

Manifiesto of interbehavioral psychology

Manifiesto de la psicología interconductual

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ABSTRACT

Describes the nature and development of interbehavioral psychology, with particular reference to its origin, postulation, data, operations, laws, and implications.

DESCRIPTORS: interbehavioral psychology

RESUMEN

Describe la naturaleza y desarrollo de la psicología interconductual, con particular referencia a su origen, postulación, datos, operaciones, leyes e implicaciones.

DESCRIPTORES: psicología interconductual.

Interbehavioral Psychology: Authentic and Misconstrued

Now that interbehavioral psychology is becoming increasingly familiar in the psychological domain, it appears desirable to forfend it against misunderstandings and exploitations which are already clearly discernible. This it is proposed to do by again explicating its nature and development.

Scholars have observed that frequently in the history of science new theories or hypotheses are suffered to pass through three undesirable stages. First they are ignored because of the veneration of older doctrines, or because of their novelty and unfamiliarity.¹ Secondly, when a glimmer of the new

¹ A friendly euphemism is to say "it is not well understood".

hypothesis is achieved it is reviled and ridiculed. Stage three is reached when a modicum of approval and acceptance is forthcoming. Then it is the fate of the new view to be misappropriated with generous distortions, and exploited in a number of ways. Interbehavioral psychology has not escaped this untoward history. Thus the time has come once more to expound and manifest the details concerning the authentic nature of interbehavioral psychology and to review systematically its Origin, Postulation, Data, Operations, Laws, and Implications.

Origin of Interbehavioral Psychology

Interbehavioral psychology originated as a critical reformation of the age-old tradition that psychological events are animistic processes derived from priestly sources concerning the soul. By contrast interbehavioral psychology was developed to draw its descriptions, hypotheses, and interpretations from confrontations of organisms with objects and events, as is the case with other sciences, physics, chemistry, and biology, and not from autistic constructs of whatever sort. It is the melancholy history of psychology that throughout two thousand years students of the behavior of organisms, both human and nonhuman, have traditionally treated such events as in whole or part transcendental processes, instead of objective and confrontable happenings. This situation continues and flourishes today, both overtly and covertly.

This negativistic aspect of interbehavioral psychology was only one of the conditions of its primary foundation. The other was the need for a comprehensive naturalistic treatment of the various types of human behavior, from simple basic reflexes, to thinking, reasoning, remembering, and so on.

a. *Science and Scientists*

It is true of course that even the most eminent natural scientists, including physicists, have allowed irrelevant constructs to influence their interpretations of confrontational results, but the events for their science have always held sway. Here a distinction must be made between scientific enterprises and institutions, and the personal views of individual scientists. To respect this distinction, is to keep alert to what individuals say by contrast with what they actually do.² This caution applies to their technical activities as compared with their metaphysical promptings.

² In the words of Einstein, "If you want to find out anything from the theoretical physicists about the methods they use, I advise you to stick closely to one principle: Don't listen to their words, fix your attention on their deeds". Einstein, A., *Essays in science*. New York: Philosophical Library, 1934.

b. *Chronology.*

The earliest complete formulation of interbehavioral psychology may be dated to the second decade of the twentieth century (Kantor, 1924-26). Its earliest inspiration derives from the fact that intellectual stirrings brought into relief for the first time the possibility that rational and valid thinking could dispense with all the transcendental and subnatural ideas prevailing since the decline of objective and naturalistic speculations of the ancient Greeks. For example, psychology no longer need be in bondage to the superstition of an immortal soul in any of its metamorphoses, including sensations, consciousness, will, and so on, or its verbal reductions to the brain and its pseudofunctions.

The history of psychology clearly enumerates the cultural details of the development of naturalistic views in psychology. The importance of the French and German materialistic styles of thinking of the eighteenth and nineteenth centuries cannot be underestimated. Similarly the nineteenth century transfer of the experimental physiology techniques to psychological problems has had its immense effect on freeing psychology from the animism which enthralled it. Among the most recent aids must be counted the twentieth century conditioning views of the Pavlovian physiologists. The conditioning movement must be accorded the status of congenial complement to interbehavioral psychology though nothing more. It is well known that the physiologist Pavlov, while not a professional psychologist, lacked all appreciation of naturalistic psychology.

