Thinking through Uncertainty: Nonconsequential Reasoning and Choice

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When thinking under uncertainty, people often do not consider appropriately each of the relevant branches of a decision tree, as required by consequentialism. As a result they sometimes violate Savage's sure-thing principle. In the Prisoner's Dilemma game, for example, many subjects compete when they know that the opponent has competed and when they know that the opponent has cooperated, but cooperate when they do not know the opponent's response. Newcomb's Problem and Wason's selection task are also interpreted as manifestations of nonconsequential decision making and reasoning. The causes and implications of such behavior, and the notion of quasi-magical thinking, are discussed. © 1992 Academic Press, Inc.

Much of everyday thinking and decision making involves uncertainty about the objective state of the world and about our subjective moods and desires. We may be uncertain about the future state of the economy, our mood following an upcoming examination, or whether we will want to vacation in Hawaii during the holidays. Different states of the world, of course, often lead to different decisions. If we do well on the exam, we may feel that we deserve a break and want to go to Hawaii; if we do poorly, we may prefer to stay at home. When making decisions under uncertainty we need to consider the possible states of the world and their potential implications for our desires and actions. Uncertain situations may be thought of as disjunctions of possible states: either one state will

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