# PRAGMATISM AND RADICAL BEHAVIORISM: COMMENTS ON MALONE (2001)

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ABSTRACT: The purpose of this commentary is to discuss briefly a few points arising from Malone's (2001) interesting paper, "Ontology Recapitulates Philology: Willard Quine, Pragmatism, and Radical Behaviorism." Malone's paper serves both as a tribute to Quine as well as a reexamination of the possible pathways of influence between Quine and B. F. Skinner. These remarks are directed primarily to questions involving pragmatism in Skinner's radical behaviorism. Some of the points made here have been discussed in more detail elsewhere (Leigland, 1999).

Key words: radical behaviorism, pragmatism, Skinner, Quine, Rorty, behavior analysis

## Realism and Anti-Representationalism

Various relations between philosophical pragmatism and Skinner's radical behaviorism have been explored in print for over two decades (e.g., Baum, 1994; Day, 1980, 1983; Hayes & Brownstein, 1986; Hayes, Hayes, & Reese, 1988; Lamal, 1983; Leigland, 1997, 1999; Morris, 1993, 1997; Moxley, 2001, 2001/2002, 2002, 2003; Schneider, 1997; Zuriff, 1980). Of course, the complexity of both literatures has assured that the relations would be complex as well. Varieties of pragmatism, for example, differ along a number of possible dimensions (e.g., with respect to such traditional philosophical issues as truth, reality, and science; Murphy, 1990). Malone's (2001) discussion makes reference to "extreme pragmatism" (p. 67), although the exact properties of pragmatism that would constitute an extreme version in such references is unclear.

The primary issue for present purposes concerns Malone's (2001) discussion of Skinner's physicalism and realism and how such views relate to pragmatism. Malone maintains that although there are similarities between pragmatism and radical behaviorism, there are also important differences. Malone notes that "the treatment of meaning by radical behaviorists is not identical to pragmatism, but close" (p. 70), that "Skinner would not wholly endorse" (p. 70) contemporary pragmatic interpretations of radical behaviorism, and that Skinner has provided "arguments against extreme pragmatism" (p. 67). The source of such differences, according to Malone, is to be found in Skinner's realism and physicalism.

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As to physicalism, Skinner did indeed make references to "physical" dimensions or properties throughout his writings, leading to potential confusions. For example, the use of such a term has led to the view in some quarters that Skinner's scientific views entail physicalistic reductionism, although arguments have been raised against such an interpretation (e.g., Day, 1980; Leigland, 1993). Further, Skinner's doctoral dissertation, originally published in 1931, contains the following passage:

We have been proceeding, of course, upon an unnecessary assumption, namely, that there *is* a flexion reflex which exists independently of our observations and which our observations approximate. Such an assumption is wholly gratuitous, but is remarkably insistent. . . [With even] less justification, we are led to assume that there are isolated reflexes concealed within the behavior of an organism, which by proper investigatory methods we may discover, and in the description of behavior to state the corollary of this proposition, namely, that behavior is the sum or the integration of these units. (Skinner, 1999, p. 498; emphasis in original)

The issue concerning Skinner's physicalism is closely connected in Malone's treatment with Skinner's realism. Generally, Malone takes realism to be the view that "assumes an objective reality that exists independent of our knowledge of it" (p. 70). Malone later provided a quotation from Skinner in which the term "real world" appeared and concluded that "Skinner. . .left a real (metaphysical?) world that seems to be independent of our reaction to it" (p. 70). Things are more complicated than this, however, as the quotation above indicates.

Malone (2001) asserted that Skinner "assumed the existence of an objective physical reality" (p. 69) and that such an assumption illustrated Skinner's physicalism and realism. Although such assumptions have the testimony of Paul Meehl (p. 67), virtually nothing in Skinner's 50+ years of published writings seem to support them. On the contrary, a great deal may be found in Skinner's writings to argue against the possibility of such views. For example, in looking at the notion of an "objective" reality, it has long been known that Skinner, from his early contacts with Watson's writings and throughout his career, never subscribed to the objective–subjective distinction (e.g., Day, 1980, 1983; Moore, 1995; Skinner, 1945, 1964, 1989).

