INTERBEHAVIORAL PSYCHOLOGY AND Q METHODOLOGY*

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ABSTRACT: Interbehavioral psychology rests entirely upon naturalistic foundations. So-called mental events are continuous with overt behavior, and all behavior has an objective character. Subjectivity means simply uniqueness of occurrence. Stephenson's emphasis upon self reference brings another dimension to Kantor's interbehavioral approach, and Q methodology makes possible an objective, nonmentalistic handling of subjectivity.

In the early 1920s, J.R. Kantor began to develop a psychology which was to be as objective and naturalistic as any physical science. As Kantor saw the situation, the first prerequisite was to rid psychology of all traces of mentalism and subjectivism. The dualistic tradition which divided man into a physical body and an immaterial soul or mind had to be completely exorcized. Consequently, Kantor was led to abandon all terms suggestive of an inner agent or

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of unobservable inner processes exerting control over overt behavior, such as consciousness, sense data, experience, or self. The private mental event, implying privileged and direct access, simply does not exist. Instead, there is a wide range of behavior extending from the most overt kind of action to such subtle responses as thinking and feeling, which are observed only with great difficulty. The key, however, lies in continuity: all psychological activities are equally behaviors and all are confrontable, natural events.

While Kantor was an anti-mentalist and shared this position with the behaviorists, he was not himself a behaviorist. Behaviorism usually meant a denial of the mental but retention of constructs regarding the role of the body borrowed from traditional psychology. Too often, for example, mental events were simply translated as brain events. The brain as surrogate for the mind was totally unacceptable for Kantor. Properly seen, the brain is an organ with only biological functions, and as such it participates in behavior but does not, by itself, perform it or control it. It is the person who thinks, feels, or remembers, not the brain.

Mentalistic psychology was linked to brain doctrine through various proposed solutions of the mind-body problem. As a result, a series of theories and doctrines grew up which were almost universally tacitly accepted by psychologists. These included Locke's secondary qualities, Muller's specific nerve energies, and Newton's causal theory of perception. Kantor's abandonment of all of these benchmarks of traditional psychology reveals something of the radical nature of interbehavioral thinking.

In developing his alternative, Kantor contended that all psychological activities have a field character. The unit psychological event, which he termed the behavior segment, consists of an integrated system of factors centering upon a stimulus function and its correlated response function and including a history of prior interactions, various setting factors, and media of contact such as light rays or sound waves.

The response function may be illustrated by a laughter response which can, of course, be given a biological description. The psychologist, however,

is interested in what the response does with respect to a given situation. Laughter, then, may cover up embarassment, express pleasure, or subject someone to ridicule depending upon the stimulus situation and one's previous interbehaviors. Similarly, the same arm-raising movement might protect one from a blow, shield one's eyes from the sun, provide a greeting to a friend, or stretch a sore muscle.

Appropriate responses, such as batting a ball, are built up over a period of time; simultaneously, stimulus functions are being elaborated (e.g., the swing of the bat comes to be accurately timed to the speed of the pitch). While some stimulus functions are clearly based upon physical properties of the stimulus (color, sound, etc.), others are largely dependent upon cultural circumstances (e.g., certain foods considered edible in one culture are inedible in another).

Since a stimulus object may have a great many stimulus functions, it is important to know which stimulus function is likely to operate in a given situation. To a considerable degree this is determined by the setting factors, such as place (home, church, or boxing arena), persons (friend, stranger, or minister), or condition of the organism (fatigue, well-being, or drug state).

Whereas biological differences between persons may account in part for psychological differences, we must look to differences in interbehavioral histories for a full understanding of their nature. Skinner emphasizes the history of reinforcement, but Kantor's interbehavioral history is a more comprehensive construct.

Traditional psychology made a sharp distinction between overt behavior, which is objective, and mental activity, which is inner, private, and subjective. Kantor did not accept the characterization of thinking, feeling, or remembering as inner or private, and held that subjectivity means simply uniqueness of occurrence. Since all psychological events have an interbehavioral character, there is no ontological difference such as is implied in the definition of psychology as the science of behavior and experience. Psychological activities are adjustments of the total organism, ranging from overt to

subtle action, and all such adjustments fall within the range of natural events.

