THE INTERBEHAVIORIST

A Quarterly Newsletter of Interbehavioral Psychology

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QUOTATION

So long as investigators continue to interact with their subject matter, they will move forward to fuller understanding and scientific knowledge in psychology. Passing trends and fads of equipment, of "sophisticated" methodology, of systematic viewpoint, and of theories may accelerate or slow this movement, but they will not stop it. Time, in which research (however misguided) continues, will inevitably lead us all to interbehaviorism, if not necessarily to its vocabulary.

- W. S. Verplanck

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of Interbehavioral Psychology

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The Interbehaviorist is a quarterly publication of news, information, discussion, journal and book notes, book reviews, comments, and brief articles pertaining to interbehavioral psychology -- a contextualistic, integrated-field approach to the natural science of behavior.

The newsletter publishes professional communications that fall between informal correspondence and colloquia, and formal archival publication. As such, the newsletter supplements contemporary journals dedicated to basic and applied research, to the history and philosophy of the behavioral sciences, and to professional issues in the field. The newsletter strongly encourages submission of notes about current professional activities of its subscribers, news and observations about interbehavioral psychology and related perspectives, comments on journal articles and books of interest, more extended book reviews, and brief articles. All submissions should be sent in triplicate to the editor and should conform to the style described in the Publication Manual of the American Psychological Association (3rd edition).

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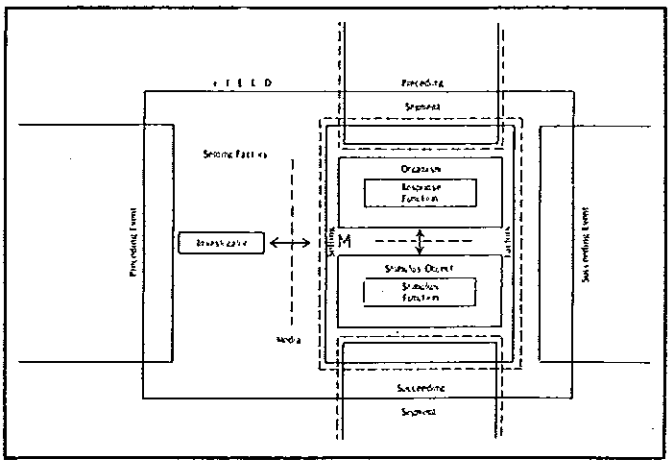

This issue of the newsletter is the final one for 1988 (Volume 16), hence 'tis the season for subscription renewals. Please complete the inserted form and return it to us with payment at your earliest convenience. Last year, we were pleased to have had a high percentage of renewals, but we did become a little anxious when renewal latencies grew long. If you could resubscribe by the end of the calendar year, that would be much appreciated.

We had mentioned previously that subscription rates might have to be increased to cover costs, the increases in large part due to higher production costs and postage. For example, when we acquired the newsletter in 1983, we budgeted the subscription rate at 200 copies of 8 pages per issue, or 200 copies of 32 pages per volume; however, we do not sell out and the pages published per volume have averaged quite above our original budget -- 46 (1983/1984), 32 (1985), 44 (1986), 48 (1987), and 40 (1988). Moreover, the postage has increased to the point that our last 12-page issue cost forty-five cents to send to each subscriber.

In any event, we have managed all of this without a subscription rate increase, and we will continue to do so because a recent, kind bequest has strengthened our financial status for at least another year. We thank that kind donor, as well as all other subscribers who contributed a little extra last year, which we encourage again. You are a generous readership -- though you might be a little more forthcoming with your newsletter submissions.

The Principia Press

Principia Press writes that The Logic of Modern Science is back in print, at a price of only $15. Relatedly, we have been remiss in not listing The Aim and Progress of Psychology and Other Sciences in recent issues; it is available for $20. At these prices, and those listed on the page opposite, every newsletter subscriber should consider having a complete library of Kantor's works.

With the reprinting of The Logic of Modern Science, the only other out-of-print text is Problems of Physiological Psychology. Principia, though, is planning to republish the latter as well, but with some updated bibliographical material and an appendix by Kantor -- "a little parable about the brain". It is hoped that the volume will be available in early 1989.

Still additional work is planned on an unfinished manuscript on which Kantor was working at the time of his death. We will keep you informed as these matters progress.

