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The start of the present wave of genetic determinism, which claims that differences in intelligence, sex differences in behaviour, even "social poise", "conformity" and "political radicalism", are largely genetic, may be dated from the writings in the late 1960s of Arthur Jensen in the United States and Hans Eysenck in Britain. Its proponents have laid heavy claims to scientificity by their reliance upon complex statistical procedures and the algebra of the heritability equation. The discrediting of the Burt results is but one example of the inadequacy of the data on which the hereditarian position is based.

But the fundamental issue is not the validity of this or that empirical survey; it is a theoretical one. All claims of the "heritability of intelligence" depend on two prior theoretical assumptions: that the IQ test measures an absolute quantity, "intelligence"; and that the algebra derived by biometricians for the study of the genetic

and environmental components of differences in perfomance in very tightly controlled plant and animal breeding programmes is applicable to the distribution of a behavioural character across a wide range of complex human environments. Both these theoretical assumptions are fallacious; the IO test is a social construct, as much a measure of the built-in assumptions of the testers, as of the innate ability of those being tested; the famed heritability estimate which emerges from the biometry is a figure without theoretical meaning or practical significance. The entire exercise is best summed up in the computer people's phrase "GIGO—"Garbage In—Garbage Out".

Except—and this is a point which those of us, biologists and psychologists, who have discussed these questions extensively over the past eight years with students, ethnic minority groups and trade unionists, have been anxious to point out—that this type of hereditarianism

has deep social and political undertones and is reflective of important ideological issues. Its purpose is to provide a biological rationale for

the status quo: IQ is distributed along class and race lines; other types of desirable behavioural characteristics are unequally distributed between the sexes (the only reason why IQ isn't is that test items which show sexual differences in scores are deleted from the test!). The hereditarian position would have us believe that the working class, the Blacks, the Irish, are genetically stupider than the middle class, the Whites, the English; that women have genes for being executives—and therefore that the explanation and justification of a class bound, racially and sexually divided society, lies not in social institutions and structures (which we can change) but in our genes (which we cannot).

--Professor Steven Rose, Biology Dept., The Open University, United Kingdom. Letter to "The Times", Nov. 9, 1976.

THE AGORA

While the editor was spending the academic year in Britain the storm over Cyril Burt developed. The disclosure that he had falsified data to support a hereditarian view of intelligence provoked a spate of letters to The Times. The line of influence of Eysenck as a student of Burt and Jensen a student of Eysenck was among the information that emerged from it. The issue is no mere academic exercise. The British educational system was largely based on the hereditarian view until recently and that view was heavily influenced by the "research" of Burt who served as a government adviser. He was knighted in 1946 for his work. The 1944 Ed-

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ucation Act provided that at age eleven all children would be divided in their further educational pursuits by an examination which would send them to a grammar school, technical school, or secondary modern school. Grammar school was a preparation for higher education while the other two were usually terminal. The division was assumed to be based on inherited intelligence. About two years ago the system was replaced by "comprehensive schools" which are similar to American schools.

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Several papers have been recently published in the Mexican Journal of Behavior Analysis

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which will be of interest to readers. Of these three are fairly closely related: (1) P. T. Mountjoy, "Science in Psychology: J. R. Kantor's Field Theory", 1976, 2, 3-21; (2) J. R. Kantor, "The Origin and Evolution of Interbehavioral Psychology", 1976, 2, 120-136; (3) N. W. Smith, "The Works of J. R. Kantor: Pioneer in Scientific Psychology", 1976, 2, 137-148.