Further, Skinner's analysis of verbal behavior (e.g., Skinner, 1945, 1957), essential for understanding Skinner's systematic views on science, indicates clearly that it is impossible for a person to step outside the processes of environment—behavior interaction into some objective "God's-eye view" of the world, in and of itself. In this sense, Skinner's radical behaviorism shares with contemporary pragmatism (e.g., Rorty, 1991) that no human activities stand outside the context of language, history, and culture (e.g., Leigland, 1999).

The important issue involved may be construed for radical behaviorism as Rorty has described it for pragmatism (e.g., Murphy, 1990; Rorty, 1991). That is, the issue concerns neither realism nor antirealism (as a traditional dichotomy in academic philosophy), but rather anti-representationalism. The latter acknowledges

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a world with which human beings and other creatures interact, but stands against the traditional view that minds or languages more or less accurately represent that world as it is, in and of itself. On this view, the language of physics, for example, is not effective *because* it represents reality as it actually is, for how could such a thing be evaluated independently of its effectiveness? We could say, rather, that it is a particularly effective vocabulary when certain goals, such as the scientific goals of prediction and control, are of particular interest. Similar pragmatic arguments may be made for the effectiveness of the technical vocabulary of behavior analysis (e.g., Leigland, 1999).

In addition to the above quotation from his 1931 doctoral dissertation, Skinner's own anti-representationalism may be seen in numerous sources throughout his career, as in the following:

In studying perception one is "actually investigating the stimulus conditions under which people" report appearances which are at variance with information obtained by other means. "You never get to the way it *really* is." (Skinner, 1964; summary and quotes by Wann, 1964, p. 101; emphasis in original)

There are often many ways in which a single event may stimulate an organism. Rain is something we see outside our window or hear on the roof or feel against our face. Which form of stimulation *is* rain?... Stimulation arising from contact may not agree perfectly with that arising visually or audibly, and we may not be willing to identify one form with reality to the exclusion of the others. There are still [those] who argue for the priority of one form of stimulation and, hence, insist upon a distinction between experience and reality.... We are much less inclined today to ask which form of energy *is* the thing itself or correctly represents it. (Skinner, 1953, pp. 276-277; emphasis in original)

Another problem which the distinction between physical and nonphysical worlds may have been an attempt to solve arises from the fact that more than one kind of response may be made to stimulation arising from a physical event. Rain is something you may run to escape from, catch in your hands to drink, prepare crops to receive, or call "rain." Which response is made to "rain in itself"? The solution was to construct a passive comprehension of rain, which was supposed to have nothing to do with practical responses. So far as we are concerned here, the problem is disposed of by recognizing that many verbal and nonverbal responses may come under the control of a given form of stimulation. With the possible exception of the abstract verbal response, no behavior need be singled out as "knowing rain." (Skinner, 1953, p. 277)

Another problem in [operant] stimulus control has attracted more attention than it deserves because of metaphysical speculations on what is "really there" in the outside world. What happens when an organism responds "as if" a stimulus had other properties? Such behavior seems to indicate that the "perceptual" world—the world as the organism experiences it—is different from the real world. But the difference is actually between responses. . .under different modes of stimulation from a single state of affairs. . .

