

SUBJECTIVITY AND PSEUDO-OBJECTIVITY
IN PSYCHOLOGY*

PSİKOLOJİDE SÜBJEKTİFLİK VE PSEUDO-OBJEKTİFLİK

Y. ÖZAKPINAR

Institute of Experimental Psychology, University of Istanbul

Objektiflik müşahadeden başka bir şey yapmamak demek değildir. İlimde objektiflik, düşüncenin objektifliğidir. Objektif olmak için düşüncenin müşahade sahasında durması icabetmez, müşahadelerle devamlı irtibat halinde olması kâfidir. Bu yazıda, «direkt müşahade ve tasvirin ötesine geçerek bir hipotez kurmak, esrarengiz zihni faaliyetlere girişmektir» diyen Skinner'in iddiası reddedilmektedir.

Objectivity does not mean doing nothing but observing. Objectivity in science is the objectivity of thought. Thought, to be objective, does not have to remain within the boundaries of observables; it is sufficient if it remains anchored in observables. In this paper, Skinner's assertion that «unlike direct observation and description the construction of an hypothesis suggests mysterious intellectual activities» is refuted.

There is little doubt that behaviorism has been a major factor in the development of psychology. This fundamentally beneficial

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influence, however, brought many drawbacks as well. They stem from the fact that behaviorism was a protest, and like so many protests, it was cast in extreme form. Behaviorism carried the banner of objectivity and insisted on behavior as the datum of psychology. This was the beneficial influence of behaviorism, and it has been an important ingredient of current psychological thinking. But, in some corners of modern psychology, the inheritors of aggressive behaviorism, not having outgrown the excesses of the original movement, still display the over enthusiasm of the pioneer. It is the purpose of this paper to show that this pseudo-objectivity, despite its superficial attractiveness, has no scientific ground to stand on.

In order to understand the reasons for behaviorist excesses, it is necessary to contrast behaviorism with introspective psychology, against which it was a protest. In the works of the most important figures of introspective psychology, Wundt, James, and Titchener, one can find 1) many correctly ascertained facts, 2) many promising intuitions and hypotheses as to the probable causes of these facts, and 3) many carefully described introspective observations, which could serve as starting points for the discovery of new facts. But, using their method, it was not possible to determine what were the facts and which hypothesis was correct. This method consisted of analysing the states of consciousness through introspection under «experimental» conditions. Experimental conditions did not provide control but merely standard procedures to make comparable the results obtained from different subjects, or from the same subject at different times. The method was, however, a logical consequence of a particular conception about the nature of psychological inquiry. A clear expression of this conception can be found in Wundt :

«... daß sich jede Erfahrung unmittelbar in zwei Faktoren sondert : in einen *Inhalt*, der uns gegeben wird, und in unsere Auffassung dieses Inhalts. Wir bezeichnen den ersten dieser Faktoren als die *Objekte der Erfahrung*, den zweiten als das *erfahrende Subjekt*. Daraus entspringen zwei Richtungen für die Bearbeitung der Erfahrungen. Die eine ist die der *Naturwissenschaft* : sie betrachtet die Objekte der Erfahrung in ihrer von dem Subjekt unabhängig gedachten Beschaffenheit. Die andere ist die der *Psychologie* : sie untersucht den gesamten Inhalt der Erfahrung in seinen Beziehun-

gen zum Subjekt und in den ihm von diesem unmittelbar beigelegten Eigenschaften. Demnach läßt sich auch der naturwissenschaftliche Standpunkt, insofern er erst aus einer Abstraktion von den in jeder wirklichen Erfahrung enthaltenen subjektiven Faktoren hervorgeht, als der Standpunkt der *mittelbaren Erfahrung*, der psychologische, der diese Abstraktion und alle aus ihr entspringenden Folgen geflissentlich wieder aufhebt, als derjenige der *unmittelbaren Erfahrung* bezeichnen»¹.