The May Institute

The May Institute would be pleased to accept (a) job applications from bachelor-level graduates or (b) practica proposals from undergraduate and graduate students for its programs, which encompass a comprehensive continuum of behavior-analytic services for individuals with autism, behavior disorders, and developmental disabilities. The Institute has programs in early intervention, early childhood education, vocational training and education, specialized foster care services, outreach group homes, intermediate care facilities, and residential and educational services.

The Institute emphasizes research, evaluation, and training: Client programs are individually based on careful behavioral assessments; programming and procedure changes are data-based and data-driven; and the entire program continually undergoes evaluation.

Applicants from the fields of special education, psychology, behavior analysis, speech, recreation, and child care are especially encouraged to apply. As the newsletter editor can attest from a recent sabbatical stay at the Chatham-based facility, these positions are more than mere jobs: The May Institute's staff training program is outstanding in providing staff with the wide range of skills necessary for working humanely with child and adolescent clients.

Interested newsletter readers and their students should contact: Peter J. Troy, The May Institute, 100 Seaview Street, P.O. Box 708, Chatham, MA 02633 (508-945-1147/1172).

Ecobehavioral Analysis

Steven R. Schroeder of the Nisonger Center at Ohio State University wrote

regarding plans he has for editing a text entitled Ecobehavioral Analysis and Developmental Disabilities: The Twenty-First Century. We were pleased to read the following explanatory material in his prospectus:

> Nearly 40 years ago, J. R. Kantor published his theory of interbehavioral psychology. The impact of this work was not felt in the field of developmental disabilities for 20 years, when the environmental design work of Barker (1968), Cleland (1969), Wahler (1971), and others ushered in the era of social ecological studies. In 1977, a book edited by Rogers-Warren and Warren (1977) entitled Ecological Perspectives in Behavior Analysis merged these trends under the rubric, "ecobehavioral analysis." This view was greeted with only modest enthusiasm. Nevertheless, there has been a considerable amount of research in the past 10 years done with people with developmental disabilities in a variety of settings that would warrant pulling together a symposium and an edited volume.

Steve and his colleagues have our best wishes in this project.

Notes from the Field

Newsletter subscribers have been prolific as book and journal authors of late. Please continue sending us reprints or notices so that we can announce your work in this column. In books of note, we hope it not injudicious to announce that Edward K. Morris and Curtis J. Braukmann edited Behavioral Approaches to Crime and Delinquency: A Handbook of Applications, Research, and Theory (Plenum). Also of applied interest is Sigrid S. Glenn's (with H. A. C. Ninness) Applied Behavior Analysis and School Psychology (Greenwood/Praeger). More explicitly interbehavioral is Henry Pronko's From AI to Zeitgeist: A Philosophical Guide for the Skeptical Psychologist (Greenwood/Praeger). Noel W. Smith published a brief and glowing review of it in the Fall 1988 issue of The Psychological Record.

Not only did Smith's review appear in that issue of The Record, but so too did numerous other articles by newsletter subscribers. Bryan D. Midgley co-authored a strongly interbehavioral manuscript, "The Integrated Field: An Alternative to the Behavior-Analytic Conceptualization of Behavioral Units." Susan M. Schneider co-authored a paper, "Comments on Quanta in the Analysis of Stimulus Control." And, William M. Gardner and Linda J. Hayes (formerly Parrott) were first authors on, respectively, "Analysis of Cheating on Academic Assignments" and "Extending Equivalence Class Membership to Gustatory Stimuli." In addition, the Summer 1988 issue of The Record included a paper co-authored by Sidney W. Bijou and Patrick M. Ghezzi, "Manual of Instructions for Identifying and Analyzing Referential Interactions II," as well as book reviews by Pronko, Parker E. Lichtenstein, Morris, and Robert W. Lundin.

In addition to her research article mentioned above, Hayes also co-authored an important book review in the Journal of the Experimental Analysis of Behavior (JEAB) (1988, 50, 97-111), in which she and her colleagues made the case for the contextualistic world view of contemporary behavior analysis. The manuscript was entitled "Finding the Philosophical Core: A Review of Stephen C. Pepper's World Hypotheses: A Study in Evidence." In another JEAB publication, Stephen T. Higgins and Lisa M. Johnson were co-authors on "An Inverse Relationship between Baseline Fixed-Interval Response Rate and the Effects of a Tandem Response Requirement" (1988, 50, 211-218), a paper that presents in part, an empirical analysis of historical causation. Johnson, Higgins, and James T. Todd were also co-authors on "Laboratory Lore and Research Practices in the Experimental Analysis of Human Behavior: Subject Selection," published in The Behavior Analyst (1988, 11, 43-50). In addition, Johnson was first author on a paper appearing in Behaviorism -- "When Speaking of Probability in Behavior Analysis"; Kantor's views figure prominently in her analysis (1988, 15, 107-129.

