COMMENTS ON BURGOS' (2015) ANTIDUALISM AND ANTIMENTALISM IN RADICAL BEHAVIORISM

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An interesting paper by Burgos (2015) argued that when radical behaviorists present criticisms of mentalism, such as the type typically practiced by cognitivists, the arguments commonly entail criticisms of dualism as well. Burgos made the case that conflating antidualism with antimentalism in such criticisms constitutes a misunderstanding of contemporary mentalistic practices in psychology, and weakens or confuses the case to be made against mentalism in psychology and behavioral science. This commentary will examine briefly this issue in the context of the different languages and practices of philosophy and of science.

A question that presents itself is whether a cumulative, progressive, and useful scientific field needs metaphysics or to address ontological issues. The issues are interesting and important to philosophical concerns, but what scientists working in a cumulative scientific field need are clearer empirical questions, better scientific methods, more effective research technologies, and explanatory practices that engage new directions, discoveries, and applications. A standard search online once led me to a group that has an interest in ontological issues in physics, but my impression is that physicists are generally uninterested in such issues (there is apparently a joke that when a physics student begins to suggest metaphysical themes in discussions, the mentor recommends, "Shut up and calculate.")

The field of behavior analysis is a cumulative and progressive science. It may be the only field among the social/behavioral sciences that shares with physics, chemistry, and biology an inductive or "bottom-up" historical/scientific development. These fields began not with philosophy or extensive theory, but with careful observation, measurement, and often accidental discoveries that raised empirical questions and established new themes and directions for research. All four scientific fields eventually began to produce effective applications.

In contrast, virtually all areas of experimental psychology (cognitive psychology, social psychology, developmental psychology, etc.) began with ordinary-language terms and concepts, and conduct experiments to test hypotheses. The results of the latter strategy are massive amounts of data and a large patchwork collection of various types of theories. Nearly all such theories are incapable of
producing applications, in principle, because the hypothetical explanatory entities are unable to find contact with the phenomena under investigation, except in the case of "inference" when conducting experimental research (the biological areas of psychology can engage technical vocabularies that allow for some applied developments, but that is because the biological sciences are progressive and cumulative fields with effective, empirically-based technical vocabularies and interrelated empirical domains).

**Language Games of Philosophy and Science**

A central problem with the application of traditional philosophical issues to scientific fields concerns the functional differences between the vocabularies of the two verbal communities (cf. Skinner, 1957). Traditional philosophical terms engaged in Burgos' (2015) discussion include *mental, behavioral, causation, and functional*. Each term has an extensive etymological history in the development of ordinary language practices (e.g., Skinner, 1989), with additional issues or connotations developed throughout the long history of philosophical analysis. A term such as *mental* can be described or discussed in ontological, theoretical, or phenomenological terms. The term *behavior* in the history of psychology has generally been reserved for overt, publicly-observable actions, but has been extended in the history of behavior analysis to also include private events as phenomena observable to the individual (e.g., Leigland, 2014; Skinner, 1945).

In the concluding section of the paper in a discussion of mental causation, Burgos states: "I thus recommend radical behaviorists to embrace mental causation. . . .Radical behaviorists could view mental causation in a radical-behavioristic way. After all, they do not reject causation per se, only causation conceived in a certain way, as functional relation," (p. 31). In this passage I take the occurrence of *functional relation* to be used in the sense of philosophical functionalism (as practiced in cognitive psychology). However, in the radical behaviorist/behavior analytic sense, a *functional relation* is at the heart of the analysis of behavior; an analysis of the environmental/historical/biological variables of which behavior, as the activities (public or private) of the organism, may be observed to be a function.

