Noel W. Smith, Editor
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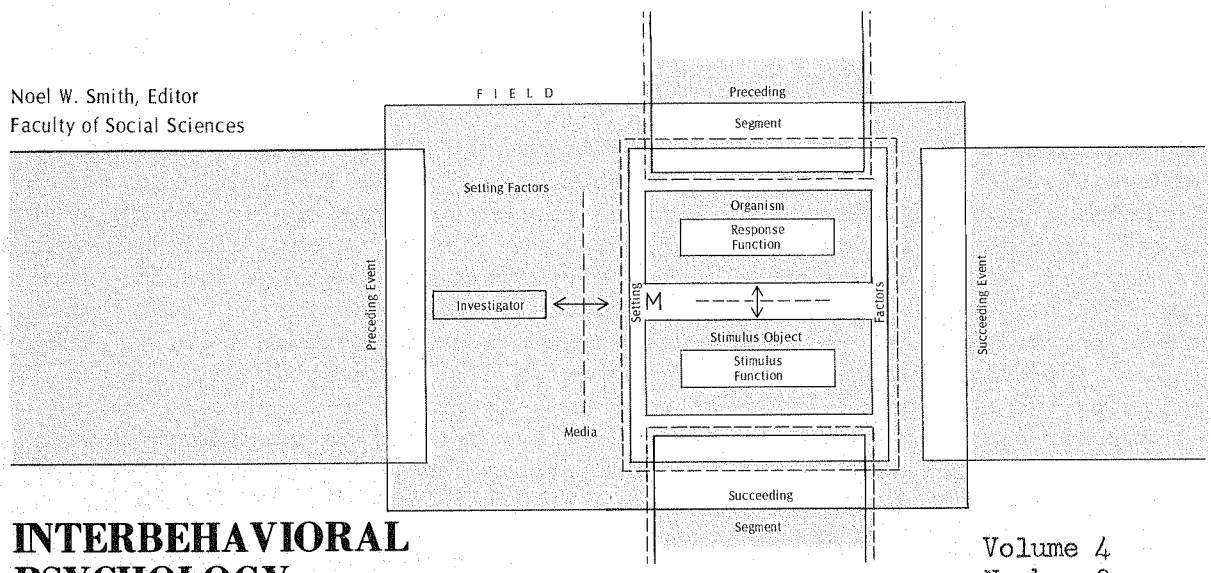

INTERBEHAVIORAL PSYCHOLOGY NEWSLETTER

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As the title implies, this is a presentation of the neuroses and psychoses from a consistently biosocial point of view. It follows a prediction made five years ago that psychopathology--or behavior pathology as I propose to call it--will shift progressively in emphasis from speculations about a psyche in a somatic container to the study of the operations of human organisms in a social field.

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This is essentially the biosocial point of view. It differs radically from the contemporary psychosomatic approach to the behavior disorders by breaking completely with the tradition of mind-body dualism. There is no need to begin by accepting the ancient and gratuitous assumption that an invisible and intangible psyche lurks within the soma, or is coextensive with it. We begin instead with what we find, a biological organism operating in and by means of a social environment. We thus create no artificial need to solve meaningless conundrums as, How does the soma affect the psyche? How does the psyche influence the soma? And how is the non-psychic reality ever contacted and tested by an insubstantial psyche? These questions are not inherent in the problems which our patients present. They are the offspring of psychosomatic dualism and we can discard them with their parent.

Norman Cameron: THE PSYCHOLOGY OF BEHAVIOR DISORDERS, 1947
(from the Preface)

THE AGORA

The symposium on "Contextual Interactionists" as reported in prospect in the preceding issue of the Newsletter will be published in the Psychological Record, Summer, 1973. It will include a brief introduction to the topic, a few [illegible]es of vita on each participant, and selected questions and answers between audience and participants as well as the five papers. The participants' voices had to periodically compete with low flying aircraft from the nearby Strategic Air Command Air Base that happened to be on alert that day, but they were indomitable in the end.

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The new ENCYCLOPEDIA OF PSYCHOLOGY in three volumes published in 1972 by Herder & Herder shows no advancement over the usual animism in its treatment of the role