By contrast with interbehavioral psychology, behavioristic psychology emerged as Watson (1930) asserted in overt form in 1912.³ As a student of comparative psychology Watson arrived at the conclusion that "the time seems to have come when psychology must discard all reference to consciousness" (Watson, 1914, p. 7). Psychology was to become a science of behavior with power to predict and control the behavior of organisms both human and infrahuman.

During the 1930s the behavioristic movement of prediction and control took the form of elaborating the specialized technique of conditioning. The adoption of stimulus and response principles proceeded to the point of adding a second item of stimulation called a reinforcement or reinforcer. For the most part psychology was presumed to emphasize the acquisition of movements or acts. Behaviorism remained in the negativistic stage from the standpoint of the general description and interpretation of psychological behavior.

Interbehaviorism and Behaviorism

From the standpoint of conventional psychology the interbehavioral hypothesis and movement stand out conspicuously in their complete and

³ Also in Watson (1930, p. 5).

final departure from historical and traditional psychology. But a different situation prevails with respect to behaviorism, which also claims emancipation from classical psychism. The similarity exists only on the basis of the negativistic aspect of interbehaviorism. With respect to the naturalistic aspect great differences are evident as the appreciation of significant traits of each clearly shows. In the following paragraphs are exhibited the main analytic contrasts.

Variant Sources

a. Behavioral sources. Basically, behaviorism was founded on the substitution of the formula $\Psi = B-M$ for the mentalistic formula $\Psi = M+B$ which prevailed for many centuries, following the soul psychology of the early Church Fathers. Specifically, the behavioristic movement originated from work with animals in which it was assumed that operations could proceed without constructs like mind, consciousness and similar ones. A great reinforcing notion was derived from the work of Pavlov and his colleagues, who popularized the principle of conditioning.

b. Interbehavioral sources. By contrast with behaviorism, interbehavioral psychology has had an altogether different beginning. As has been mentioned above it originated as a scientific movement to investigate organismic interbehavior in the same way in which all the authentic sciences operate.

Variant Models

a. Behavioral models. Behaviorism in its original conditioning phase may be represented by the following models

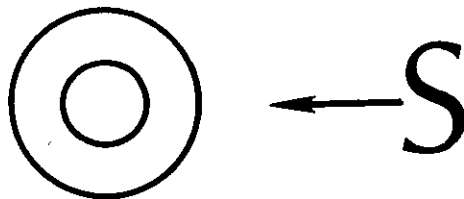


Figure 1

showing that organisms are put into action and controlled by stimuli, that is objects causing them to perform in ways forced by the nature of objects. A powerful and universal facilitating principle is assumed to be a special process called reinforcement.

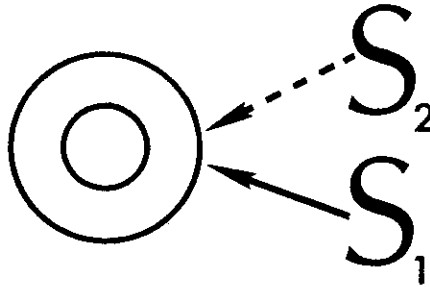


Figure 2

But obviously psychological behavior is not represented by such a model, and so because behavior is regarded as emittent an additional model is in vogue among behaviorists as follows.

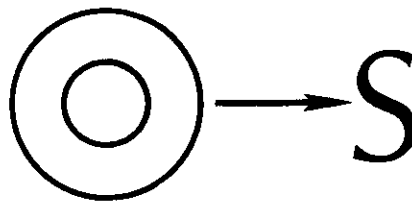
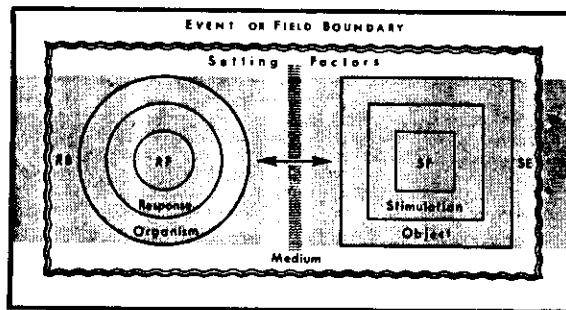


Figure 3

However, both types of model fail to take account of the actual occurrences of psychological action and the modes of operation.

b. Interbehavioral model. The basic interbehavioral model is presumed to show the precise general details of psychological behavior of all types, as indicated in Fig. 4.



