

# THE INTERBEHAVIORIST

A Quarterly Newsletter of Interbehavioral Psychology

Published at the University of Kansas

Volume 12

Fall, 1983-1984

Number 5

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## QUOTATION

Almost 50 years ago, Kantor (1924) argued eloquently against the use of psychology of metaphysical abstractions, which find extreme representations in the "bodyless mind" of the psychics and the "mindless body" of the mechanists. His analysis retains its timeliness.

- Kanfer and Karoly,  
*Behavior Therapy*,  
1972, 3, p. 399.

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A Quarterly Newsletter of  
Interbehavioral Psychology

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The Interbehaviorist is a quarterly publication of news, discussion, and articles pertaining to interbehavioral psychology -- a natural science of psychology from a contextualistic, integrated-field perspective. The Interbehaviorist serves as a newsletter committed to professional communication that falls between informal letters and colloquia, and formal archival publication. As such, the newsletter supplements contemporary journals in the behavioral sciences dedicated to basic and applied research and to the history and philosophy of the behavioral sciences. The newsletter actively encourages reader submission of articles, book reviews, commentaries on publications of interest, observations on current practices and trends in the behavioral sciences, convention and conference notes, bibliographies (annotated or not), and news of interest about the professional activities of interbehaviorists.

\* \* \*

Contributions should be submitted to the editor in triplicate and should conform to the style described in the publication manual of the American Psychological Association (3rd ed., 1983). Submitted articles will undergo a regular review process through the members of the editorial board. For other submissions, the editor reserves the right to make minor editorial and stylistic changes.

\* \* \*

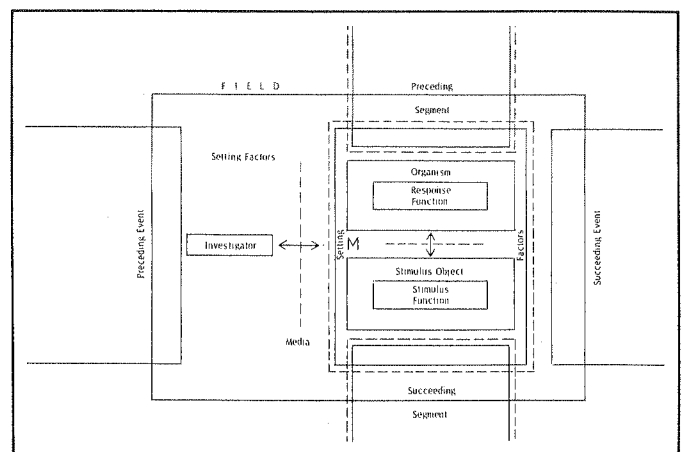
The support of the faculty and staff of the Department of Human Development at the University of Kansas is gratefully acknowledged.

NOTES FROM THE FIELD

Two important awards were given at the recent APA meetings. First, Sidney W. Bijou received the Edgar A. Doll Award from Division 33 (Mental Retardation) and, on that occasion, gave a paper entitled, "Challenge Ahead for the Field of Retardation." Second, Gerald R. Patterson was presented with APA's Distinguished Scientific Award for the Application of Psychology. In addition to papers given by Sid and Gerry, other newsletter subscribers were also involved in presentations: Atwater, Baer, Cone, Daurette, Delprato, Epstein, Fox, Higgins, Mountjoy, Kanfer, Krasner, Larsen, Morris, Mountjoy, Parrott, Sarbin, and Todd. Good showing, interbehavioral psychologists!

Among recent publications by subscribers are: David Cornwell and Sandy Hobbs's "Behavioral Analysis of Metaphor" (The Psychological Record, 1984, 34, 325-332); Sandy Hobbs's set of book reviews entitled "The Ecological Validity of Research in Social Psychology" (The International Journal of Sociology and Social Policy, 1983, 3, 83-87); and Noel W. Smith's "Illusions and Counter-Illusions or Aesthetic Effects in Greek Temples" (Storia e Critica della Psicologia, 1983, 4, 157-170). Also of note are book reviews in the summer issue of The Psychological Record by Donna M. Cone, Paul T. Mountjoy, and N. H. Pronko.