Finally, Iver H. Iversen was first author on "A Multi-Purpose Vertical Holeboard with Automated Recording of Spatial and Temporal Response Patterns for Rodents," published in the Journal of Neuroscience Methods, 1988, 25, 251-263.

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Jane Bennett (Michigan)
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BOOK AND JOURNAL NOTES

Hilgard, E. R. (1987). Psychology in America: A historical survey. New York: Harcourt, Brace, Jovanovich.

The only reference to Kantor and interbehavioral psychology in Ernest Hilgard's recent Psychology in America reads as follows:

> Another American behaviorist, J. R. Kantor (b. 1888), a professor at Indiana University, had long been interested in language. He summarized his views in his Objective Psychology of Grammar (1936), where the expression psycholinguistics found an early use. Kantor was always much admired by those who knew him and engaged in conversation with him, but his books were never widely influential. (p. 251)

As a footnote, Hilgard added:

> Although Skinner was chairman of the Department of Psychology at Indiana University (1945-1948), including the year in which he gave his Harvard lectures on verbal behavior, and Kantor was active on the faculty, their mutual interests in varieties of behaviorism and in psycholinguistics apparently did not lead to common understanding about language. Skinner (1957) found no occasion to cite Kantor's book of 1936, and when Kantor wrote again on psycholinguistics (Kantor, 1977) he found no occasion to mention Skinner's of 1957, although he did mention Chomsky. (p. 821)

In an earlier footnote on behaviorism after Watson, Hilgard also wrote:

> The roots of behaviorism prior to Watson have been documented by Burnham (1968b), along with the influences on Watson himself. Woodworth (1924) identified four varities. Other behaviorisms as they branched out in America included anthroponomy (Hunter, 1930), biosocial psychology (Weiss, 1930), and the interbehavioral psychology (Kantor, 1924, 1942), in addition to the more widely familiar later variants of Guthrie, Tolman, Hull, and Skinner. (p. 813)

Marsella, A. J. (1984). An interactional model of psychopathology. In W. A. O'Conner & B. Lubin (Eds.), Ecological approaches to clinical and community psychology (pp. 232-250). New York: Wiley.

In a chapter in a recent edited book on ecological psychology (1984), A. J. Marsella associates Kantor not with the behavioral movement, as is typical, but with the early interactionist movement and with those such as Angyal, Brunswik, Goldstein, Lewin, Meyer, Murray, and Perls. In a particularly favorable quote, Marsella (1984) had this to say:

> Still others who became supporters of the interactional model in this period included Henry Murray and Jacob R. Kantor, both well-known American personality theorists. Kantor was one of the earliest writers in this area and has not been given the credit he deserves. He was influenced by Adolf Meyer, the famous psychiatrist associated with "psychobiological" approaches to psychopathology. Kantor (1933) believed that the individual interacts as a whole with certain stimuli. He noted the individual does not exist in a vacuum but rather in an environmental setting and the subject matter of psychology is the "interbehavior" of the individual with objects, events, other individuals and groups. (p. 238)

According to Marsella (1984), however, things did not end too well for Kantor and his colleagues:

> By the 1960s, Lewin, Kantor, Angyal, and Goldstein had died [metaphorically], Perls had turned to Gestalt therapy, and Murray and Brunswik's theories had failed to capture the energies of new generations of psychologists. (p. 239)

Regardless, Marsella noted that the interactionist movement was perpetuated via the influence of other developments, such as Roger Barker's ecological psychology (see R. Barker, 1968, Ecological psychology. Stanford, CA: Stanford University Press.) (Contributed by Bryan D. Midgley)

The Interbehavioral Field: An Introduction

Edward K. Morris

Every relatively adequate psychological system has, at its basis the scientists who establish and maintain the system -- science is, ultimately, the behavior of scientists. Second, adequate systems have a philosophical world view that describes the broad metatheoretical commitments of its scientists (whether known or unknown to them) and that reflects more specific criteria for what constitutes (a) an adequate theory, (b) meaningful and appropriate research and research methodology, and (c) proper explanations for empirical findings. And third, adequate systems have a basic conceptual unit of analysis that brings into focus and makes explicit the necessary and sufficient factors to be encompassed by the theory. The purpose of this paper is to describe interbehavioral psychology's basic unit of analysis -- the interbehavioral field.