Introspection was for Wundt the most appropriate method for psychological investigations because he accepted, as in the passage quoted above, immediate experience as the proper domain of psychology and relegated to natural science all abstractions from the subjective factors contained in immediate experience. Immediate experience is indelibly imprinted in the mind of the subject (or of the experimenter playing the role of the subject). It cannot be verified. One can only compare it with the immediate experience of another subject under the same conditions. And, to be exact, it should be noted that the experimenter has no access to the immediate experiences of his subjects; what he gets is a verbal report about their immediate experience, and he is not in a position to know what might have happened while the immediate experience was being transformed into a verbal report. Since introspection could not provide objectively verifiable data, endless arguments among psychologists were inevitable and there seemed to be no way of resolving the issues. The truth of an argument can only be decided upon by the arbitration of objective data. Reality reveals itself indirectly; in fact, it must be constructed by means of abstractions from concrete events. The evidence must exist outside one's immediate experience, or it must be abstracted from it by control operations observable by everyone. A psychologist may legitimately study immediate experience, but scientific understanding demands a source of evidence apart from the immediate experience itself. The comprehending subject of Wundt (the experimenter himself or another person introspectively studying his own immediate experience) should be regarded as a to-be-comprehended object, and the experimenter should observe the behavior (verbal and non-verbal) of the object, thereupon making inferences, deductions and test observations. If reality is

not conceived as occurring independently of the thought grasping it, then reality cannot test the truth of the thought.

Watson, in protest against introspective psychology, accepted behavior and refused consciousness as objects of study. The transition from the analysis of immediate experience to the observation of the behavior of organisms was a great stride for psychology on its way toward becoming an objective science. But Watson's conception of objectivity was rather rough and narrow. For him, the criterion of objectivity was direct observation through sensory organs. Consequently, any concept, any system or any mechanism which might be developed to account for observed events was suspect and would be thrown out as subjective, not directly given by sensory observation. Thus, Watson not only discarded the immediately experienced contents of consciousness as the data of psychology, but he also banned psychologists from talking about central processes like perception, attention and thought. Like Wundt, he made no distinction between the nature of the thing studied and the nature of the method of study. Wundt could not see the experiencing subjects as the object of study, and instead of going to objectively verifiable sources of evidence, he used immediate experience as its own source of evidence. Watson insisted on direct observation as an essential part of the method of study, but could not see the legitimacy of making inferences from the data of observation. Central processes are beyond the reach of direct observation, and yet their logical status is quite different from that of the contents of consciousness. In introspective psychology, contents of consciousness immediately experienced and analysed by the subject provide both the facts and their explanations. Watson had every right to object to such a procedure. But the central processes inferred from objectively established behavioral facts, and objectively verified in controlled experiments, have nothing to do with introspection and subjectivity. They are not given by subjective immediate experience but hypothesized on the basis of objective evidence to be tested with further evidence.

Consistent with his crass objectivity, Watson did not aim at a causal explanation of behavior. This is not surprising since causality is not something directly observable in behavior. Watson's system

depends on the observed associations of stimuli and responses. Generalized associations are assumed to be a sufficient explanation and a means for the practical control of behavior.

In his zeal for objectivity and in his abhorrence for introspection, Watson discarded the concepts like perception, attention and thought, and asserted that «... certain stimuli lead organisms to make certain responses. In a system of psychology completely worked out, given the stimuli the response can be predicted»².

This pseudo-objectivity, which had impoverished psychological thought for many years, inevitably lost its grip on the minds of psychologists who insisted on facing the «irreducible and stubborn facts»³. Because, even conditioned reflexes, which had been regarded by behaviorists as the building blocks of all behavior including the most complex skills, turned out to be not as simple as behaviorists had thought they were. Indeed, central processes have to be invoked in order to explain the many properties of a conditioned reflex that are not intelligible in pure stimulus-response terms⁴. By the late 1940s, central theories began to come to the fore. One of the central theorists, Hebb, has said: «Man or animal is continuously responding to some events in the environment, and not to others that could be responded to (or 'noticed') just as well. When an experimental result makes it necessary to refer to 'set' or 'attention', the reference means, precisely, that the activity that controls the form, speed, strength, or duration of response is not the immediately preceding excitation of receptor cells alone. The fact that a response is not so controlled may be hard to explain, theoretically; but it is not mystical, and 'attention' is not necessarily anthropomorphic, or animistic, or undefinable... So there is a rational basis for postulating a central neural factor that modifies the action of a stimulus. The theoretical problem now is to discover the rules by which it operates»⁵.

Watson's pseudo-objectivity has modern representatives, notably Skinner and a whole army of Skinnerians. Skinner, unlike Watson, is quite sophisticated and for this reason deserves some attention, though his influence on the general course of psychology is not comparable to Watson's.

