The Behavioral and Brain Sciences

An International Journal of Current Research and Theory with Open Peer Commentary

Volume 4

Number 2

June 1981

Measurement of sensory intensity RICHARD M. WARREN

With Commentary by N. H. Anderson; J. C. Baird; M. H. Birnbaum; D. W. Curtis; D. D. Dorfman; H. Eisler; G. A. Gescheider; D. C. Hood & M. A. Finkelstein; G. J. Iverson; G. R. Lockhead; R. D. Luce; R. J. W. Mansfield; L. E. Marks; E. Mittenecker; I. Pollack; E. C. Poulton; S. J. Rule; B. Scharf & R. Hellman; B. Schneider; R. Teghtsoonian; M. Treisman; A. Tumarkin; W. R. Uttal; W. D. Ward; W. H. Warren, Jr. & R. E. Shaw; G. S. Wasserman; W. A. Yost; G. E. Zuriff, and Author's Response

page 175

A multiple-level model of evolution and its implications for sociobiology

H. C. PLOTKIN and F. J. ODLING-SMEE

With Commentary by J. H. Barkow; D. T. Campbell; I. D. Chase; F. T. Cloak, Jr.; D. A. Dewsbury; D. L. Eckberg; M. T. Ghiselin; D. L. Hull; T. D. Johnston & G. Gottlieb; P. H. Klopfer; S. Lenington; R. C. Lewontin; P. C. Mundinger; A. J. Perzigian; S. A. Peterson; H. R. Pulliam; P. J. Richerson & R. T. Boyd; M. Ridley; M. Ruse; E. E. Ruyle; M. A. Simon; L. B. Slobodkin; P. L. van den Berghe; A. Vetta; D. Wahlsten; G. C. Williams, and Authors' Response

page 225

Categories, life, and thinking MICHAEL T. GHISELIN

With Commentary by M. Bunge; A. L. Caplan; P. A. Corning; W. L. Fink; H. Heise; D. L. Hull; T. D. Johnston; R. K. Jones & A. D. Pick; F. C. Keil; J. B. Kruskal; F. J. Odling-Smee & H. C. Plotkin; A. Packard; E. S. Reed; A. Rosenberg; M. Ruse; S. N. Salthe; S. P. Schwartz; E. O. Wiley, and Author's Response page 269

Dalbir Bindra (1922–1980) D. O. Hebb; G. A. Ferguson

page 315

Cambridge University Press

ISSN 0140-525X

The Behavioral and Brain Sciences

Editor

Stevan Harnad P.O. Box 777, Princeton, NJ 08540

Assistant Editor

Helaine Randerson

Associate Editors

Animal Intelligence
David Premack/U. Pennsylvania

Behavioral Biology

Jack P. Hailman/U. Wisconsin

Cognition and Artificial Intelligence Zenon Pylyshyn/U. Western Ontario

Developmental Psychology Charles J. Brainerd/U. Western Ontario

Ethology and Neuroethology John C. Fentress/Dalhousie

Evolutionary Biology Michael T. Ghiselin/U. Utah Experimental Analysis of Behavior

A. Charles Catania/U. Maryland Baltimore County

Higher CNS Function Robert W. Doty/U. Rochester

History and Systems Julian Jaynes/Princeton

Language and Cognition
Peter Wason/University College London

Neurobiology Graham Hoyle/U. Oregon

Neurophysiology
Barry H. Smith/National Institutes of Health

Neuropsychology Karl Pribram/Stanford

Philosophy
Daniel C. Dennett/Tufts

Daniel C. Dennett/Tut

David S. Olton/Johns Hopkins

Editorial Policy

THE BEHAVIORAL AND BRAIN SCIENCES (BBS) is an international journal providing a special service called Open Peer Commentary* to researchers in any area of psychology, neuroscience, behavioral biology, or cognitive science who wish to solicit, from fellow specialists within and across these BBS disciplines, multiple responses to a particularly significant and controversial piece of work. (See Instructions for Authors and Commentators, inside back cover.) The purpose of this service is to contribute to the communication, criticism, stimulation, and particularly the unification of research in the behavioral and brain sciences, from molecular neurobiology to artificial intelligence and the philosophy of mind.

Papers judged by the editors and referees to be appropriate for Commentary are circulated to a large number of commentators selected by the editors, referees, and author to provide substantive criticism, interpretation, elaboration, and pertinent complementary and supplementary material from a full cross-disciplinary perspective. The article, accepted commentaries, and the author's response then appear simultaneously in BBS.

The service of Open Peer Commentary is primarily devoted to original articles appearing first in BBS, but it will occasionally be extended to a recent book or already published paper widely judged to be particularly appropriate for Commentary. The editorial office will consider recommendations from the BBS readership concerning possible topics, authors or already published materials for future BBS Commentary. (Please consult the criteria for accepting manuscripts in the *Instructions*, inside back cover.)

Commentary on BBS articles may be provided by any qualified professional in the behavioral and brain sciences, but much of it is drawn from a large body of BBS Associates who have become formally affiliated with the project.

A qualified professional is eligible to become a BBS Associate if he or she has (1) been nominated by a current BBS Associate, (2) refereed for BBS, or (3) had a commentary or article accepted for publication. A special subscription

*Modelled on the CA Comment' service of the journal Current Anthropology.

rate of \$29.00/£16.00 (1981) is available to Associates. Individuals interested in serving as BBS Associates are asked to write to the editor.

This publication was supported in part by NIH Grant LM 03539 from the National Library of Medicine.

Copying

This journal is registered with the Copyright Clearance Center, (21 Congress St., Salem, MA 01970). Organizations in the U.S.A. who are also registered with the CCC may therefore copy material (beyond the limits permitted by sections 107 and 108 of U.S. Copyright Law) subject to payment to the CCC of the per-copy fee indicated in the code on the first page of the article. This consent does not extend to multiple copying for promotional or commercial purposes.

ISI Tear Sheet Service, 325 Chestnut Street, Philadelphia, PA 19106, is authorized to supply single copies of separate articles for private use only.

For all other use, permission should be sought from the Cambridge or New York offices of the Press.

Subscriptions

The Behavioral and Brain Sciences (ISSN 0140-525X) is published quarterly in March, June, September and December. Four parts form a volume. The subscription price, which includes postage, of Volume 4 (1981) is US \$89.00 net in the U.S.A. and Canada (£48.00 in the U.K. and rest of the world) for institutions; US \$44.50 net (£24.00) for individuals; and US \$29.00 net for students (in the U.S.A. and Canada only) who provide proof of eligibility with order. Single parts cost US \$25.00 net (£14.00) plus postage. Orders may be sent to a bookseller or, in the U.S.A. and Canada direct to: Cambridge University Press, 32 East 57 Street, New York, N.Y. 10022; in the U.K. and rest of the world to: Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU, England. Second class postage paid at New York, N.Y. Postmaster: send address changes to Cambridge University Press, 32 East 57 Street, New York, N.Y. 10022.

Advertising

Inquiries about advertising should be sent to the Journals Promotion Department of the Cambridge or New York office of Cambridge University Press.