Behavior Segment (or Unit Psychological Event)
 RB = Reactional Biography; RF = Response Function;
 SE = Stimulus Evolution; SF = Stimulus Function

Figure 4

It will be noticed at once that interbehavioral psychology is free of all metaphysical notions such as linear causation and intervening variables. Fields are also free from metascientific categorization as for example environmentalism, geneticism, innateness, as well as any universal system of general data origins. Skinner (1979), a prominent behaviorist, wrongly attributes environmentalism to the interbehavioral way of thinking, although psychological fields display no basis for such a misinterpretation. All descriptions of interbehavioral events are based on observable or inferred contacts of integral organisms and stimulus objects.

It cannot be too often repeated that interbehavioral psychology has originated as a scientific interest in a particular type of event field similar to that of all the authentic sciences. There is a definite continuity between the interbehaving fields of psychology and that of the other sciences. The following lines serve as reminders of this fact.

1. Physics is concerned with interrelations of mechanical, electrical, or radiational field components.

2. Chemistry deals with interactions of elements, molecules, and reagents with corresponding objects under the influence of pressure and temperature.

3. Geology is primarily concerned with interactions between terrestrial bodies and various conditions (motions, temperature, gaseous expansions and contractions).

4. Biology in its anatomical, physiological, and pathological phases investigates the interbehavior of various units (cells, tissues and organs) with each other and with environing conditions while ecologically it is involved with the reciprocal activities of organisms with other organisms or other external objects and conditions.

5. Anthropology is a specialized inquiry into the interbehavior of humans, natural and cultural, with each other and with the surrounding objects and conditions.

6. Consonant with the other sciences psychology investigates the interbehavior of organisms with other organisms, objects, and surrounding conditions though always specific as to organisms and prior history of encounters with reciprocal objects.

Postulates of Interbehavioral Psychology

As is the case with all the sciences, psychology is obliged to be aware of its basic assumptions. Such assumptions, technically termed postulates, are guides to observation and also lay bare the significance of all the interactions of investigators with ambient things and conditions, as well as the circumstances of the investigator himself.

As the following postulates of interbehavioral psychology and their comments indicate, interbehavioral psychology stresses the construction of descriptions and interpretations of events directly or inferentially from

psychological events with severe restriction of influences from prevalent intellectual traditions and established institutions, such as the metaphysical dualism of nature and of human beings. In brief, these postulates summarize the basic intellectual foundations of naturalistic psychology.

Postulate 1. Psychological events consist of multifactor fields.

Comment. As indicated in the model above (Fig. 4) interbehavioral psychology is exclusively concerned with the interbehavior of organisms with other organisms, things, and conditions under specified conditions. Prominent in interbehavioral fields are also media of contact, as light in vision and air waves in hearing. For the most part and in general psychological interbehaviors are historical as based on prior encounters during which organisms and their counterpart stimuli objects build up coordinate functions. It is these functions which are essentially the subject matter of psychology.

Postulate one implies the complete and final abjuration of all esoteric and occult principles such as psychic states or processes, whether regarded as extravening or intervening. Furthermore psychological fields, whether reflex behaviors of infrahuman organisms or the most complex behavior of human persons, are data for observation. They do not carry within themselves the answer to all questions. When in any given instance we are unable to observe the details of the interbehavior, we can only assume as in all the other sciences, that this incapacity arises from nothing else than the intricacy of the events or the ineffectiveness of the techniques employed.

Postulate 2. Psychological events are coextensive with other events.

Comment. Psychological fields are in all naturalistic respects coterminous with the fields of physics, chemistry, biology, and the humanistic disciplines. In fact psychological events are of course at the same time biological, biochemical and electrophysical. Each type of field is a unique interrelation of components or factors. Fig. 5 is an attempt to show the variation in the three usually recognized field types.