Usually, objects are capable of generating many different kinds of stimuli which are related to each other in certain ways. Responses to some forms of stimulation are more likely to be "right" than responses to others, in the sense that they are more likely to lead to effective behavior. Naturally these modes are favored, but any suggestion that they will bring us closer to the "real" world is out of place here. (Skinner, 1953, pp. 138-139)

Scientific laws. . .specify or imply responses and their consequences. They are not, of course, obeyed by nature but by men [and women] who deal effectively with nature. The formula  $s = 1/2gt^2$  does not govern the behavior of falling bodies, it governs those who correctly predict the position of falling bodies at given times. (Skinner, 1969, p. 141)

It would be absurd for the behaviorist to contend that he is in any way exempt from his analysis. He cannot step out of the causal stream and observe behavior from some special point of vantage, "perched on the epicycle of Mercury." In the very act of analyzing behavior he is behaving—as, in the very act of analyzing thinking, the philosopher is thinking. (Skinner, 1974, p. 234)

As consistent as such passages are in advocating an anti-representationalist position, there are also passages in Skinner's writings in which he speaks in simple terms about the "real world," as in the quotation provided by Malone (2001, p. 70). The term "real" may be interpreted in different ways, depending on the verbal context, of course. A pragmatist such as Rorty (1991), for example, has argued against the traditional philosophical agenda which has become attached to the term, as opposed to the term's occurrence on ordinary language, as when we ask whether our coffee contains real cream or non-dairy whitener. In the passage by Skinner quoted in Malone (2001), Skinner is using "real world" as a way of contrasting his view of environment–behavior (including verbal behavior) interactions with the traditional alternative involving ideas and minds. One need not conclude that the passage implicates a world apart from behavior.

This point illustrates the ease with which ontological issues can become implicated by the use of ordinary terms (e.g. Leigland, 1998). For example, Malone (2001), in describing a similarity between radical behaviorism and pragmatism, states that for both "there is no 'real' reality existing independently of our activity with respect to it" (p. 70). Yet such an assertion can itself be called an ontological claim, as it seems to be a statement that such a reality doesn't exist. Rather than claiming that there is no such reality, pragmatist philosophers characteristically make the alternative case that philosophical arguments of an independent reality are pointless or useless (e.g., Rorty, 1991).

Also, as noted above, another part of Skinner's writings may be brought to bear upon possible metaphysical implications of Skinner's work, and that is his writings on verbal behavior. In surveying Skinner's (1957) book *Verbal Behavior*, for example, one finds no way to escape the network of environment–behavior contingencies to arrive at some truly "objective" conception of reality (as any such conceptions may also be described as verbal behavior in interaction with the verbal and nonverbal environment; e.g., Leigland, 1999; Moore, 1995).

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## Summary and Conclusions: "(He) Would Have Puked"

Skinner's writings imply a broad consistency with pragmatist philosophers such as Rorty in the sense that both argue against traditional representationalist views, and both generally avoid ontological disputes (which are generally construed as pointless language games). However, if Malone is correct in saying that Skinner would not entirely endorse pragmatic views, then where would the differences occur if not on the issues of physicalism and realism?

Among Malone's (2001) interesting quoted passages and discussions is a footnote that quotes Paul Meehl as saying that Skinner "would have puked had he read Rorty, which he wouldn't even bother to do" (p. 66). Many familiar with Skinner or his autobiographical writings would likely not be surprised that Skinner never bothered to read Rorty or any other philosopher, but it is the former prediction that is of interest here; namely, that Skinner would have "puked" had he read Rorty. The question is, why Skinner would have had such a reaction of distaste?

It would not be Rorty's anti-representationalism, which Skinner would have been obliged to endorse. Nor would it be because of Rorty's lengthy critical discussions of traditional philosophical areas (e.g., epistemology; Rorty, 1979) or issues (mind-body and other dualisms; e.g., Rorty, 1991), which Skinner would certainly have opposed as well.

Part of Skinner's predicted reaction would be consistent with his well-documented contempt for philosophy in general, an attitude linked to the influence upon Skinner of the writings of Francis Bacon and Ernst Mach (Bjork, 1993; Smith, 1986). More specifically, however, it would likely have been Rorty's views of science and social change that would have stuck in Skinner's throat. Rorty's pragmatism, unlike Dewey's, has sought to raise the prestige of literature and the arts to the level widely enjoyed by science. Rorty (e.g., 1991) has strongly criticized the scientistic view that science holds a privileged position in the investigation of nature and reality. As noted above, the consistent application of anti-representationalism means that the specialized scientific vocabularies are not "closer descriptions of reality," but rather are especially effective vocabularies when certain goals are important (e.g., prediction and control). Other human goals, however, are better suited to other areas of inquiry.

