

Dictionary Entry on Richard Jeffrey for the *Dictionary of Modern American Philosophers, 1860-1960* (ed. E. LePore, Thoemmes Press, Bristol)

Richard Carl Jeffrey. *August 5, 1926 (Boston), + November 9, 2002 (Princeton). M.A. 1952 (Chicago), PhD 1957 (Princeton). Fulbright Scholar (Oxford). Fellow, Institute for Advanced Study (Princeton.). Assistant Professor of Electrical Engineering at MIT (1958-9). Appointments in philosophy departments at Stanford, City College of New York, University of Pennsylvania, and Princeton (1974-99). Since 1999 Professor Emeritus at Princeton and Visiting Professor at the University of California at Irvine. Studied with Carnap at Chicago, with Hempel at Princeton, and with G`del at the Institute for Advanced Study. Published *The Logic of Decision* in 1965 (LD)(a corrected edition in 1983), substantially drawing on work in measure theory by E. Bolker. Author of two textbooks in logic: *Formal Logic: Its Scope and Limits* (first published 1967), and *Computability and Logic*, with G. Boolos, and, more recently, with J. Burgess (first published 1974). In 1992, Jeffrey published a collection of articles called *Probability and the Art of Judgment*. Editor of posthumous works by Boolos and Hempel. Jeffrey's work is primarily in decision theory and epistemology, reaching into philosophy of science, philosophy of mind, and ethics. His work is unified by his commitment to (and development of) Bayesianism, the view that making up one's mind is a matter of adopting an assignment of judgmental probabilities, or features of such assignments. Jeffrey's writings vary from historical and philosophical overviews to close technical studies. He is the most influential philosopher of the 20th century working in decision

theory, and a main proponent of developing and securing the heritage of logical empiricism.

Alongside L. Savage's *Foundations of Statistics*, LD is the most influential account of decision theory in which probabilities and utilities are subjective and related to preferences by a representation theorem. Unlike in Savage's theory, preferences in LD determine utility functions only up to fractional linear transformation. For two such functions U_1 and U_2 , we have $U_1 = [(aU_2 + b)/(cU_2 + d)]$, where $ad - bc > 0$, $cU_2(A) + d > 0$, and $cU_2(T) + d = 1$ for any proposition A for which U_2 is defined and T is the necessary proposition. Probabilities vary across such transformations: $P_1 = P_2(cU_2 + d)$. Probabilities are unique if the utility function is unbounded. A unified theory, LD attributes probabilities and utilities to the same objects (propositions closed under finite truth functional operations). Acts are propositions the agent has power to make true and thus receive probabilities and utilities. An evidential account not taking a causal notion as primitive, LD recommends taking one box in Newcomb scenarios. The second edition of LD introduces the notion of ratifiability to consider that decisions change probabilities and to bring about the recommendation to take both boxes. A ratifiable decision is a decision to perform an act of maximal expected desirability relative to the probabilities the agent thinks she will have if she finally decided to perform that act.

In epistemology Jeffrey continues logical empiricism by championing *radical probabilism*, denying objective probability and abandoning attempts to analyze judgment into a rational and an empirical component, without residue. A non-foundational methodology, radical probabilism denies that probabilities are to be based on certainties. Probabilistic judgment is an immediate response to experience, and passing it is a subject

matter-dependent skill. Updating by conditioning is generalized to “probability kinematics” (“Jeffrey conditionalization”), where an observation on a random variable X need not single out one value, but may prompt a new probability distribution over all values of X. Effects of observations, apart from the influence of prior probabilities, are captured by the “Bayes” factors [(new odds)/(old odds)] by which the observer’s odds between hypotheses are updated.

Bibliography:

The Logic of Decision (Chicago, 1965; second, corrected edition, 1983)

Probability and the Art of Judgment (Cambridge, 1992)

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