “Pragmatic Arguments for Rationality Constraints” in: *Reasoning, Rationality and Probability*, Maria Carla Galavotti, Roberto Scazzieri and Patrick Suppes (eds), CSLI Publications, 2008.
- Amartya Sen, Rational Fools, *Philosophy and Public Affairs* 6, pp. 317 - 344, 1977.

Supplementary Readings

- Jon Elster, “The Nature and Scope of Rational-Choice Explanation”, in: *Readings in the Philosophy of Social Science*, Michael Martin and Lee McIntyre (editors), The MIT Press, 1994.

4. *Rationality in Interaction* (2 Lectures). John von Neumann and Oskar Morgenstern wrote in their seminal book, often cited as the starting point of modern day game theory, that “we wish to find the mathematically complete principles which define ‘rational behavior’ for the participants [in a game]” (pg. 31, *Theory of Games and Economic Behavior*, Princeton University Press, 1944). To what extent they and subsequent game theorists have succeeded in this lofty goal is the subject of much debate. After introducing some basic concepts in game theory, we will focus on the well-known Prisoner’s Dilemma, which seems to pose some problems for the instrumental conception of rationality. Time-permitting, we will also consider another important issue in the foundations of game theory: the paradox of backwards induction, which seems to pose a problem for the key assumption that it is *common knowledge* that players “behave rationally”.

Core Readings

- Gerald Gaus, Chapter 4: “Game Theory” in [OPPE]
- Christina Bicchieri, “Rationality and Game Theory” in [HR]

- Philip Pettit and Robert Sugden, The Backward Induction Paradox, *Journal of Philosophy*, Vol. 86, pgs. 169 - 82, 1989.

Supplementary Readings

- Christina Bicchieri, Self-refuting theories of strategic interaction: A paradox of common knowledge, *Erkenntnis*, 30:1-2, pgs. 69-85, 1989.

5. *Collective Rationality*. (1-2 Lectures). How can a group of “rational” individuals arrive at a rational choice? This module will introduce the key issues in *social choice theory* (eg., Arrow’s Theorem on the “impossibility” of a rational group decision procedure) and, time-permitting, related work on *judgement aggregation*.

Core Readings

- Gerald Gaus, Chapter 5: “Social Choice Theory” in [OPPE]

Supplementary Readings

- Philip Pettit, Rationality, Reasoning and Group Agency, *Dialectica*, Vol 61, pgs. 495 - 519, 2007.
- Christian List and Philip Pettit, Aggregating Sets of Judgments: An Impossibility Result, *Economics and Philosophy*, Vol. 18, pp. 89-110, 2002.

Objectives

Content:

- to become acquainted with important philosophical literature
- to understand and evaluate various perspectives on human rationality
- to become familiar with foundational issues in the social sciences
- to understand the interface between problems in philosophy, economics and psychology
- to see the relevance of philosophy for societal questions

Skills:

- to read and to understand complex scholarly texts
- to learn how to organize and to structure your thoughts and arguments
- to improve academic writing skills
- to prepare for your Master Thesis and potential research projects
- to improve your level of English