Further Resources

Many of the ideas discussed in this lecture were originally set forth by David Lewis, in his classic paper "A Subjectivist Guide to Objective Chance".

Some additional texts

- For a good overview of Bayesian theories of probability, I recommend Kenny Easwaran's "Bayesianism I: Introduction and Arguments in Favor" and "Bayesianism II: Criticism and Applications".
- For a mathematically rigorous introduction to probability theory, see Joseph K. Blitzstein's *Introduction to Probability* .
- For a comprehensive treatment of the Principle of Utility Maximization, and the ensuing decision theory, see Richard Jeffrey's *The Logic of Decision* .
- In Section 6.4.1.2 I mention that failures of countable additivity inevitably lead to mathematical awkwardness. The result I have in mind is this: if a probability function on a countable space fails to be countably additive, then there is no conditional probability function extending it that satisfies conglomerability (i.e.~the condition that whenever $k_1 \leq p(E|H) \leq k_2$ for each H in a set of mutually exclusive and jointly exhaustive propositions, $k_1 \leq p(E) \leq k_2$). The result is proved in Schervish, Seidenfeld, and Kadane's "The extent of non-conglomerability of finitely additive probabilities" and Hill and Lane's "Conglomerability and countable additivity". I learned about the result in Kenny Easwaran's "Conditional Probability". If you're interested in this topic, you might also like to have a look at Easwaran's "Why Countable Additivity?".
- For further discussion of infinitesimals, see Timothy Williamson's "How Probable is an Infinite Sequence of Heads?"
- The cube factory example that I used to illustrate the difficulty of formulating an adequate Indifference Principle was drawn from Bas van Fraassen's *Laws and Symmetry* .
- If you'd like to know more about the best-systems account of objective probability, I recommend David Lewis's "Humean Supervenience Debugged".
- My discussion of objective probabilities above is vastly oversimplified. If you'd like to learn more about the sorts of ways in which probabilities might be derived from a

physical theory without bringing in subjective considerations, I recommend Tim Maudlin's "Three Roads to Objective Probability 1".

- My own thoughts about localism are drawn from Crispin Wright's "Wittgensteinian Certainties", which is itself inspired in Ludwig Wittgenstein's *On Certainty* .
- For Broome's treatment of the Two-Envelope Paradox see his "The Two-Envelope Paradox". For David Chalmers's treatment, see his "The St. Petersburg Two-Envelope Paradox".