

Have Title, Need Text

Review of David Bakan, *On Method: Toward a Reconstruction of Psychological Investigation*. San Francisco: Jossey-Bass, 1967. Pp. xviii + 187. \$7.50.

It is perhaps an exaggeration to say that this book peaks in the preface and goes downhill from there, but not much of one. Only the first two papers (on hypothesis testing and curve averaging) in this heterogeneous collection of the author's past journal articles have sufficient substance to merit re-publication for their own sake, and no edifying gestalt emerges from the mosaic of their juxtaposition.

This is not to say that these essays are wholly without interest. Over and above the two good papers already mentioned, it is worth recalling, e.g., that Bakan was first (in 1953) to endow the psychological literature with a precise if curtailed definition of scientific "variable," and readers fond of musing upon the contours of human existence will find assorted morsels to titillate their taste. (E.g., "man is . . . the only animal who can make himself into what he wants to be" [p. 129].) Neither is this collection entirely without cohesion, for some themes recur, notably, an interest in inverse probability, support for introspection, and Freudian-eyed visions of science as a mode of man's being. But there is no accretion of momentum, no professional striving for a technically honest development of these ideas; only touch-and-run jottings at the level of an undergraduate Psychology Club lecture as though mere mention of a topic sufficed to say something significant about it.

Were it not for its title and preface, this book could be consigned to Bakanophiles in gentle silence. But by its own proclamation it seeks identity as a critique of research methodology, and from this perspective I can feel only dismay and some resentment that Bakan can so strongly sense the need for re-thinking the foundations of psychological inquiry and then unblushingly pretend that this compendium of irrelevant trivia will help to slake that need. His indictment of significance tests is fine so far as it goes, but a particular choice of model for assessing sampling uncertainty is, after all, a pretty superficial aspect of research methodology, especially when no one but an occasional journal editor takes the model's higher absurdities seriously anyway. More pregnant is the Preface's intimation that "experimental method as [currently practiced in] psychology interferes with the processes whereby we may acquire knowledge from experience." Unfortunately, Bakan never undertakes to show how this is so, nor does he propose any better way to process experience beyond averring that introspection, too, is OK.

Throughout this book one senses desire that the anal constrictiveness of current

scientizing give way to a free-spirited openness to experience—an existentialist theory of research? But not only is Bakan mute on how to distinguish *warranted* (rational, justified, credible) interpretations of experience from free-associative speculations, he does not even acknowledge that this is a problem. Thus “epistemological scepticism” (e.g., British empiricism and modern behaviorism) is clinically dismissed as the symptom of a philosophy of alienation (p. 81f.) without so much as a hint that positivistic theories of knowledge, even if ultimately misdirected, have been courageous attempts to surmount profound problems of ampliative inference which alternative epistemologies seldom dare to confront. Similarly, while Bakan correctly notes that empirically remote hypotheses are in principle data-confirmable via the theory of inverse probability, he neglects to say how we can obtain the numerical probabilities required to make such inferences feasible. (As has become only too clear in my own recent work on confirmation theory, inverse probabilities alleviate none of the classic problems of epistemology but are merely a new vehicle for their reappearance.) And the outputs of this collection’s most substantive—one on learning theory, two harvesting fruits of introspection—are gross speculations unaccompanied by any manifest concern for the technical operations, both conceptual and empirical, needed to refine such conjectures into well-established scientific conclusions. (Bakan’s brief references to replicability and generalizability on p.110f. seem all the more inadequate when one realizes that the point at issue is only how consistently his introspective procedure yields the same hypotheses.)

Regarding Bakan’s Prefatory unhappiness over modern research design, I strongly suspect that this reflects confusion of experimental design as such—i.e., a systematic planning of observations—with tactics for analyzing the data so obtained. I strongly agree with Bakan that the hypothesis-testing orientation is a monkey on our back, poisoning psychology’s research vitality. Most pernicious of all its stupidities is simply that analyzing experimental results only as a yes-or-no vote on one particular hypothesis throws away virtually all the information so painstakingly acquired and blinds the experimenter to what is probably the data’s most provocative patterning. (Oddly, this point was neglected by both Bakan and myself (Rozeboom, 1960; Bakan, 1966) in our respective null-hypothesis papers, though his present Preface hints at it.) But replacing hypothesis testing by the incomparably more powerful parametric approaches to *analysis* of data would urge few if any revisions in *design* technique. Contrary to Bakan’s Prefatory insinuations, there is no reason why “good experimental design” (the sneer-quotes are Bakan’s) should not in principle allow all possible outcomes to be considered in advance. It is just that in practice, since a sophisticated multi-variate design maximally disentangles whatever complex structure may invest the data, it would take heroic motivation and a small eternity to sweat out the implications of all alternative data patterns that *could* appear prior to determining which one in fact obtains. Receptivity

to research experience should indeed be loosed from the shackles of hypothesis testing, but “good experimental design” is what it takes to get experiences worth being receptive to.

Bakan has healthy instincts and a good book title. Perhaps someday he will get honest and give us the text that goes with them.

References

- Bakan, D. (1966). The test of significance in psychological research. *Psychological Bulletin*, 66, 423–437.
- Rozeboom, W. W. (1960). The fallacy of the null-hypothesis test. *Psychological Bulletin*, 57, 416–428.