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In Number 1 of this volume we commented on the developing interest in setting factors as part of the psychological field. Sid Bijou's new book also makes extensive use of the concept: CHILD DEVELOPMENT: THE BASIC STAGE OF EARLY CHILDHOOD, Prentice-Hall, 1976. It also utilizes concepts of stimulus functions and interactional history. James W. McKearney, Senior Scientist at the Worcester Foundation for Experimental Biology, has been giving considerable emphasis to multiple factors in his research. In "Punished Behavior: Increases in Responding after d-Amphatemine", Psychopharmacologia, 1975, 41, 23-26, he reports the effects of "co-existing behaviors" and "environmental context" with respect to drugs. In "Drug Effects and the Environmental Control of Behavior", Pharacological Reviews, 1976, 27 (3), he explores some of the varied factors that influence the effects of drugs as reinforcers. In a paper to be published in PERSPECTIVES IN BIOLOGY AND MEDICINE, "Asking Questions about Behavior", he develops a position about causation, biological factors in behavior, settings, and functional meanings of objects that is entirely interbehavioral. For example. "Knowing the physiological concomitants of a behavior could be very useful information and yet not be an explanation. Since behavior is a complex product of many interacting factors, it is erroneous to attribute primary causal status to any one of these acting in isolation". Still another paper, "Interrelations among Prior Experience and Current Conditions in the Determination of Behavior and the Effects of Drugs" to be published in Volume 3 of ADVANCES IN BEHAVIORAL PHARMACOLOGY, Academic Press, states "although there has been a traditional recognition of the importance of prior experience and of situational or contextual factors in the determination of behavior, these factors have not been much emphasized in the experimental analysis of behavior and analysis of the behavioral effects of drugs". For offprints and preprints write the author at the Foundation, 222 Maple Ave., Shrewsbury, Massachusetts 01545. The interest in setting factors has also appeared in Germany: "¡Setting factors' (Kantor, 1959) sind ebenfalls unmittelbare Umstände, unter denen sich ein Individuum verhält, und erleichtern oder unterdrücken bestimmte Reaktionen. Ein setting factor kann z. B. die Anwesenheit einer anderen Person sein, aber auch der Zustand, in dem sich die Vp befindet, z. B. ihr Alter oder ihre gesundheitliche verfassung". Source: Monika Rennert, "Der Einfluss der Versuchssituation bei Imitations experimenten", Archiv für Psychologie, 1975, 127, 70-77. Also in number 1 Roger Ray was quoted on the subject of the role of setting and situational factors in conditioning. He predicted that future research would demonstrate the "profound" influences of such factors and force a shift to "more ecological models" of conditioning. Readers should know that in the years since that 1973 statement, Ray (with several associates) has been active in fulfilling his own prophecy. A seris of papers entitled "A Systems Approach to Behavior" report an impressive variety of experimental and field studies of animal and human behavior (including but not limited to conditioning) establishing relationships between subtle and often ignored setting factors and a variety of behavior parameters. In addition to drawing attention to the importance of such setting

factors, Ray is consistent with the interbehavioral field orientation in his philsophical and methodological commitment to the notion of a continuous behavioral flow. Two of the papers in the series have already appeared in the Psychological Record (1975, 25, 459-478; 1976, 26, 147-180) and a third (which includes a particularly delightful study of the behavior of a killer whale at a sea amusement park) will appear in the Record shortly. All three papers demonstrate that interbehaviorism is far more than a stimulating exercise in philosophical psychology: it has revolutionary potential for empirical psychology as well, drawing the behavioral scientist toward relatively unexplored determinants as well as novel measures of behavior. Along these same lines another paper of interest is the lead article in the July 1977 American Psychologist entitled "Toward an Experimental Ecology of Human Development" by Urie Bronfenbrenner. The interactional flavor of this manifesto for "broader perspectives in theory, method, and substance" of research on human development is demonstrated by Bronfebrenner's proposed definition for his new "ecology of human development":

The ecology of human development is the scientific study of the progressive, mutual accommodation, throughout the life span, between a growing human organism and the changing immediate environments in which it lives, as this process is affected by relations obtaining within and between these immediate settings, as well as the larger social contexts, both formal and informal, in which the settings are embedded.

