

INTERNATIONAL PEER COMMENTARY

On Skinner's Disenchantment

Professor MARC N. RICHELLE

Laboratory of Experimental Psychology, University of Liège, Belgium

Skinner's tone in this paper is one of disenchantment. About 50 years after his seminal book *The Behavior of Organisms* (1938), Skinner is drawing up the balance sheet of Psychology, and it looks very much like a statement of affairs. To those who have for some time heralded the death of behaviorism, it will almost sound like a rejoinder; the situation reported is much the same, even though the feelings about it are quite opposite. Skinner, of course, does not share their satisfaction, but he seems to acknowledge defeat. Nothing has changed in his conviction that psychology is no science if it is not the science of behavior, but psychology is going astray.

For sure, we know of other cases in the history of science where good ideas have been rejected or ignored for some time, because of hostile forces, inside or outside of science itself, or because people were not ready to receive them. Galileo and Mendel might provide some comfort. But ideas once taken for good have also been abandoned and eventually replaced. How can we tell if the decline of behaviorism reflects a regression of psychology to a prescientific stage or the normal evolution of a field of science from one paradigm to another? After all, scientific ideas, as living forms and operants, are submitted to selection, and survival is the ultimate value by which they can be judged. (Catania has drawn an analogy between current disrepute of behaviorism and the relative disgrace of Darwinism at the turn of the century, and takes it as a reason to hope. But one similar episode is no guarantee toward identical outcome.)

It seems to me that Skinner's view of the situation is overpessimistic. It contrasts with the way he used, in the last few years, to appraise the contribution of behaviorism, highlighting the achievement of the experimental analysis of behavior not only in the laboratory but in various fields of application. In a classical paper celebrating another 50th anniversary (Skinner, 1963), he replied to Sigmund Koch's obsequies of behaviorism by pointing that "*Behaviorism, as we know it, will eventually die—not because of its failure but because of its success. As a critical philosophy of science, it will necessarily change as a science of behavior changes, and the current issues which define behaviorism may be wholly resolved*".

In an attempt to clarify the term *cognitivism* and to classify the very different referents it has in current psychology, I have suggested that one category of

cognitivism is simply taking over the task of scientific psychology as it has been carried out for more than half a century under the banner of behaviorism (Richelle, 1986, 1987). Important progress has been made in getting access to heretofore inaccessible phenomena, animal psychophysics being only an early breakthrough in that direction, as pointed by Skinner in 1963. As he noted in the discussion of peer commentaries to his main papers appearing in reprint (Skinner, 1984), "*Most of what is called cognitive science is work that was carried on in more or less the same way before that magical word was added*". Part of that might be questionable from a behaviorist point of view, but another important part is good experimental work, and as such contributes to completing the puzzle, whatever the theoretical affiliation of those who do it. You need not be in the club to do useful things, as Skinner acknowledges in the paper under review ("*Many of the facts, and even of the principles, that psychologists have discovered when they may have thought they were discovering something else are useful.*" (p. 782). An example in point is the research area dealing with what Skinner had called *the global verbal episode*, in current psycholinguistics: pragmatics and related approaches are very akin to a behaviorist treatment of verbal interactions.

The question is: why do those who practice scientific psychology that way insist to call themselves cognitivists? This could be a matter for the sociology of science. It seems difficult today to live without an -ism. And that particular -ism seems fashionable, and, moreover, it has become a very efficient shibboleth in applying for grants. Also, the Kuhnian concept of paradigm and of scientific revolution seems to have impressed many psychologists to a point that they would feel behind the times if they would not jump to a new paradigm now and then. Building upon the previous generation's paradigm reflects an obvious lack of originality and of intellectual creativity, and gives one no future. One should not worry too much about such superficial aspects of current psychology. Behaviorism might look dead only because it has become so familiar that it is no longer necessary to name it.

Admittedly, not all contemporary psychology can be interpreted that way. There are trends that strongly resist the behaviorist tenets. Skinner has devoted a large part of his writings, for many years, to discussing them. Here, he identifies three main enemies—more mildly called *obstacles*—namely: humanistic psychology, psychotherapy and cognitive psychology. It would take more than 1000 to 2000 words to analyse the arguments. I shall limit myself to two short comments.

First, I do not think it appropriate to identify humanistic psychology and psychotherapy as two separate obstacles (another sign of Skinner's overpessimistic mood in writing this paper?). As far as academic and professional psychology is concerned, humanistic psychology has little bearing outside the field of psychotherapy. Besides, it is one of the numerous alleys of philosophical, religious and common sense reflection on human nature that have been explored as much after the rise of scientific psychology as before. Psychotherapy today is undoubtedly a very confused field, where the most serious practices go side by side with the fanciest ones, and where new labels help sell old stuff. It is no surprise that it attracts, in more or less disguised forms, all sorts of revivals of prescientific and parascientific psychologies. However, what was noted above about experimental

psychologists doing good (i.e. by a behaviorist's standards) work, be it under the banner of cognitivism, could be true of psychotherapy as well. Much of what practitioners are actually doing with their clients or patients, whatever their theoretical affiliation and the account they would propose themselves of their action, could probably be rewritten in other terms, in many cases compatible with a behavioral analysis. Here again, what matters is what is really done, not the -isms used to name it.

