

# A PHILOSOPHICAL ANALYSIS OF SOME OF THE FUNDAMENTAL TECHNIQUES USED IN THE STUDY OF HUMAN BEHAVIOR

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Upon analyzing some of the fundamental techniques used in the study of human behavior, three major points of concern can be noted:

1. Many of the philosophical assumptions underlying the study of human behavior are vague, and possibly false.
2. Many of the terms used are vague and ambiguous.
3. There has not been sufficient evidence for the demonstrable truth of many of the conclusions put forth.

More specifically, within the study of human behavior, several key concepts used with purportedly universal applicability fail to be validated by scientific method. The following exposition will claim that due to the ambiguities existing within the realm of the behavioral sciences, the methodology used by some practitioners does not seem to be able to produce scientifically validated knowledge.

It should be realized that scientific method as a paradigm in physics and the physical sciences, when applied to psychology and sociology, tends to limit those fields dangerously. To say that scientific method is other than heuristic in studies of human behavior is dogmatic and self-stultifying. The methodological argument here at issue is not based on what behavioral scientists *should* do, but rather what some of them *are* doing. Consider the following examples:

Terms such as "behaviorism," "objective," "experimental," "impersonal," "logical-positivistic," "operational," and "laboratory," refer to a trend in the behavioral sciences which is *limited* by scientific method. Behaviorism is concerned with observable behavior. It is not concerned with inner meanings, purposes, or the inner flow of experiencing. B. F. Skinner, working within this trend, states that:

The subject need not be regarded as observing or evaluating conscious experiences.<sup>1</sup>

Terms such as "phenomenological," "existential," "self-theory," "self-actualization," "health-and-growth psychology," "being and becoming," and "science of inner experience," refer to a trend in the behavioral sciences which is *not limited* by scientific method. Carl Rogers, working within this trend, states that:

Valuable as have been the contributions of behaviorism, I believe that time will indicate the unfortunate effects of the bounds it has tended to impose.<sup>2</sup>

Rogers claims that:

Instead of being restrictive and inhabiting [as behaviorism has been], [phenomenology] will throw open the whole range of human experiencing to scientific study.<sup>3</sup>

These examples show that there are at least two major trends in the behavioral sciences, one of which is limited by using scientific method as a paradigm, the other of which is not so limited. The following argument is directed primarily toward those behavioral scientists who are using scientific method as a paradigm.

The argument begins with a general view of science and scientific method. According to a generally agreed upon definition, science is the human attempt to organize experience in meaningful terms. The purpose of science is to understand, predict, and control experience. Protocol sentences are the raw material of science, and there are three main classes of evidence:

1. *Sense Data*: These propositions are based on evidence immediately available to the senses, and are interpreted through prior knowledge organized by the community of scientists.

2. *Derived Propositions*: These are empirical propositions based on sense perceptions that are not immediately available, but inferred from other sense experiences.

3. *Mathematical or Analytical Propositions*: These propositions do not depend on sense data at all—they are based on the rules of logic.

For purposes of this discussion, scientific method will be represented in four basic parts:

1. The explicit development, stating, and defining of a question or problem.
2. The explicit development, stating, and defining of a hypothesis.
3. Precise experimentation related to the hypothesis.
4. The explicit stating and defining of the experimental results, the conclusion.

Although oversimplified, these remarks on science and scientific method will provide a reference for the main points to be discussed.

Although the definition given seems to justify referring to a large amount of material as science, it should be noted that as one progresses from *definition*, to *purpose*, to *evidence*, to *method*, the limitations become progressively more apparent. The most crucial limitations are implied in the four parts of the scientific method as stated. It would seem that definitively:

1. If a question or problem cannot be explicitly stated or defined, it cannot be studied *via* the scientific method.
2. If a hypothesis cannot be explicitly stated or defined, it cannot be studied *via* the scientific method.
3. If precise experimentation related to the hypothesis cannot be done,

it cannot be studied *via* the scientific method.