To illustrate some of the confusions regarding objectivity and subjectivity in science, let us look at two simple examples. Suppose that A and B each take thermometer readings and report the same temperature to the nearest degree. We are then led to say that B has verified A's observation and that we are dealing with objective data. Now in a different situation, A and B fixate upon a red square for 45 seconds and then look at a white background. Both report seeing a bluish-green after-image which waxes and wanes. In this instance we may be inclined to say that each observer is reporting on a subjective state which, as a private event, is not capable of verification by another observer. Why the difference in the way we handle the two situations?

In the first case, we say that the thermometer is "out there", whereas there is no corresponding external object in the after-image situation. If, however, we view the perception of an after-image as subjective only in the sense that it is a unique event and never identical with any other event even though it may closely resemble it, is not the observation of the thermometer just as subjective? On the other hand, we have in both situations agreement by competent observers (objectivity?), even though in the after-image situation the response is changing and fleeting as compared with the stable observation of the thermometer.

While Kantor rejected traditional introspection, he acknowledged the importance of self-observation. He said, "Practically all that we know concerning the emotional, thinking, willing, feeling, and speaking reactions, as well as all others related to these in complexity, we have learned from field observations of the self-inspection sort. The same thing is true of the complex responses that go the make up what we call intelligence, character, moral conduct, etc. of the person" (Kantor, 1924: 15). Presumably, self-observation involved an objective point of view; one made observations of his own behavior, both overt and covert, and attempted to describe its conditions as fully as possible.

Kantor emphasized the objectivity of subjectivity, which meant that one could study his own perceiving

and thinking behavior just as objectively as Ebbinghaus could plot his own forgetting curve. Kantor denied privileged access to a separate subjective realm, but there is a sense in which there is privileged access. Take for a moment a hypothetical case. Smith is a total analgesic; he has never felt pain. He becomes fascinated with learning all he can about the nature of pain and becomes an authority on the subject. We can agree that he has a commanding knowledge about pain and its conditions, knowledge that we might regard as being of the "objective-subjective." There is, however, an understanding of pain which he lacks, that is, felt pain, self-referential pain, or what we might call the "subjective-subjective." It was this latter type of subjectivity which Kantor tended to ignore and which gave his writings an impersonal tone even when he was treating behaviors of the most intensely personal kind. Of course, Kantor denied pain as an inner psychic process, but he granted that in contrast with other behavior fields the stimulating function is localized within the anatomical organism.

To clarify Kantor's position on subjectivity, one needs to discuss his concepts of implicit behavior and inapparent behavior. Implicit behavior is defined as response to an absent stimulus object through the operation of a substitute stimulus. Thinking and feeling may be wholly implicit, while perceiving is partially implicit. As Kantor and Smith (1975:198) put it, implicit behavior is "the stuff of which dreams are made." It is through implicit action that we react to past or future events, conduct thought experiments, explore beliefs and attitudes, etc. It should be apparent that implict behaviors are often components of highly significant behavior segments and that they repeat in some way behavior previously developed to the now absent object or event.

Substitute stimuli which give rise to implicit reactions may be spoken words referring to the absent object, or might be words spoken only to oneself. In the latter case, we regard the stimulus as inapparent to an external observer, and the implicit reaction to it may likewise be inapparent. Inapparent stimuli may be inapparent to an external observer but not to the self, or they may be inapparent to both. Responses which are inapparent to an external

observer are commonly called subjective, mental, or private events. To classify behaviors as public or private could be regarded, however, as a new dualism (Parrott, 1986). For Kantor, the implicit reaction is morphologically and functionally continuous with overt behavior, and while the interbehavioral field may be difficult to access, it is not private or totally inaccessible. As a matter of fact, when the observer has a thorough knowledge of a person's interbehavioral history through intimate acquaintance, he may have reliable knowledge of what that person is thinking in a given situation.

