https://doi.org/10.1017/S0140525X00044137 Published online by Cambridge University Press

https://doi.org/10.1017/S0140525X00044137 Published online by Cambridge University Press

https://doi.org/10.1017/S0140525X00044137 Published online by Cambridge University Press

The Behavioral and Brain Sciences

Instructions for Authors and Commentators

The 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The service of Open Peer Commentary will be primarily devoted to original unpublished manuscripts.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 is also eligible for Commentary if the author submits a comprehensive, article-length précis to be published together with the commentaries and his 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. 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 well-established 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 significantly 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 later developments? In: *Growing points in ethology,* ed. P. P. G. Bateson & R. A. Hinde, pp. 1–10. 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 original manuscript with **eight copies** for refereeing, and commentators their original plus **two copies,** to: Steven Harnad, Editor, The 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.

*Individuals interested in serving as BBS Associates are asked to write to the editor.

https://doi.org/10.1017/S0140525X00044137 Published online by Cambridge University Press

The Behavioral and Brain Sciences

To appear in Volume 7, Number 3 (1984)

Offprints of the following forthcoming BBS treatments can be purchased in quantity 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, N.Y. 10022.

Evolution and ontogeny of neural circuits

Sven O. E. Ebbesson, *Louisiana State University School of Medicine*

Recent studies on neural pathways in a broad spectrum of vertebrates suggest that, in addition to migration and an increase in the number of certain select neurons, a significant aspect of neural evolution is a "parcellation" (segregation–isolation) process that involves the loss of selected connections by the new aggregates. Because the process is repeated, at least partially, during ontogenetic development, it is suggested that in many neuronal systems axons do not invade unknown territories during evolutionary or ontogenetic development but follow in their ancestors' paths to their ancestral targets; if the connection is later lost, it reflects the specialization of the circuitry.

With *Commentary* from P Alberch, WH Calvin, CBG Campbell; J-P Ewert; TE Finger; BE Fritzsch, H Ito, JH Kaas; JJ Koenderink; PD MacLean; RG Northcutt; E Ramon-Moliner; J Szentagothai; W Wilczynski, JZ Young, and others.

The scope of neuroethology

Graham Hoyle, *University of Oregon*

Neuroethology is now a formal subdivision of neuroscience, boasting two recent introductory texts, but there is as yet no common focus for research interests. This article examines the history of ethology and shows that its profound success was due to the confinement of research to the study of stereotyped, complex, nonlearned, innate behaviors. A useful model propounded by Lorenz in 1949 summarized the principles. This model and its updated derivatives imply common neurophysiological mechanisms that are as yet unknown. It is argued that neuroethologists should restrict their attention to working out the underpinnings of these principles for a variety of instinctive behaviors of animals from diverse phyla.

With *Commentary* from U Bässler; P Bateson; TH Bullock; F Clarac; F Delcomyn; J Erber; J-P Ewert; DM Guthrie; RA Hinde; I Kupfermann; A Manning; H Markl; CHF Rowell; AI Selverston; JZ Young; and others.

Sensation seeking: A comparative approach to a human trait

Marvin Zuckerman, *University of Delaware*

Sensation seeking in humans is compared with potential models in animal behavior in terms of genetic determination and common biological correlates. The augmenting–reducing of cortical evoked potentials and levels of platelet monoamine oxidase (MAO) provide two biological markers with common correlates in animal and human behavior. The monoamine systems regulated by MAO have been implicated in general behavioral activity, behavior in novel situations, socialization, sexual and consummatory behaviors, and intracranial self-stimulation in animals. Indicators of activity in the noradrenergic system have been correlated with sensation seeking in humans. An optimal-level theory of behavior in relation to the activity of catecholamine systems is suggested.

With *Commentary* from E Callaway; G Claridge; VA Eterović & PA Ferchmin; HJ Eysenck; JA Gray; CE Izard; L von Knorring; ST Mason; RWJ Neufeld; DE Redmond, Jr.; EN Sokolov; J Strelau; P Suedfeld; JF Wohlwill, and others.

Among the articles to appear in forthcoming issues of BBS:

Special Issue: Canonical Papers of BF Skinner

MC Baker & MA Cunningham, "The biology of bird song dialects"

Multiple book review of J Fodor, *The modularity of mind*

H Rachlin, "Pain and behavior"

Cambridge University Press
The Pitt Building, Trumpington Street, Cambridge CB2 1RP
32 East 57 Street, New York, N.Y. 10022
296 Beaconsfield Parade, Middle Park, Melbourne 3206

Printed in the United States of America
by Capital City Press, Montpelier, Vermont