

## In Response

### The Great Power of Steady Misrepresentation: Behaviorism's Presumed Denial of Instinct

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In the January 1987 issue of *Scientific American*, James L. Gould<sup>1</sup> and Peter Marler stated that behaviorists "have traditionally treated instinct as irrelevant to learning" (p. 74). Further on in "Learning by Instinct," they made several more claims that behaviorists deny the role of innate factors in behavior (pp. 75-76, 85) and argued that a more complete understanding of learning is possible now that the environmentalistic beliefs of behaviorists have been disproved. Gould's perspective on this matter is not confined to articles for the general public, however. In his textbook, *Ethology: The Mechanisms and Evolution of Behavior* (1982), he stated:

It is now widely accepted that behaviorism is on the decline, its loss of vigor the result of its inability to come to grips even with the existence of innate behaviors, much less with their mechanisms and evolutionary origins. (p. 8)

The statements quoted above are just a few examples of an already pervasive misconception (Todd & Morris, 1983) which is only further reinforced by its repetition by recognized authorities such as Gould and Marler. The purpose of this "In Response" is not, however, to answer the ethologists' misstatements; the present audience needs little education in these matters. The purpose is, instead, to suggest (a) that although Gould and Marler commit a seemingly simple error, in

fact, they perpetuate a serious impediment to effective scientific interaction between behaviorists and ethologists; (b) that the misconception may be difficult to correct; and (c) that remediation is possible if certain points are considered.

The widespread view that behaviorism denies instinct is an important problem in itself, but the implications of the view are even more serious: If behaviorists are presumed to deny the accepted fact that natural selection plays a role in behavior, why should their opinions on any other matter be accepted? That is, how can substantive scientific interaction occur between behaviorists and other behavioral scientists if behaviorists are thought to be naive about their own subject matter? Indeed, a lack of conceptual interaction is illustrated by ethologists' increasing embrace of cognitive science. Ethologists have probably not embraced cognitive science because they have analyzed and rejected behaviorists' position on mentalism or concluded that behaviorists have failed to provide an effective, alternative account of private events. Instead, behaviorism is usually dismissed beforehand on the basis of its alleged denial of innate factors; substantive issues such as private events and mentalistic metaphors rarely get to be addressed. Gould's (1982) textbook, for example, does not present behaviorism in detail beyond the charge of environmentalism; it contains less information on the "principles of behavior" (operant and classical conditioning, etc.) than many other ethology textbooks, and does not even index "reinforcement."

Unfortunately, most misconceptions about behaviorism, including its alleged environmentalism, will be difficult to

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<sup>1</sup> Not to be confused with paleontologist Stephen Jay Gould.

correct because they owe more to "academic folklore" than to scholarly analysis. This academic folklore is passed from textbook to textbook (Cornwell & Hobbs, 1976) and from teacher to student as unquestioned fact. The misconceptions are so well accepted that genuine critical investigation is brought to a halt. For example, Gould (1982, p. 7) quoted Watson's "dozen healthy infants" statement without mentioning its supporting context (Watson, 1930, pp. 93-139); as evidence of behaviorism's antipathy to ethological concepts, but ignored Watson's ethological studies and reports of imprinting (Watson, 1908, p. 240), vacuum activities (pp. 224-227), and species differences in learning (pp. 247-251). It seems obvious, too, that behaviorists' more contemporary writings on the relationship between learning and innate behavior, such as "The Phylogeny and Ontogeny of Behavior" (Skinner, 1966) and "Selection by Consequences" (Skinner, 1981), have gone unnoticed by Gould and Marler, as well as by many others.

The identification of misconceptions is an easy task. Discovering effective solutions is much more difficult. The comments below may serve as guidelines in attempting to correct misunderstandings of behaviorism's position on innate behavior and promote scientific interaction among behaviorists, ethologists, and others. (1) The academic folklore about behaviorism suggests that ethologists, for example, are unlikely to find anything of interest to them in behaviorist publications. They are not going to come to us; we will have to go to them. (2) Because the folklore says behaviorism denies instincts, nonbehaviorists may too easily accept environmentalistic-sounding statements as truly representative of behaviorists' views. For instance, a careless comparison of response shaping to the molding of a lump of clay may be taken as greater "proof" for environmentalism than an entire article is against such a charge. (3) Behaviorists and ethologists

have traditionally studied different, but overlapping, aspects of behavior. Interdisciplinary communication can be facilitated by emphasizing the areas of overlap. (4) Behaviorism—as a philosophy of science—neither addresses specific empirical issues nor demands the use of a specific research methodology. Rather, it suggests that behavioral questions are best resolved by the analysis of behavior on its own level as the interaction of physical events. Behaviorists should emphasize at every opportunity that their traditional research interests and methodologies do not exhaust the possibilities of behaviorism. Indeed, no part of ethology's subject matter is "off-limits" to behaviorists.

If behaviorists can correct the pervasive misconceptions regarding their views, then "the ultimate demise of behaviorism" (Gould, 1982, p. 9) may be prevented. If not, then, behaviorism's demise will not be the result of its "inability to come to grips" with innate behavior, but due to the inability of others to come to grips with the subtlety and complexity of behaviorism.

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