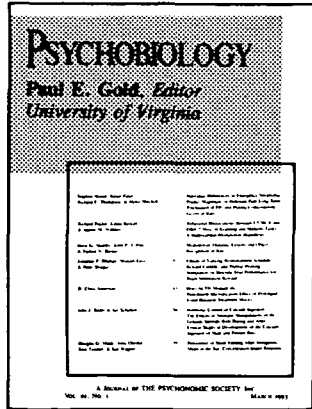


PSYCHOBIOLOGY



Psychobiology publishes articles concerned with the biological substrates of behavior and cognitive function. Experimental and theoretical contributions from researchers worldwide are included, and submissions are encouraged from a wide range of perspectives such as:

- anatomy
- biology
- clinical neuropsychology
- computational neuroscience
- endocrinology
- pharmacology
- development and aging
- neuronal plasticity

Psychobiology also presents invited reviews and book reviews that focus on important new research results. Short communications are published with minimal delay.

Published quarterly, beginning in March.
 Subscription rates for 1993: Institutions \$73
 Individuals \$36
 Please add \$6 foreign/Canadian postage. Canadian subscribers add 7% GST. Student rates and back issues are also available.

RECENT ARTICLES include:

- The relationship between fact and source memory: Findings from amnesic patients and normal subjects.** *A. P. Shimamura & L. R. Squire.*
- Aging, short-term memory, and frontal dysfunction.** *A. J. Parkin & B. M. Walter.*
- Cerebral correlates of cognitive aging: Gray-white-matter differentiation in the medial temporal lobes, and fluid versus crystallized abilities.** *N. Raz, D. Millman, & G. Sarpel.*
- Maternal factors regulate stress responsiveness in the neonatal rat.** *F. Cirulli, S. L. Gottlieb, P. Rosenfeld, & S. Levine.*
- Ventral trunk somatosensory determinants of nursing behavior in Norway rats: 2. Role of nipple and surrounding sensations.** *J. M. Stern, L. Dix, C. Bellomo, & C. Thramann.*
- Dopaminergic regulation of feeding behavior: I. Differential effects of haloperidol microinfusion into three striatal subregions.** *V. P. Bakshi & A. E. Kelley.*
- Short- and long-term factors in tolerance to morphine-induced antinociception: Single or multiple mechanisms?** *C. R. McLaughlin, W. L. Dewey, & M. S. Fanselow.*
- NMDA-induced lesions of the amygdaloid complex block the retention-enhancing effect of posttraining epinephrine.** *L. Cahill & J. L. McGaugh.*
- Serum corticosterone level predicts the magnitude of hippocampal primed burst potentiation and depression in urethane-anesthetized rats.** *M. C. Bennett, D. M. Diamond, M. Fleshner, & G. M. Rose.*
- Aniracetam has proportionately smaller effects on synapses expressing long-term potentiation: Evidence that receptor changes subserve LTP.** *U. Staubli, M. Kessler, & G. Lynch.*
- Rats, nets, maps and the emergence of place cells.** *A. Treves, O. Miglino, & D. Parisi.*
- Evocation in paradoxical sleep of a hippocampal conditioned cellular response acquired during waking.** *C. Maho, E. Hennevin, B. Hars, & S. Poincheval.*
- Analysis of response systems in Pavlovian conditioning reveals rapidly versus slowly acquired conditioned responses: Support for two factors, implications for behavior and neurobiology.** *R. C. Lennartz & N. M. Weinberger.*

PLEASE ENTER MY 1993 SUBSCRIPTION TO PSYCHOBIOLOGY (VOL. 21):

- Payment of \$_____ (U.S.) enclosed. Please bill my VISA or MasterCard:
- Purchase order enclosed. Please bill institutional rate.

No.: _____

Expires: _____ Signature: _____

PLEASE SEND INFORMATION ON:

- Other Psychonomic Society journals
 Back/special issues
 Psychonomic Society membership
 Student rates
 Other _____

Name _____

Address _____

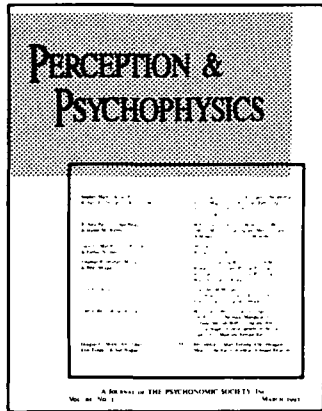
City _____ State (Country) _____ Zip Code _____



Psychonomic Society Publications • 1710 Fortview Rd. • Austin, TX 78704

== PERCEPTION & PSYCHOPHYSICS ==

Charles W. Eriksen, *Editor*
University of Illinois, Urbana-Champaign



Perception & Psychophysics contains articles that focus primarily on the sensory processes, perception, and psychophysics. Studies employ either human or animal subjects. Most articles published in the journal are reports of experimental investigations, but articles that are primarily theoretical are included as well, as are integrative and evaluative reviews.

Published monthly.
Subscription rates for 1993: Institutions \$149
Individuals \$68
Please add \$14 foreign/Canadian postage. Canadian subscribers add 7% GST. Student rates and back issues are also available.