Skinner would have to agree with this much: that scientific and, for example, literary verbal communities differ with respect to goals and other pragmatic criteria, rather than on metaphysical grounds or because one field has a special link to "true reality" (e.g., see Skinner's [1957] chapter on "Logical and Scientific Verbal Behavior"; Leigland, 1999). Where Skinner and Rorty would part company, however, is in the larger implications of these views.

Skinner's scientism, his outspoken advocacy of science, is not based on representationalism but rather on pragmatic concerns for improving the human condition (e.g., Skinner, 1971). Where Rorty's concern for improving the human condition involves promoting a Skinner-like view of contingency in human beings and human relations on the one hand and promoting strategic views of persuasion,

discussion, pluralism, and democracy on the other, Skinner would likely view such proposals as nauseatingly inadequate examples of previously attempted philosophical—political discourse. For Skinner, the contingent view of human beings and human relations means that the full range of human functioning, problems, and solutions may be approached with what history has shown to be the most effective tools and methods available; namely, the tools and methods of science.

Yet Skinner might have benefited from Rorty's suggestions in that effective social change requires more than the availability of more effective social practices. It also requires the successful *implementation* of those practices. Skinner's writings on social change emphasize the building of an effective science of behavior, and the difficult issues that arise when the implications of such a science confront traditional Western-culture values (e.g., Skinner, 1953, 1971). Questions remain, however, regarding the methods by which science-based practices are to become adopted in a democratically oriented culture that has strong investments in those traditional Western-culture values. Such problems are familiar to behavioral scientists even now, as behavior analysts struggle in their attempts to find acceptance for effective, data-based practices in such fields as education and developmental disabilities. Perhaps solutions to the problems of implementation will also be found through empirical research, but it is difficult to see how the advocacy of effective cultural practices may be achieved without Rorty's notions of discussion, persuasion, and politics.

As Malone (2001) has indicated, despite important similarities between Skinner's radical behaviorism and pragmatism, Skinner would clearly have not endorsed all variations or issues of pragmatic philosophy. Nevertheless, Malone's interesting look at Quine and Skinner raises additional questions about points of agreement and disagreement—and issues of similarity and difference—that are worthy of further investigation.

#### References

- Baum, W. M. (1994). *Understanding behaviorism: Science, behavior, and culture*. New York: HarperCollins.
- Bjork, D. W. (1993). B. F. Skinner: A life. New York: Basic Books.
- Day, W. F. (1980). The historical antecedents of contemporary behaviorism. In R. W. Rieber & K. Salzinger (Eds.), *Psychology: Theoretical–historical perspectives* (pp. 203-262). New York: Academic Press.
- Day, W. F. (1983). On the difference between radical and methodological behaviorism. *Behaviorism*, 11, 89-102.
- Hayes, S. C., & Brownstein, A. J. (1986). Mentalism, behavior–behavior relations, and a behavior–analytic view of the purposes of science. *The Behavior Analyst*, 9, 175-190.
- Hayes, S. C., Hayes, L. J., & Reese, H. W. (1988). Finding the philosophical core: A review of Steven C. Pepper's World hypotheses: A study in evidence. Journal of the Experimental Analysis of Behavior, 50, 97-111.
- Lamal, P. A. (1983). A cogent critique of epistemology leaves radical behaviorism unscathed. *Behaviorism*, 11, 103-109.