We are pleased to announce the success of our subscribers in their respective fields. However, while we can keep our eyes on quite a few journals, we cannot cover them all. We need to expand our media of contact (so to speak), and so would appreciate receiving reprints of (or citations to) your publications so that we can note them in this column.



## THE AGORA

This issue completes my first volume (1983-1984, Vol. 12) as editor of The Interbehaviorist. I was complimented to be offered this position and have found the responsibilities exciting, educational, and gratifying. These characteristics of my tenure, though, are the result of the contributions and support of many people, whom I would like to thank.

First, I want to thank Rose Roberts, who processed so many of our words and who tolerated my compulsive idiosyncracies with competence and good humor. Among the others to whom I wish to express appreciation are Judith M. LeBlanc and James A. Sherman, Co-chairs of the Department of Human Development, who made staff time and other sundry support available throughout the year; Robert C. Bearse, Associate Vice-Chancellor for Research and Graduate Studies, who gave professional and financial support that was important for the continued publication of the newsletter; John G. Saylor, Director of the Kansas University Printing Service, who provided friendly, careful, and pragmatic advice on publishing, and who oversees the least expensive (not "cheapest") printing service in town; the Associate Editors, who provided personal support and the products of their prodigious scholarship; and the Editorial Assistants, who were so very wise and cheerful in their critiques and careful reading of the material that has been published. Lest I seem autistic, however, let me also thank all the new and renewed subscribers of the newsletter. You are the newsletter's reason for being.

### The Year in Review

This year has been a good one for The Interbehaviorist, at least from a non-financial standpoint. We began the year with about 65 subscribers, and have ended with about 140. We are listed in Blackwells, Faxsons and Swets subscription services and are pursuing ways to make the newsletter more widely and easily available. With the completion of the volume, we will have published five issues this year, thereby catching up to our responsibilities from the previous volume. The new format has met with positive comment, though improvements may always be made. Finally, manuscript submissions

have increased slightly in the last several months. We are pleased with this growth, but must not stop here.

As suggested above, the financial status of the newsletter is not what we would like. Extra one-time expenses accrued for start-up with a new printer, special mailings, and the extra issue in this volume. We also face continuing increases in printing costs, and are likely to face a postal increase soon.

At present, we print 200 copies of each issue, of which about 145 are mailed. If we had 200 subscribers, the cost of printing and mailing a typical 12-page issue would come to \$4.50 a year for an individual subscriber; for the 140 subscribers, the cost per individual per year is considerably higher. We were able to complete this year in large part through money Ron Heyduk left in the newsletter's account, through the sale of back issues of the newsletter and of Harry Mahan's book, and through generous gifts from a few individuals.

We have explored several ways to decrease our costs per subscriber. First, we could increase the number of subscribers, which is our ultimate goal. Moreover, once at 200 subscribers, we can use bulk mail service, which is considerably less expensive. We are also pursuing the development of a non-profit educational status, which will lessen our postage expenses even more. Second, we could find a less expensive printer, but the University of Kansas Printing Service already has the lowest rates. Finally, we could print in a less expensive format. We think, however, this would detract from what scholarly appeal we have, and hence we are reluctant to pursue this avenue. If you, the subscribers, have additional suggestions for lowering costs, we would be pleased to have them.

The alternative to decreasing the costs, of course, is to increase income. As mentioned above, we will continue to seek ways to increase the number of subscribers. Recently, for instance, we contacted all past subscribers, some of whom have resubscribed (see "Subscriptions" below) or asked for sample copies. We will also seek to increase purchases of back issues of the newsletter and Harry Mahan's book. More directly, we can increase subscription rates, which we are afraid we must do. These increases are, we think, warranted on the basis of

inflation and to what we hope you think is a stylistically improved product. The overall increase will not itself cover expenses, but with the addition of more subscribers and reductions in postage, we can break even on four 12-page issues a year. We would like to publish longer issues, and will use any surplus for that purpose. The new subscription rates are as follows:

|                      |           |
|----------------------|-----------|
| Regular Subscription | \$ 6.00   |
| Student Subscription | 4.00      |
| Foreign Subscription | 8.00      |
| Institution          | 10.00     |
| Back volume (12)     | see above |
| Back volumes (1-11)  | 4.00 each |
| Student, per set     | 15.00     |
| Regular, per set     | 25.00     |
| Institution, per set | 40.00     |

You will note that student subscriptions are below cost, but we think this discount is important in order to encourage as much student participation as possible, for students are surely the future of the field. We hope that you can bear these increases and continue to support the newsletter. We think this change is essential for the future of the newsletter and important for interbehavioral psychology in general. By the way, now is the time to resubscribe -- see insert in binding. Thank you for your support.