of biological organs in psychological activities. It states under the entry "Central nervous system" that "All afferent sensory nerve paths receiving information from the sense organs regarding the state of the environment end in the CNS, where, in terms of reflexes, reactions, behavior patterns and volitions, this information is processed and conveyed once more by means of efficient motor nerve fibers to the motor effectors, and hence to the environment." The section on "Brain" maintains that "the totality of neuronal activity in our brain represents our individual world." The view that the cerebral cortex is "the highest central unit on whose activity the control of all more complex behavioral processes and the occurrence of psychic (mental) processes depend" is now revised so that the reticular formation "controls the activity of the cerebral cortex and hence all experience and behavior" (emphasis added--ed.). The entry "Brain pathology" provides a slight inkling that the brain might be considered a participating organ, but that is soon overwhelmed by the usual cultural beliefs about its controlling, directing, initiating, and interpreting functions. Similarly, under "Sense organs" we find that these organs communicate information. The encyclopedists would have the organism populated with a panoply of little homunculi who screen incoming "signals" and then tell the master homunculus in the skull about them. He (she?) then provides the final interpretations and decisions for all the little homunculi who then act accordingly. Nowhere is there the slightest indication of alternative approaches or the merest recognition that science must start with actual events rather than cultural presuppositions. The entries in the Encyclopedia that are definitions or simple descriptions are, with a few exceptions, quite standard and differ little from what can be found in an elementary text. Examples of entries that are significant include Lundin's "Music, psychology of" and Brozek's informative account of "Soviet psychology." On the whole, the COMPREHENSIVE DICTIONARY OF PSYCHOLOGICAL TERMS by English & English published in 1958 with its critical analyses is far more useful than this $75 triad.

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Ronald Heyduk has compiled for teaching purposes thirteen pages of material from the Newsletter from the three years 1970-72. Copies can be obtained by writing him at the Department of Psychology, Appleton Hall, Amherst College, Amherst, Massachusetts, 01002. He contributed "Cracks in the 'Billiard Ball' Organism" to the Newsletter in 1970 (Nr. 3) and some apt quotations and critique in 1971 (Nr. 3) when he was a graduate student at the University of Michigan.

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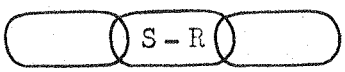
The Newsletter is singularly honored to have in this issue an original contribution by J. R. Kantor whose inspiration is the Newsletter's bedrock. His contributions loomed large in the Cheiron symposium on "Contextual Interactionists" and in David Miller's guest address "Can Social Scientists Be Humane?" His own guest paper "Segregation in Science: A Historico-Cultural Analysis" aroused considerable interest as shown by the numerous questions that were asked; and his extensive ad lib commentary throughout his paper was a delight to all.



A PROPOS WATSON'S HYPERBOLA

In the continuing dialogue between nativistic and empiristic psychologists concerning the genetics of behavior, the classical statement of Watson turns up occasionally. Even empirically inclined psychologists appear to regard Watson's claim to produce desirable or undesirable types of personality, given his conditions of operation, as an unmitigated hyperbola. But what is the alternative? It is alleged that to reject the extreme developmental hypothesis is to entertain an ungrounded belief in occult determiners. Surely Watson's declaration and its validity deserves careful examination. Despite its familiarity it may be worth quoting here for purposes of ready reference

> I should like to go one step further now and say, "Give me a dozen healthy infants, well-formed and my own specified world to bring them up in and I'll guarantee to take any one at random and train him to become any type of specialist I might select--doctor, lawyer, artist, merchant-chief, and yes, even beggarman and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors." I am going beyond my facts and I admit it, but so have the advocates of the contrary and they have been doing it for many thousands of years. Please note that when this experiment is made, I am to be allowed to specify the way the children are to be brought up and the type of world they have to live in.

It is not surprising in view of the circumstances under which Watson formulated his argument that it comprises some opacities and even some paradoxes. For example, fellow behaviorists have pointed out that Watson himself admitted that he was going beyond his facts, and that he affirmed that some behavior is inherited. It may be contended, however, that Watson's basic hypothesis is thoroughly sound and that an analysis of the issues involved can illuminate the problem of behavioral genetics as well as genetics in general and the process of biological reproduction.

In what way did Watson go beyond the facts? Surely, he as an individual had not performed the experiment, but is there any doubt that such an experiment would succeed? How else but by means of the variables of personal and social development are personalities with all their traits evolved? Is it not through the conditions of parental and familial circumstances, economic and ethnic conditions, and cultural institutions that doctors, lawyers, merchants, artists, beggars, thieves, murderers, and governors are produced? No events available to scientists are more revealing that the modes of cultivating the many occupational, professional, and political personalities of complex societies. As we have intimated above, the objection to the evolutional theory concerning the origin of various traits and capacities may be prompted by lingering notions that occult powers determine the characteristics of persons and their later performances.

As to the paradoxes in Watson's statement, it cannot be denied that he slipped in asserting his disregard of talents, penchants, tendencies, and abilities. For there is no evidence that such traits are not evolved in the interbehavior of growing organisms in their encounters with things and events. It is not special pleading in defense of Watson's hypothesis to suggest that what counts are the observed events and not the rhetoric used to argue for them. We turn now to some relevant issues.

