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Straight Choices: The Psychology of Decision Making
Benjamin R. Newell, David A. Lagnado, and David R. Shanks.
New York: Psychology Press (www.psypress.com)
2007, 215 pp, $53.95 (Hardcover)

I begin with two comments. First, I am the author of a competing textbook, "Thinking and deciding," which just had its fourth edition (Cambridge University Press, 2008). I cannot avoid comparing the book by Newell et al. to my own, so I won't try.

Second, if your sole interest is in the application of cognitive psychology and judgment-and-decision-making (JDM) research to clinical psychology, do not consider Newell et al. It does not emphasize the parts that are most relevant. Do consider mine. And stop reading now.

That said, I really liked this book, and I am still thinking about whether to use it instead of my own when I teach my course in judgments and decisions. (It would absolve me of the charge that my classes are redundant with my book, which contains, after all, everything I know, and more. But I would get in trouble because of the price.) It is well written, easy to read, and sometimes enlightening even to an old hand. It ties the field of JDM to cognitive psychology. That is its stated purpose, and it succeeds brilliantly. It does touch most of the other bases, so it could be used as a course text along with supplemental reading.

It emphasizes repeated judgments and decisions, and this makes sense given its goals. It reviews many experiments in which subjects see repeated stimuli, usually varying in a small number of attributes. They make responses to these stimuli, either categorizing them (e.g., making a binary decision about them) or rating them on a numerical scale representing one single variable, sometimes a prediction. The subjects may be basing their responses on their own prior learning, so this sort of experiment can be used to compare experts and novices.

In other studies, the subjects have an opportunity to learn from feedback during the experiment. When learning is involved, the results can be analyzed with learning theories. One excellent chapter in the book discusses the connections between judgment experiments of this sort and classical learning theory in psychology, going back to the work of Rescorla and Wagner and beyond. It turns out that various biases in judgment experiments can be explained in terms of learning models, and the models themselves must sometimes be modified to account for recent experimental results.

Another example of this emphasis is the short chapter on group decision making. It is largely devoted to group judgment experiments, in which the same kinds of judgments are made. Although it mentions some other work on groups - e.g., a nice review of the studies of "groupthink" - it omits some other topics completely, such as social dilemmas or any of the other games used in experimental economics.

The emphasis on cognitive psychology also leads to more discussions of strategies, including those studied by Gerd Gigerenzer and his colleagues. The review is fairly thorough, but this field is moving quickly.

One view of the JDM field, which I emphasize in my own teaching, concerns a distinction among three types of models: normative, prescriptive, and descriptive. Normative models are standards that allow us to evaluate subjects' answers. They are often drawn from probability theory, statistics, or decision theories such as expected-utility theory. Many of these models emphasize internal consistency or coherence. Studies of probability judgment often rely on trapping subjects into an inconsistency, such as saying it is more likely that "Linda is a bank

teller" than that "Linda is a bank teller who is active in the feminist movement" (which, of course, implies that she is a bank teller).

Descriptive models look for systematic biases and try to explain them. Thus, the error just summarized is explained in terms of a heuristic, a rule of thumb, by which probability judgments are made in terms of judgments of similarity (representativeness). Linda was described as the sort of person who would be a feminist but not a bank teller, so the second statement was more similar.

Prescriptive models tell us what to do about these biases. For example, a recent approach to prescriptive models in general is a recent book by Richard Thaler and Cass Sunstein, "Nudge" (Yale University Press, 2008), who discuss the importance of "decision architecture," the idea of setting up decisions either to make use of biases to guide people in good directions or to avoid biases.

Newell et al. present some of this approach, but they do not go into detail about the justification of normative models of the usual sort, and at some points I feel that they pass on the confusion of other authors without trying to cut through it (e.g., the discussion of Herbert Simon on p. 22). They do discuss explicitly another type of normative model, namely, correspondence with reality. When judgments are predictions, then it is perfectly reasonable to evaluate them in terms of their accuracy. This leads to the contentious distinction between correspondence and coherence as criteria of "rationality." It isn't clear to me why this gets so many people hot and bothered, but it may be because a few judgments can be evaluated both ways. So what? In any case, this book explains this distinction clearly without the heat. Students will come away with a reasonable, moderate view.

On the question of heuristics and biases, the book is slightly (but not seriously) disjointed, perhaps because it was written by three authors. At one point, it expresses skepticism about the seriousness of biases, claiming that "biases often arise when correspondence-based mechanisms are assessed in terms of coherence-based standards." I'm not sure I was convinced by what followed, although the book does a nice job of categorizing biases into those involving coherence and those involving correspondence. Elsewhere, the book explains biases, even discussing some important ones that I do not discuss (cascaded inference), and sometimes even talks about how serious they might be.

For a textbook, this is quite short, 215 pages, so it invariably misses a lot. For another example, there is nothing about Kahneman's important distinction between predicted utility, decision utility, and experienced utility, almost nothing about moral judgment, and perhaps most relevant to clinical psychology, very little about the extensive research on "irrational belief persistence."

Some areas are dealt with in a cursory way, inconsistently with other areas, where the text reads like an up-to-date and incisive literature review. Because of the latter, I do not think this is a good book for freshmen. It is a good book for serious students who want a quick, well-written introduction to a particular point of view, which is important and sometimes truly not appreciated by those with other points of view on JDM.

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