#### The Mahan Book

As mentioned in previous issues of the newsletter, Harry Mahan (Project Socrates) has generously donated the remaining copies of his text, The Interactional Psychology of J. R. Kantor: An Introduction (Mahan, 1968), to us for resale to finance the remaining two issues of this volume. The book is available for \$5.00 (U.S. postage paid; \$7.50 foreign postage paid).

The book contains, in order, a full-page photo portrait of Professor Kantor, a preface, and chapters on the nature of psychology, personality, learning interactions, habit interactions, affective reactions, implicit reactions, attention reactions, and perceptual reactions. The book ends with a bibliography of J. R. Kantor's works up through 1983. Professor Mahan would be pleased to receive any comments you might have on the book or any other matters pertaining to interbehavioral psychology.

#### Kantor Memorials

A special memorial paper session was held in honor of Professor Kantor at the 7th Mexican Meeting of Behavior Analysis in August. Papers were presented by Linda Parrott, Ely Rayek, and Emilio Ribes that covered Kantor's career, his contributions to our understanding of behavior, and his contributions to the theory of psychology in general. A similar session also took place at the XXIII International Congress of Psychology in September, this time with the participation of Sid Bijou, Linda Parrott, and Emilio Ribes.

We want to thank those who have contributed to the Kantor Memorial Fund, which serves as the basis for the long-term financial stability of The Interbehaviorist. The current Fund stands at \$654, reflecting the generous contributions of Don Blomquist, Dennis Delprato, Helene J. Kantor, Harry Mahan, and Doug Ruben. No contribution is too small.

#### Subscriptions

Several subscribers wrote or called to say they had not received the last issue (Vol. 12, No. 4) of the newsletter. We had experienced some problems with postage on that issue, so if you did not receive your copy, please write or call. We will send another copy posthaste. Also, if your copies arrive tattered and torn, we would be pleased to replace them.

As mentioned above, the subscription list now numbers about 140 individuals, which is about double what we began with in mid-1983. We are delighted with these gains, which could not have been achieved without the assistance of those who promoted the newsletter so vigorously. That assistance has been greatly appreciated. Our goal for next year is to double the size of the subscription list again. To do so, we will continue to need your assistance in encouraging institutions and individuals to subscribe (at the new rates). Perhaps you could consider sending a gift subscription to a friend.

Listed on the back of this issue are the names of all subscribers to the current volume. If you have paid for your subscription, but your name does not appear, please let us know. For those who are interested, a mailing list is available upon request. Listed below are

the new and renewed subscribers for the next volume of the newsletter

#### New Subscribers

Robert Deitchman  
E. J. Hovorka  
Benjamin F. Gillis  
John M. Grossberg  
Seymour Rosenberg  
Albert Silverstein  
E. R. Venator

#### Renewed or Continuing Subscribers

Donald A. Blomquist  
Arthur Kahn  
Maria M. A. Matos  
Mary Ann Scafasci  
Wanda Smith  
Yoshikazu E. Tomiyasu

#### New Programs at the Cambridge Center

The Cambridge Center for Behavioral Studies was founded in 1981 as an advanced studies institute and library, along the lines of the Center for Advanced Study in the Behavioral Sciences at Stanford. Distinguished board members include Nathan H. Azrin, Sidney W. Bijou, Donald M. Baer, Joseph R. Cautela, I. Bernard Cohen (Victor S. Thomas Professor of the History of Science at Harvard University), Hans J. Eysenck, Donald O. Hebb, David H. Hubel (Nobel laureate), Fred S. Keller, Ogden R. Lindsley, Gardner Lindzey, Jean Mayer (President of Tufts University), Neal E. Miller, W. V. Quine (Edgar Pierce Professor of Philosophy Emeritus at Harvard University), Janet T. Spence (Past President of the American Psychological Association), Roger W. Sperry (Nobel laureate), Joseph Wolpe, and many other leaders in the academic world. The Center is an affiliate of the Massachusetts Psychological Association. For further information, contact Ms. Janice K. Olson or Dr. Robert Epstein at the Center, 11 Ware Street, Cambridge, MA 02138, or call 617-495-9020.

