

Legitimation in Decision Making

Reflections on Howard Kunreuther's Contributions to Legitimation Theory in the
Integration of Descriptive and Prescriptive Models of Decision Making

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Capturing the essential ingredients of uncertainty and ignorance in decision making requires expanding the standard framework of decision sciences to encompass explicit formation of belief intensity and the models or theories used to predict choices with consequences. Figure 1 shows the ingredients of choice under ambiguity and uncertainty, following Kleindorfer et al. (1993). My focus in this paper will be on legitimation theory. A very short summary of this theory in the context of Figure 1 could be stated as follows: a credible anticipation of being held accountable not just for outcomes but for the logic that led to them will have predictable effects on the nature of decision making.

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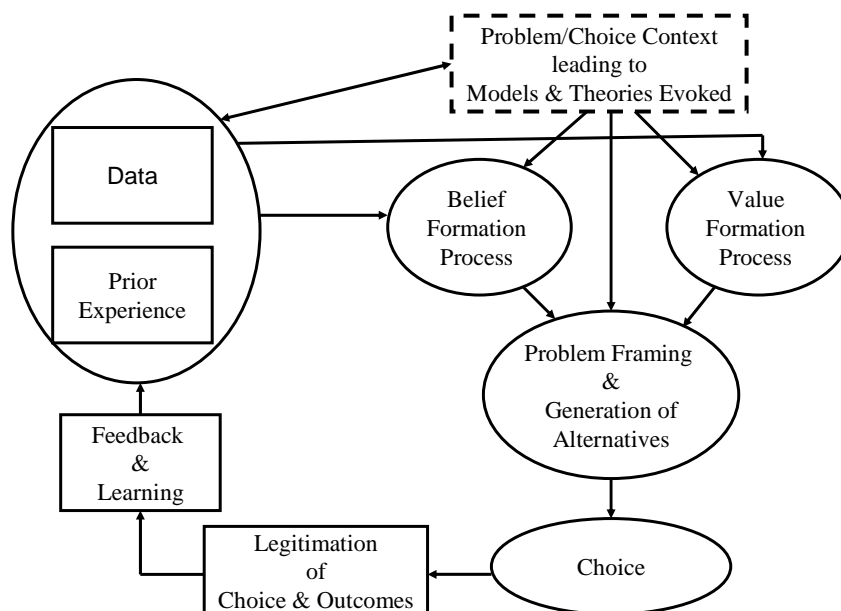


Figure 1: Beliefs, Values, Choice and Legitimation

Legitimation theory has been important in social psychology, political science and philosophy, but much less so in decision sciences. Attention in economics and finance has been focused rather on certainty and Knightian risk, where issues of causal modeling are not central.² Exceptions include research on the rules of evidence (Shafer, 1976), on various forms of “belief calculus” on how to combine beliefs from multiple sources in consistent ways (Schocken and Kleindorfer, 1989), and the study of modeling errors (the fact that different models may provide different results for the same data (Dempster, 1968; Hastie and Dawes, 2001). A central point that Howard has made repeatedly is that the key problem for choice in repetitive situations with good data is computational, whereas the key problem under uncertainty and ambiguity shifts to the evaluation of multiple competing models, data sources, and risk perception. Enter legitimation!

The most famous modern writer on the subject of legitimation is the German philosopher Jürgen Habermas. A summary of the legitimation theory of Habermas in the context of decision theory under conditions of uncertainty and ambiguity is chapter 5 of Kleindorfer et al. (1993). Legitimation refers to the process by which choices are explained ex post, making sense of these both to the decision maker as well as to other stakeholders. The anticipation of an open legitimation process ex post can be expected to

² On this point, see Taleb (2001) for a detailed assessment of all the short-cuts financial decision makers use to avoid confronting uncertainty. A recent paper making the point that decision theorists and economists have paid precious little attention to the belief formation process is Gilboa et al. (2007), who also review the formal literature on the subject. Kleindorfer et al. (1993), Slovic (1988), and Hastie and Dawes (2001) review calibration and other literatures related to biases in belief formation processes, for which there is an extensive literature in psychology. These issues are of interest in their own right, of course, but they take on a special meaning when examining legitimation of decisions.

have a significant effect on choice itself, as well as on the espoused theories used for belief and value formation. The basic argument is that legitimation leads us to use “accepted models” or particular data that are in common use for a given decision situation. In this way, if a negative outcome occurs, one can take shelter in the company of fellow travelers. Needless to say, this may also lead to the use of models and theories that are not suitable to a particular decision task, merely because these are accepted.

I will revisit this issue with some examples from both experimental work of others as well as from Howard’s work over the years in risk management, in mitigation choices (his friends and neighbors work) and in interdependent security (where trust and tipping behavior are arguably triggered by self-interest and legitimation). In the process, I will identify some current issues that might be approached best from a legitimation theory perspective. These include problems of climate change, natural disasters and other highly uncertain areas of current concern where major financial and human losses can potentially result from the interaction of human choices and external systems.