The Problem of Behavioral Inheritance

Geneticists in unending recurrence insist that no anatomical character is transmitted to offspring. What passes from parents to offspring are patterns of genes which in interaction with environing factors result in certain structure-function traits. Gene patterning in interaction with environing conditions constitute the mechanisms whereby offspring conserve the species similarities of successive generations of organisms.

Such being the case with anatomical structures and physiological functions, how much less are behaviors transmitted? Surely we need here some critical analysis of what is happening. And this is easily done by observing an organism as it begins its life as a zygote and later as a neonate and as a developing personality.

The entire process clearly goes on upon several stages. In each we find definite interactions with copresent things and events. For the foetus these conditions of development are located in the narrow confines of the uterus where the total situation does not allow for more than anatomical and physiological development. On the whole it is proper to say that whatever psychological action is performed consists primarily of the operation of cellular systems.

The development of the neonate is facilitated by the enlarged range of confrontable things and conditions. At the point of birth the foundation is laid for a tremendous repertoire of action and action traits. The individual becomes the speaker of a particular ethnic and dialectic language, a sectarian believer, a unique type of craftsman or vocationist, a cultural male or female, a conformer or unorthodox performer, a conventional moralist or transgressor.

In every case, whether the development is straight or oblique, smooth or rough, difficult or relatively easy, rapid or slow, there is always development in complex interbehavior with objects, persons, conditions, circumstances, aids and hinderances, all within the range of biological normality or abnormality of organisms and their surroundings.

Does any unbiased observation of the actual development of organisms allow for any alternative interpretation? The answer is, of course, no. Yet an alternate one is proposed based not on observation, but on cultural indoctrination. It is derived from the acceptance of historical transcendentalism, from the traditional belief in occult powers and forces that are the creations of verbalistic imagination. In substance, such non-developmental constructions are blood brothers to Orenda, Wakanda, and Mana of primitive peoples.

The Tabula Rasa Argument

Writers who unwittingly deny or are skeptical about the universal and inevitably complete development of behavior and personality drag into the discussion the red herring of the tabula rasa. They hark back to the seventeenth century debate between those who affirmed that the soul was loaded with faculties and those who held that the souls of individuals were only raw materials that had to be completely developed. However sympathetic we may be with those who believe they are espousing the principle of nihil ex nihilo, we cannot but criticize them for dragging in a metaphysical problem into biological and psychological situations. In both biological and psychological situations we perforce meet with transition conditions

in which new things and actions are evolved. Surely at one stage in their development organisms start at a psychological zero point. But this is not to say anything about a metaphysical nothing. We are concerned with a growing organism, which, if it interacts effectively with its surrounds, will develop psychological behavior and psychological traits.

By the same token the organism has passed through a biological zero point when it was only a prezygotic ovum and sperm. The evolutional process involves a before and after, and the observer can see how it is that scientific potentialities are actualities on a preexistent level. The evolutional process in biology and psychology comprises discontinuities as well as continuities.

Psychological and Biological Relations

To stress observations rather than conjectural dialogue with little or no connection with events is to be able to solve many of the problems concerning the intimate relations of psychological and biological events. We consider the proximal and divergent connections under the conditions of emergence and participation.

Emergence.[1] Psychological and biological events are continuous in the sense that it is organisms and their behavior that are the locus of both. For most of the prenatal life of even complex[2] organisms behavior is purely biological, they are only physiological functions of cellular structures. A definite, though partial, differentiation begins in late gestation and in greater and greater amplitude in post-natal development. The neonate enters a new world, so to speak, and develops adjustments to the great variety and constantly changing things and events with which it becomes surrounded.

Psychological events may truly be said to emerge from biological matrices, but this fact in no wise obliterates the differences between psychological and biological behavior. Evolutionally both may be variant performances of the same organisms. The variation in development of the two types of events may be regarded as stemming from either forward or backward reference points. Biological interactions are influenced by the continuity of individuals with the members of the species from which they spring through the agency of their cellular organization. Psychological interactions are cumulative adjustments developed under current conditions with potential competence for acting in future similar exigencies.

Undoubtedly, an appreciation of the similarities and dissimilarities in the two types of situations is important for the analysis of heredity problems.

Participation. Heredity problems, too, are illuminated by the inevitable participation of biological factors in all psychological activities. Since all psychological events are at the same time biological events, it is overlooked that the two types can differ markedly. The greatest similarity is found in simple reflex behavior. But even here we must distinguish between biological reflexes of tissue preparations and the conditioned reflexes of intact organisms.

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[1] Only concrete events are considered, and not philosophical speculations.

[2] Plants and simple animals, of course, remain so during their entire life cycles.

