

porated algorithmically in the diagnostic scheme. In some instances, these formal aids have been shown to be highly effective, yet their widespread adoption by the medical community has been somewhat slow. In addition, the introduction of coursework in decision making has not been widely accepted in medical school curricula. The authors note that a variety of factors contribute to this unwillingness, including the already tight packing of courses in existing curricula and concern that medical students might overutilize or misapply formal decision analyses at the expense of cultivating sound clinical judgment, with an appreciation for the kind of nuance often omitted from quantifiable sources of information. If the success of formal decision analysis continues to mount, however, some explicit introduction and training in its theory and methods is likely to gain greater acceptance. When it does, medical students will become more keenly aware of their own decision-making processes, including biases and heuristics, as well as the uses and limitations to which formal decision theory can be put. The present book is highly recommended as a text for such a medical school course. In addition, it should be of interest to psychologists who seek an introduction to the application of decision analysis to medical problems.

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Communication and Persuasion: Central and Peripheral Routes to Attitude Change

By Richard E. Petty and John T. Cacioppo. New York: Springer-Verlag, 1986. 262 pp. \$33.00.

This research monograph presents a general framework and supporting experiments for a central topic in social psychology. The book on attitude change builds constructively on the plethora of previous research and theory. The framework is developed in terms of an Elaboration Likelihood Model of the consequences of exposure to persuasive communications. Central to the model is information-processing dynamics: The complicated relationships between messages and persuasion can only be understood by accounting for the information in the message and the processing of that information by the participant. What is impressive is that the research is social only because

of its origins and history; in every other respect, it is experimental cognitive psychology.

The most innovative contribution of the approach is the distinction between two major routes of attitude change. The central route involves the careful and thoughtful (perhaps conscious, controlled, and effortful) assessment of the message, whereas the peripheral route involves a fairly direct change in attitude without careful thought and consideration (perhaps unconscious, automatic, and effortless). This distinction is central to the theoretical framework and serves as the major construct to impose order on a somewhat complex, and perhaps the most voluminous, body of research in psychology or, at least, social psychology.

The book is organized in an informative manner with just the appropriate mix of theory, previous research, and new research. It begins with the development of the Elaboration Likelihood Model followed by chapters covering methodology, objective and biased elaboration, peripheral cues, and persistence of persuasion. The authors not only present their point of view but respectfully consider related and alternative views and even test among them. In this regard, the book exemplifies psychological research at its best, while making transparent the integrative value of research monographs.

The authors are well served by several developments in cognitive psychology, but might have capitalized even more on the field. For example, the same degree of attitude change via the central route is much more robust and immune to forgetting and counterarguments than attitude change resulting from the peripheral route. One wonders to what extent a general levels-of-processing explanation really explains this finding or merely describes what requires explanation.

In summary, I was impressed with the substantive advances that could be made in a complex area of inquiry. The research is clearly Brunswikian, being concerned with both information and information processing. There is still much progress to be made, however. I would have liked to have seen more cognizance of Norman H. Anderson's work within information-integration theory, for example. Furthermore, I saw too many predictions confirmed, predictions that our grandmothers would have made. Notwithstanding these minor irritations, the authors are to be applauded for advancing the state of the art in an important but complex area of psychological inquiry.

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