Cognitive psychology raises a more important issue, because it is often presented as the alternative to behaviorism, as the new paradigm that has definitely overcome Watson's legacy and paved the way for a renewal of psychology, redefined as the science of the Mind—or of the *psychè* as an influential French psychologist has recently suggested (Fraisie, 1987). Cognitivism is not, however, a unified movement. The term covers concepts or practices at very different levels, and with very different implications, sometimes methodological, sometimes epistemological, sometimes ethical, sometimes simply academic or professional (see Richelle, 1987). Not all variants of cognitivism have the same bearing on the debate on the subject matter of a psychological science. On some important issues, cognitivisms of some persuasions would probably feel closer to radical behaviorists than to cognitivists of other persuasions. The relation with brain sciences is one of those crucial issues. While some cognitivism is responsible, as Skinner rightly points out, for selling psychology to neurosciences, another trend typically argues for a science of mind—compared to software—independent of the science of brain—looked at, somewhat despisingly, as hardware. Cognitive psychology deals, in Marr's terms, with the computational level, leaving to neurosciences the more prosaic level of implementation. The question to be asked now is: *given the present stage of development of brain and behavioral sciences, in which the contribution of Skinner's techniques has been far from negligible, is it still reasonable to advocate the strict autonomy of the psychological level of analysis or is it not? Or instead, is it advisable to favor an integrated approach that has been adopted by many researchers and has revealed to be fruitful?*

Skinner identifies external obstacles, and argues against them. Are there not also internal obstacles to the (relative) failure of behaviorism? A documented answer to that question would require a whole volume on the history of 20th century psychology. A few points can be made briefly concerning the particular evolution of the Skinnerian school of thought. It certainly tended to develop in a sort of isolation from other parts of psychology, forming new specific groups and associations, editing its own journals, having its own meetings. There is, of course, no objection to such moves that are taken quite naturally by any school with some sense of its own originality. It can result, however, in undesirable consequences. Inasmuch as a major goal was to pervade psychology at large with a specific methodological and epistemological style, isolation might not have been the best strategy: it cut the radical behaviorist school from those it intended to influence. Deliberate self-isolation has been changed to isolation by others. Work by so-called *experimental analysts* that would normally be of interest to other psychologists is currently ignored. Terms have been forged for technical purposes that have not passed to the scientific community, but have eventually evolved in a sort of dialect.

Self-isolation has had another, more important, consequence. Lack of contact with other trends in psychology, or indifference to them has deprived radical behaviorists from fruitful confrontation with other approaches that were by no means hostile to their own position, but simply derived from other historical traditions. They failed to integrate major contributions, or they did so with undue delay.

A case in point is the discovery of ethology among Skinner's disciples. Though ethology, sometimes called the *biology of behavior*, had been with us for some time, it was not until the mid-seventies that it became familiar to them and changed some of their views about animal behavior [the debate between Herrnstein & Skinner (Skinner, 1977) was a typical episode in that respect].

Another example is the neglect of the developmental dimension in the study of behavior. Skinner has always minimised the value of developmental studies, by considering age as an independent variable with no special status. He seems to have missed the importance of development in the explanation of behavior. To discard it as the mere description of behavior as a function of age is like saying that phylogenetic evolution is just plotting living forms as a function of geological time. The endeavors of great developmental theories, like Piaget's one, convergent on some points with Skinner's views, have been completely left out by radical behaviorists.

References

- FRAISSE, P. (1987) La psychologie à la recherche de son objet? in: SIGUAN (Ed.) *Comportement, cognition, conscience. La psychologie à la recherche du son objet*, pp. 261-268 (Paris, PUF).
- RICHELLE, M. (1986) Introduction: on some varieties of cognitivism, in: P. EELLEN & O. FONTAINE (Eds) *Behavior therapy: Beyond the conditioning framework*, pp. 13-21 (Leuven-Hillsdale, NY, Leuven University Press and Lawrence Erlbaum).
- RICHELLE, M. (1987) Les cognitivismes: progrès, régression ou suicide de la psychologie? in: M. SIGUAN (Ed.) *Comportement, cognition, conscience. La Psychologie à la recherche de son objet*, pp. 181-199 (Paris, PUF).
- SKINNER, B.F. (1938, 1966) *The Behavior of Organisms: an experimental analysis* (New York, Appleton-Century-Crofts).
- SKINNER, B.F. (1963) Behaviorism at fifty, *Science*, 140, pp. 951-958.
- SKINNER, B.F. (1977) Herrnstein and the evolution of behaviorism, *American Psychologist*, 32, pp. 1006-1012.
- SKINNER, B.F. (1984) Canonical papers, *The Behavioral and Brain Sciences*, 7, pp. 669-711.

Professor B. F. Skinner recently suffered a serious concussion requiring hospitalisation. He has therefore been unable to contribute the author's response which it is hoped will be published in *Counselling Psychology Quarterly* Vol. 2.

EDITOR