Kantor was willing to grant that what we call private and inner are intimate responses often fleeting in nature. Such events may come and go with great rapidity; Kantor called them millisecond phenomena. And while Kantor did not regard them as totally inaccessible in spite of their inapparent nature, it is obvious that from a practical standpoint such events, because of their great number and complexity, simply cannot be handled within the conventional methods of psychology. Quite properly, Kantor rejected traditional introspection and phenomenology, but he seemed to be left without a method for handling inapparent behaviors. Furthermore, he failed to see self-reference as a significant aspect of such behaviors. It remained for Stephenson to treat subjectivity inductively and naturalistically as self-reference. Stephenson's Q methodology, with its concepts of self-reference, communicability, and concourse, while quite different from Kantor's approach, was entirely consonant with it. Kantor and Stephenson shared a thoroughgoing naturalism as is seen, for example, in their abandonment of sense data theories and, in fact, all psychisms. The operant procedure of Q methodology exhibits interesting affinities with Skinner, particularly in the way in which operant conditioning and Q methodology both lead to results which could not, in any detail, have been anticipated. Both are explorations or, as Stephenson suggests, probes leading to interesting and significant discoveries.

I am indeed struck by certain similarilties in the careers of B.F. Skinner (1938) and William Stephenson (1982). Both have been highly inventive, Skinner with the operant conditioning apparatus which

continues to generate so much in the way of psychological data, and Stephenson with the Q sort and the more recent elaborations of Q methodology. Both have passed on techniques to younger students only to pursue more profound questions at the frontiers of their respective approaches. Both reflect a zeal for their work which has continued over virtually a lifetime. I should add that Kantor, too, was busily engaged in writing up to the time of his death at age 95. While Kantor, Skinner, and Stephenson may have differed in their interests and certainly would not always have been in agreement, there was much that they shared. They have marched in the same direction and their systematic approaches have been, as Verplanck (1954) put it in comparing Skinner and Kantor, at least first cousins.

Stephenson's behavioral emphasis is refreshing in light of the current resurgence of mentalism with its hidden powers, or as Kantor called them, "spooks." Under the influence of behaviorism during the 1920s and '30s, mind was virtually eliminated from the psychological vocabulary. By the late '50s, a few cognitive psychologists were cautiously reviving the mind, although frequently identifying it with the brain. Today, the return to the psychic has become quite overwhelming. Just a quick survey of one of my bookshelves, for example, reveals the following titles:

- *The Mind's I* (Hofstadter & Dennett, 1982)
- *Frames of Mind* (Gardner, 1983)
- *The Science of the Mind* (Flanagan, 1984)
- *The Psychobiology of Mind* (Uttal, 1978)
- *States of Mind* (Miller, 1983)
- *The Natural History of the Mind* (Taylor, 1979)
- *The Mind* (Smith, 1984)
- *The Origin of Consciousness in the Breakdown of the Bicameral Mind* (Jaynes, 1976)
- *Maps of the Mind* (Hampden-Turner, 1981)

An examination of each of the books listed reveals assumptions, theories, and conclusions which an interbehavioral psychologist would find quite objectionable and which may be regarded as remnants or revivals of the dualistic tradition.

To some extent, the revival of mind has been hastened by the failure of behaviorism to handle subjectivity. Stephenson has provided a behavioral alternative to mentalism and a complementary approach to interbehavioral psychology which should go a long way toward rendering cognitive revivalism unnecessary.

Just a brief word about factors and the structure of the so-called mind. Although Kantor focused attention on fleeting actions or momentary responses to stimuli, he recognized that behavior can also possess an enduring character. As he saw it, it is the personality as an organization of traits that is "the basis for psychological unity, coherence, and identity" (Kantor, 1971:135). The factors emerging from Q sorts are operant, naturally occurring, and, as Stephenson has suggested, are indicative of real functions. Not only that, but the factors are complementary to one another. That the so-called mind is quantumized is a proposition with possibly far-reaching implications which I would not pretend to understand even dimly. I can only hope that these developments will not offend common sense as drastically as the quantum theoretical views of some physicists. At the same time, I do look forward to the discoveries and changing conceptions in science which methodologies such as Q will inevitably open up.

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Research without an actively selective point of view becomes the ditty bag of an idiot, filled with bits of pebbles, straws, feathers, and other random hoardings. (Robert S. Lind)