Skinner has a special category of facts obtained by his own operant conditioning technique. By objectivity he means observing behavior under experimental conditions, recording the order and consistency in behavior, and not searching for explanations outside the order and consistency of behavior⁶. Once the order and consistency in behavior is established, manipulation of behavior to the desired ends is possible. For Skinner practical control and explanation are the same thing. Like Watson, he insists on leaving everything that cannot be grasped by direct observation outside the realm of discussion. He deems theories unnecessary in psychology⁷. He uses theory and hypothetico-deductive method interchangeably. As a matter of fact, the function of theory within the inductive method is quite different from that within the hypothetico-deductive method. Theory is essential in experimental sciences, whereas the hypothetico-deductive method, with all its axioms, postulates, theorems, and corollaries, characterizes geometry. «Unlike direct observation and description», says Skinner, «the construction of an hypothesis suggests mysterious intellectual activities. Like those who are said to be capable of extrasensory perception, the hypothesis-maker seems to display knowledge which he cannot have acquired through ordinary channels⁸». By «ordinary channels» Skinner evidently means sensory channels. Certainly, hypotheses do not directly come through these channels; they are a product of thinking over the evidence obtained through these channels. But an hypothesis is not considered knowledge at the instant of its construction. It becomes knowledge if it is affirmed by the test observations made through «ordinary channels». And this knowledge is open for disproof by further observations. However, Skinner conceives the function of an hypothesis in a rather peculiar way : «For one thing, the method tends to be used when it is not needed, when direct observation is not only possible but more effective. To guess who is calling when the phone rings seems somehow more admirable than to pick up the phone and find out, although one picks up the phone to confirm the guess⁹». Two suppositions in this quotation should be corrected. Hypotheses are not the same thing as the hypothetico-deductive method, and they are not guesses at the event but at the system producing the event. Therefore, hypothe-

sis-making is not a superfluous activity as Skinner wants us to believe.

The scientist arrives at an hypothesis starting from a set of observations, but the hypothesis itself does not contain the observed events. Yet, they can be deduced from it. Some unobserved events can also be deduced. The latter, called predictions, serve to test the hypothesis. So hypothesis (hypothetical explanation) is a region of thought between the observed to-be-explained events and the test observations. But there is no loss of objectivity here. An hypothesis is built upon observables and is tested by observables. The propositions contained in it are the description of a system from whose properties the to-be-explained events are deducible.

To sum up : objectivity does not mean doing nothing but observing. Objectivity in science is the objectivity of thought. Thought, to be objective, does not have to remain within the boundaries of observables; it is sufficient if it remains anchored in observables. «There are fish which can detect weak electrical fields, and locate objects which distort their self-made fields. These fish have a sense entirely foreign to us, and yet we know a great deal more about electrical fields than they do; and we have learned to develop instruments which locate objects in the same way and more efficiently¹⁰».

NOTES AND REFERENCES

- 1 W. Wundt: *Grundriß der Psychologie*. Leipzig: Wilhelm Engelmann, 10. Aufl., 1911, p. 3.
- 2 J.B. Watson: Psychology as the behaviorist views it. *Psychological Review*, 1913, 20, 158-177.
- 3 An expression used by William James in a letter to his brother Henry James.
- 4 Cf. D.E. Broadbent: Classical conditioning and human watch-keeping. *Psychological Review*, 1953, 60, 331-339.
- 5 D.O. Hebb: *Organization of Behavior*. New York: Wiley, 1949, pp. 4 and 7.
- 6 Cf. Bitterman's remark: «Skinner's assertion that theories 'lose their point' in the face of order and consistency of behavior also is difficult to accept. One might argue, on the contrary, that order and consistency is much more likely than disorder to stimulate inquiry into cause». M.E. Bitterman: *Learning in Animals*. In H. Helson and W. Bevan (eds.): *Contemporary Approaches to Psychology*. Princeton: Van Nostrand, 1967, p. 175.
- 7 B.F. Skinner: Are theories of learning necessary? *Psychological Review*, 1950, 57, 193-216; B.F. Skinner: A case history in scientific method. In S. Koch (ed.): *Psychology: A Study of a Science*, Vol. 2 New York: McGraw-Hill, 1959.
- 8 B.F. Skinner: *Contingencies of Reinforcement*. New York: Appleton-Century, 1969, p. ix.
- 9 B.F. Skinner: *op. cit.*, p. ix.
- 10 R.L. Gregory: *Eye and Brain*. London: World University Library, 1966, p. 221.