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In numbers 1 and 2 of this volume we published a translation of Tilquin's account of interbehaviorism. In this number we publish a translation of Foulquie & Delledalle's account. In the case of Tilquin he offers an overview that has only occasional misunderstandings. But he ends with conclusions that are totally inconsistent with what he reports about it. He is unable to recognize that one need not assume an "interior life" as opposed to an exterior one, that there is no evidence that nature has divided humans or other organism into "inner" and "outer". He also fails to recognize that one may regard all events as part of the physical universe, that none are "leftovers" or objects of "despise", that all are subject to scientific investigation, and that his includes "qualities, meanings, and values" constituted by organism-object interactions. Assertions about "desubjectivising" or "exteriorizing" are based on dualistic assumptions invented by medieval theologians. Foulquie & Deledalle agree with Tilquin's conclusions but give them a slightly different twist. By some rather obscure logic they arrive at a "subjective world". For these authors to analyze a naturalistic approach to psychology with fair accuracy and then return to metaphysics that do not follow from it indicates the tenacious grip that this cultural doctrine has even on diligent scholars. Without metaphysical assumptions the doubts and criticisms fall away and psychology can be a true natural science dealing with the observed events of valuing, developing meanings, etc .-- a part of human activity, these activities in turn being as much a part of the domain of the physical universe as are falling rocks. A similar confusion was analyzed in some detail in "A Commentary", Volume 6, Number 2.

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Paul Fuller once mentioned that there is a Russian book that has an account of interbehaviorism but that he had lost the reference. If anyone knows of it please send us the particulars. Perhaps we could locate a copy, find a translator, and present it in these pages.

After eight years and seven volumes of the Newsletter/Quarterly the editor would like to turn the job over to a successor. If anyone is interested in this enterprise please contact him.

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In the final number of Volume 7 we will include information about Dr. Kantor's new book on language behavior.

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The following essay, a revision and expansion of a portion of an undergraduate sophomore's examination in a History and Systems of Psychology course at Kenyon College, grapples with the relationship between behavioristic and interbehavioristic perspectives. This relationship is, of course, intriguing in its complexity: as befits close siblings, the behaviorist and the interbehaviorist are at once the most faithful of allies (in their efforts to establish a naturalistic psychology) and the most irreconcilable of opponents (in their analyses of the psychological event and the interrelations of its parts). The essay also draws humanism into the comparison of psychological perspectives, and in the process aptly raises questions about whether the "humanistic revolution" is truly as revolutionary as promoted.

Interbehaviorism, Behaviorism, and Humanism:
A Comparative Analysis of Three Psychological Systems

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This essay is a brief attempt to contrast and compare three psychological systems of the twentieth century: behaviorism, interbehaviorism, and humanism. This will be done by examining first the similarities and differences between behaviorism and interbehaviorism, and then discussing the similarities and differences between interbehaviorism and humanism.

Interbehaviorism and Behaviorism: Similarities and Differences

Both behaviorism and interbehaviorism reject mind-body dualism. Both systems strive to create a psychology that is monistic, that takes as its subject matter only natural, observable acts of the organism. Behaviorists and interbehaviorists believe that the "mind" does not exist; that it is just a cultural imposition upon psychology. Psychologists of both schools want to study what really exists, what is natural and observable, not some artificial, intangible construct. Another similarity between the two systems is that each is opposed to physiological reductionism as a solution to mind-body dualism. Each believes that psychological events can never be fully explained in neurological terms; such an effort is not only futile, but misdirected because in spite of his monistic intentions the physiological reductionist maintains a dualism, simply substituting for "mind" a new term, "brain", with the same spiritual properties. The brain perceives, thinks, learns, and directs behavior exactly as the mind did. Thus the organism is still not unified: "lower" aspects of the organism are subordinated to the omnipotent "mind-brain".

