# Investigators in Psychology, Neuroscience, Behavioral Biology, and Cognitive Science

## Do you want to:

- draw wide attention to a particularly important or controversial piece of work?
- solicit reactions, criticism, and feedback from a large sample of your peers?
- place your ideas in an interdisciplinary, international context?

## Behavioral and Brain Sciences (BBS).

an extraordinary journal, provides a special service called Open Peer Commentary to researchers in any area of psychology, neuroscience, behavioral biology, or cognitive science

Papers judged appropriate for Commentary are circulated to a large number of specialists who provide substantive criticism, interpretation, elaboration, and pertinent complementary and supplementary material from a full cross-disciplinary perspective.

Article and commentaries then appear simultaneously with the author's formal response. This BBS "treatment" provides, in print, the exciting give and take of an international, interdisciplinary seminar.

The editor of BBS is calling for papers that offer a clear rationale for Commentary, and also meet high standards of conceptual rigor, empirical grounding, and clarity of style. Contributions may be (1) reports and discussions of empirical research of broader scope and implications than might be reported in a specialty journal; (2) unusually significant theoretical articles that formally model or systematize a body of research; and (3) novel interpretations, syntheses or critiques of existing theoretical work.

Although the BBS Commentary service is primarily devoted to original unpublished manuscripts, at times it will be extended to précis of recent books or previously published articles.

Published quarterly by the Cambridge University Press. Editorial correspondence to: Stevan Harnad, Editor, BBS, Suite 240, 20 Nassau Street, Princeton, NJ 08542. All other correspondence to BBS, Journals, Cambridge University Press, 32 E. 57th Street, New York, NY 10022. "[BBS's corrected 1982 impact factor of 6.370] places BBS in third place [out of 1300 journals indexed]... in the SSCI Journal Citation Reports... an impressive position for a journal that was then in only its fifth year of publication. By the next year, 1983, the citation impact factor for the target articles in BBS was 7.577... now ahead of any other psychology journal. Even more germane to the question of the value of peer open commentary... the total of 119 citations to the commentaries was greater than the total citations to over 91% of the journals reported in SSCI... [G]ood scientists recognize that science progresses most rapidly by building on the ideas and observations of others, by its self-correcting nature, and by the free interaction of competing ideas and evidence."

#### American Psychologist

"... superbly presented ... the result is practically a vade mecum or Who's Who in each subject. [Articles are] followed by pithy and often (believe it or not) witty comments questioning, illuminating, endorsing or just plain arguing ... I urge anyone with an interest in psychology, neuroscience, and behavioural biology to get access to this journal."

### New Scientist

Nature

"The field covered by BBS has often suffered in the past from the drawing of battle lines between prematurely hardened positions: nature v. nurture, cognitive v. behaviourist . . . [BBS] has often produced important articles and fascinating interchanges . . . the points of dispute are highlighted if not always resolved, the styles and positions of the participants are exposed, and mutual incomprehension is occasionally made very conspicuous . . . commentaries are often incisive, integrative or bring highly relevant new information to bear on the subject."

"Care is taken to ensure that the commentaries represent a sampling of opinion from scientists throughout the world. Through open peer commentary, the knowledge imparted by the target article comes more fully integrated into the entire field of the behavioral and brain sciences. This contrasts with the provincialism of specialized journals."

#### Eugene Garfield, Current Contents

"... open peer commentary... allows the reader to assess the 'state of the art' quickly in a particular field. The commentaries provide a 'who's who' as well as the content of recent research."

### Journal of Social and Biological Structures

"... presents an imaginative approach to learning." Library Journal

CALL FOR PAPERS

## **Behavioral and Brain Sciences**

Instructions for Authors and Commentators

Behavioral and Brain Sciences (BBS) is a unique scientific communication medium, providing the service of Open Peer Commentary for reports of significant current work in psychology, neuroscience, behavioral biology or cognitive science. If a manuscript is judged by BBS referees and editors to be appropriate for Commentary (see Criteria below), it is then circulated to a large number of commentators selected (with the aid of systematic bibliographic searches) from the BBS Associateship\* and the worldwide biobehavioral science community, including individuals recommended by the author.

Once the Commentary stage of the process has begun, the author can no longer alter the article, but can respond formally to all commentaries accepted for publication. The target article, commentaries and authors' response then co-appear in BBS. Continuing Commentary and replies can appear in later issues.

**Criteria for acceptance** To be eligible for publication, a paper should not only meet the standards of a journal such as *Psychological Review* or the *International Review of Neurobiology* in terms of conceptual rigor, empirical grounding, and clarity of style, but it should also offer a clear rationale for soliciting Commentary. That rationale should be provided in the author's covering letter, together with a list of suggested commentators. The original manuscript plus eight copies must be submitted.

A paper for BBS can be (i) the report and discussion of empirical research that the author judges to have broader scope and implications than might be more appropriately reported in a specialty journal; (ii) an unusually significant theoretical article that formally models or systematizes a body of research; or (iii) a novel interpretation, synthesis, or critique of existing experimental or theoretical work. Occasionally, articles dealing with social or philosophical aspects of the behavioral and brain sciences will be considered.

