

Philosophy 114
Probability and Confirmation
Fall 2006

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Texts:

Salmon, *The Foundations of Scientific Inference*

A reader will also be available online on eres

Evaluations for the course will be based on two exams, a quiz on the probability calculus, a take-home essay, class attendance and participation, and the final requirement.

Tentative Schedule

Review of Deductive Logic:

Traditional Confirmation Theory

Hypothetico-Deductive method

Earman and Salmon, The Confirmation of Scientific Hypotheses, pp. 42-55, from *Introduction to the Philosophy of Science*

Hempel's theory

Hempel, "Studies in the Logic of Confirmation"

Probability and Confirmation

Salmon on conceptions of firmness; "Confirmation and Relevance" by Salmon in *Minnesota Studies in the Philosophy of Science*, Vol 6, 1975, pp. 3-36.

Goodman's New Riddle of Induction

"The New Riddle of Induction." Chapter III of Nelson Goodman (1983): *Fact, Fiction, and Forecast*. Cambridge, MA: Harvard University Press, 59-83.

The Probability Calculus:

Skyrms, "The Probability Calculus," pp. 109-136.

Salmon, pp. 63-65

Interpretations of Probability

The Classical Interpretation of Probability:

Salmon pp. 65-68

Hajek, <http://plato.stanford.edu/entries/probability-interpret/> (recommended)

The Logical Interpretation of Probability:

Salmon pp. 68-79

Hajek, <http://plato.stanford.edu/entries/probability-interpret/> (recommended)

The Frequency Interpretation of Probability:

Salmon pp. 83-108

Hajek, <http://plato.stanford.edu/entries/probability-interpret/> (recommended)

The Propensity Interpretation of Probability:

Hajek, <http://plato.stanford.edu/entries/probability-interpret/> (recommended)

The Subjective Interpretation of Probability:

Salmon pp. 79-83

Richard Samuels and Stephen Stich, "Rationality and Psychology", in Alfred Mele and Piers Rawling, eds., *The Oxford Handbook of Rationality*, pp. 279-300.

Hajek, <http://plato.stanford.edu/entries/probability-interpret/> (recommended)

The Epistemic Interpretation of Probability:

Warrant and Proper Function, chapters 8 and 9, by Plantinga

Otte, "Counterfactuals and Epistemic Probability"

Relation between Objective and Subjective Probability:

"A Subjectivist's Guide to Objective Chance" (and postscript) by Lewis

"Objective Probability as a Guide to the World" by Strevens (*Philosophical Studies* 95: 243-275, 1999)

Bayesianism:

Coherence:

Subjective Probability: The Real Thing by Richard Jeffrey, pp. 8-21,

http://www.princeton.edu/bayesway/Book*.pdf.

Warrant: The Current Debate, chapters 6 & 7, by Plantinga

Bayes or Bust by John Earman, pp. 33-46.

Laws and Symmetry Chapter 7, pp. 151-160, by van Fraassen

"A Nonpragmatic Vindication of Probabilism," *Philosophy of Science* 65 (December 1998) by Joyce

Conditionalization:

Talbot, "Dutch Book Arguments"

<http://plato.stanford.edu/entries/epistemology-bayesian/supplement2.html>

Subjective Probability: The Real Thing by Richard Jeffrey, pp. 55-57.

Laws and Symmetry, chapter 7, pp. 160-182, by van Fraassen

“Dutch-Book Arguments Depragmatized: Epistemic Consistency for Partial Believers” by David Christensen

“Conditionalization, Subjective Probability, and Rational Belief” by Richard Otte

Jeffrey Conditionalization:

‘3.2 Generalized Conditioning’ in *Subjective Probability: The Real Thing* by Richard Jeffrey, pp. 57-65.

Reflection:

”Belief and the Will” by van Fraassen (*Journal of Philosophy* 81, 5, pp. 235-256, May 1984)

”Clever Bookies and Coherent Beliefs” by David Christensen (*Philosophical Review* 100 (1991): 229-47.)

”Belief and the Problem of Ulysses and the Sirens” by van Fraassen (*Philosophical Studies* 77: pp. 7-37, 1995)

Old Evidence:

“Old Evidence and Logical Omniscience” by Daniel Garber

“Probability Reparation: The Problem of New Explanation” by Richard Jeffrey

’2.5 Old News Explained’ in *Subjective Probability: The Real Thing* by Richard Jeffrey, pp. 49-52.

’Old Evidence and New Theories” by Lyle Zynda (*Philosophical Studies* 77:67-95, 1995)

”The Problem of Old Evidence” chapter 5, in *Bayes or Bust?* by John Earman, pp. 119-135

New Hypotheses:

“Some Problems for Bayesian Confirmation Theory” by Chihara (*British Journal for the Philosophy of Science*, 38, pp. 551-60)

”A Solution to a Problem for Bayesian Confirmation Theory” by Otte (*British Journal for the Philosophy of Science* 45, 1994, pp. 764-769)

”Probabilities for New Theories” by Maher (*Philosophical Studies* 77: 103-115, 1995)

Bayesian Response to the Raven paradox

Bayesian Response to the New Riddle of Induction

Likelihoods vs. Bayesianism:

“An Introduction to Bayesian Epistemology” by Elliott Sober, <http://philosophy.wisc.edu/sober/bayes.pdf>

“Likelihoodism, Bayesianism, and Relational Confirmation,” by Branden Fitelson, *Synthese*

Bayesianism and self-locating beliefs (Sleeping Beauty)

”Self-locating belief and the Sleeping Beauty Problem” by Adam Elga (*Analysis* Vol 60, Num 266, 2000, pp. 143-146)

”Sleeping Beauty: reply to Elga” by David Lewis (*Analysis* Vol 61, Num 271, 2001, pp. 171-175)

”Sleeping Beauty: in defence of Elga” by Cian Dorr (*Analysis* Vol 62, Num 276, 2002, pp. 292-295)

”Sleeping Beauty and the forgetful Bayesian” by Bradley Monton (*Analysis* Vol 62, Num 273, 2002, pp. 47-52)

"Reflections on Sleeping Beauty" by Frank Arntzenius (*Analysis* Vol 62, Num 273, 2002, pp. 53-62)

The Cable Guy

"The Cable Guy Paradox" by Alan Hajek *Analysis* 65.2 April 2005, pp. 112-119.

Conditional Probability

"What Conditional Probability Cannot Be" by Alan Hajek (*Synthese* Vol. 137: 3, December 2003, pp. 273-323.)

The Doomsday Argument

"Time and the Anthropic Principle" by John Leslie

"The Doomsday Argument Without Knowledge of Birth Rank" by Brad Monton