Note in each case the field boundary and setting or auspice conditions (wavy line). In each case there is the double-headed arrow and variation in the component field factors. In the physiochemical field two bodies are represented, the interbehavior of which may be formulated as an equality of energies. The biological field components include at least one organic factor which sometimes uses up more energy than impinges upon it from the stimulus object. What the organism does is mainly dependent upon its cellular organization of tissue and organs. Finally the psychological field interbehaves with stimulus objects on the basis of functions developed by each in the course of continued contacts through historical convergences under specified settings or auspices.

Postulate 3. Psychological events are evolved from ecological interbehaviors.

Comment. As adjustments of organisms to environing things and conditions, psychological events are derivable through definite evolutionary processes. Through phylogenetic interactions there develop ecologically the

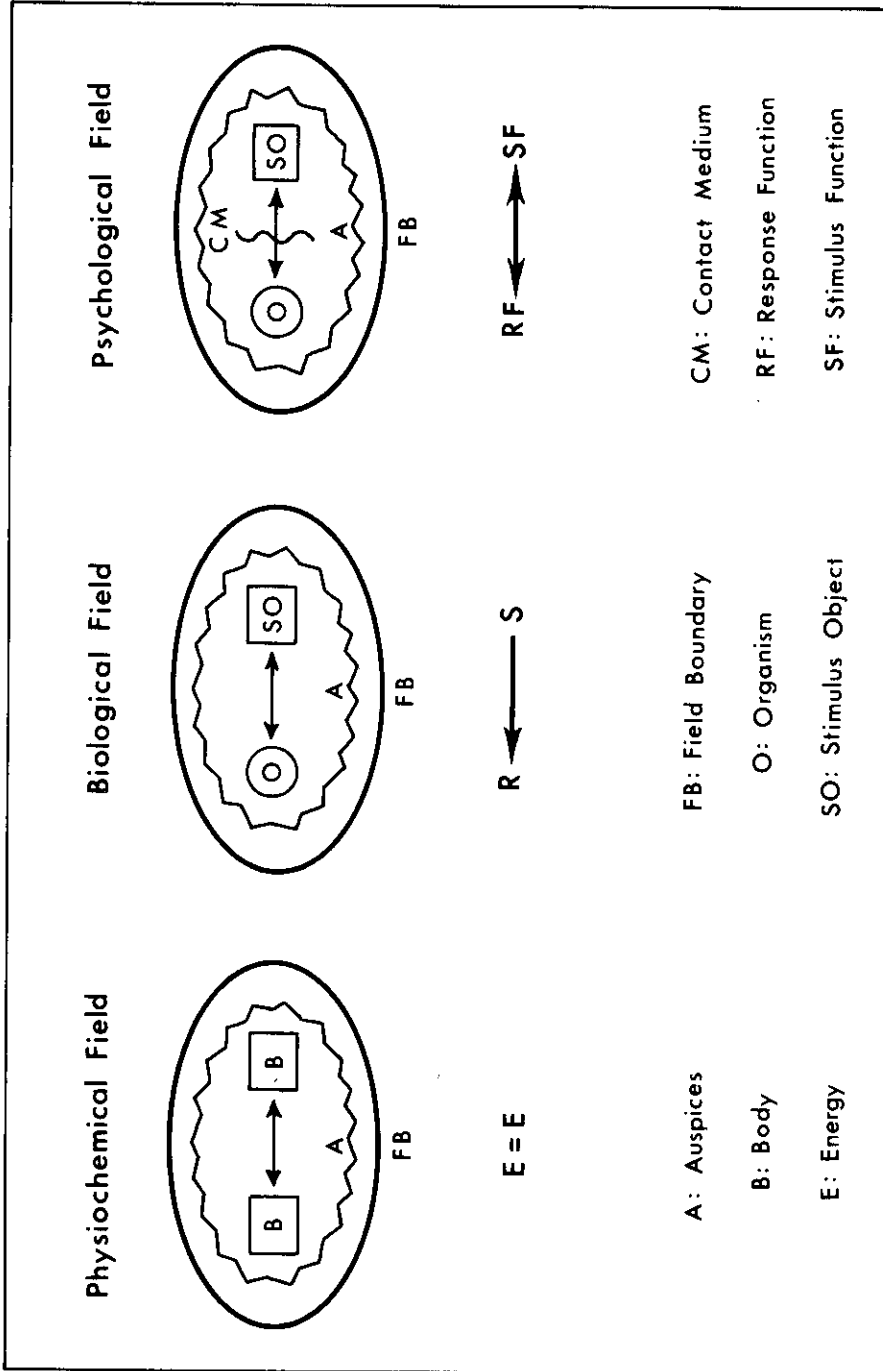


Figure 5 Three types of scientific fields

various species of organisms and their potentialities for interacting with corresponding objects and conditions. Excluded from consideration are all notions of determiners either on the side of organisms or stimulus objects.

Postulate 4. Psychological fields are ontogenetic.

Comment. Interbehavioral fields occur only as events involving specific integrated individuals and reciprocating objects. The law of specificity is evident in every instance of psychological activity and is the basis for the invariable rule of individual differences.

The earliest phases of psychological development may be regarded as the late stages of embryological development. In human organisms neonates soon after birth begin to participate in psychological fields, the most complex of which are discernible as feeling, thinking, and reasoning.

Postulate 5. All constructs are derived from events.

Comment. Since all scientific constructions (descriptions, interpretations, and law generalizations) to be solid must be based upon observations of events, there exists a definite continuity between the events and constructs developed from investigations. It is prohibited to approach psychological data with hypotheses or theories not derived from prior interbehavioral observations of the events studied.

Data of Interbehavioral Psychology

We repeat, all events consist of specific configurations of interbehaving factors. The science of physics may be well described as concerned with bodies in interaction as illustrated by Newton's laws of motion and universal gravitation, or by more recent principles of relativity. The interbehavior of biological factors is paramount in the events referred to as metabolism, reproduction, immunology, symbiosis, and so on.

