## **Column 8: Exploring Mysteries of Living: Behaviorology History**



## Copyright © 2019 by Stephen F. Ledoux

## A Los Alamos member of The International Behaviorology Institute

*Why these Columns?* Because human behavior causes global problems, and solving these problems requires changes in human behavior... So *everyone* benefits from knowing something about the natural science of human behavior (called behaviorology) that these columns relate. Having first appeared as newspaper columns, these columns began appearing on **BehaviorInfo.com** starting in 2020.

Behaviorologists separated their natural–science discipline from psychology after psychologists in general repeatedly refused numerous attempts over 50 years to nudge the non–natural discipline of psychology toward natural–science.

Psychology had separated from philosophy in the 1800s. In simplified terms, which some folks might call grossly oversimplified, some philosophers back then had noticed the great strides of their physics, chemistry, and biology colleagues. This occurred in European universities. These strides seemed to stem from the use of scientific methods. They figured that even as philosophers they might also make more strides if they too adopted these methods. Their fellow philosophers, however, essentially said, "No. Using scientific methods would not be philosophy. It would be a different discipline. Start your own discipline."

So those who favored adopting scientific methods started a new discipline, psychology. However, they should also have adopted the philosophy of science of natural science, the basic assumptions that ground natural science. For example, they should have adopted the assumption that scientists deal only with natural events as independent and dependent variables. But they have never done so.

Instead they extended their philosophical outlook to embrace accounting for behavior with a range of spontaneously operating internal agents like minds, psyches, selves, souls, and personalities. These often derived from the theological philosophies preceding them. As a result psychology began as a non-natural discipline and, sadly, remains so today for most psychologists.

B. F. Skinner was an early exception to this operational pattern. In the early 1930s, he had contact with W. J. Crozier. Crozier was a leading professor in the biology department at Harvard University. From his contact with Crozier, Skinner brought the philosophy of

naturalism to his study of behavior as a natural science, studying behavior as a natural phenomenon.

Sticking to dealing only with real, natural, measurable variables, Skinner and his students and colleagues built up this natural science of behavior over the next several decades, a process that continues. During these early decades they not only worked in traditional psychology departments, where they were historically stuck, but they also attempted to get psychology to change into a natural science. They fostered this change by successfully producing and accumulating masses of the standard kinds of formal evidence that normally, in natural–science disciplines, prompts that kind of world–view change.

But during this period, psychology kept a monopoly (aside from religion) on the human nature, human behavior subject matter. It even defined itself as "the study of behavior *and the mind,*" as it stuck to its secular (that is, non-theological) version of mystical behavior causes.

As the early natural scientists of behavior accumulated advances during this period when psychology and their natural science of behavior shared their history, the name they used to describe their work changed several times. After "operant psychology" came "TEAB" (The Experimental Analysis of Behavior) and "behavior analysis." In the process, they founded various organizations and journals in support of their natural science. Ultimately, however, contingencies precluded getting psychology to become a natural science.

So in 1987 some of these natural scientists of behavior looked again at the data from the attempts to change psychology. Being under contingencies that compelled data-based actions, they saw that they had succeeded in setting up numerous arrangements separate from their psychology colleagues, including separate courses, programs, journals, organizations, certification, accreditation, and a few departments. They also saw that the numerous, continual and overlapping change attempts, over about five decades, had gotten nowhere, even as the global problems of our world accelerated, demanding a share of attention from a natural science of behavior.

Their traditional psychology colleagues seemed to be saying, "No. Accepting naturalism and rejecting inner–agent accounts, just to be a natural science, would not be psychology. It would be a different discipline. Start your own discipline."

Under such circumstances, those natural scientists of behavior declared their independence from psychology, called their long established but newly separated discipline "behaviorology," and proceeded to found new professional organizations and journals. TIBI and its *Journal of Behaviorology* are among these.

So occurred the emergence of the natural science of behavior that we call behaviorology. It started around 1913, over 100 years ago, with John Watson's description of a behaviorist perspective. It developed through several types of "behaviorism" (a future column topic?) with the variously named natural science of Skinner and his colleagues and their students for about 75 years after that. And it has been an *independently* organized natural science of behavior discipline, divorced from psychology, for over 30 years, since 1987, under the behaviorology label.