The service of Open Peer Commentary will be primarily devoted to original unpublished manuscripts. However, a recently published book whose contents meet the standards outlined above may also be eligible for Commentary. In such a BBS Multiple Book Review, a comprehensive, article-length précis by the author is published together with the commentaries and the author's response. In special cases, Commentary will also be extended to a position paper or an already published article dealing with particularly influential or controversial research. Submission of an article implies that it has not been published or is not being considered for publication elsewhere. Multiple book reviews and previously published articles appear by invitation only. The Associateship and professional readership of BBS are encouraged to nominate current topics and authors for Commentary.

In all the categories described, the decisive consideration for eligibility will be the desirability of Commentary for the submitted material. Controversiality simpliciter is not a sufficient criterion for soliciting Commentary: a paper may be controversial simply because it is wrong or weak. Nor is the mere presence of interdisciplinary aspects sufficient: general cybernetic and "organismic" disquisitions are not appropriate for BBS. Some appropriate rationales for seeking Open Peer Commentary would be that: (1) the material bears in a significant way on some current controversial issues in behavioral and brain sciences; (2) its findings substantively contradict some wellestablished aspects of current research and theory; (3) it criticizes the findings, practices, or principles of an accepted or influential line of work; (4) it unifies a substantial amount of disparate research; (5) it has important cross-disciplinary ramifications; (6) it introduces an innovative methodology or formalism for consideration by proponents of the established forms; (7) it meaningfully integrates a body of brain and behavioral data; (8) it places a hitherto dissociated area of research into an evolutionary or ecological perspective; etc.

In order to assure communication with potential commentators (and readers) from other BBS specialty areas, all technical terminology must be clearly defined or simplified, and specialized concepts must be fully described. Authors should use numbered section-headings to facilitate cross-reference by commentators.

**Note to commentators** The purpose of the Open Peer Commentary service is to provide a concentrated constructive interaction between author and commentators on a topic judged to be of broad significance to the biobehavioral science community. Commentators should provide substantive criticism, interpretation, and elaboration as well as any pertinent complementary or supplementary material, such as illustrations; all original data will be refereed in order to assure the archival validity of BBS commentaries. Commentaries and articles should be free of hyperbole and remarks ad hominem.

Style and format for articles and commentaries Articles must not exceed 14,000 words (and should ordinarily be considerably shorter); commentaries should not exceed 1,000 words. Spelling, capitalization, and punctuation should be consistent within each article and commentary and should follow the style recommended in the latest edition of A Manual of Style, The University of Chicago Press. It may be helpful to examine a recent issue of BBS. A title should be given for each article and commentary. An auxiliary short title of 50 or fewer characters should be given for any article whose title exceeds that length. Each commentary must have a distinctive, representative commentary title. The contributor's name should be given in the form preferred for publication; the affiliation should include the full institutional address. Two abstracts, one of 100 and one of 250 words, should be submitted with every article. The shorter abstract will appear one issue in advance of the article; the longer one will be circulated to potential commentators and will appear with the printed article. A list of 5-10 keywords should precede the text of the article. Tables and figures (i.e. photographs, graphs, charts, or other artwork) should be numbered consecutively in a separate series. Every table and figure should have a title or caption and at least one reference in the text to indicate its appropriate location. Notes, acknowledgments, appendices, and references should be grouped at the end of the article or commentary. Bibliographic citations in the text must include the author's last name and the date of publication and may include page references. Complete bibliographic information for each citation should be included in the list of references. Examples of correct style for bibliographic citations are: Brown (1973); (Brown 1973); (Brown 1973; 1978); (Brown 1973; Jones 1976); (Brown & Jones 1978); (Brown, Jones & Smith 1979) and subsequently, (Brown et al. 1979). References should be typed in alphabetical order in the style of the following examples. Journal titles should not be abbreviated.

Kupfermann, I. & Weiss, K. (1978) The command neuron concept. Behavioral and Brain Sciences 1:3–39.
 Dunn, J. (1976) How far do early differences in mother-child relations affect

Dunn, J. (1976) How far do early differences in mother-child relations affect later developments? In: Growing points in ethology, ed. P. P. G. Bateson & R. A. Hinde. Cambridge University Press.

Bateson, P. P. G. & Hinde, R. A., eds. (1976) Growing points in ethology. Cambridge University Press.

**Preparation of the manuscript** The entire manuscript, *including notes and references*, must be typed **double-spaced** on 8½ by 11 inch or A4 paper, with margins set to 70 characters per line and 25 lines per page, and should not exceed 50 pages. Pages should be numbered consecutively. It will be necessary to return manuscripts for retyping if they do not conform to this standard.

