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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.

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 Target articles must not exceed 14,000 words (and should ordinarily be considerably shorter); commentaries should not exceed 1,000 words, including references. 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.

All submissions must include an indexable title, followed by the authors' names in the form preferred for publication, full institutional addresses, and electronic mail addresses. Target article authors must also provide numbered subheads to facilitate cross-reference by commentators. **Two abstracts**, one of 100 and one of 250 words, should be submitted with every target 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 all target article texts. Notes, acknowledgments, appendices, and references should be grouped at the end of the target article or commentary.

**Illustrations:** Tables and figures (i.e., photographs, graphs, charts, or other artwork) should be numbered consecutively. Every table should have a title; every figure, a caption. At least one reference in the text must indicate the appropriate locations. (For sizes, see below.)

**References:** 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 are: Brown (1973); (Brown 1973); (Brown 1973; 1978); (Brown 1973; Jones 1976); (Brown & Jones 1978); (Brown et al. 1979). References should be typed on a separate sheet in alphabetical order in the style of the following examples. **Do not abbreviate journal titles.** 

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: <u>Growing points in ethology</u>, ed. P. P. G. Bateson & R. A. Hinde. Cambridge University Press.

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

**Preparation of the manuscript** The original, **double-spaced** target article plus **eight single-spaced**, **double-sided** copies must be submitted. The entire manuscript, *including notes and references*, must be typed **double-spaced** ( $^{1}/_{4}$ -inch space between lines) on  $8^{1}/_{2}$  by 11 inch paper, with margins set to 70 characters per line (not "justified") and 25 lines per page, and should not exceed 50 pages. Pages should be numbered consecutively. Commentators should send their original plus two copies. 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  $8^{1}/_2$  by 11 or  $8^{1}/_2$  by  $5^{1}/_2$  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.

All submissions should include a diskette in Word™ or WordPerfect™ for Macintosh or IBM-compatible computers and containing the full manuscript. Target articles should be sent to: Stevan Harnad, Editor, *Behavioral and Brain Sciences*, Department of Psychology, University of Southampton, Highfield, Southampton, SO17 IBJ, United Kingdom. **Phone:** +44 (0)1703-594-583. **Electronic mall:** bbs@ecs.soton.ac.uk. Commentaries should be sent to: *Behavioral and Brain Sciences*, Cambridge University Press, Journals Department, 40 West 20th Street, New York, NY 10011-4211. **Phone:** 212 924-3900 (ext. 369). **Electronic mail:** bbs@cup.org. *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.

### To appear in Volume 19, Number 1 (1996)

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, 40 West 20th Street, New York, NY 10011-4211.

## The base rate fallacy reconsidered: Descriptive, normative and methodogical challenges

#### Jonathan J. Koehler, University of Texas at Austin

We have been oversold on the base rate fallacy in probabilistic judgement from an empirical, normative, and methodogical standpoint. First, contrary to the conventional wisdom, a thorough examination of the literature reveals that base rates are almost always used and that their degree of use depends on task structure and internal task representation. Second, few tasks map unambiguously into the simple, narrow framework that is held up as the standard of good decision making. Third, the current approach is criticized for its failure to consider how the ambiguous, unreliable and unstable base rates of the real world should be used in the informationally rich and criterion-complex natural environment. A more ecologically valid research program is called for. **With Commentary from** NH Anderson; LJ Cohen; RM Dawes; G. Gigerenzer; G Keren & LJ Thijs; GD Kleiter; J Krueger & WS Hunter; HE Kyburg; I Levi; H Margolis; BA Spellman; PD Windschitl & GL Wells; and others.

#### What are "normal movements" in atypical populations?

#### Mark L. Latash, Pennsylvania State University, and J. Greg Anson, University of Otago

Patterns of voluntary movements reflect priorities (coordinative rules) of the central nervous system that help it overcome the problem of redundancy. In certain atypical conditions, that may include cognitive, central neurological, and peripheral disorders, the central nervous system may reconsider its priorities. In such conditions, changed motor patterns should be viewed not as pathological but rather as adaptive to a primary disorder. In fact, perhaps they may even be viewed as optimal for a given state of the system of movement production. Thus, therapeutic approaches should not be directed towards restoring the motor patterns to as close to "normal" as possible, but rather towards resolving the original underlying problem.

With Commentary from A Berardelli et al.; E Biryukova & AA Frolov; JM Gurd; RL Glatzky; RSW Masrers & RCJ Polman; KM Newell & S Newell; JP Scholz; E Thelen; PJ Treffner & JAS Kelso; REA van Emmeik & RC Wagenaar; AM Wing; and others.

#### Intentional relations and social understanding

#### John Barresi and Chris Moore, Dalhousie University

We present a theory of social understanding based on a view of intentional relations as a species of causal relation. A system for the uniform representation of intentional relations of self and other uses a generalized capacity to share intentional relations and an intentional schema to generate and integrate first person information of an intentional relation of self with third person information of a comparable intentional relation of another. A four level framework of representations that do and do not require the intentional schema can explain the phylogeny and ontogeny of social understanding and perhaps autism.

With Commentary from S Baron-Cohen; A Ben Ze'ev & K Oatley; G Csibra & G Gergely; G Gallup; JC Gomez; RM Gordon; C Heyes; P Hobson; RW Mitchell; K Nelson; A Oosterwegel, D & AJ Premack; C Slater; and others.

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

- A Koriat & M Goldsmith, "Memory metaphors and the every day laboratory controversy: The correspondence versus storehouse conceptions of memory"
- JJ Wright & DTJ Lilley, "Dynamics of the brain at global and microscopic scales: Neural networks and the EEG"
- D Geary, "Sexual selection and sex differences in mathematical abilities"
- "Controversies in Neuroscience IV" (Motor learning and synaptic plasticity in the cerebellum); "Controversies in Neuroscience V" (Persistent pain); SD Epstein, S Flynn & G Martohardjono, "Second language acquisition: Theoretical and experimental issues in contemporary research"; R-A Müller, "Innoteness, autonomy, universality?: Neurobiological approaches to language"; GH Heyman, "Resolving the contradictions of addiction"; V Braitenberg, D Heck & F Sultan, "The detection and generation of sequences as a key to cerbellar function: Experiments and theory"; AM Glenberg, "What memory is for"





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