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- Leigland, S. (1993). The case against physicalism in the analysis of behavior. *The Behavior Analyst*, 16, 351-355.
- Leigland, S. (1997). Systems and theories in behavior analytic science: An overview of alternatives. In L. J. Hayes & P. M. Ghezzi (Eds.), *Investigations in behavioral epistemology* (pp. 11-31). Reno, NV: Context Press.
- Leigland, S. (1998). Radical behaviorism and the clarification of causality, constructs, and confusions: A Reply to Hayes, Adams, and Dixon. *The Psychological Record*, 48, 423-437.
- Leigland, S. (1999). Pragmatism, science and society: A review of Richard Rorty's *Objectivity, relativism, and truth: Philosophical papers* (Vol. 1). *Journal of the Experimental Analysis of Behavior*, 71, 483-500.
- Malone, J. C. (2001). Ontology recapitulates philology: Willard Quine, pragmatism, and radical behaviorism. *Behavior and Philosophy*, 29, 63-74.
- Moore, J. (1995). Radical behaviorism and the subjective—objective distinction. *The Behavior Analyst*, 18, 33-49.
- Morris, E. K. (1993). Behavior analysis and mechanism: One is not the other. *The Behavior Analyst*, 16, 25-43.
- Morris, E. K. (1997). Some reflections on contextualism, mechanism, and behavior analysis. *The Psychological Record*, 47, 529-542.
- Moxley, R. A. (2001). Sources of Skinner's pragmatic selectionism in 1945. *The Behavior Analyst*, 24, 201-212.
- Moxley, R. A. (2001/2002). The selectionist meaning of C. S. Peirce and B. F. Skinner. *The Analysis of Verbal Behavior*, 18, 71-91.
- Moxley, R. A. (2002). Some more similarities between Peirce and Skinner. *The Behavior Analyst*, 25, 201-214.
- Moxley, R. A. (2003). Some early similarities and later differences between Bertrand Russell and B. F. Skinner. *The Behavior Analyst*, *26*, 111-130.
- Murphy, J. P. (1990). *Pragmatism: From Peirce to Davidson*. Boulder, CO: Westview Press.
- Rorty, R. (1979). *Philosophy and the mirror of nature*. Princeton, NJ: Princeton University Press.
- Rorty, R. (1991). *Objectivity, relativism, and truth: Philosophical papers* (Vol. 1). Cambridge: Cambridge University Press.
- Schneider, S. M. (1997). Back to our philosophical roots: A journal review of transactions of the Charles S. Peirce Society. *The Behavior Analyst*, 20, 17-23.
- Skinner, B. F. (1945). The operational analysis of psychological terms. *Psychological Review*, *52*, 270-277, 291-294.
- Skinner, B. F. (1953). Science and human behavior. New York: Macmillan.
- Skinner, B. F. (1957). Verbal behavior. New York: Appleton-Century-Crofts.
- Skinner, B. F. (1964). Behaviorism at fifty. In T. W. Wann (Ed.), *Behaviorism and phenomenology* (pp. 79-108). Chicago, IL: University of Chicago Press.
- Skinner, B. F. (1969). *Contingencies of reinforcement: A theoretical analysis*. New York: Appleton-Century-Crofts.
- Skinner, B. F. (1971). Beyond freedom and dignity. New York: Alfred A. Knopf.
- Skinner, B. F. (1974). About behaviorism. New York: Alfred A. Knopf.
- Skinner, B. F. (1989). The behavior of organisms at fifty. In B. F. Skinner (Ed.), *Recent issues in the analysis of behavior* (pp. 121-135). Columbus, OH: Merrill.
- Skinner, B. F. (1999). The concept of the reflex in the description of behavior. In B. F. Skinner, V. G. Laties, & A. C. Catania (Eds.), *Cumulative record* (definitive edition) (pp. 475-503). Cambridge, MA: B. F. Skinner Foundation.

- Smith, L. D. (1986). *Behaviorism and logical positivism: A reassessment of the alliance*. Stanford, CA: Stanford University Press.
- Wann, T. W. (Ed.). (1964). *Behaviorism and phenomenology*. Chicago, IL: University of Chicago Press.
- Zuriff, G. E. (1980). Radical behaviorist epistemology. *Psychological Bulletin*, 87, 337-350.