A basic difference between behaviorism and interbehaviorism is the way in which each tries to rid psychology of "mind" and thereby create a monistic psychology. The behaviorist's solution is to focus on overt behavior and deny or ignore "mental functions" such as perceiving, thinking, and remembering. In the process, however, says the interbehaviorist, dualism is maintained, because by ignoring "mental" events, one is tacitly admitting to their non-natural status. In contrast, the interbehaviorist, rather than regarding the acts of perceiving, thinking and remembering as unobservable functions of an ethereal "mind", views them as natural functions of a whole organism, no different in kind than "overt" behavioral accomplishments in that they represent an interaction between an organism and an environment. This leads to the second essential difference between behaviorism and interbehaviorism. The behaviorist treats the psychological event as an action-reaction, a sequential process beginning with a "cause" (a "stimulus" or environmental situation influencing an organism) and ending with an "effect" (the response of the organism to that situation), while the interbehaviorist believes behavior is the result of a complex interaction between organism and environment, with no single, localized cause.

<sup>\*</sup> The former author contributed organization, style, and most of the content of the essay; the latter author exerted his prerogative as the former's teacher by suggesting several modifications, mainly editorial in nature.

The most fundamental difference between the two schools (the difference from which the other differences derive) concerns the definition of the two components of a psychological event, "stimulus" and "response." The behaviorist defines a stimulus as an environmental object (or the flow of energy it produces), and a response as a movement or a secretion. The stimulus occurs first, in the environment, and elicits a response from the organism. Stimulus and response are separate and distinct, and the environment is said to control the organism. The interbehaviorist, when viewing the psychological event, concentrates not on physical stimuli and responses, but on stimulus functions and response functions. What matters is not the physical stimulus but its function ("meaning") for the stimulated organism. A clinched fist and a glaring look, though different physical stimuli, may have the same stimulus function. Similarly, what matters is not the muscle activity comprising a response, but its function ("intent"). A glance at one's watch and a yawn during a lecture can have the same response function. The interbehaviorist notes that while physical stimulus and response occur as isolable units in a cause-effect sequence, stimulus and response functions are not so isolable: they can be understood only in terms of their relationship. One cannot determine a behavior's "intent" (response function) without knowing the behaving organism's interpretation of the current environment (stimulus function); conversely, an organism's interpretation of the environment (stimulus function) is only defined or revealed by the organism's action in that environment (response function).

Interbehaviorism and Humanism: Similarities and Differences

Interbehaviorism and humanism are similar in that both systems are reactions against what are viewed as oversimplifying characteristics of behaviorism. Humanists and interbehaviorists agree that man is a complex and active organism that should not be treated as an object controlled by the environment or by his physiology. The similarity between the two systems ends there, however. Humanists, in rejecting the behavioristic conception that man's behavior is determined by the environment, assert in polar opposition that man determines his own behavior. A fundamental belief of the humanist is in the free will of man, in man's ability to control his own behavior, and in man's inherent goodness. Interbehaviorists do not argue that man is basically good or evil, nor do they believe in simplistic control of behavior, either by the environment or by man's "will". Interbehaviorists believe that causes of behavior can be determined, but that "first causes" or "prime movers" do not exist. Instead of simple cause-effect determinism, interbehaviorism posits an interaction between the organism and the environment, with each dependent upon but neither controlling the other. Humanism and behaviorism espouse opposing theories of behavior control, while interbehaviorism is in the center, believing neither in strict environmental nor organismic control but rather in an interaction of behavior determinants. Humanism, in attempting to make a complete break with behaviorism, reintroduces the mind and dualism, and strives to make psychology unnatural and unscientific once again. Interbehaviorism also rejects the simplistic elements of behaviorism, but interbehaviorist still believe in a scientific, naturalistic, and monistic psychology.

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## LA PSYCHOLOGIE CONTEMPORAINE

Paul Foulquie
with the collaboration of
Gérald Deledalle

Paris: Presses Universitaires de France, 1951

Le Behaviorisme Organismique de Kantor\*

The behaviorist Jacob Kantor (born in 1888), professor at Indiana University, leans heavily on the modern behaviorists but also seems to have been influenced by the psychology of form: and because of the importance that he attributes to environment he is reminiscent of the concept of the psychology of man represented by certain contemporary phenomenologists.

