

Decision Theory: Preferences, Beliefs, and Desires

Graduate Seminar, Spring 2010

Professor Lara Buchak

Wednesday, 4-6 PM

234 Moses Hall

Course Description

At its core, decision theory is a mathematical theory that relates preference, belief, and desire. This theory is used in a variety of ways: to guide action, to explain and predict behavior, to normatively assess choices, and to gain access to mental states. However, before it can be adequate for any of these purposes, its theoretical core needs to be expanded upon. In particular, the notions of preference, belief, and desire all need to be interpreted.

This seminar explores foundational issues in decision theory. In particular, we will focus on debates surrounding the analysis of preference, belief, and desire. Topics include the relationship between preference and behavior; the relationship between desire and reason; incommensurable values; substantive theories of utility; whether degrees of belief can be vague; and other issues. In addition to their importance to decision theory, these debates touch on issues in ethics, epistemology, and philosophy of mind.

This course is intended for graduate students in philosophy, but advanced undergraduates may enroll with permission. No background in decision theory or formal epistemology is required. One of my goals in teaching this course is to introduce “newcomers” to the subject. I will simplify the technical material for easier accessibility, but students wishing to go more in depth will have the opportunity. Additionally, there will not be significant overlap with my decision theory seminar from fall 2008; students who have taken that seminar are encouraged to take this one as well.

Assignments

Presentation: Each student must prepare a short presentation on the readings for one week. You should consider yourself an expert on that week’s reading, and be prepared to respond to other students’ questions and help clarify the discussion.

Paper: Each student will write a paper of length and quality appropriate for a graduate student in philosophy. Please consult with me about your topic before you begin writing. Papers are due on Friday, May 7th.

Graduate students please note: this course may fill any of the “area requirements,” depending on the content of your paper.

Tentative Schedule

Week 1. Introduction (1/20)

I. Decision Theory and Its Uses

Week 2. Decision Theory as Normative (1/27)

Dreier, James. "Decision Theory and Morality." In Oxford Handbook of Rationality, A. Mele and P. Rawling, eds., 2004. pp 156-160.

Maher, Patrick. Betting on Theories. Cambridge University Press, 1993. pp. 1-12, 21-23, 34-62.

Week 3. Decision Theory as Interpretative (2/3)

Lewis, David. "Radical Interpretation." *Synthese* (1974), 27: 331-344.

Zynda, Lyle. "Representation Theorems and Realism about Degrees of Belief." *Philosophy of Science* (March 2000), 67(1): 45-69.

Week 4. Rationality (2/10)

Bermúdez, José Luis. "Decision Theory and the Dimensions of Rationality." Chapter 1 of Decision Theory and Rationality. Oxford University Press, 2009.

Optional: Smith, Holly. "Deciding How to Decide: Is There a Regress Problem?" In Foundations of Decision Theory, M. Bacharach and S. Hurley, eds., 1991. pp. 194-219.

II. Preference

Week 5. Preference and Choice (2/17)

Sen, Amartya. "Behavior and the Concept of Preference." *Economica*, New Series (1973), 40(159): 241-259

Pettit, Philip. "Preference, Deliberation, and Satisfaction." *Royal Institute of Philosophy Supplement* (2006), 81: 131-154 Cambridge University Press

Optional: Gul, Faruk and Wolfgang Pesendorfer. "Temptation and Self-Control." *Econometrica* (2001), 69(6): 1403-1435.

Week 6. Incomparability and Ambivalence (2/24)

Broome, John. "Incommensurable Values." Chapter 9 of Ethics out of Economics. Cambridge University Press, 1999.

Hare, Caspar. "Take the Sugar." Forthcoming in *Analysis*.

Optional: Baker, Derek. "Ambivalent Desires and the Problem with Reduction." Forthcoming in *Philosophical Studies*.

Week 7. Individuating Outcomes (3/3)

Bermúdez, José Luis. "Individuating Outcomes." Chapter 3 of Decision Theory and Rationality. Oxford University Press, 2009.

Optional: Schick, Frederick. Chapters 1 and 3 of Understanding Action. Cambridge University Press, 1991.

III. Desire

Week 8. Humeanism (3/10)

Broome, John. "Can a Humean be Moderate?" Chapter 5 of Ethics out of Economics.

Cambridge University Press, 1999. (Originally published 1993)

Dreier, James. "Rational Preference: Decision Theory as a Theory of Practical Rationality." In *Theory and Decision* (1996), 40: 249-276.

Week 9. Reason-Based Choice (3/17)

Lewis, David. "Desire as Belief." *Mind* (1988): 323-33.

Shafir, Eldar, Itamar Simonson, and Amos Tversky. "Reason-based choice." *Cognition* (1993), 49: 11-36.

SPRING BREAK, 3/24

Week 10. Utility (3/31)

Broome, John. "Utility." Chapter 2 of Ethics out of Economics. Cambridge University Press, 1999.

Bermúdez, José Luis. "Making Sense of Utility and Preference." Chapter 2 of Decision Theory and Rationality. Oxford University Press, 2009.

IV. Degrees of Belief

Week 11. What are Degrees of Belief? (4/7)

Skyrms, Brian. "Degrees of Belief." Chapter 2 of Pragmatics and Empiricism. Yale University Press, 1984,

Eriksson, Lina and Alan Hajek, "What are Degrees of Belief?" *Studia Logica* (2007), 86: 183-213.

Week 12. Sharp Degrees of Belief (4/14)

White, Roger. "Evidential Symmetry and Mushy Credence." Draft.

Elga, Adam. "Subjective Probabilities Should be Sharp." Draft.

Optional: Gärdenfors, Peter and Nils-Eric Sahlin. "Unreliable probabilities, risk taking, and decision making." Chapter 16 of Decision, Probability, and Utility, Gärdenfors and Sahlin, eds. Cambridge University Press, 1988.

Week 13. Logical Omniscience (4/21)

Hacking, Ian. "Slightly More Realistic Personal Probability." *Philosophy of Science* (1967), 34(4): 311-325.

Stalnaker, Robert. "The Problem of Logical Omniscience I." *Synthese* (1991), 89(3): 425-440.

V. Conclusion

Week 14. Which Roles Can Decision Theory Play? (4/28)

Bermúdez, José Luis. "Rationality: Crossing the Fault Lines?" Chapter 5 of Decision Theory and Rationality. Oxford University Press, 2009.

Week 15. Reading Week (5/5)

Discussion of student papers