Book Reviews

Everyday Information Processing

Cognition and Social Behavior. Papers from a symposium, Pittsburgh, Apr. 1975. JOHN S. CARROLL and JOHN W. PAYNE, Eds. Erlbaum, Hillsdale, N.J., 1976 (distributor, Halsted [Wiley], New York). xiv, 290 pp., illus. $16.50.

In the last decade or two, social psychologists have become increasingly interested in cognitive processes, yet they have paid little attention to the field of cognitive psychology. This is changing as social psychologists working with attribution theory discover that they are concerned with issues that cognitive psychologists have dealt with for some time: how people perceive, integrate, interpret, and store information gathered from their environment.

This volume, the collected papers of the eleventh annual symposium on cognition, reflects the recent shift. The purpose of the symposium was to bring together the fields of social psychology and cognitive psychology "in response to a growing desire among many social psychologists to seek out or develop a more systematic body of theory, and a corresponding desire among cognitive psychologists to study the everyday affairs of people outside the laboratory" (p. ix). The book has 16 chapters, including four discussion chapters that summarize and evaluate the other contributions.

Two themes run through many of the chapters. The first is that most people go about making decisions in an ineffective and wrong-headed fashion. For example, Dawes presents evidence that man has severe cognitive deficiencies. He argues that cognitive limitations, rather than motivational factors, account for the many disastrous decisions we seem to make individually and collectively. The data Dawes presents and the arguments he makes are, for the most part, not new. However the chapter is well written, and Dawes is persuasive on issues that hit close to home. He points out that to select students for graduate school we would be better off (statistically) deriving a linear composite index from Graduate Record Examination scores, grade point averages, and the like than following hunches derived from a glance at the applicant's folder and a 30-minute interview. Left to our own devices, we are simply bad integrators of information. Similarly, Carroll and Payne discuss how cognitive limitations and biases affect parole decisions; Hamilton, how they might produce intergroup stereotypes; Nisbett, Borgida, Crandall, and Reed, how they affect people's acceptance of information; and Slovic, Fischhoff, and Lichtenstein, how they influence societal decision-making and risk-taking.

The chapters on cognitive biases and limitations are generally well written, and they should appeal to a broad audience. Hamilton's chapter on stereotyping is a case in point. After discussing traditional conceptions of stereotypes, Hamilton goes on to show how stereotyping could well be a "natural" result of cognitive processing variables. He argues that, for the typical white person, interaction with a black person is an infrequent and hence distinctive event. In addition, undesirable behavior is distinctive because it occurs less frequently than desirable behavior. Hamilton then cites evidence that pairings of distinctive events tend to be over-recalled. Consequently, the white observer who occasionally pairs "blackness" with "undesirable behavior" might infer a stable relation between the two, even if the ratio of desirable to undesirable behaviors is identical in whites and blacks. Hamilton's research supports this reasoning, and it seems to make a major contribution to our understanding of intergroup biases.

The chapter by Slovic *et al.* should also be of general interest. The recent decision to ban saccharin and the debate over nuclear power plants demonstrate how scientific information about risk affects policy decisions. In addition, the controversies over the two issues point to the importance of understanding and being able to predict the public's response to such decisions. Slovic *et al.* address issues of this kind in their discussion of cognitive limitations and biases.

Nisbett *et al.* discuss an intriguing information processing quirk that demonstrates that attribution theorists need to consider cognitive processing variables. Nisbett *et al.* find that people are much more willing to draw general inferences from specific information than they are to make specific inferences from general information. To paraphrase an example from the chapter, if a man is deciding whether to purchase a Volvo or a Saab, which information would he find more compelling: a *Consumer Reports* survey, based on a large sample, indicating the superiority of the Volvo, or his brother-in-law's bad experience with a Volvo? As Nisbett *et al.* note, we are much more influenced by concrete information than we are by more valid, abstract, consensus information.

A second major concern, reflected particularly in the discussion papers, is that social psychologists seem to be adopting the language but not the methods of research on information processing. Some argue that further advances cannot be made unless social psychologists also adopt the methodology, including computer simulations. Clearly there is a whole collection of research tools that bear scrutiny, though it is not clear to me at this point just how useful the tools will be.

The chapter by Abelson stands out from the rest in that it presents a broad theory of cognitive functioning. Abelson hypothesizes that semantic memory is organized in terms of scripts that are applicable to different social situations. By a "script" he means "a coherent sequence of events expected by the individual, involving him either as a participant or as an observer" (p. 33). Scripts are learned through both direct participation and observation. As Taylor notes in her discussion paper, Abelson does not present a test of script theory in the chapter. Nor does he present grounds for the falsification of the theory. Consequently, there is a danger that the theory will merely affect the language we use to describe phenomena, rather than increase our understanding of the phenomena. Nevertheless, script theory, as it is presented here, is in its early stages. It seems likely that the theory will have important implications for our thinking about decision-making, attitudes, and attribution processes. As a result, it is essential reading for cognitive social psychologists.

All in all, if this book is any indication, there is reason to be optimistic about a wedding between cognitive and social psychology. As Herbert Simon observes in the final, summary chapter, "there is no lack of research opportunities here that combine social relevance of the most basic kind with deep scientific interest" (p. 267).

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