He calls his concept organismic psychology which we will translate as "Psychologie organismique" although in one of his articles that he published in 1929 for the short-lived Revue de Psychologie Concrète this was translated as "organic psychology". That review states "Organic psychology is the study of the activities of psychological organisms. It has no relation to traditional psychology which is concerned with psychic or mental states". It does not call upon introspection and considers states of consciousness to be a fiction. We consider that the object of psychology is concrete reactions of an organism to its surrounding stimuli (Ibid.).

"The data of organic psychology are soley the concrete interactions of psychological organisms and of objects acting upon them as stimuli. The concern then is with a type of interaction absolutely analogous to the interaction of objects as they are studied by the natural sciences" (Ibid.). For Kantor, the terms "spirit" and "body" are only metaphysical abstractions which do not represent anything real (Principles, I, p. 30). Holding to that reality which is perceptible to the senses, the psychology he limits himself to analyzing and describing is "the intervention of an organism which responds to an object which stimulates it" (Ibid., p. 182).

But Kantor is very careful to point out that psychology, as he conceives it, is distinguished not only from the properly biological sciences but also from classical behaviorism represented by Watson. Although for him, psychism is no more than organic reactions, organic psychology should not be confused with biology or with physiology. Indeed, while these natural sciences only study organisms, psychology concentrates its attention on the interaction of the organism with the stimuli which stem from the environment in which the organism lives. Rooted in

<sup>\*</sup>This translation was corrected and improved by Lucien Leduc. All footnotes are by the editor.

<sup>1&</sup>quot;L'etat actuel du behaviorisme", 1929, 2, 136-137.

<sup>&</sup>lt;sup>2</sup>This statement does not occur on the page indicated.

biology, psychology has a special object and one can consider it as an ecological (or bionomic) science (Ibid., p. 20). Moreover, psychological reactions differ essentially from physical or biological reactions: they vary with the circumstances; they integate themselves into complex behaviors; they can be put off or even inhibited (Ibid., p. 5-9).

In addition, in psychology it is essential to observe one's own behavior because a large number of facts cannot be known in any other way. Let us imagine, for example, a person leaving his house, taking a few steps on the street, then returning home, only to emerge again with a book under his arm. Anyone observing this will understand that the person had forgotten the book and then had suddenly remembered it (p. 8-9). But how did he remember it? Only that person can answer the question by observing his own behavior. This type of information which singularly resembles introspection is unknown to biology.

Lastly, besides physical or biological there are psychological stimuli that the biologist is not concerned with; among the former one must include geographic, climatic, and ecological conditions.

Although he stated in his Principles of Psychology that this book somewhat shares the view of authors who "sail together under the pennant of behaviorism" (I. p. 72)3 he does not want to be confused with those for whom psychology is only the study of organisms considered as a whole. "Organic psychology is the science of a specific form of interaction among real persons -- or animals -- and the objects and situations which constitute their natural and social milieu" (Revue, 1929). For Kantor as for Watson the primary object of psychology is reactions or behavior. But organismic psychology considers behaviors as separate from the biological organisms that produce them and it integrates them in increasingly complex structures whose development is described in the Principles. Also in rejection of the mentalist attitude and introspective method, Kantor claims to avoid the mechanisms by which all is reduced to reflexes. His work even begins with this declaration: "The domain of psychology comprises the menomena which we call conscisousness or psychological reactions" (p. 1). He further specifies: "By psychological reaction we mean the responses which psychological organisms, such as human individuals and higher types of animals perform when they adjust themselves to the various stimulating objects surrounding them" (p. 1). He deems it impossible to explain these psychological reactions by analyzing the organic activity ending in the reflex-arc, the basic unit of psychism. "Psychology cannot take as its unit anything less full of content than the actual response of a person to a stimulus object" (p. 2). Every response is the response of a personality (p. 36). "Personality constitutes one of the essential psychological data" (p. 74). In fact, Kantor admits only of an empirical personality. It amounts to systems of reactions or to behavioral equipment acquired by the individual in the course of his past experience; it seems that there is something that transcends the purely organic.

