The Behavior Analyst 1995, 18, 401–408 No. 2 (Fall)

. . . But Not Simpler: A Review of Baum's *Understanding Behaviorism: Science, Behavior, and Culture*

Jack Marr
Georgia Tech

"Everything should be made as simple as possible, but not simpler" (Albert Einstein)

Understanding Behaviorism (1994) is a most welcome book to the field. No extant text for undergraduates possesses the combination of scope and clarity in a treatment of the position known as radical behaviorism. This is a courageous effort, not only because of the obvious intelligence, labor, and passion that comprises it, but also because of the essential controversies it will occasion. I say "essential" in that any effort of this kind would be considered a noble failure by some because the field itself is, and will continue to be, a fluid enterprise of self-discovery and change.

Thus, reviewing a book of this sort is to me, at least, a daunting prospect. One is tempted to focus on one or two essences or criteria that define radical behaviorism and perhaps take Baum to task. Although I tend to side with Oscar Wilde in resisting everything but temptation, on this occasion I wish to take a different, more pragmatic approach and deal largely (but not exclusively) with the book as a pedagogical instrument. I have had one occasion to use it in a senior/graduate-level course in the experimental analysis of behavior at Georgia Tech. Most, if not all, of the students had no previous significant exposure to the area, certainly not to the conceptual issues. In earlier years I used Skinner's *About Behaviorism* (1974) but had grown increasingly dissatisfied with it on several counts. Although presumably written for the college student and the apocryphal intelligent layman, the book is cryptic and subtle; without proper guidance it is easily misinterpreted or simply dismissed. Students found at least parts of it tough going. Perhaps with more time to spend it would be satisfactory, but mine is a one-quarter course in which already busy students also read two other challenging experimental texts; thus, clarity and brevity are very important.

I asked the students to keep a notebook on *About Behaviorism* summarizing each chapter with critical comment and questions. It was primarily those notebooks that convinced me that Skinner's book was not the place to start with an exhibition of radical behaviorism. A basic problem is that Skinner is long on assertion and short on development. The effect of this on many students is to dismiss the whole enterprise as simplistic, if not trivial and irrelevant. Students also kept notebooks on Baum's text. They helped me to write this review.

At the outset, I have to say that I had fun teaching from *Understanding Behaviorism.* I have enjoyed the considerable and animated discussion generated by my able students wrestling with the fascinating issues treated here. My experience with using Baum's

---

Baum, W. M. (1994). *Understanding behaviorism: Science, behavior, and culture.* New York: HarperCollins.

Address correspondence to Jack Marr, School of Psychology, Georgia Tech, Atlanta, Georgia 30332-0170 (E-mail: mm27@prism.gatech.edu).

book indicates that it is a far better text in almost every respect than *About Behaviorism* is, yet some of the same kinds of criticisms continue to appear, I think for similar reasons. But, I run before my horse.

OVERVIEW

The book is organized into three major sections: What Is Behaviorism? (chapters 1 through 3), A Scientific Model of Behavior (chapters 4 through 8), and Social Issues (Chapters 9 through 14). The topical sequence is excellent. One has a clear sense of cumulative development from the basic to the more complex. I would delete nothing. However, as with all texts of this kind that attempt to reach a wide audience, the text cannot provide the detail and sophistication many would look for in a philosophical presentation. Thus, much will be left to the instructor to deal with the simplifications, provide details, generate critical arguments and questions, expand the reading lists, and so on. Given that the instructor is reasonably well informed on the topic, such a condition might be an advantage; however, sadly, that is not always the case, especially in an area in which there is a common tendency toward the doctrinaire. At any rate, Baum leaves himself open to the charge of, at best, oversimplification, or, at worst, naïveté.

What Is Behaviorism?

After reading the first three chapters, I began to wonder if somewhere there might be a discussion of the extended and continuing conflicts between behavior analysis and cognitive psychology. This can hardly be ignored in the face of the overwhelming influence cognitive psychology has had in directing research and conceptual efforts in many of those areas that behaviorism and behavior analysis would also address—problem solving, remembering, perceiving, verbal behavior, and so on. Also, in its ascendancy to the dominant role in directing experimental psychology, cognitive psychology has been unsparing in its attacks on behaviorism and behavior analysis as being primitive, wrong-headed, simplistic, and, indeed, worthless in its ability to deal with really interesting and significant topics in psychology. I want to emphasize that the primary issue here is pedagogical, not doctrinal. That is, there is little use in showing that one approach is wrong and the other right; rather, the point is to inform the student about the distinctions and similarities of behavior analysis and cognitive psychology in their treatment of particular problems in behavior. Also, some description of the misconceptions expressed by both approaches about each other would be useful. Students who have been heavily exposed to cognitive psychology (and most have) not only expect it in a book of this sort, but relish the debate. My concern is that this topic, inspired but not treated by this text, will be left to far less competent hands.