Each table and figure should be submitted on a separate page, not interspersed with the text. Tables should be typed to conform to BBS style. Figures should be ready for photographic reproduction; they cannot be redrawn by the printer. Charts, graphs, or other artwork should be done in black ink on white paper and should be drawn to occupy a standard area of 8½ by 11 or 8½ by 5½ inches before reduction. Photographs should be glossy black-and-white prints; 8 by 10 inch enlargements are preferred. All labels and details on figures should be clearly printed and large enough to remain legible even after a reduction to half size. It is recommended that labels be done in transfer type of a sans-serif face such as Helvetica.

Authors are requested to submit their double-spaced original manuscript with eight copies for refereeing, and commentators their original plus two copies, to: Steven Harnad, Editor, Behavioral and Brain Sciences, 20 Nassau St., Suite 240, Princeton, NJ 08542. In case of doubt as to appropriateness for BBS commentary, authors should write to the editor before submitting eight copies.

**Editing** The publishers reserve the right to edit and proof all articles and commentaries accepted for publication. Authors of articles will be given the opportunity to review the copyedited manuscript and page proofs. Commentators will be asked to review copyediting only when changes have been substantial; commentators will not see proofs. Both authors and commentators should notify the editorial office of all corrections within 48 hours or approval will be assumed.

Authors of target articles receive 50 offprints of the entire treatment, and can purchase additional copies. Commentators will also be given an opportunity to purchase offprints of the entire treatment.

<sup>\*</sup>Individuals interested in serving as BBS Associates are asked to write to the editor.

## **Behavioral and Brain Sciences**

## To appear in Volume 12, Number 1 (1989)

Offprints of the following forthcoming BBS:treatments can be purchased for educational purposes if they are ordered well in advance. For ordering information, please write to Journals Department, Cambridge University Press, 32 East 57th Street, New York, NY 10022.

## Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures

## David M. Buss, University of Michigan

Contemporary mate preferences yield clues about human reproductive history. Five predictions about sex differences in human mate preferences derived from evolutionary considerations concerning parental investment, sexual selection, human reproductive capacity, and certainty of parenthood. These were tested in 37 samples from 33 countries (total N = 10,047); demographic data on actual practices were used to corroborate the questionnaire data. Females valued cues to resource acquisition in potential mates more than males. Characteristics signaling reproductive capacity were valued more by males. These sex differences provide strong cross-cultural documentation of current sex differences in reproductive strategies.

With Commentary from RH Bixler; G Borgia; LR Caporael; SM Essock; J Hartung; W Irons; N Nur; H Nyborg & C Boeggild; D Rancour-Laferriere; JP Rushton; D Symons; A Zohar & R Guttman; and others.

## Real space and represented space: Cross-cultural perspectives

## J. B. Deregowski, University of Aberdeen

A cross-cultural survey of difficulties in understanding pictures-from the failure to recognize a picture as a representation to the inability to recognize the object represented-indicates that similar problems occur in pictorial and nonpictorial cultures. Data on real and pictorial space come from the study of picture perception in "remote" populations and the study of perceptual illusions. Cross-cultural differences in the perception of both real and represented space involve two kinds of skills: those related only to real space or only to represented space and those related to both. Different cultural groups use different skills to perform the same perceptual task.

With Commentary from I Biederman; J Caron-Pargue; S Coren; AC Danto; RH Day; TL Hubbard, JC Baird & A Ajmal; G Jahoda; RH Pollack; DW Smothergill; FJR van de Vijver & YH Paortinga; RA Weale; P Wenderoth; and others.

## Classical conditioning: The new hegemony Jaylan Sheila Turkkan, The Johns Hopkins University School of Medicine

Converging interdisciplinary data suggest that the role of classical conditioning processes in human and animal behavior is larger than previously supposed. Seemingly unrelated phenomena such as drug relapses, the placebo effect, and the immune response all turn out to involve classical conditioning. The view that classically conditioned responses are merely secretory, reflexive, or emotional is giving way to a broader one that includes problem-solving and other rule-governed behavior formerly thought to be the exclusive province of operant conditioning or cognitive psychology.

With Commentary from A Alexieva & NA Nicolov; PJ Bersh & WG Whitehouse; M Domjan & S Nash; E Fantino; C Fields; JJ Furedy; S Grossberg; EJ Kehoe; HD Kimmel; W Klosterhalfen; H Lacey; C Locurto; JW Moore; JB Overmier; AL Riley; and others.

### Among the articles to appear in forthcoming issues of BBS:

D Lightfoot, "The child's trigger experience: Degree-0 learnability"

LE Krueger, "Reconciling Fechner and Stevens: Toward a unified psychophysical law"

LR Caporael, RM Dawes, JM Orbell & AJC van de Kragt, "Selfishness examined: Cooperation in the absence of egoistic incentives"

WR Utall, "On the meaning of models of visual processes"

S Chevalier-Skolnikoff, "Spontaneous tool use and sensorimotor intelligence in Cebus compared with other monkeys and apes"

JP Rushton, "Genetic similarity, human altruism, and group selection"

GL Gottlieb, DM Corcos & GC Agarwal, "Strategies for the control of voluntary movements with one degree of freedom"

R Näätänen, "Role of attention in auditory information processing revealed by event-related brain potentials"