The Center has recently announced several new programs that should interest many readers. These are described in the following paragraphs.

Press office. The Center has established many contacts with the media for the purpose of informing the public about advances in behavioral psychology and related disciplines. Any individual involved in basic research or applied disciplines may make use of this new

facility. If you feel that you have accomplished something noteworthy -- the successful application of an existing therapy, the development of a new technique in therapy, education, or business, the discovery of a new phenomenon in research -- send an account of it to the Press Office, care of the Center. Your material will be edited and transferred to the Center's press release forms and then mailed to contacts in various branches of the media. For especially important news, the mailing will be followed up by phone calls. Be sure to include a contact number, so that someone can call you for further details; please also specify a release date on the material.

Internship program. The Center has now begun an internship program for talented undergraduates and graduate students. Qualified students will be selected as interns for one or two semesters. Inquiries can be made by phone or in writing. Preferably, nominations should come from a faculty member or practicing psychologist, but students may also contact the Center directly. Students may become involved in many different activities, depending on their background and interests. For example, the Center publishes both an academic journal (Behaviorism) and a book series (Progress in Behavioral Studies, co-published with Lawrence Erlbaum Associates). Students are responsible for many aspects of these publications: copy editing, proof reading, typesetting, printing, distribution, and so on. There are also opportunities for students to help organize the Center's library, to catalog archival materials, to restore historical items, to conduct research in an animal behavior laboratory, and so on. Exceptional students will be provided with word processing systems for their places of residence.

Contributions to the Center's collections. The Center welcomes contributions of books, journals, archival material, and items of historical significance. The Center's current holdings include a dozen different types of early teaching machines (including one of Skinner's original desk machines), an aircrib, the original Sidman avoidance box, an early cumulative recorder, and many other noteworthy items. Contributions are fully tax deductible, since the Center holds 501(c)(3) status

with the IRS. For further information, write to Ms. Laurie J. Averill, Acting Librarian, at the above address.

Thesis program. The Center will house and index masters theses and doctoral dissertations in behavioral psychology and related disciplines. Individuals who have completed theses or dissertations are invited to submit one bound, labeled copy to Ms. Averill.

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#### JOURNAL AND BOOK NOTES

We encourage readers to submit brief book and journal notes for this section of the newsletter.

Cromwell, R. L. (1984). Schizophrenia: A right and just war. [Review of Schizophrenia: The epigenetic puzzle.] Contemporary Psychology, 29, 112-115.

Though not necessarily an inter-behavioral review of Irving I. Gotteman and James Shield's text (Cambridge University Press), Cromwell's last paragraph contained this interesting material:

In the same sense that J. R. Kantor used C. C. Pratt's The Logic of Modern Psychology (MacMillan, 1948) as a textbook to illustrate philosophical shortcomings in Pratt's view of Watsonian behaviorism, this book would be useful as a text to illustrate how certain assumptions (and a lack of others) can affect the direction of research and block out useful areas of investigation. The book is an accurate body count of a right and just war that has failed because of an incomplete strategy (p. 115). (Edward K. Morris, University of Kansas)

Hayes, S. C. (1984). But whose behaviorism is it? [Review of Behaviorism, science, and human nature.] Contemporary Psychology, 29, 203-206.

In this excellent review of B. Schwartz and H. Lacy's Behaviorism, Science, and Human Nature (New York: Norton, 1982), Steve Hayes acknowledges an important similarity between radical behaviorism and interbehaviorism. Hayes describes one of the philosophical assumptions of radical

behaviorism as: "functionalism in the development of psychological analyses and [in] the definition of psychological terms, including a dynamic, organic, interbehavioral perspective on the definition of psychological terms" (p. 205). Hayes' explicit description of the organismic, interactional nature of radical behaviorism is important because this stands in sharp contrast to the naive, simplistic account of behaviorism presented in Schwartz and Lacy's book. All contemporary behaviorists should work together against such misrepresentation. Subsequent issues of Contemporary Psychology (CP) contain two exchanges of views between Hayes and Schwartz and Lacy on the nature of radical behaviorism (see CP, 1984, 29, 676-678, and CP, 1984, 29, 833-834). (James T. Todd, University of Kansas)

Manicas, P. T., & Secord, P. F. (1983). Implications for psychology of the new philosophy of science. American Psychologist, 38, 399-413.

