
BEHAVIORAL and BRAIN SCIENCES



Cambridge
Journals

EDITOR:

Stevan Harnad, *Princeton, NJ*

Behavioral and Brain Sciences publishes particularly significant and controversial "target articles." These have been successful in drawing out the leading investigators in a wide range of fields who discuss, debate and critically analyze topics of current interest to the entire biobehavioral science community. Fascinating and often surprising results come from the 20-30 open peer commentaries on each target article from psychologists, linguists, philosophers, neuroscientists, anthropologists, developmentalists and other specialists within and across these disciplines.

Selected Papers

Sex differences in human mate preferences:
Evolutionary hypothesis tested in 37 cultures,
D.M. Buss

The child's trigger experience: "Degree-O"
learnability, *D. Lightfoot*

Strategies for the control of voluntary movements
with one degree of freedom, *G.L. Gottlieb et al.*

Numerical competence in animals: Definitional
issues, current evidence and a new research agenda,
H. Davis, R. Perusse

Reconciling Fechner and Stevens: Toward a
unified psychophysical law, *L.E. Krueger*

Behavioral and Brain Sciences (ISSN 0140-525X) is
published quarterly. Subscription to Volume 12, 1989
(US and Canada only): \$154.00 for institutions; \$65.00
for individuals; single parts \$43.00.

Back Volumes: 1-11 (1978-1988) \$54.00 each.

Send orders to:

Journals Department

Cambridge University Press

32 East 57th Street, New York, NY 10022, USA; or

The Edinburgh Building, Cambridge CB2 2RU, UK



**Behavioral and
Brain
Sciences**

A N N O U N C I N G

Psychological Science

Research, theory, and application in psychology and related behavioral, cognitive, neural and social sciences

Editor: **William K. Estes**, Harvard University



First Issue - January 1990

The bimonthly flagship journal of
The American Psychological Society

**Psychological Science will publish research articles, research reviews,
short reports and perspectives on psychological science and its applications.**

Cambridge Journals of Related Interest

• **Applied Psycholinguistics**

A quarterly journal publishing research papers on the psychological processes involved in language and language development and defects in adults and children.

• **Behavioral and Brain Sciences**

The internationally renowned quarterly with the innovative 'Open Peer Commentary' format. Target article, 20-30 commentaries, author response and references published together are a seminar in print.

• **Development and Psychopathology**

A new multidisciplinary quarterly publishing original empirical, theoretical and review papers which address the interrelationship of normal and pathological development in adults and children.

• **Psychological Medicine**

Quarterly issues contain original research in clinical psychiatry and the basic sciences related to it.

• **Psychology of Women Quarterly**

Publishes empirical studies, review articles, and theoretical articles aimed at establishing a greater understanding of women's issues and sex roles in society.

• **Visual Neuroscience**

A monthly journal publishing research and theoretical articles in basic visual neuroscience, with primary emphasis on retinal and brain mechanisms that underlie visually-guided behaviors and visual perception.

Cambridge University Press

V I S U A L N E U R O S C I E N C E

Volume 3

October 1989

Number 4

CONTENTS

Research Articles

- JOSEPH C. CALLAWAY, ANN E. STUART, AND JOHN S. EDWARDS 289 Immunocytochemical evidence for the presence of histamine and GABA in photoreceptors of the barnacle (*Balanus nubilus*)
- JOSEPH C. CALLAWAY AND ANN E. STUART 301 Comparison of the responses to light and to GABA of cells postsynaptic to barnacle photoreceptors (I-cells)
- JOSEPH C. CALLAWAY AND ANN E. STUART 311 Biochemical and physiological evidence that histamine is the transmitter of barnacle photoreceptors
- ROSALYN E. WELLER AND JON H. KAAS 327 Parameters affecting the loss of ganglion cells of the retina following ablations of striate cortex in primates
- V.D.GLEZER, V.V. YAKOVLEV, AND V.E. GAUZELMAN 351 Harmonic basis functions for spatial coding in the cat striate cortex
- TATIANA PASTERNAK, KRIS M. HORN, AND JOHN H.R. MAUNSELL 365 Deficits in speed discrimination following lesions of the lateral suprasylvian cortex in the cat
- ROBERT B. NORRGREN, JR. AND RAE SILVER 377 Retinal projections in quail (*Coturnix coturnix*)
- 389 Detailed Information for Contributors
- 390 The Humane Care and Use of Animals

ISSN 0952-5238

© 1989 Cambridge University Press

Printed in the United States of America