Related to the behaviorism versus cognitivism debate is the emphasis placed by behavior analysts on functional relations or a functional account as opposed to invoking metaphorical mediational processes, internal hypothetical mechanisms, pseudoneurological structures, and the like to account for a given behavior. The notion of a functional account is hinted at in chapter 2 in the discussion of Mach, but is never properly developed. It would be interesting to see how Baum would treat cognitive psychology from his emphasis on the invention of concepts and explanation as everyday description (i.e., in common, familiar terms). In fairness, the issues, as Baum knows well, are very deep here. But, again, in his attempts to simplify he may either mislead the reader or provoke questions that could be avoided.

An example is the discussion of the term *natural* in chapter 3. To assert that science requires only that phenomena be natural, observable or not, leaves me without a clear use for the word *natural.* How does one invent natural

phenomena? Is the moment of inertia as natural as rain? The term was never clearly defined, but it seems to cry out for a polar adjective like *unnatural* or *immaterial* or even *supernatural.* Why does a term such as *natural* receive emphasis in light of the previous discussion in chapter 2 of the problems of *realism*? For Baum the term seems to stand in opposition to *fictional,* as in "The mind and all its parts are *fictional*" (p. 31). Does that mean *unreal*? Baum needs to develop a more coherent argument here; otherwise, he is in danger of falling into his own category mistake. The issue is not one of existence but of use of terms (like *exist*) and descriptions in the language game of behavioral science. For example, what use in the language are the various expressions containing the word *mind*? Surely, some of them have a use. I could understand well enough to act upon the exclamation: "You'd better stay away from Nebuchadnezzar today; he's lost his mind!" The same argument can be made for terms like *consciousness, purpose, knowledge,* and *meaning.* Baum asserts that these terms have "no place in behavior analysis" (p. 119). That cannot imply that these terms have no use in the language; moreover, isn't Baum providing throughout the book a behavior-analytic or functional approach to these kinds of terms, in other words, a *use*?

In this context, Baum is much too slick and subtle with a definition of *behavior* on page 30. For a book on behaviorism, more extensive discussion of the term *behavior* is necessary. Some expansion occurs in chapters 4 and 5, but I don't think it is enough.

Chapter 3 has many other interesting difficulties that space does not allow me to deal with adequately. Wittgensteinian philosophers, especially, would have a field day with Rachlin's discussion of what it means to be in pain: "to feel pain *is* to show it" (p. 39) reminds me of Wittgenstein's wry comment, "I must be depressed, my head is bending so." A major problem here is behaviorally distinguishing different categories of *knowing.* To ask a person if he knows he is in pain seems very different from asking if he knows the way to Carnegie Hall. The person is likely, with good reason, to be perplexed by the first question.

On the positive side, it is good to see a discussion of Ryle. Also, I applaud Baum's use of many excellent examples to illustrate complex and slippery concepts such as Ryle's *category mistake.* Within the limitations mentioned above, the organization within the chapters by and large is coherent and clear. However, I found the transition in chapter 1 from the discussion of the historical development of behaviorism to a treatment of free will versus determinism (p. 10) to be rather abrupt. It did not seem to be related to the earlier material. The topic is certainly essential and is covered later in an entire chapter. Why is it here?

A Scientific Model of Behavior

The middle section is, on the whole, excellent, and I have little to criticize. Students not only need to understand the basics of natural selection but also to see the relevance to a behavior analysis, actually as well as metaphorically. Baum avoids collapsing all behavior into classical and operant conditioning, with only lip service given to behavioral biology. Indeed, behavior is a biological function of organisms, just as much as digestion (although, of course, far more complex). Behavior is certainly more complex than conditioning alone would have us understand, as, for example, modeling and imitation reveal.