For the most part, the philosophies of science that have developed since the beginning of this century have been characterized by dualism, solipsism, or a priori logical assumptions concerning the nature of scientific activity. In the Logic of Modern Science, though, J. R. Kantor presented what is perhaps the first truly scientific approach to the philosophy of science. Unfortunately, Kantor's book has been largely ignored by scientists in general and psychologists in particular, the latter of whom might benefit the most from Kantor's formulations.

The recent publication of Manicas and Secord's (1983) "Implications of the New Philosophy of Science for Psychology," however, is an encouraging sign that some logicians of science are headed in more naturalistic directions. Drawing heavily on the work of Tomulín, the authors provide a cogent (though difficult to read) critique of the old philosophies of science and then set forth the major tenets of what they consider to be the new philosophy of science. Although Kantor's work is not cited, many of the major tenets of this new philosophy of science are compatible with interbehavioral views. For instance, Manicas and Secord reject solipsism and adopt a position that

integrates both the realist and fallibilist perspectives. The authors believe that a world exists independent of the scientist's experience. Scientific knowledge is thus "constructed" through contacts with the world, but can never be said to be the truth of that world. In addition, and perhaps more important, the authors generally reject reductionistic and mechanistic views of causality, and embrace more contextualistic, field-theoretic views. The authors also demonstrate the wide applicability of their system by showing its relevance to almost every major area of psychology.

The authors' views, however, could be usefully supplemented and strengthened by an interbehavioral philosophy of science, especially with respect to two issues. First, while the authors reject most aspects of mechanistic views of causality, they still imbue particular aspects of field events with "causal powers." Second, an a priori logic of science still lingers implicitly in their writing. Nonetheless, Manicas and Secord have performed a valuable service to psychology and other sciences. (Replies to this article may be found in the American Psychologist, 39, 917-926.) (Steve Larsen, University of Kansas)

Zinberg, Norman E. (1984). Drug, set, and setting: The basis for controlled intoxicant use. New Haven: Yale University Press.

Zinberg explores how drugs (e.g., composition and dose), sets (e.g., interbehavioral history, organismic context), and settings (e.g., environmental context and media of contact) interact to produce controlled or uncontrolled drug use. If readers can overcome the psychiatric flavor of the book, they will find portions of Zinberg's analysis quite interbehavioral. For example, Zinberg's contextual views on drugs can be gleaned from the following quote: "As for the power of drugs, the notion that the pharmacological properties of a drug, irrespective of set and setting, are the sole determinants of disturbed or violent behavior dies hard. There is considerable evidence to the contrary..." (p. 31). In other words, drug taking and its effects cannot be separated from the contexts in which they occur. In Zinberg's own longitudinal

study reported in the book, subjects were interviewed extensively about various contextual factors: family, work, school, friends, drug history, drug use, etc. Such research is a step in the right direction in the search to understand all the participating factors in drug-behavior interactions. (Lisa M. Johnson, University of Kansas)

\* \* \*

ARTICLE

A Brief Commentary on  
Autistic Abstraction vs. Confrontation  
with Things and Events: Reinforcing Power  
and Generalization

Dallas W. Stevenson and  
Michael J. Hemingway

Wayne State University  
Obesity and Risk Factor Clinic

Setbacks in behavioral scientists' attempts to construct a natural science of human behavior often occur when we forsake lucid description of the interaction of things and events for culturally valued "explanations" of the phenomena we study. Take two examples.

First, in their useful introductory text, Martin and Pear (1978) attempt to describe a behavioral phenomenon by stating, "...when backward chaining is used, the reinforcing power of the positive reinforcer (presented at the end of the chain) is transferred down the line to each [discriminative stimulus] as it is added to the chain" (p. 149). In their attempt to explain, Martin and Pear have taken a technical language that was designed to describe a particular phenomenon observed in nature, and introduced some unobservable force -- the power of the reinforcer -- which somehow mystically moves from stimulus to stimulus.