In so doing, I provide, where possible, parallel concepts from behavior analysis, and occasionally draw some comparisons and contrasts between the two systems (see also Morris, 1982, pp. 197-209). These comparisons and contrasts, though, will be kept to a minimum, because that would take us into an arena where the commonalities (Morris, 1982, 1984; Morris, Higgins, & Bickel, 1982, 1983) and differences (Parrott, 1983, 1987) between the two systems are not a settled matter.

The Interbehavioral Field

The basic conceptual unit of analysis in interbehavioral psychology is the ever-evolving interbehavioral field which, when excised from the stream of behavior for examination, is referred to as the "behavior segment." As shown in the figure on the next page, the behavior segment is composed of five conceptually separable, but in actuality, inseparable factors: (a) the organism and (b) the stimulus environment -- the two most obvious factors -- and the contexts for the interactions between organism and environment, those being (c) their medium of sensory contact, (d) their setting factors, and (e) their interbehavioral history.

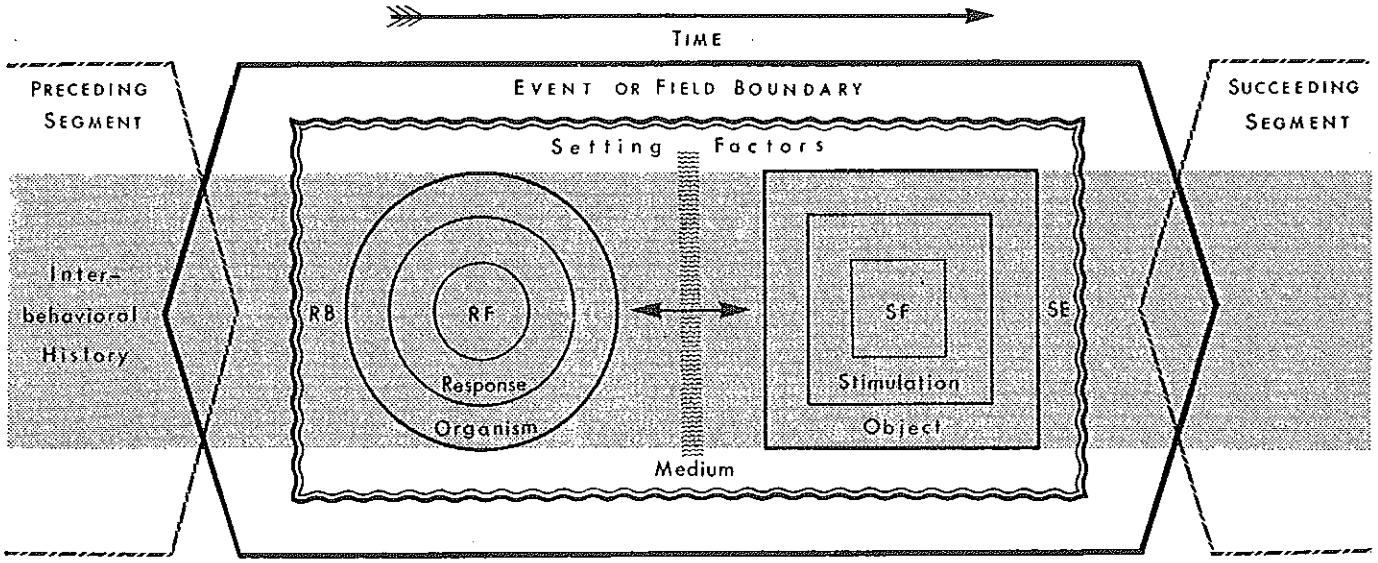
Several of these factors may be described in further detail, though any particular level of analysis, like the factors more generally, is not actually separable from the other levels or from the behavior segment as a whole. These descriptions range from being explicitly described for a particular factor, to being implicit in the factor's representation in the behavior segment, to not being formally distinguished within the segment at all.

As for the factors having explicit levels of analysis, the figure depicts the organism as a set of concentric circles and the stimulus environment as a set of embedded squares, both representing three systematic ways of understanding those factors -- ways that elucidate the manner in which organism and environment participate at every level in the interbehavioral field.