4. If precise experimentation cannot be done, no conclusions validated by the scientific method can be obtained.

This restricts certain areas of study from being qualified as science, if scientific method is used as a criterion for qualification as a science; specifically, history, sociology, and, to a certain extent, psychology. Although many of the practitioners within these fields of inquiry, like Carl Rogers, have themselves been in doubt about the direct applicability of the scientific method to their disciplines, there are some, like B. F. Skinner, who seem to have no doubt, and use scientific method as the paradigm, rejecting the idea that the actions of rational agents are more sensibly explained by reasons rather than causes, a distinction generally known in the analytic tradition. Rogers believes that a different approach which is not limiting, as scientific method is, will tend:

... to a naturalistic, empathetic, sensitive observation of the world of inner meanings as they exist in the individual. The whole range and scope of the human situation as it exists in each individual is thus opened for consideration.<sup>4</sup>

Skinner, on the other hand, maintains that:

If [psychology] is ... a science of the behavior of organisms, human or otherwise, then it is part of biology, a natural science for which tested and highly successful methods are available.<sup>5</sup>

This disagreement among the practitioners as to the applicability of scientific method, and the fact that practitioners on both sides appear to be able to produce working knowledge of human behavior, calls for consideration of one of two plans of action:

1. Broaden the concept of science and its methodology to include the study of human behavior and all of its manifestations, as Carl Rogers suggests.

2. Develop a new method of study, or *explicit* explanation of an already *implicit* method of study, and coin a new word to describe it.

The second of these two suggestions seems the most plausible in view of the inherent limitations of scientific method. What could result, then, would be two frameworks, or systems, of study:

1. The study of natural science.
2. The study of human behavior.

The concept of the first would remain unchanged, while the concept of the second would be designed in a way such that psychology, sociology, and history, would all be grouped together under the common heading, "The Study of Human Behavior."

Based on this discussion, the concept of the scientific study of human behavior, and the heading *Behavioral Sciences*, seem to be meaningless. This, however, is not the case at the present time, for there has been much

work which has provided, through use of the scientific method, a working knowledge of human behavior. This immediately seems strange: how might it be possible to obtain a working knowledge of human behavior, which is purportedly scientific, when it does not seem possible to do so, owing to the problem of meeting the precision required by the scientific method? To begin with, use of scientific method in psychology and sociology often parallels the method outlined, with one major difference in part three—where the scientific method requires precise experimentation, the sociological use and, in some cases, the psychological use, of scientific method appears to expand the implied meaning of precise experimentation to precise accumulation of data. Further, the sample survey, case studies, participant observation, and indirect observation are generally accepted sources of data. Use of scientific method in psychology seems to be more feasible than in sociology due to the fact that much *individual* behavior can be explained through physiology and biology, sciences in the strict sense. While some things can be empirically validated *via* scientific method in psychology, very little can be in the field of sociology. This seems to be due to the idea that truth in non-physiological psychology and, to a greater extent, in sociology, is generally demonstrated by little more than repeated verification. Consequently, prior to repeated verification, the purported statements serve only as predictions, with a low degree of precision. Only after repeated verification can the purported statements be considered explanations with a higher degree of precision. Hence, through precise accumulation of data, obtained through the aforementioned sources, and by turning to physiology and biology, it appears possible to obtain a working knowledge of human behavior, but not a *complete* knowledge.

How, then, might it be possible to obtain a more nearly complete knowledge of human behavior? It seems quite possible, though not empirically verifiable *via* scientific method, that man acquires knowledge of human behavior from his experience with others. Consider the following suggestion:

*Empathy*: Is "... the ability to project ourselves into other people's personalities."<sup>6</sup> Empathy is defined as "... the process through which [one] arrive[s] at expectations, anticipations of the internal psychological states of man."<sup>7</sup>

The idea of empathy stimulates thought for the reconsideration of the study of human behavior. From this groundwork, the concept of empathy could be expanded upon to explain how one can acquire knowledge of human behavior. It may even be proposed that "the more experience an individual has with people and their doings, the more he can understand people and their doings, and the more he can know about human behavior." Thus, the more he would be able to understand, predict, and, if

he so desired, control human behavior.