Second, consider the topic of generalization. Stokes and Baer (1977) have attempted to address the troublesome issue of generalization in applied behavior analysis, and they offer several important suggestions for the practitioner. Their use of the term generalization, however, and its subsequent use by others, is problematic. Practitioners have stated that treatment

failures may be the result of failing to achieve "generalization" of behavioral interventions. Use of the term in this fashion leads to the following position: In the situation where the scientist can account for the critical participating field variables, he or she describes them, while everything else is attributed to "generalization."

As Kantor (1981) has long maintained, an important rule in the construction of a natural science is that we must take great care to anchor our descriptions in the phenomena we study. When we talk about our descriptions apart from our subject matter, we are in danger of leaving the scientific domain and entering into competition with the brothers Grimm in the myth-making business. Such attempts at explanation are substituted for careful scientific inquiry. Johnston and Pennypacker (1980) and Kantor (1981) have warned against the use of terms and the creation of verbal abstractions that carry with them explanations not anchored in observation. If behavioral science is to progress, behavioral scientists must monitor their writing and verbal behavior with respect to this issue.

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#### ARTICLE

Do We Need the Concept of Mind  
in Psychology?

Noel W. Smith

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at Plattsburg

Let us begin our approach to this question by looking at some terms that are now related to psychophysical dualism, but that originally were not.

PSYCHE to Aristotle meant the life functions of the organism, including nutritive and reproductive acts, locomotion, sensing, and thinking. Psyche, he said, is to the body as cutting is to the ax. Psyche is what the organism does -- its most characteristic acts. Aristotle developed a systematic psychology around this usage that included sensing, thinking, remembering, imagining, and dreaming. He seemed to be at no disadvantage for not having psychophysical dualism.

SPIRIT in Latin originally meant, quite simply, breath, and not any metaphysical entity.

SOUL in Old English, as used in Beowulf, referred to life itself or components of the body, such as blood, that were associated with life and with life actions, such as thinking.

MIND goes back to Indo-European origins, perhaps 4000 years ago or more, to men-, which meant "to think," "remember," or "intend." It is possibly related to "man," meaning "the one who thinks." It was not an entity or agent or internal process, but thinking activity.

"Mind" (as gemynd) is first recorded in English in the year 971 and was used as the action of thinking about something, as in the phrase "to have mind of," or to intend, as in "have a mind to" (Oxford English Dictionary on Historical Principles, 1983). It was not until 1125 that mind came to be something distinct from the body, a practice that was influenced by Christianity. Mind then became the seat or agent of perceiving, thinking, willing, etc. and was contrasted with matter.

Psychophysical dualism is a relatively recent creation. It is not an inevitable or necessary way of thinking. How did it arise? I can only take the time for a brief glance at a long and complex history. It arose as a retreat or a turning inward and away from a cruel world that existed through the Hellenistic and Graeco-Roman times. It began in the School of Alexandria about 200 B.C. and was refined and carried to greater levels of abstraction by the theologians such as Clement of Alexandria, Origen, Hippolytus, Gregory of Nyssa, and others and by that



supreme mystic, Plotinus. There were a few opponents of this way of thinking. Lucretius (*De Rerum Natura*), for example, argued that there could be only matter and space and no third thing, but his was a voice in the wilderness during a period of great social insecurity. The overwhelming need was not for rationality, but for a belief in a nonphysical psychological agent that would survive the destruction of the body and live in a paradise in the hereafter. This was vital to oppressed and insecure people.

Once psychophysical dualism had been created, no effort was made to resolve it until the 17th century. Descartes declared, quite illogically, that mind and body interacted, and he was severely criticized by other philosophers. Leibnitz said that mind and body operated in parallel without any contact with each other; they were set on this parallel course by the Creator. Spinoza held that mind and body were but two aspects of a single thing -- nonphysical mind when looked at from the inside and physical body from the outside. The French materialists argued that mind was a by-product of the body, something the body produces. These and other attempted solutions all failed because two contradictory constructs cannot be brought into interplay or mutual influence. Unfortunately, no one seemed to recognize that these arguments completely avoided any reference to actual events.