The factor with the more implicit level of analysis is the interbehavioral history, that is, the historical context that establishes the initial basis for organism-environment interactions. The interbehavioral history is indicated to the left of the main behavior segment in the figure, and is composed of two subcomponents: first, the organism's "reactional biography," abbreviated "RB" to the left of the concentric circles, and second, the environment's "stimulus evolution," abbreviated "SE" to the right of the embedded squares.

Not formally distinguished in terms of any levels of analysis are the setting factors and the medium, comprising largely the current context which enables and actualizes organism-environment interactions. Setting factors may, however, be characterized as having two separable features. First, setting factors have a physical character in that the material nature of the organism and environment "enable" (or not) the occurrence of particular interactions. Second, setting factors have a functional character in that they influence what organism-environment interactions will be "actualized" (or not) given that they are physically enabled.

As for the medium of contact between organism and environment, no subsystems are offered within interbehavioral psychology, except perhaps that the media may be organized according to the



different systems involved in the five senses -- seeing, hearing, touching, smelling, and tasting.

Conclusion. That, then, is an overview of the interbehavioral field, the behavior segment, and the five factors (and their different levels of analysis) that comprise the segment. In the material to follow, I describe the five factors and their subsystems more specifically, beginning with the organism and the stimulus environment, and then moving on to the historical and current contexts.

Organism and Environment

The organism. The participation of the organism within the behavior segment occurs, as described before, in three different levels, each typically more interesting to us as psychologists. As depicted in the figure by the concentric circles, the outer circle represents the organismic equipment, the middle circle represents the response form, and the center circle represents the response function.

The organismic equipment refers to no more and no less than the organism's entire biological structure and functioning -- its anatomy, physiology, and neurology -- as instantiated through species phylogenic and individual ontogenic history. The comparable behavior-analytic concept here might be the "response equipment" of the organism.

The mechanistic metaphor notwithstanding, the organismic "equipment" is not a static participant within the interbehavioral field, but rather is a continually changing participant -- changing as a consequence of its continued interactions with the other field factors. For instance, the organismic equipment develops and is altered as a function of sensory exposure, functional use, maturation, disease, and injury. Although not an efficient "cause" of behavior, the organismic equipment is nonetheless necessary for and participates in all psychological activity (cf. Kantor, 1947).

A second way in which the organism may be understood is in terms of its response forms, represented in the figure by the middle concentric circle. The response form refers to the (in principle) physically measurable activity the organism is said to be engaging in when behaving -- or, more precisely, when "interbehaving" with a stimulus. The form of this activity may be relatively simple and discrete, such as a young child's first spoken word or halting steps, or it can be lengthier and more complex, such as spoken adult language and athletic prowess. Comparable behavior-analytic terminology would be the response instance defined topographically: a key peck and a bar press are instances of responding that involve the participating organismic equipment, be those responses inside or outside the skin.

Although respectively necessary for behavior and for the measurement thereof, the organismic equipment and response forms are not what is usually of

compelling interest to us. We are often not so much interested in the material constitutents of activity or in the form it takes, but rather in its function -- that is, in its response function, represented by the RF in the center circle. The focus here is on understanding the organism in terms of the function or "meaning" of its activity within the interbehavioral field.

In behavior analysis, response functions are, in one sense, broadly classified as operant or respondent. In another sense, though, when respondents and operants are analyzed more closely, the comparable behavior-analytic concept is that of the "response class" -- a response class of response forms or instances, either homogeneous or heterogeneous in structure (see Skinner, 1931, 1935).

Two points are critical here. First, the function of a response form cannot be identified (or established, enabled, or actualized) independently of the other factors in the behavior segment. Instead, response functions are defined by those interrelations with the other factors, especially with their corresponding stimulus functions. Just as one cannot identify what operant or response class a response instance is a member of without understanding how it is affected by the environment, so one cannot identify a response function on the basis of its form alone. For example, as Irv Wolf once pointed out when I was a student at Denison University, you cannot tell whether a person running alongside a railroad bed is "training for a run" or "running for a train" on the basis of the response form or topography alone.

The second point is that response form-response function relationships exist in wide dynamic variability and multiplicity. As in the example above, the same response form -- running -- may have either of two functions -- running for a train or training for a run, or many, many more functions, either concurrently or successively, within individuals or across them. Likewise, crying may be either an elicited respondent or an accomplished thespian's operant. Additionally, different response forms, for instance, acting out in class and working studiously, may have the same response function or be part of the same operant -- its function residing in its relationship to teacher attention. In sum, and put in other terms, the means-end, process-achievement relationship is a highly dynamic and variable one from an interbehavioral perspective.