Be that as it may, it is interesting to note his insistence in affirming the effect of an individual's past in his present conduct: "One of the best established of all psychological principles is that the activities of an individual depend upon his reactional biography or behavior history" (p. 159). Whereas

<sup>3</sup>All quotations from the <u>Principles</u> are here presented from the original English rather than being retranslated.

on the one hand biological behavior is rigorously determined by the present disposition of the organism and on the other by environment, psychological behavior depends even more on the past contacts of the organism with the surroundings and subsequently is seen to be highly personal.

Further, Kantor's points are not in agreement with the rigourous methods that experimental psychologists claimed to acquire from physics. Introspection is rejected and one must be content with exterior observation which appears in two principle forms: (1) field observation—what one would call naive or popular observation and which consists of the study of psychological organisms as they are found in spontaneous or free activity; (2) laboratory research or experimentation. Now it is interesting to note that it is to the first that Kantor gives more importance, just as do the traditional psychologists. Field observation he says is irreplaceable such that psychology is essentially a field science and supplies us with first notions of thought, feeling, wanting, etc; it is only by this that we have an understanding of complex facts that laboratory analysis would distort. Psychology is none the less a science; for it is a critical attitude which makes for a scientific attitude and thanks to it these two modes of observation are separated only very tenuously (p. 15).

Of even more interest is the Kantorian concept of stimulus. The stimulus does not identify with a physical phenomenonthat is identical for all. What is identical for all is the object. For example, a white ball has natural properties which act in a similar fashion on the retinas of the eyes which perceive it; but this is only a small part of the stimulatory properties of things. The stimulus is created rather than given in natural objects. Indeed, transformations occur which add to the latter powers what they did not originally possess. In other words, where classical behaviorism supposes that experience modifies the organism, but not the environment which acts upon it, Kantor teaches that the environment is also modified and that the objects are enriched by new stimuli. For a child, for example, a red ball viewed from a distance, is characterized only by its round form and color; but when it is placed in his hands and he senses its freshness, when he caresses it with his fingers, when he feels its smoothness and its hardness and weight, the original stimulus will be singularly enriched. Thus, to the mysterious object in itself is progressively substituted the object for us which is reminiscent of the world of phemenologists. The study of the interactions which result in both the adaptation of the behavior of organisms and the constitution of a new world becomes for Kantor the object of psychology.

Association one would guess plays a major role in what one may call "psychologization" of the material world. But Kantor does not fall into associational psychology that prevailed in the 19th century, which concerned association of ideas. For it, everything occurs within the subject; it is pure mentalism. For Kantor, on the contrary, it is not ideas or states of consciousness which are associated but more or less complex stimuli and responses. "Precisely as in the case of an earlier psychological period, associated processes today may be looked upon as fundamental and universal mechanisms for all psych-

<sup>4</sup>The authors use quotation marks for this clause but have actually summarized "is it not this critical attitude in observing and interpreting phenomena in whatever way it may be employed, which constitutes science?" They have also rendered "attitude" as esprit, "spirit" or "mind". "Attitude" is the same word in French from which it was borrowed.

ological phenomena. But unlike the earlier period in which association was considered as having to do only with mental states, we must today consider it as referring to the organization of actual stimuli-response situations" (p. 343).

Kantor made substitutions to Watsonian behaviorism which he called interbehaviorism and for the psychology of reactions he substituted the psychology of interaction. On the one hand the beings that he calls "psychological organisms" do not merely react to the actions of stimuli; their reactions are responses in the sense of human relationships; they consist of new attitudes in which the individual faces a situation, and which little by little gives him the "psychological equipment"; and that equipment is more or less independent of the organism and of the surroundings. On the other hand the stimuli arriving from the surroundings don't remain indifferent to the responses which are made to them; their powers of stimulation can either increase or decrease. There are therefore more than two terms having bearing: a being capable of reactions and objects capable of provoking reactions. Beyond these assumptions that one may consider as the structure of psychic activity, there arises in the life course of the individual, complex superstructures which result from the interaction of the two terms in relation. The object of psychology is the study of these superstructures.