The arguments continued into the 20th century. John Watson pronounced that there was only a behaving body without a mind. He lopped off one-half of the dualism, thereby implicitly acknowledging it. A favorite current argument is that brain and mind are one. The brain thinks, interprets sensations, and processes information. This homunculean brain has the same metaphysical status as mind or soul, and the same insurmountable problems.

Aristotle did not need psychophysical dualism for his psychology. Do we need it for ours? By way of answer I will offer three brief examples of alternatives to dualism. First, let us consider the case of someone who is preparing for a formal debate. The individual sits quietly thinking of some arguments that will be useful in the debate. This interaction would be unobservable to another observer, although special instruments might provide

indications that the individual was thinking about something, a behavior that some might call mental. As this individual continues to think about the arguments, he becomes slightly more animated. He mumbles and gestures slightly. The interaction is now slightly observable. As he continues further in this activity, he becomes increasingly animated until he is speaking out loud and gesturing fully just as he would in an actual debate. The interaction has varied on a continuum from unobservable to observable (or covert to overt), but at what point has it changed from mental to physical? Is there any difference in principle between the interactions at any point on the continuum? Are these not just all confrontable interactions that vary in degree of subtleness or of observability?

As a second example, let us consider so-called psychosomatic disorders. The term "psychosomatic" means that the psyche, not in Aristotle's sense but in the sense that the Church Fathers gave it, is acting on the body, the soma, causing malfunction or tissue damage. In the case of ulcers, a mental or psychic disturbance is said to act destructively on the body. The alternative approach can be stated very briefly: A prolonged stress situation involves a configuration of reactions including excessive gastric secretion and resulting ulceration as part of the interaction.

A final example comes from studies on perceptual constancies. The usual account is that a brain process makes adjustments to objects viewed at different angles, distances, and brightnesses and gives a read-out such that things look the same regardless of these changes. For example, we see a table as rectangular regardless of our viewing angle even though a rectangle is subtended on the retina only when we view the table from directly above. This is said to occur because our brain somehow processes the parallelograms or other nonrectangular images that appear on the retina and reinterprets them as a rectangle. We then have an internal representation of a constantly rectangular table. Instead of adapting an explanation by recourse to a metaphysical brain and a resulting double world (one inside and another outside), we need simply note that people respond to things in accordance with their meanings, and that meanings are

developed through a history of interactions with them. A table looks rectangular to me regardless of my viewing angle, not because of some mysterious brain process, but because of my history of contacts with such objects. These objects look to me in accordance with what they mean to me, and what they mean to me consists of my history of interactions with them.

In conclusion, I suggest that if we start our inquiry or our investigation with confrontable events, we do not need metaphysical constructs. We are susceptible to them because of our cultural indoctrination which leads us implicitly to assume such constructs and then impose them on whatever we observe. The remedy is to start with events, develop our constructs from events, and keep our constructs consistent with the events. With this direct approach, "mind" would disappear from psychology and never be missed. It could then revert to the theologians and mystics from which it sprang.

[This paper was presented at the State University of New York at Plattsburg, February 23, 1984, in a panel discussion on the topic "Is the Concept of 'Mind' a Necessary One in Psychology?"]

\* \* \*

#### ARTICLE

#### On Reciprocal Behavioristic Concerns

Jay Moore

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I recently spent a few moments considering whether we are realizing a genuinely behavioristic psychology as effectively as we might, given that there are probably now a greater number of interbehaviorists and radical behaviorists active than ever before. I reluctantly reached the conclusion that we are not. I would like to take this opportunity to share my thoughts on this important matter in the context of an answer to the following question: What factors seem to be inhibiting the interaction between interbehaviorists and radical behaviorists in pursuit of the common goal of a truly effective science of behavior?