The lengthy chapter on verbal behavior is a useful introduction to this difficult area for students. Baum avoids the temptation to place much emphasis on confusing jargon so common in even elementary treatments. As I mentioned previously, however, his treatment of the concept of meaning as use is flawed. Also, I simply don't understand why speaking to myself is not generally an example of verbal behav-

ior. Not all occurrences of any behavior result in a significant change in the environment. In a long fixed ratio is only the terminal response the true operant?

Social Issues

In the third section Baum has taken on an exceedingly difficult task in providing a coherent account of the most complex and controversial phenomena I know of, namely social issues of freedom, responsibility, control, values, and cultural change and design. It is, of course, at some level an effort doomed to failure. These topics have been argued about since the beginning of history by the greatest thinkers in many fields, and these efforts will continue unabated. The issue here is to what extent Baum has succeeded in applying the concepts of behavior analysis to the problems at hand and, at the same time, engaged the student in the process. An answer to this question depends on a number of factors, but perhaps most importantly on the particular goals of the effort. An overview of these chapters indicates to me that if the goals are simply to inform the students of the social issues, provide a precis of how a dedicated behaviorist might go about looking at them, and to encourage questions and discussion, then Baum has succeeded quite well. But, in relation to the complexities of the topics, these are modest goals indeed. This is *not* primarily a scholarly treatment; rather, it is expository in the sense of laying out some selected facts or themes as a prelude to interpretive discussion and analysis. Although some contact is made with a vast literature on relevant subjects ranging from cultural anthropology to sociobiology to political science to history to economics to theology to the philosophy of ethics to modern experimental and developmental social psychology, very little empirical evidence is presented to either confirm or disconfirm assertions. Even the relatively small literature on the experimental analysis of social interaction and organizational behavior is ignored. In common with *About Behaviorism,* there is a distinct risk here in that by choosing a basic expository route, Baum is open to severe criticisms of oversimplification, inaccuracy, and bold assertion without supporting evidence. I reiterate my concerns about the general quality of instruction of those who might use this text. Clearly, to do real justice to what Baum has written will take a teacher with broad and deep knowledge of many topics beyond behavior analysis. A much more comprehensive reading list would help both student and instructor. Thought questions at the end of each chapter might encourage discussion and extend the material. More timely and compelling examples would also help. Although Baum does provide many examples, they tend to be trivial or superficial. (The real howler for students is husband Bill's dishwashing gaining him opportunities to reproduce [p. 183]. A notable exception is the discussion of the program to reduce teenage pregnancy.) There are certainly many possible examples from the current economic and political arenas along with issues of social change.

Baum begins these chapters by asserting correctly that social problems are behavior problems. But this is followed by a rather weakly stated list that could be made much more powerful by providing some grim statistics from today's headlines. In the chapters to follow he could then begin to address at least some of those issues from a behavior-analytic perspective.

The concept of freedom is a recurring theme in this book; Baum's treatment is somewhat checkered. He emphasizes two aspects in this section: (a) the availability of choices and (b) the relative lack of punishment as a consequence for those choices. Both are equally important. There are significant complexities, however, that Baum does not address. It might be summed up in words like *conflict, dilemma,* and *quandary.* The availability of alternatives often means the *exclusive or.* Choices that bring about one set of

consequences and eliminate others must be made. Also, various alternatives typically have multiple consequences—reinforcing, punishing, and so on. In this sense *freedom* is an onus perhaps to be taken in small quantities. The late 1960s and much of the 1970s was a period in this country during which freedom (at least for some) abounded. There were important advances in civil rights and perhaps other social concerns, but in many quarters, rule-governed behavior deteriorated into social chaos. The present conservative political trends are, in part, reflective of those processes. There has to be some foundational structure that constrains people's choices and assigns responsibilities in order to provide stability to a culture as well as for the maintenance of individual sanity. Many cultures, relative to our own, have very restrictive customs regarding marriage, family, social rank, gender roles, and so on. There may be severe penalties for violating these customs. Many decisions we must struggle with in exercising our freedoms in our culture are already made in these societies. That can be of some advantage both to the individual and to the culture. Do these people feel as free as we are supposed to? I suspect so. Are these people less happy? Baum would presumably say yes; I would disagree. Is this some kind of ignorance on their part? I doubt it. Perhaps Baum would like to argue in a Platonic mode that there exists some optimum freedom (in his sense) for maximum happiness. That, at minimum, would seem to depend on history. Baum, who is an expert on India, might consider the different uses of the term *freedom* in India and in this country and the consequences of an exchange in the two cultures.