Empathy would provide the base of a quasi-plausible method of study, or, an *explicit* explanation of an already *implicit* method of study, perhaps to be coined the *EMPAPSYCHOSOCIOHISTORICAL* study of human behavior. The successive syllables (without the -logy, of course) correspond to the successive levels of knowledge and understanding leading up to a possibly more complete knowledge and understanding of human behavior:

1. *-EMPA-*: Knowledge and understanding of one's immediate contacts.
2. *-PSYCHO-*: Anticipated knowledge and understanding of other known or unknown individuals.
3. *-SOCIO-*: Anticipated knowledge and understanding of one's own society and culture.
4. *-HISTORICAL-*: Anticipated knowledge and understanding of one's ancient and contemporary societies and cultures.

The hierarchial relationship between these four levels is this: knowledge and understanding of one's immediate contacts is basic and prerequisite to anticipating knowledge and understanding of other known or unknown individuals; knowledge and understanding of other known or unknown individuals is basic and prerequisite to anticipating knowledge and understanding of one's own society and culture; knowledge and understanding of one's own society and culture is basic and prerequisite to anticipating knowledge and understanding of one's ancient and contemporary societies and cultures. Based on this relationship, it can be said that attainment of the historical level is necessary to have a nearly complete knowledge of human behavior.

The philosophical suggestions as to the defensibility of this approach seem to be these:

1. There is a common structure in the minds of people who use language—a common thing that makes communication possible.
2. There is a common structure of the human mind.
3. There seem to be common universal responses in the human mind.
4. Man does share common situations and responses.
5. There is an undeniable and basic common element that allows one to understand different cultures.
6. There is a common structure of situations and responses which make it possible to understand human behavior at all levels by developing further the notion of empathy.

Just as important in this method as intellectual ability, is moral and aesthetic acceptability. In other words, the ability to investigate other individuals, societies, and cultures without evaluating them morally or aesthetically; what is required is a genuine sense of moral and aesthetic acceptance.

Based on this discussion, the following points can be made:

1. Psychology, sociology, and history *are not* sciences in the strict sense of the term, although they do share some of the basic ideas of the strict sense: 1) a human attempt to organize experience in meaningful terms; 2) the purpose of understanding, predicting, and controlling experience; 3) the search for universal laws of behavior.
2. Psychology, sociology, and history *cannot* be sciences in the strict sense which requires proper use of scientific method, due to the ambiguities that exist.
3. Psychology, sociology, and history *should not* be sciences in the sense that physics is a science. Rather, they should be parts of a separate field of study of human behavior.
4. Empathy beyond ethics and aesthetics strongly appears to be the key to developing a more nearly complete knowledge and understanding of human behavior.

#### NOTES

<sup>1</sup> B. F. Skinner "Behaviorism at Fifty," in *Behaviorism and Phenomenology*, ed. T. W. Wann (Chicago, London: The University of Chicago Press, 1964), p. 89.

<sup>2</sup> Carl Rogers, "Toward a Science of the Person," in *Behaviorism and Phenomenology*, ed. T. W. Wann (Chicago, London: The University of Chicago Press, 1964), p. 119.

<sup>3</sup> *Ibid.*, p. 119.

<sup>4</sup> *Ibid.*, p. 130.

<sup>5</sup> Skinner, *op. cit.*, p. 79.

<sup>6</sup> David K. Berlo, *The Process of Communication* (New York: Holt, Rinehart and Winston, 1960), p. 119.

<sup>7</sup> *Ibid.*, p. 120.