A complicating factor deserves some attention. The behavior analysts took those and

other independence-oriented steps while still closely associated with psychology. This allowed the psychology discipline to claim the "behavior analysis" label for itself. Decades ago some behavior analysts somewhat validated that claim when, apparently as one of the reasonable attempts to move psychology toward giving up mysticism in favor of natural science, they used the behavior-analysis label as the name for the journal of an official division of the American Psychological Association. Later the same division took "Behavior Analysis" as its own name.

Focusing on (and perhaps distracted by) their successes with autism interventions, behavior analysts lost the name they had been using for their basic, and increasingly separate, natural science. Raising insufficient or no clamor of objections, they let the mystical discipline of "behavior and the mind" take over the "behavior analysis" label. Today's "Behavior Analysis," as "Applied Behavior Analysis," or ABA, is the engineering arm derived from the basic science we call behaviorology.

Indeed, currently most states have laws that differentiate between psychology and "behavior analysis" for concerns like licensing and certification. Most such laws clarify that the study of psychology is inappropriate preparation for professional certification in "behavior analysis" as a Board Certified Behavior Analyst or BCBA. This use of "behavior analysis" also provides an example of how legal–system terminology can tend to lag decades behind disciplinary developments.

The valid psychology claim to behavior analysis and its label leaves others, including natural scientists in general, worried about whether or not today's behavior analysts are as committed to natural science as their forebears were. The collegial relationships that some natural scientists of behavior have with some traditional natural scientists may reduce that worry a bit. But beyond such relationships, those natural scientists of behavior analysts" invite avoidance from traditional natural scientists.

Such natural scientists see those behavior analysts as refusing to go independent and leave the inherent secular mysticism of psychology behind. They see them as refusing to become behaviorologists and use this long accepted independent label to name their separate basic natural science. And these circumstances can delay the potential benefits for humanity that could accrue from more shared work with traditional natural scientists to help solve global problems.

In the years 1984–1987, an extensive debate filled the published behavioral literature regarding, pro and con, the question of fully and officially separating the natural science and philosophy of behavior from psychology. Many discussants acknowledged numerous types of recognizable separation already present in varying degrees, including some academic departments and programs.

But none of those early department separations occurred under full and formal declarations of independence, although some departments came close. For example, the "Department of Behavior Analysis," named before the behaviorology label came into use, was fully separate from and independent of the Department of Psychology at the University of North Texas in Denton.

The 1984–1987 debates culminated in 1987 when a group of natural scientists of behavior met to reassess the situation and take action. They came to several conclusions.

(a) By invoking standard, evidence–based methods, their data from a half century of continuously attempting to change psychology into a natural science "from within" showed failure to produce even slight movement in that direction. So changing psychology was not going to happen within a meaningful time span. To them this meant before the opportunity passes in which to help humanity reduce global warming and so avoid its worst effects, a time frame which they rather optimistically understood as about 100 years.

(b) Their natural science of behavior was not, and never actually had been, any kind of psychology, for it had never accepted the basic psychological core of mystical agential origination of behavior.

And (c) instead, their already well–established natural science would continue, at least in part, as a fully separate and independent discipline called behaviorology. This term had appeared in the late 1970s specifically to describe a natural science of behavior discipline completely separate from and independent of psychology. It is the only term, from among all proposed names, to have survived and is in use today.

For readers who prefer detailed histories, Lawrence Fraley and I, as participant-observers of the events, provided a 130-page, comprehensive, and thoroughly analyzed history of the emergence of behaviorology in our 1992 paper, "Origins, Status, and Mission of Behaviorology." You can currently find it either in the 2015 book, *Origins and Components of Behaviorology—Third Edition,* which is fully described on the "Books" page of www.behaviorology.org, or across five articles on the "Specific Articles" page on this website. There you can also find my article, "Behaviorism at 100 unabridged," which also reviews this history, and is more comprehensive than the article, "Behaviorism at 100" that appeared in *American Scientist* in January 2012.

Writing these columns occurs separately from membership in The International Behaviorology Institute (TIBI, at www.behaviorology.org where you can always find more information and resources). The author is not speaking for TIBI, and the author and TIBI need not be in agreement. TIBI welcomes feedback, members, and donations (501.c.3). This is column 8 of 72.