Reference Dependence for Ambiguity

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This paper introduces prospect theory into the Anscombe-Aumann approach (AA), which is nowadays the almost exclusively used approach to analyze ambiguity. We thus show how prospect theory can be extended to ambiguity, and we show how prospect theory’s reference dependence and loss aversion can be introduced into the study of ambiguity. The latter extension is descriptively desirable because reference dependence and loss aversion are empirically pronounced under ambiguity, even more so than under risk, and they descriptively falsify virtually every theoretical model for ambiguity presently existing in the literature. A special feature of the AA approach that is desirable for the study of prospect theory is that, with cardinal utility readily available, we can uniquely separate loss aversion and utility without needing an arbitrary scaling convention for gain- versus loss-utility.