For Kantor, psychological analysis could not go beyond the stimulus-response pair, which he calls a "segment of behavior" and which constitutes a determinate adaptation. The primary forms of behavior are reflex and instinct to which experience imposes "basic behavior" which constitutes the framework of personality. Finally, with social behavior appears psychological behavior. Under the name of psychological behavior Kantor goes on to analyze, with a profusion of divisions and subdivisions unknown to classical psychology, the varying psychic functions, emphasizing their characteristics of behavior or reaction: attentive reactions, implicit actions as responses to absent stimuli (thought), affective reactions, cognitive responses, volitional conduct, etc. (p. 307).

Thus the images (or rather the imaginal responses) consist of vestiges of perceptual reaction systems. To this observation the author adds this profound remark: in great measure, to imagine means to verbally analyze the manner in which we react to absent objects (p. 307).

He rejects the realist concept that intelligence is a special power; it is only "the particular way the individual adapts himself to his surroundings" (p. 128) and this "particular way" consists in predicting and varying the reaction systems. However, for Kantor these predictions and these attempts at varied reactions are the business of implicit behavior and not of thought; classical psychology says the same thing.

The description that Kantor gives us of the free act or rather of idiosyncratic activity singularly recalls the Bergsonian theory of freedom: there are, he says, contingential reactions which depend not on the organism but on the "psychological equipment". In these situations the individual derives his response from his personality, from his "reactional biography" (p. 195).

<sup>&</sup>lt;sup>5</sup>This is misleading. See <u>Principles</u>, I, P. 155-158. Kantor was one of the earliest critics of the instinct doctrine.

Kantor rejects any hypothesis that goes beyond immediate data, and it is in the name of scientific positivism that he rejects Watsonian materialism as well as classic spiritualism. Claiming to limit himself to what is immediately verifiable he considers psychology as a descriptive science and he does not seek any explanation of observed facts.

In fact he reconstitutes the contents of consciousness and interior life on a new plan, which are so vilified by objective psychology. In their place he speaks of psychological behavior and psychological environment, all the factors of interbehavior. As M. Tilquin accurately said "One understands then how Kantor while denying interior life does not deprive psychology of human experience. Rather he exteriorizes interior life by projecting itinto stimuli and responses, and he makes stimuli and responses that are objective phenomena undergo a 'subjectivation'" (p. 354).

For the author we have just quoted a return to subjectivity constitutes a fundamental error for he says "Psychology only aspires to be a science like the others" (p. 355). One can, on the contrary, believe that in becoming a science like the others, it no longer attains its goal; because of this we have indirect constitution of a subjective world.



A proper understanding of psychological events will only come when researchers change their conception of them. For one of the most eloquent of the group of cognitive theorists, Neisser (1967), the task is to "trace the fate of the input" (p. 4), what happens to the stimulus once it has entered the body. Such an approach clearly views psychology as what happens inside, and so it is essential to fill the organism with psychological functions. Behaviour is not seen as being a function of the stimulus context but as a function of organismic processes, which are recognized as being hypothetical constructs (p. 4). Behaviour is merely a manifestation of these underlying processes. Cognition is no longer something which a person does but is something performed by cognitive structures, which have no existential reality. How can it possibly be justified that one can explain a phenomenon by referring to something which does not exist? Only by recognizing that psychology is the study of the interaction of an organism and an environment will any progress be made in the understanding of its events. The environment does not somehow enter the organism and be processed; it merely comes into contact with the environment. And it is the study of the various types of relationships with which psychology is concerned. In brief, psychology is not the study of what occurs between stimulus and response in the CNS (Conceptual Nervous System); it is the study of the interaction between the two factors. Stimulus and response now play a central rather than a peripheral role in the event -- they are the event. Reference to the CNS does not account for the event, it merely provides us with a more detailed description of the response phase. Viewed in isolation from the stimulus

context, the responding of an organism is a purely biological eventpsychological events are not located in biological structures and it only attains psychological status when it is linked with the stimulus context.

> Edward Blewett Letter, June 14, 1976