It seems to me that there are factors on both sides. Indeed, according to an integrated-field analysis, how could it be otherwise? Let me speak frankly to two matters that in my experience have been of concern to radical behaviorists about interbehaviorists. First, radical behaviorists often express concern about the apparent absence of a "research program" among interbehaviorists, and not finding what they seek, turn away from what interbehaviorists actually have to offer (for further discussion of this issue, see Verplanck, 1983). For my part, I do not feel that this sort of concern is valid, and the loss is the radical behaviorists'. Any systematic enterprise in which stimuli are manipulated, and responses measured, counted, or recorded, with the aim of describing the constituent factors of things and their participation in events, is a research program. A research program does not have to conform to a particular style, technique, or even employ an idiosyncratic piece of apparatus. Kantor would probably argue that it would be inappropriate for experimentation to be so constrained. Moreover, much of interbehavioral scientific effort is interpretative in nature, and it is ironic that radical behaviorists, who place much value in the interpretative work found in Skinner's Verbal Behavior, criticize interbehavioral interpretative work.

There is, however, a second concern that is perhaps more substantive. It seems to me that all too frequently, interbehaviorists end up including Skinner among the traditional figures whose approaches they reject, with the result that interbehaviorists inadvertently end up endorsing alternative approaches to doing science, particularly those that they take as emphasizing the psychological, constructional processes of the scientist. Although anyone's approach to doing science is worthy of inspection, it seems to me that interbehaviorists then run the risk of becoming quickly trapped up by mentalistic formulations of the behavior of the scientist, a risk that Skinner has repeatedly tried to bring to everyone's attention in the context of criticisms of "the operationism of Boring and Stevens." Kantor himself warns against confusing statements about events with the events themselves; his injunction focuses upon Berkeleyian constructionism

and attendant attempts to define a phenomenon that was held to be from a "subjective" dimension in ostensibly "objective" ways. For example, conventional operationism may be unmasked as a rather explicit endorsement of dualism, and presumably may be rejected on that basis (see discussion in Kantor, 1945, p. 145). The point is that irrespective of any claim of objectivity, claims that rating scales or observational technique are somehow valid simply because they accommodate the "subjective" constructional processes of the observer/scientist are simply adding to the problem of dualism, rather than relieving it. Recall Kantor (1938): "Why the term subjective in psychology? We are passing...back to medieval times of dividing the universe..." (p. 17). In brief, interbehaviorists must be somewhat more selective as to what approaches they reject and endorse as leading to legitimate formulations of events. In particular, they must take care not to endorse the orientations that are the very source of the problems standing in the way of a genuinely behavioristic psychology.

Let me now speak to what seems justifiably of concern to interbehaviorists about radical behaviorists. It seems to me that most radical behaviorists have a rather mechanistic view of causation, concerned with identifying either the billiard ball effect of a prior stimulus or the supposedly retroactive effect of reinforcement. That is, most radical behaviorists seem to fractionate behavioral events inappropriately into neat little parcels, just so that they can assign causal power to some factor external to the behaving organism. This practice, it could be contended, is just as much in error as trying to assign causal power to some factor internal to the behaving organism. In my experience, radical behaviorists do not seem cognizant of integrated-field approaches, and although Skinner himself does not use the term or principle, his own conceptions seem entirely consistent with event fields of integrated factors: "An operant is a class, of which a response is an instance or a member...A set of contingencies defines an operant...The role of stimuli in defining contingencies is perhaps even more important...Only by surveying many instances can we identify properties of

stimuli and responses which enter into the contingencies" (Skinner, 1969, p. 131-132). Most Skinnerians do not appreciate Skinner's concepts, let alone the elegance of Kantor's approach, and a renewed emphasis on scholarly understanding of Kantor's position would be most profitable. Indeed, an integrated-field perspective, which emphasizes relations among the specificity of the factors involved, might go along way toward preventing such errors as assuming that "the animal comes to the laboratory as a virtual tabula rasa, that species differences are significant, and that all responses are about equally conditional to all stimuli" (see (Breland & Breland, 1961, p. 684). Granted that Skinner himself does not subscribe to the view expressed in the quote above, and never did, there are nevertheless enough who do subscribe to such a view to cause plenty of problems.

The foregoing, as Kantor once said, is only the simplest kind of sketch, with the omission of many details and citations, with the inclusion of only the most abstract contour lines to frame the issue. Perhaps it will be of interest to some readers. If only one researcher re-examines the way he or she does science, then perhaps some good will have come of it.

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