Staddon's recent article (1995) in *The Atlantic Monthly* makes two important points with which I agree. First, *freedom* cannot be functionally defined either in terms of choices or lack of punishment; and second, that legal and personal responsibility *implies* determinism. " 'holding a man responsible' for his actions means nothing more than making him subject to punishment if he breaks the law. The social view of punishment assumes that people are sensitive to reward and punishment—that behavior is predictably subject to causal influences" (p. 93). In the second edition, Baum should address Staddon's analysis.

Baum's discussion of spiritual freedom reminded me of the 1960s Kris Kristofferson lyric: "Freedom's just another word for nothing left to lose." Baum did well to include this section; it is of special interest to many students.

The chapter "Responsibility, Credit, and Blame" seems to have some points of agreement with Staddon (1995), but not entirely. In a deterministic system, what is the status of *responsibility*? I have no deep problem with most of what Baum says about this issue, but rather with what he does not say. A key point is the relation of responsibility to differential consequences. "Practically, responsibility comes down to a decision on whether to impose consequences" (p. 169) and "to say we hold someone responsible is to say we hope to change the person's behavior by punishing or reinforcing it" (p. 171). Consider two cases, one dealing with credit, the other with blame. First, we have greatly admired concert pianists like Arthur Rubinstein or Vladimir Horowitz. Presumably, their immense skills as pianists emerged from special genetic and environmental histories. But not even the most ardent behaviorist would have attended their concerts with the purpose of applauding (i.e., reinforcing) their individual genetic and environmental histories! At best, only the performance could be reinforced, of course. The performance cannot be said to be *identical* with those histories; otherwise, we could never distinguish cause and effect. This would be a kind of category mistake. But what, then, are the sources and foci of reinforcement? If no one ever acknowledged their pianistic talents and

performances, it is unlikely that these performers would ever have appeared in the concert hall. Once they did, we helped to maintain their behavior but did not necessarily change it. In other words, once their reputations had been established, they did not necessarily increase their concert tours thereby. Nobody would have applauded Rubinstein in the hopes that this would have enhanced his playing or increased the overall frequency of it, even if those were the actual outcomes.

Primarily, however, we attended their concerts and applauded because of how their performances affected *us*. This is an outcome of our own histories. We also purchase and listen to their recordings (we can never see them in concert again, except in films). They are no less responsible now than they were in life, yet our responses to them are still basically the same (as it is to the music they played, mostly by composers long dead). Now, we stand in awe of such people. This response is not simply dependent upon some attribution to a mysterious quality of the individual (and certainly not to free will). Knowing that what we see before us is the outcome of a very special history takes none of the mystery away because we still haven't the foggiest idea how to create that history. If we were able to produce great performances by formula, they would no longer compel our attention as being associated with individuals (except perhaps those who created the formula). Indeed, we might pay no attention to them at all.

Now consider a case of blame, say with respect to someone like the serial killer Ted Bundy. We may assign to him responsibility for his actions not because of any consequences we might impose (including death, the ultimate aversive consequence), but because of the consequences of his behavior for society. Again, you cannot punish a history, even if you knew what that history was. An important aspect not adequately explored by Baum here is that of compensation for harmful acts. Even if a history is known, or if all sorts of extenuating circumstances exist, or there is the possibility of redemption through reinforcement, there is still the issue of compensation. Baum's son should still pay for the broken window. Simply not doing it again is not enough. Of course, in many significant cases, no compensation is possible. Ted Bundy exemplifies this to the ultimate extent. Here society protects itself not through punishment (or reinforcement) in the technical sense of modifying subsequent behavior, but by isolating the individual or removing him altogether. Is he still considered responsible?

The issues of control and countercontrol are immensely important, and Baum provides a useful discussion in the chapter "Relationships, Management, and Government." Students need to be attuned to the basic fact that we are immersed in a sea of controlling relations involving parents, peers, professors, politicians, and all sorts of propaganda, promotions, media manipulations, and so forth. Only by understanding those kinds of relations can effective countercontrols be exerted. I am not convinced, however, that Baum has achieved his goal of a behavior analysis "that allows relatively clear answers" to what is equity. Yes, the descriptions are useful, but answers as to how to achieve equity versus equality, and under what conditions either of these might or might not be desirable to the survival of a culture, organization, or relationship are vague or too abstract to be convincing. Can Baum, for example, specify the conditions that favor say, a capitalistic versus socialistic economic structure? What about a proper balance of the two? But what would that balance be?