The stimulus. Corresponding to the three ways in which the psychological organism can be understood are three analogous means for analyzing the participation of the stimulus with which organisms interact. Here we turn to the right hand side of the figure to the embedded squares that represent, in order, the stimulus object, the stimulus form, and the stimulus function. Because the following analyses of the stimulus closely parallel those of the organism, I will be briefer, but I hope illustrative.

The stimulus object, represented by the outer square border, is akin to the organismic equipment in that it refers to the material constitution of a stimulus as it exists in nature and with which an organism may interact.

Of more interest to us, though, is the form of the stimulus with which the organism interacts, that is, its structure or form as measured (at least potentially) in terms of its physical characteristics. The stimulus environment, either inside or outside the organism, may be discrete and simple, such as a lit response key, a food pellet, words of social approval, or a toothache, or it may be complex, involving, for instance, the linguistic practices of a community of speakers or the diffuse emotional disquietude felt when presenting a paper at a national convention.

Although the stimulus object is necessary for a world with which to interact, and the stimulus form is necessary for the measurement thereof, we are typically less interested in the form and energy of a stimulus than in its function or meaning within the interbehavioral field (Lichtenstein, 1970). This "stimulus function" is represented by the SF in the central square in the figure. Here, our concern is with understanding the stimulus in terms of its function or meaning for the organism.

Within behavior analysis, stimulus functions are broadly classed as eliciting, discriminative, and reinforcing, though for closer analysis, a stimulus function is usually characterized as a "stimulus class" -- a stimulus class

of forms, either homogeneous or heterogeneous (see Skinner, 1931, 1935).

As with response functions, two points bear emphasizing. First, the stimulus function of a stimulus form cannot be identified (or established, enabled, or actualized) independently of the other factors within the interbehavioral field. Rather, stimulus functions are defined by their interrelations with the other factors, especially with their corresponding response functions. Just as a stimulus cannot be identified as a reinforcer without understanding its relationship to behavior, so a stimulus function cannot be identified on the basis of a stimulus form alone. Verbal approval, for instance, is not a reinforcer on the basis of its form alone, but rather is described as such on the basis of its effect on the rate of responding.

Second, and relatedly, a wide multiplicity of stimulus form-stimulus function relationships exist, such that the same stimulus form may have more than one function, concurrently or at different times, both for the same and for different individuals. Drugs, for instance, may serve eliciting, discriminative, and reinforcing functions -- as well as function as setting factors. Concommitantly, different stimulus forms may have quite similar functions. For instance, verbal approval and verbal disapproval, different by formal definition, may have the same function for classroom behavior: Given an appropriate interbehavioral history and setting factors, both may function as reinforcers.

Summary. To summarize to this point, interbehavioral psychology is focally concerned with the interactions among responses and stimuli in terms of the functional relationships into which they enter. In this sense, the behavior segment is an irreducible whole: It cannot be understood in terms of the formal elementary responses or stimuli alone.

The Context of the Organism-Environment Interaction

There is, of course, more to the interbehavoral field than this -- there is the medium, setting factors, and interbehavioral history, all of which are contexts for the interrelationships among stimulus and response functions. Interestingly, whereas stimuli and responses are explicit in both the interbehavioral field and in the behavior-analytic, operant three-term contingency, the medium, setting factors, and behavioral history have typically been but implicit in the latter, while being explicit in the former -- a point I will focus on in my conclusion.

The medium. The medium refers to the physical means by which sensory contact is made between organisms and their environments. For instance, light and air are, so to speak, the medium for the message. In any event, the medium is not a property of a stimulus, but rather is an enabling condition for contact between organism and environment, which in turn allows realization of their functional relationship. Because changes in the medium (e.g., in illumination) can affect the relationship between organism and environment, interbehavioral psychology is explicit in distinguishing the medium from the other factors, as opposed to simply allowing its implicit inclusion as, for instance, a supplementary condition imbedded in the operant three-term contingency.

Setting factors. Setting factors refer to the effects of the current context in establishing what interbehavior can and will occur -- that is, what interbehavior is respectively enabled and actualized. Because setting factors affect the relationship between responding and stimulation, both formally and functionally, they are shown as surrounding them jointly in the figure. What functional relations can occur depends on the physics of the current context, whereas what relations will occur depends on its function.