Obviously the same situation prevails in scientific psychology. Accordingly, the basic datum of this discipline consists of organisms interbehaving with objects under specific conditions. Quite understandably, since psychological events are also biological events, it has become conventional to name the organism's action as responses while the interbehaving objects, which may be persons, things, or conditions, as stimulus objects.

But this superficial aspect of psychological events requires substantial analysis. In the first place psychological stimuli and responses are directly encountered or inferred from directly encountered behavior fields. Such events are in no way to be confused with historically engendered psychic principles or with vague, abstract qualities even if they are not animistic.

Again the response aspects of psychological fields are not merely movements or stances of organisms but behavior of integral organisms developed in interaction with stimulus objects. Thus psychological responses are not functions of biological structures but functions of interbehavioral fields. Responses comprise three analytical phases: (1) acts of anatomicophysiological

organisms, (2) acts in a field, and (3) acts of participants in prior or present contacts with stimulus objects. The specific performances of organisms are denominated as response functions.

Similarly the performance of stimulus objects in interbehavioral fields is analyzable into three correlated factors: (1) physiochemical action whether organic or inorganic, (2) the reciprocal activity coupled with that of organisms, and (3) the functions developed in various interaction fields. The process of developing psychological functions is well illustrated by conditioning, learning, and casual adaptations of organisms to environing things and events. An outstanding feature of the interbehavioral process is its occurrence in every form of interbehavior ranging from simple reflexes to the most complex reasoning or problem solving.

A justified claim made for interbehavioral psychology is that it is the only way to make psychology a truly naturalistic science. Organismic behavior is studied from birth on as the organisms develop to maturity and declines without even a hint of transcendental substance and powers.

Interbehavioral Operations

As a naturalistic discipline interbehavioral psychology stresses the continuity of encounters of specialized scientific workers with the things and events adjusted to by organisms of every level of development. Scientific interbehavior consists of the relatively free investigation of behavioral fields as described in an earlier section. The continuity of interbehavior with behavioral fields may be divided into three succeeding levels.

1. The lowest or immediate level is conveniently called sensory. It covers such adjustments as smelling, seeing, hearing, tasting, and touching.

2. An intermediate level includes more technical interbehavior such as warning reactions, recording, remembering, handling, wishing, desiring, behaving plus admiring and judging responses.

