

# Philosophy 321: Induction and Decision

## Term Paper — Due Dec. 3/99

Write a 2000 - 2500 word (8 to 10 page) paper. Here are some possible topics; more will be added later. (I will attempt to provide options for students who prefer a more technical assignment.) I encourage you to choose a topic of your own, but please discuss it with me first.

**1. Decision Theory and Ethics.** Rawls, Harsanyi and Gauthier have all applied decision-theoretic principles in arguments for fundamental ethical principles. Present and evaluate the arguments of at least two of these philosophers. Sample readings:

Rawls, J. *A Theory of Justice* (Harvard University Press, 1971).

Rawls, J. "Some Reasons for the Maximin Criterion", *American Economic Review* 64 (May 1974), 141.

Harsanyi, J. "Can the Maximin Principle Serve as a basis for Morality? A Critique of John Rawls's Theory", *American Political Science Review* 59 (1975), 594; reprinted as chapter 4 of *Ethics and Welfare Economics*.

Harsanyi, J. "Morality and the theory of rational behaviour", *Social Research*, Winter 1977, vol. 44, no. 4.

Gauthier, D. "The Social Contract: Individual Decision or Collective Bargain?" In Hooker, Leach and McClennan (eds.), *Foundations and Applications of Decision Theory, Vol. II* (D. Reidel, 1978), 47.

**2. Interpretations of probability.** Explore one (or at most two) of the logical, frequentist, subjective or propensity interpretation of probability in greater detail. Can objections to these approaches – as discussed in lectures – be met?

Salmon, W.C. *The Foundations of Scientific Inference*. Pittsburgh: University of Pittsburgh Press, 1966. [Great overview]

Skyrms, B. *Choice and Chance, 3d edition*. Belmont: Wadsworth Publishing Company, 1986.

Howson, C. and Urbach, P. *Scientific Reasoning: The Bayesian Approach* (Open Court, 1989). [Good overview; defense of subjective view]

Jeffrey, R.C. "Bayesianism with a Human Face", in *Probability and the Art of Judgement* (Cambridge: Cambridge University Press, 1985). [Defense of subjective view, and response to some objections.]

Kyburg, H. and Smokler, H. eds. *Studies in Subjective Probability*. New York: Wiley, 1964. [Defense of subjective interpretation. Some highly advanced material.]

Kyburg, H. "Propensities and Probabilities," *British Journal for the Philosophy of Science* 25 (1974), 358-375. [the propensity interpretation and its problems]

Popper, K. "The Propensity Interpretation of Probability," *British Journal for the Philosophy of Science* 10 (1959), 25-42. [the propensity interpretation]

Reichenbach, H. *Experience and Prediction* (Chicago: University of Chicago Press, 1938). [frequentist interpretation]

Carnap, R. *Logical Foundations of Probability, 2d edition*. Chicago: University of Chicago Press, 1962. [the logical interpretation]

**3. Newcomb's Problem.** Explore the problem in greater depth by explaining and evaluating at least two positions on the topic, as represented in either papers we have read in class or additional papers. Here are some additional papers on the topic (which vary greatly in difficulty):

Nozick, R. "Reflections on Newcomb's Problem: A Prediction and Free Will Dilemma". *Scientific American* 230 (1974): 102. [Survey article]

Lewis, D. "Causal Decision Theory", *Australasian Journal of Philosophy* v. 59, No. 1 (March 1981), 5. [Two-box argument]

Skyrms, B. "Causal Decision Theory", *Journal of Philosophy* (1982), 695. [Two-box argument]

Bar-Hillel, M. and Margalit, A. "Newcomb's Problem Revisited," *British Journal for the Philosophy of Science* 23 (1972): 295. [One-box argument]

Gauthier, D. "In the Neighbourhood of the Newcomb Predictor," *Proceedings of the Aristotelian Society* May 1989 [One-box argument]