The physics of the current context is, in a sense, a reiteration of the first levels of analysis for the organism and the stimulus. That is, setting factors exist materially as both the organismic equipment (i.e., anatomy, physiology, and neurology) and as stimulus objects (i.e., as the physical ecology). As such, the physics of the current context enables (or not) what interbehavioral relationships cannot materially occur. For instance, physical strength and sensory-perceptual capabilities affect what an organism can do, as does the architectural design or ecology of the environment in which an organism lives.

More central to our concerns, however,

is the function of the current context. In interbehavioral terms, this character of setting factors "actualizes" the stimulus and response functions that have been established and enabled, and that may now occur. That is, setting factors establish what behavior will occur by imbuing responses and stimuli with their respective functions or meaning for the present.

At one time, behavior analysis explicitly acknowledged such a factor via Skinner's (1931) concept of "third variables." Involved here were habituation-dishabituation operations affecting the elicitation of respondent behavior and deprivation-satiation operations affecting the reinforcement of operant behavior, but also, for example, the effects of fatigue, emotion, and drugs. Currently, the behavior-analytic function of setting factors is represented by terms that usually specify subclasses of such setting factors in both basic and applied research, for instance, in Bijou and Baer's (1978) and Wahler and Fox's (1981) use of "setting events," in Jack Michael's (1982) suggestions regarding "establishing operations" and "establishing stimuli," in Murray Sidman's (1986) analysis of the "conditional stimulus control" involved in stimulus equivalence, and in Schlinger and Blakely's recent comments on "function-altering, contingency-specifying stimuli," such as rules (Schlinger & Blakely, 1987; Blakely & Schlinger, 1987)

Interbehavioral history. The third contextual feature, and the fifth and final factor in the behavior segment, is the interbehavioral history, the specification of which appears to the left of the main behavior segment in the figure. This history pertains both to the organism, where it is referred to as the "reactional biography," designated with the "RB" to the left of the organism, and it pertains to the stimulus, where it is referred to as the "stimulus evolution," designated with the "SE" to the right of the stimulus.

Interbehavioral history (or the historical context) encompasses part of what behavior analysts refer to as "phylogenic" and "ontogenic" history, though actually the interbehavioral stages encompass inorganic, phylogenetic, ontogenetic, and interbehavioral history. If we may so parse, phylogenic history establishes species-typic biological structure and function for behavior, the ontogenic history establishes the individual-typic biological structure and function, and interbehavioral history begets the individual-typic behavioral structures and functions. Of most concern to us, interbehavioral history establishes what response-stimulus functions may occur and is, as well, a primary source of individual differences in those functions, both across people and within them over time. Spoken of more behavior-analytically, conditioning or reinforcement history establishes the conditioned functions of eliciting, discriminative, and reinforcing stimuli.

Conclusion

My description of the interbehavioral field remains, of course, underdeveloped. As such, its implications and import extend in more directions than a conclusion can properly contend with, but I would like to emphasize one point in closing: Interbehavioral psychology is decidedly contextualistic, as opposed to mechanistic, in world view (Morris, 1982; Reese, 1982; cf. Pepper, 1942). Behavior analysis, in contrast, is commonly cast and castigated for being mechanistic, although it may also be characterized as contextualistic (see S. C. Hayes, 1988; S. C. Hayes, Hayes, & Reese, in press; Morris, 1988, in press).

Interbehavioral psychology has been construed as contextualistic, and not mechanistic, in part, because of its explicit inclusion of contextual factors within its unit of analysis -- the media, setting factors, and interbehavioral history. In this sense, interbehavioral psychology may be said to hold to a context theory of meaning in that stimuli and responses have no meaning in and of themselves, but only in context.

A similarly explicit rendering of context within behavior analysis might usefully suggest contextualism as well, because context is categorical in contextualism, and might mitigate against presumptions about mechanism. In doing so, that account might begin to clarify many of the misunderstandings about behavior analysis, especially that it does not account well for intra- or interindividual differences -- differences that have led others to posit hypothetical biological and cognitive constructs to account for such

variability. The phenomena referred to by biology and cognition in these cases, sometimes proposed as two new terms (Molloy, 1984) for the three-term contingency, are generally handled quite well by the historical and current context (Morris, 1985). A five-term contingency that included not biological and cognitive constructs as the two additional factors, but rather the historical and current context, might make behavior analysis more outstanding in its field.

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