3. Scientific interbehavior consists generally of the more specialized and more intimate interbehavior with fields that may be generalized under the rubric of manipulations. The following terms symbolize the specific actions involved, generalizing, counting, precisely measuring, experimenting, organizing or systematizing, analyzing, synthesizing, interpreting, and so on.

The primary naturalistic approach to scientific data is to inquire into the origin, composition, and development of specific objects and events. Each scientific problem, of course, demands operations appropriate to the behavioral fields being studied.

Negatively envisaged, psychology and other scientific operations must not be isolated from contacts with events studied. In the history of psychology the following magical universals were at one time or another paramount among psychologists, "psychic association," "mental," "consciousness," "reinforcement," "physiological," "stamped in," "brain based," and many

others. In a general way the terms applied to the operation of psychological investigation were cultural, religious, and conventional.

On the positive side, psychological operations are instigated mainly by an interest in the nature or properties of objects or fields. Ideally, psychological interests and personnel pursuing them are sufficiently complete to cover many types of fields. To be mentioned are evidently sensing, feeling, remembering, reasoning, and many others besides.

Sophisticated investigative operations can be divided into two general types, (a) laboratory studies and (b) field studies. Notice will be taken as to whether experimentation is available at all. It is a matter of expertise to decide that only certain scientific fields can be effectively brought into a laboratory setting. To confuse manipulations of some sort with experimentation is of counter value for any science.

A summary of interbehavioral operations for psychology as well as for any science is to construct hypotheses as to the nature of the events to be studied and to modify or reject them on the basis of their conformity or adaptability to the event fields under investigation.

Interbehavioral Laws

Laws in science are constructions and can only be valid and useful when they represent direct or partially indirect derivations from confrontations with events. Specifically, scientific laws constitute generalized propositions summing up the traits of things and events as well as the results of technical encounters with them.

Scientific psychology it follows possesses an armory of laws in favorable comparison with the other sciences. The slanderous assertion that psychology lacks laws is based entirely on the mistaken assumption that it is concerned with mind, consciousness, and other transcendental processes or entities.

When psychology is properly envisaged as a definite investigation and research enterprise, laws can be formulated with respect to the various phases of scientific work including the original events, their origin and evolution, investigation, exploration, along with the interdisciplinary circumstances of the various sciences. Such a summary of laws in psychology has been proposed by Observer (1977).

Implications of Interbehavioral Psychology

A recapitulation of the essentials concerning interbehavioral psychology illuminates the fact that it mirrors natural occurrences and not historical dogmas. Accordingly, certain implications follow under the following rubrics.

Acausality. Interbehavioral psychology clears the way to an understand-

ing of the perennial and constantly employed metaphysical notion of cause. To say that stimuli cause responses is to drag into psychological science the notion of occult forces or powers to bring about certain happenings. Although in the resort to causes psychology only follows the lead of other sciences in neglecting to take account of interbehavioral fields, no science can prosper by unwittingly resorting to invalid philosophical ways of thinking.

Psychological Science and Psychological Practice. Scientific knowledge as the product of human interests and operations frequently becomes in demand for application to the needs and problems affecting mankind. Thus arises a close relationship between sciences and professions. Especially is this the case with psychology. Psychological behavior as adjustments to complex situations often requires aids for satisfactory adjustment to domestic, vocational, and social environments. Hence there arises in the psychological domain serious problems relative to the quest for knowledge on the one hand and the remedying of ills and the search for general progress on the other. Such conflicts of interest often result in the confusion of psychology as a science with psychology as a profession. Scientific psychology is frequently coupled with the work of modifying or attempting to modify behavior.

Science and scientific work imply no obligation to make pecuniary profit or to ameliorate human problems, though custom and convention encourage such applications wherever feasible. Such applications to be successful must be based upon valid information concerning psychology. Psychological science and psychological practice must be clearly distinguished. To base practice upon spurious psychology is to embrace the logic of those who put salve on the knife to cure its lacerations. Strictly to be avoided is to allow practical interests to influence the criteria for evaluating operations. To practice psychology without regard to a basic scientific foundation is to invite failure from inadequate knowledge of the nature and conditions of the situations that require improvement or correction.

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