Thinking and Deciding, Fifth Edition

The fifth edition of the classic text Thinking and Deciding updates the broad overview of the field of judgments and decisions offered in previous editions. It covers the normative standards used to evaluate conclusions, such as logic, probability, and various forms of utility theory. It explains descriptive accounts of departures from these standards, largely in terms of principles of cognitive psychology, emphasizing the distinction between search processes and inferences. Chapters cover decisions under risk, decision analysis, moral decisions and social dilemmas, and decisions about the future. Although the book assumes no particular prerequisites beyond introductory high-school algebra, it is most suited to advanced undergraduates, early graduate students, and active researchers in related fields, such as business, politics, law, medicine, economics, and philosophy.

Jonathan Baron has a BA in Psychology from Harvard and a Ph.D. in Experimental Psychology from the University of Michigan, USA. He has published over 200 papers and several books, including Rationality and Intelligence (1985), Morality and Rational Choice (1993), Judgment Misguided (1998), and Against Bioethics (2006). From 1974 to 2013, he taught at the University of Pennsylvania, USA, where he advised thirty-two Ph.D. students. He is a fellow of the American Association for the Advancement of Science, the Psychonomic Society, and the Society of Experimental Psychologists (among other groups). He is founding editor (2006) and current co-editor of the journal Judgment and Decision Making.
Thinking and Deciding

Fifth Edition

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Preface to the fifth edition

The fifth edition retains major features of the first four editions:

1. Knowledge about judgment and decision making has been scattered among a number of different fields. Philosophers, psychologists, educators, economists, decision scientists, and computer scientists have different approaches to the theory. The approach in this book represents my own effort to draw together some of the key ideas from these different disciplines. Most of what I present is not original or new. If it were either of these, I would not be so confident that it is mostly correct.

2. I retain some basic ideas: that all goal-directed thinking and decision making can be described in terms of what I call the search-inference framework, and that one main problem with our thinking and decision making is that much of it suffers from a lack of active open-mindedness.

3. In addition, I retain the distinction between normative, descriptive, and prescriptive models, and the defense of normative models. Normative standards are often criticized but rarely defended. This book will summarize the defense that others can attack.

Yet I now see the character of this book somewhat differently. It is historical. As time passes, the ideas and research I present seem older, yet they still seem necessary in order to understand both current research and the applied issues on which it bears. I once mentioned to the late Henry Gleitman that I would love to teach a course in the history of psychology, but I never studied it myself. He replied, “That doesn’t matter. You have lived through half of it.” This was about twenty-five years ago, so now I have lived through considerably more than that, and I feel that my experience is valuable. Thus, a lot of what I discuss here may seem like “old hat” to some current researchers, but I think even they could benefit from a better understanding of how we got where we are and what issues initially inspired various lines of research.

On the other hand, I have had to minimize, to save space, some discussion of approaches that once seemed more interesting and relevant than they are now. Some readers may feel that I should have eliminated much of the discussion of utility measurement and decision analysis on these grounds. However, I have kept most of that because the field of decision analysis itself seems to need a discussion of its relationship to the empirical study of judgments and decisions, beyond the discussion by von Winterfeldt and Edwards, in their deep and interesting book Decision analysis and behavioral research. In any case, readers may skip those chapters, or others. I
have tried to include more extensive references to sections and pages when I refer to other parts of this book.

In the last several years, the field covered by this book has become more important. I thus retain, and somewhat expand, discussion of implications for policy.

This edition will be my last. Because I want it to be useful for a while, I have attempted to emphasize fundamental concepts. I make less of an attempt at keeping up to date with current literature, despite being quite familiar with it in my role as editor of the journal *Judgment and Decision Making*. Many of the studies I describe have generated a large follow-up literature. I make no attempt to summarize this; the book would be twice as long if I did. This book is an introduction, not a comprehensive review. In a few cases, however, my crystal ball says that some recent ideas in the literature will retain value, so I have tried to explain them. The same fallible crystal ball tells me that other ideas of some current interest are at best diversions that will take on a life of their own, separate from the main stream of progress. Because I cannot cover everything, I have used this fallible judgment as a guide for exclusion.

In the first edition, my goal was to link the study of judgment and decision making with cognitive psychology, hence the title. The book lost this emphasis over successive editions, in part because the two fields became somewhat detached. But now they are coming back together in several ways. Look, for example, at recent contents of the journals *Cognition* and *Thinking and Reasoning*. I thus feel emboldened to bring back a bit more of the original emphasis. The title is now somewhat appropriate once again, although I cover only the most relevant parts of cognitive psychology.

In the course of this book, I apply these ideas to the major concepts and theories in the study of thinking. I begin, in Part I, with general considerations: the nature of rationality; methods for studying thinking; and logic. Part II is concerned with belief formation, which is a form of thinking in which the goal of thinking is held constant. In this part, I introduce probability theory as a formal standard. Part III concerns decision making, including the making of decisions about personal plans and goals, and decisions that affect others, such as those that involve moral issues or matters of public concern. This part introduces utility theory, which formalizes many of the ideas that run throughout the book.

Many people have provided useful comments and other assistance. For the first four editions, Judy Baron, Kathie Galotti, and anonymous reviewers each gave useful advice about several chapters. Other chapters or sections were helpfully read by George Ainslie, David Baron, Judy Baron, Dorrit Billman, Colin Camerer, Allan Collins, Mandeep Dhami, Craig Fox, Deborah Frisch, Robin Gregory, John C. Hershey, Joel Kupperman, Liang Zhuyuan, David Messick, Andrew Meyer, Chris Poliquin, Paul Slovic, Peter Ubel, and Peter Wakker. Many students brought errors to my attention. Christie Lerch, as an editor for Cambridge University Press, provided the final, most demanding, most detailed, and most helpful set of criticisms and constructive suggestions concerning all levels of writing and organization for earlier editions. The book was formatted using \LaTeX.
PREFACE TO THE FIFTH EDITION

The current edition benefitted from additional, extremely helpful comments from Rakefet Ackerman, Maya Bar-Hillel, Mandeeq Dhami, Geoff Goodwin, Joshua Greene, Deanna Kuhn, Barbara Mellers, Andrew Meyer, Don Moore, Mark Nieuwenstein, Natalie Obrecht, Ilana Ritov, Ed Royzman, Jay Russo, Johannes Siebert, Paul Slovic, Annika Svedholm-Häkkinen, Robert Weisberg, and Eldad Yechiam. I regret that I did not have the space to make use of all of their suggestions. And of course they are not responsible for remaining infelicitous acts or omissions.

I am also grateful to many colleagues, as well as scholars I never knew or who lived before my time, who have influenced my thinking over the years, too many to name here except for one who died recently, Rex Brown.