Skinner (1945, 1953, 1957) described four types of contingences of reinforcement that could establish functional relations between classes of discriminated private events and classes of verbal behavior. There is a sense in which such relations could be regarded as a version of "mental causation", but for the unclear connotations of the term *mental*. As to the term *causation*, Skinner's views were strongly influenced by the work of prominent physicist Ernst Mach, and Skinner had adopted Mach's view of causality. Skinner was very clear in four sources, from his 1931 doctoral dissertation to Science and Human Behavior (1953), in describing the term *cause* to mean nothing more than an observed correlation, without any implication of "underlying forces" (Leigland, 1998).

The purpose of raising such complex issues of language is not to criticize the study or language of ontology or philosophy generally, but rather to emphasize that
the language of science must be as clear and specific as possible in order to be useful in progressive research and applications. There is a philosophy that is well-suited to such goals. A substantial literature describes close relations between Skinner's radical behaviorism and pragmatism (e.g., Baum, 2005; Chiesa, 1994; Day, 1980, 1983; Hayes & Brownstein, 1986; Leigland, 1992, 1999; Moore, 2008; Moxley, 2001, 2002; Schneider, 1997; Todd & Morris, 1995; Zuriff, 1980). While pragmatism shares with other areas of philosophy a diversity of views on certain issues, the pragmatism inherent in radical behaviorism allows for scientific goals to be pursued without the necessity of traditional philosophical problematics.

A Functional Analysis of Philosophical Terms

This is not in any way to suggest that philosophical questions are useless or are to be ignored. Ontology might be viewed as a complex example of a figure/ground phenomenon. In the famous example of the Necker cube, a "three-dimensional" outline of a cube is presented in two dimensions, but which of the two squares appears to be in "front" or "back" may be seen to shift from one to the other. It would be useless to ask which square is really in front.

The language of ontology may be addressed in fully engaged and extended literality for the purposes of philosophical analysis, but it may also be viewed as verbal behavior in contact with a complex social and nonsocial environment over spans of time. Skinner appeared to address this multi-perspective view in the following well-known passages:

We may quarrel with any analysis which appeals to...an inner determiner of action, but the facts which have been represented with such devices cannot be ignored (Skinner, 1953, p. 284).

We are interested in finding terms, not to take traditional places, but to deal with a traditional subject matter (Skinner, 1957, p. 115).

No entity or process which has had any useful or explanatory force is to be rejected on the ground that it is subjective or mental. The data which have made it important must, however, be studied and formulated in effective ways. The assignment is well within the scope of an experimental analysis of behavior, which thus offers a promising alternative to a commitment to pure description on the one hand and an appeal to mentalistic theories on the other. (Skinner, 1964, p. 96)

It thus might be possible to engage the language of ontology as the subject matter of behavioral science (Leigland, 2015) in way similar to Skinner's proposal for the functional analysis of psychological terms (Leigland, 1996; Skinner, 1945). The purpose of such an empirical analysis would not be to address the extended philosophical issues involved, nor would the analysis be a reductive exercise in which ontology would be viewed as "mere language." Rather, it would explore empirically the verbal and nonverbal conditions and histories that affect ontological terms and discourse. Methodological development would be needed, but some methodological themes have been suggested in Skinner's Verbal Behavior.
In our laboratory, research is currently in progress on epistemological terms such as knowing, and an interesting and detailed experimental analysis of volition has been reported in a series of studies by Neuringer (e.g., Neuringer, Jensen, & Piff, 2007; Neuringer & Jensen, 2010).

Earlier in this commentary it was stated that the pragmatism inherent in radical behaviorism allows for scientific goals to be pursued without the necessity of traditional philosophical problematics. Beyond necessity, however, is the pragmatic theme of effective communication, and this is the theme promoted by Burgos (2015).

In philosophy of mind and in the field of behavior analysis, the figure/ground of ontology/pragmatism, or of literality/function would allow those who would see value in both presentations to find new perspectives on an important subject matter and the philosophical and scientific verbal practices involved with its investigation. The work of Burgos (e.g., 2004, 2015) has contributed to both perspectives, raising awareness of philosophical issues, emphasizing clarity of argument, and promoting the advancement of behavioral science.

References


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COMMENTARY/BURGOS

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