UC Berkeley Logic Group Philosophy Preliminary Syllabus 2013 Decision Theory: Paradoxes and Alternatives (Prof Lara Buchak)

Many normative alternatives to classical decision theory have arisen in recent (and not-so-recent) years in response to particular paradoxes and problems. These alternatives must be evaluated according to standards of rationality, which raises the question of what decision-theoretic rationality amounts to. This syllabus studies four problems and the corresponding alternatives: (1) non-sharp credences; (2) risk-aversion; and (3) acts that are evidence for outcomes but not causally efficacious. It contains readings on a brief introduction to classical decision theory, the paradoxes and alternatives, and whether these alternatives stand up to the canons of rationality.

I. Classical Decision Theory: History of decision theory; uses of decision theory; the norm of decision theory; the status of paradoxes and counterexamples.

Michael Resnik, (1987), Choices: An Introduction to Decision Theory. University of Minnesota Press., 81-119.

James Dreier (1996). "Rational Preference: Decision Theory as a Theory of Practical Rationality." In *Theory and Decision* 40: 249-276,. dx.doi.org/10.1007/BF00134210

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

Optional Background: Lara Buchak (2013), "Decision Theory." Oxford Handbook of Probability and Philosophy, eds. Christopher Hitchcock and Alan Hajek. Oxford University Press.

II. Paradoxes and Alternatives: Non-sharp credences, risk-aversion, Newcomb's problem.

Roger White (2009), "Evidential Symmetry and Mushy Credence." In <u>Oxford Studies in Epistemology</u>, eds. Tamar Szabo Gendler and John Hawthorne. Oxford: Oxford University Press. Pp. 161-88.

Peter Gärdenfors and Nils-Erik Sahlin (1982), "Unreliable Probabilities, Risk Taking, and Decision Making." In *Synthese* 53: 361-386.

Lara Buchak (2013), "Risk and Tradeoffs." Erkenntnis (FEW 2012 special issue).

Allan Gibbard and William Harper (1978), "Counterfactuals and Two Kinds of Expected Utility." In William Harper, Robert Stalnaker, and Glenn Pearce, eds., *Ifs: Conditionals, Belief, Decision, Chance, and Time*, pp. 153–190, Dordrecht: Reidel (1982).

Andy Egan (2007), "Some Counterexamples to Causal Decision Theory." Philosophical Review 116(1): 93-114.

III. Rationality and Consequentialism

Michael D. Resnik (1987), *Choices: An Introduction to Decision Theory*. University of Minnesota Press., pp. 68-79.

David Christensen (1996), "Dutch Book Arguments Depragmatized: Epistemic consistency for partial believers." *Journal of Philosophy* 93: 450-79.

David Lewis (1981), "Why Ain'cha Rich?" Nous 15(3): 377-80.

John Broome (1991), Weighing Goods: Equality, Uncertainty, and Time. Oxford: Blackwell Publishers Ltd., Ch. 5.

Frank Arntzenius, Adam Elga, and John Hawthorne (2004), "Bayesianism, Infinite Decisions, and Binding." *Mind* 2004.

Christopher J.G. Meacham (2010), "Binding and Its Consequences." *Philosophical Studies*.

Adam Elga (2010), "Subjective Probabilities Should be Sharp." Philosophers' Imprint 10(5).