Concepts of equity and equality also interact with roles of responsibility. In the traditional marriage, husband and wife had different roles defined by different responsibilities. So it is with labor and management, faculty and student, server and patron, and a host of other relations. To complicate matters

further, we compensate people, *in part,* on the basis of the consequences of those people's actions on our own behavior, their assigned responsibilities, and the training and talent necessary to their tasks. That is why neurosurgeons get paid more and have higher prestige than coal miners. The coal miner could well argue in his resentment to this state of affairs that his work is harder and more dangerous. Can any equity be achieved here?

Baum occasionally makes statements about history that seem unsubstantiated, at best. On page 180 it is said that child laborers in the 19th century were "paid and often received care; they were mostly content." Dickens, for one, seemed to have thought otherwise: "Please, sir, I want some more."

Many students will be surprised to discover that behaviorism is not strictly supportive of moral relativism and situational ethics, two putative tenets of secular humanism, that bête noire of Christian fundamentalism. Actually, I was somewhat surprised also. It is mostly a question of emphasis. Sure, that genetic and other biological mechanisms may contribute to human social behavior is, I think, beyond dispute. But how much, and in what ways, remain very much open questions. Why this is the case is exemplified by Baum's rather Pollyanna perspective on the qualities of humankind and kindness. Altruism as the expression of self-interest and gene-pool protection is one thing. But it is the problem of *evil* in the world that is foundational to concepts of religion (and, specifically, free will in the Judeo-Christian tradition) and in the development of ordered societies based on rules of law. It appears that humans have to be trained, exhorted, or otherwise impelled to behave wisely and well for both the individual and cultural good. Reasons for this have already been explicitly or implicitly discussed by Baum in earlier chapters. For example, the differential effect of immediate versus delayed consequences is perhaps the greatest source of evil and misery in the world.

However, the relative contributions of genetic mechanisms to ethical and moral behavior can be put in perspective by noting that human history is an unabated nightmare of slaughter, plunder, exploitation, jingoism, bigotry, paranoia, tyranny, rape, and slavery. Such actions may also have genetic sources. They certainly have contributed to survival of both individuals and cultures. *Equity, equality, rights, democracy,* yes, and even *family values* are terms very, very recent in human history, both in concept and in practice. As late as the 19th century in western culture, infants were often given little emotional investment by parents partly because most died before the age of five. Children were not even viewed as children, but rather as little adults, and thereby often treated harshly. Today, kin-based altruism has to be seen in the light of the frequency of child abuse and murder. There are too many other examples to list, but thoughtful students who have read, say, *Candide* along with the daily paper will raise these issues. Baum should address them with a bit less sugar to make the medicine go down.

"The Evolution of Culture" is an excellent chapter treating in a carefully developed and organized way the analogy between organic evolution and cultural evolution; at the same time, it presents plausible mechanisms for adoption and transmission of cultural practices based upon interactions between natural selection and acquisition processes. To a certain extent, this chapter deals more effectively with some of the problematical aspects of earlier chapters that I have commented on earlier. A prime feature of this chapter is that it makes more extensive contact with relevant literature. This allows the arguments to take on a clarity and plausibility that mere assertion coupled with homey examples cannot provide.

The impressive final chapter on "Design of Culture: Experimenting for

Survival" brings together many issues raised in the earlier chapters to bear on the experimenting culture. Conceptually, there is little to argue with here. Indeed, some students should gain inspiration and much-needed hope for a better future in thinking carefully about the implications of the overall perspective. The treatment might be enhanced by providing specific examples of contingency management in various organizational settings.

DESSERT

It will not have escaped the reader of this review that it contains a fundamental contradiction. Earlier, I emphasized how important clarity and brevity were in a text of this sort. Yet, I have continually asked for more—like Oliver: "Please, sir, I want some more." In large part, I believe this is a result of the successes of the book, not its failures. An exquisite dessert like crème brûlée, despite its inherent richness, never seems to be in enough quantity; its flavor has an elusive quality that keeps you in gustatory pursuit. So it is with this book. I have, however, suggested some changes in the recipe.

REFERENCES

Skinner, B. F. (1974). *About behaviorism.* New York: Knopf.

Staddon, J. (1995). On responsibility and punishment. *The Atlantic Monthly, 275*(2), 88–94.