The most striking difference between the participation of organisms in psychological interactions are to be observed while comparing a conditioned reflex with the complexities of a thinking or reasoning performance. In the latter it is obviously an organism that interacts, but the interaction has been derived in a cultural development and is not just the functioning of tissues or organs. Given a particular anatomical part, say, a hand or foot, it can perform in enormously different ways; the hand can hold something, clap, play an instrument, transcribe records, and so on. Similarly, the foot can support, kick something, walk, and in rare cases draw and paint. Participation in all sorts of interbehavior is possible. Comparable or variant anatomical traits--size, race, sex--can participate equally well in crude or precise actions. Coexistence and participation when properly interpreted are exact indications of how biology and psychology are interrelated.

Participatory Graduation

When we compare the participation of biological components in comparatively simple reflexes and in the formulation of a mathematical law, we must be struck with ranges of participation. Always a biological organism is the performer, but the degree of cellular functioning must be considered in the ratio of anatomico-physiological contribution to the processes and adjustmental results as compared with the cultural factors. Minus the cells and tissues and organism there is no psychological behavior, but the evolution of a biologically competent organism--upright walking and elaborately neuralized--must be followed by the invention of a cultural environment and the accumulation of its products or it will remain a metabolizing, maturizing, and reproducing animal.

Behavior and Behavior

Problems of innateness in biology and psychology are invariably beclouded by the use of common names for the description of different types of events. Certainly this is the case when the term "behavior" is used to mask the differences in biological and psychological events. Here is the source of considerable misinterpretation. It may be helpful, therefore, to clarify some prominent terms in the discussion of natvism and empiricism.

Biological Behavior. Essentially biological behavior consists of the operation or functioning of cells as living entities or factors in various structures or organizations as tissues, organs, and organisms, in ecological interaction with energizing conditions as in reflex action, or with objects as evolved animals or plants. Basically, biological behavior is localized in the phylogenetic, structural, reproductive, and mutational conditions of a line of cellular organizations.

Psychological Behavior. The identifying mark of psychological performances is that they constitute adjustmental interactions with immediately occurring events, or adjustments based upon a number of encounters with other organisms or environing objects and conditions ordinarily grouped as a class called stimuli. The emphasis is upon individual developmental or historical contacts of organisms rather than upon their evolution as members of species or cellular organizations. The cellular structures, that is, the organic or species traits of the interacting organism, may be central or peripheral in the behavior.

Psychological Innateness. This term is predominately linguistic and has no correspondence with confrontable events. It is illicitly employed to refer to some non-existent, non-developed power or force to act in a certain way. Nativists as-

sume that organisms are endowed with inherent characteristics such as intelligence, morality, genius, creativity, affectivity, artistry, and so on.

Behavioral Development. Of the many kinds of behavior development we have only to distinguish two types, the biological and the psychological. On the biological level development begins with conception, the fertilization of an ovum, then the differentiation and growth of zygote, and the gradual succession of foetus, embryo, and a neonate organism. At each stage the developmental process involves contacts with things and conditions which may directly affect organisms in their future responses to similar situations.

The development of psychological behavior begins in the late prenatal stages of biological development. Psychological acts and traits arise from single or serial contacts with stimulus objects under specific circumstances. After stimulus and response fields are developed they may recur periodically when the original situation or some phases of them reappear. Psychological development by contrast with biological development differs in the rapidity of the process and the increasingly enlarged scope available for confrontations with organisms and other objects and conditions.

Learning. Properly employed, this term refers to a specialization and modification of behavioral development mediated by contrivances of various sorts. Among the many different kinds of contrivance that can be arranged are included rewarding, punishing, encouraging, cajoling, isolating, grouping, and general control of the learning situation. The various contrivances may be singly employed or in concert.

Summary and Conclusion

Upon close examination Watson's hyperbola turns out to be no such thing. On the contrary, what seems to Watson himself and others as overstepping the bounds of observable data actually fall short of this process. Watson does not go far enough when he asserts that his training procedures operate in disregard of talents, penchants, tendencies, and abilities. These terms all refer to traits that are developed in their entirety during the individual's psychological development and are subject to control during the development of the social traits and behavior of persons as doctors, lawyers, merchants, and so on.

It must be admitted that Watson reveals here his transition from a belief in innate traits and tendencies toward the new emphasis upon biological evolution and psychological development each from a zero point emergence from an earlier embryological stage, but this is no impeachment of his new anti-innateness attitude.

It is sometimes implied that Watson could not give up a belief in the inheritance of behavior because he shared the layman's belief that respiration, digestion, elimination, growth, and random activity are inherited. This allegation merely stimulated the study of the differences between the concrete reproduction processes in species continuity and the putative similarity of such processes to the transfer of property. When Watson says he is going beyond his facts, he is merely paying tribute to the great complexity of developmental circumstances and the paucity of economic, legal, and social control over the complex operations.

J. R. Kantor