

*HOW DO I KNOW THEE?
LET ME COUNT THE WAYS: A REVIEW OF
INVESTIGATIONS IN BEHAVIORAL EPISTEMOLOGY,
EDITED BY LINDA J. HAYES AND PATRICK M. GHEZZI*

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If you want something done, all too frequently you have to do it yourself. Steve and Linda Hayes wanted more books published on neglected or at least underexposed areas of scientific psychology, and so they formed Context Press nearly a decade ago and began to do it themselves. Since then, they have published an impressive array of books on such diverse topics as contextualism, verbal behavior, social behavior, ethics, scientific standards, and developmental psychology. Of interest to readers of *JABA* is the degree to which all Context books are derived from or, at the very least, relevant to radical behaviorism. An establishing operation often used by Context involves sponsoring a conference devoted to an important theme, recruiting presentations from major investigators who are notable for accomplishments relevant to the theme, and publishing paper versions of the presentations and related commentaries shortly after the conference. The Hayes and Ghezzi edition is one of the most recent and, in my view, most interesting of the series. It was developed from the proceedings of the Nevada Conference on Philosophy of Science in Psychological Perspective held in January of 1996. Please note, if your intellectual and scientific sen-

sibilities require consensus, do not look for it in this book. Epistemological diversity was the order of the day. The range of positions on methods for transforming opinion into knowledge was surprising for a field so frequently criticized for being epistemologically narrow. No book or paper I have read recently (or not so recently for that matter) supplies a better rebuttal to that criticism. Note too that although the influence of B. F. Skinner suffuses the book, fidelity to his views varies from chapter to chapter. As the book makes plain, there are many ways of knowing, even within behavioral psychology.

The inaugural chapter by Sam Leigland presents an overview of various approaches to behavior analysis and endorses those whose mission is the identification of rules for effective action over those with the more mainstream mission of accurately describing "reality." This is followed by Steve Hayes' chapter in which he argues for a nonverbal dimension of knowing and offers a whack on the noggin with a two by four for skeptics who insist that knowledge is necessarily verbal. His point is that profoundly physical events, such as being whacked by a piece of wood, persuasively predicate nonverbal knowing. The next four chapters involve behavior analysts playing poker, in a sense, with behavior-analytic conventions.

William Baum, citing a diverse blend of papers, opens the hand with a bet on indirect, distal contingencies suggestive of behavioral teleology. Jack Marr raises with an endorsement of a nonlinear, dynamic systems approach to behavior analysis. Greg-

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ory Galbicka calls and raises with an argument that rate is not (or at least should not be) the sine qua non dimension used in the analysis of behavior. A peek at his hand shows that he holds at least one ace: a solution to the long-standing puzzle of shock-maintained behavior. He solves the puzzle using studies from his own laboratory showing that shock reduces (i.e., punishes) long interresponse times (IRT). Because the logical (and functional) obverse of IRT is response rate, decreases in IRT are accompanied by increases in rate. Focusing solely on the increases leads to the spurious conclusion that shock can function as a reinforcer. In the final of the four gambles, J. E. R. Staddon pushes all his chips into the pot by arguing for internal states. The chapter nominates neurobiology as the source of “real answers” to psychological questions, implicitly dismisses contextualism (and applied behavior analysis) as unqualified to compete, and demonstrates, using habituation in the nematode (Rankin & Broster, 1992) and a hypothesized internal state with some explanatory value, how theoretical behavior analysis could continue to be a player.

The chapter by Linda Hayes demonstrates the permeability of the supposed barrier between the subjectivity of scientific observers and the objects of their scientific observations. The fundamental goal of most scientific theory, mainstream scientific psychology, and, apparently, Staddon’s theoretical behavior analysis is to explain nature (e.g., how the mind works). This goal, however, presupposes the possibility of wholly objective analysis—that there is a nature, entirely independent of the explainer, to be explained. The interpretive blend of physics and philosophy in Hayes’ chapter calls this possibility into question. Reading Hayes’ chapter as a companion to Staddon’s, the incisive commentary on Staddon’s chapter by Lyons, an earlier version of Staddon’s po-

sition (Staddon, 1993a), related commentaries, and Staddon’s response (Staddon, 1993b) could generate spirited classroom debate.

The remaining chapters contend with other important (and fun) domains of knowing. For example, Bernard Guerin argues against the culturally implicit metaphysical barrier between verbal and nonverbal behavior. Using “getting things done” as the ultimate purpose of human activity, words can be seen as tools, differing in form but not ultimate function from pedestrian tools such as hammers and saws. Stepping just outside behavioral psychology, Jaime Leeser and William O’Donohue prescribe use of topic-appropriate objector groups to aid the evolution of notions as they travel up cognitive streams to spawn and produce knowledge. In an attempt to bring language study back inside behavioral psychology, Patrick Ghezzi and Charles Lyons provide a taxonomy of nonpsychological approaches and offer a behavioral supplement. And lest we forget consciousness, a topic of great importance to the history of psychology, Noel Smith offers a naturalistic, event-based field theory (interpsychological) approach to its study.

Readers of this review who are searching for complaints about the book will not find them aired here. Oh, there are the usual concerns that accompany publications from small presses trying to save on overhead such as the occasional misspelled word, solecism, and missing reference or the absence of an author index. But these are small beer compared to the sheer fun gained from reading how these authors discuss their preferred ways of knowing, dismiss the ways preferred by others, and address epistemic conundrums, confusions, and confounding effects in the many-splendored science of behavioral psychology. If you want to know more, I have my own epistemological recommendation: Buy and read this book.

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