RECENT ARTICLES include:

- Effects of glide slope, noise intensity, and noise duration on the extrapolation of FM glides through noise.** *K. R. Kluender & R. L. Jenison.*
- Absence of compensation and reasoning-like processes in the perception of orientation in depth.** *W. C. Gogel & J. D. Tietz.*
- Filtering versus parallel processing in RSVP tasks.** *J. Botella & C. W. Eriksen.*
- The orientation of a parallel-line texture between the verticals can modify the strength of the Poggendorff illusion.** *R. Masini, R. Sciaky, & A. Pascarella.*
- Perceptual restoration of a "missing" speech sound: Auditory induction or illusion?** *B. H. Repp.*
- Attention in visual search: Multiple search classes.** *M. Cheal & D. R. Lyon.*
- Saccades to targets in three-dimensional space: Dependence of saccadic latency on target location.** *H. Honda & J. M. Findlay.*
- Feature analysis and the role of similarity in preattentive vision.** *H.-C. Nothdurft.*
- Properties of the re-combination of one-dimensional motion signals into a pattern motion signal.** *F. L. Kooi, K. K. De Valois, D. H. Grosz, & R. L. De Valois.*
- Prime Time: Fatigue and set effects in the perception of reversible figures.** *G. M. Long, T. C. Toppino, & G. W. Mondin.*

PLEASE ENTER MY 1993 SUBSCRIPTION TO P&P (VOLS. 53-54):

- Payment of \$_____ (U.S.) enclosed.
 Purchase order enclosed. Please bill *institutional* rate.

Please bill my VISA or MasterCard:

No.: _____

Expires: _____ Signature: _____

PLEASE SEND INFORMATION ON:

- Other Psychonomic Society journals
 Back/special issues
 Psychonomic Society membership
 Student rates
 Other _____

Name _____

Address _____

City _____ State (Country) _____ Zip Code _____



Psychonomic Society Publications • 1710 Fortview Rd. • Austin, TX 78704

ESSENTIAL READING FROM CAMBRIDGE

Diseases of the Nervous System in Childhood

Jean Aicardi

Offers a comprehensive description of the neurological disorders of children as well as all significant diseases of the central and peripheral nervous systems from the fetal period to adolescence.

Clinics in Developmental Medicine 115-118
Published in North America by agreement with Mac Keith Press

1992 1425 pp. 41273-0 Hardcover \$160.00

Essentials of Neural Development

Second Edition

M. C. Brown, W. G. Hopkins, and R. J. Keynes

This up-to-date account of the development of the nervous systems in invertebrates and vertebrates emphasizes fundamental concepts.

1991 186 pp. 37698-X Paper \$29.95

Emerging Visions of the Aesthetic Process

In Psychology, Semiology, and Philosophy

Edited by Gerald C. Cupchik and János László

Explores the underlying aesthetic processes and play from the perspectives of psychologists, philosophers, and semiologists.

1992 343 pp. 40051-1 Hardcover \$49.95

The Neurophysiological Examination of the Newborn Infant

Edited by J. A. Eyre

Provides an up-to-date description of the application of neurophysiological examination techniques and evaluates their importance in the care of newborn babies.

Clinics in Developmental Medicine 120
Published in North America by agreement with Mac Keith Press

1992 217 pp. 41276-5 Hardcover \$54.95

Night Vision

Basic, Clinical and Applied Aspects

Edited by R. F. Hess, L. T. Sharpe, and K. Nordby

Details up-to-date book describes the light and dark adaptation of receptor and post-receptor mechanisms from a number of perspectives.

1990 562 pp. 32736-9 Hardcover \$125.00

Cambridge Medical Reviews

Neurobiology and Psychiatry

Volume 1

Edited by Robert Kerwin, David Dawbarn, James McCulloch, and Carol Tamminga

Presents an evaluation and dissemination of information on recent developments concerning the fundamental aspects of biological psychiatry.
Cambridge Medical Reviews: Neurobiology and Psychiatry 1

1992 188 pp. 39442-9 Hardcover \$69.95

Successful Lab Reports

A Manual for Science Students

Christopher S. Lobban and Maria Scheffer

Bridges the gap between the many books about writing term papers and the advanced books about writing papers for publication in scientific journals.

1992 106 pp. 40404-5 Hardcover \$34.95
40741-9 Paper \$12.95

An Introduction to the Modelling of Neural Networks

Pierre Peretto

Examines what neural networks can reveal about brain function as well as the implications for psychology, artificial intelligence and computer design.

Collection Aléa-Saclay: Monographs and Texts in Statistical Physics 2

1992 491 pp. 41451-2 Hardcover \$100.00
42487-9 Paper \$39.95

Now in paperback...

Modelling Brain Function: The World of Attractor Neural Networks

Daniel J. Amit

"... regard this book as an opening of a discussion—undoubtedly a very qualified one."

—*Journal of Mathematical Psychology*

504 pp. 42124-1 Paper \$24.95

Available in bookstores or from

CAMBRIDGE
UNIVERSITY PRESS

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

Call toll-free 800-872-7423

MasterCard/VISA accepted. Prices subject to change.

Contents continued from back cover

- RICK VAN DER ZWAN, 703 Reduction of a pattern-induced motion aftereffect by binocular
PETER WENDEROTH, rivalry suggests the involvement of extrastriate mechanisms
AND DAVID ALAIS
- FERENC I. HÁROSI AND 711 Visual pigments in the sea lamprey, *Petromyzon marinus*
JOCHEN KLEINSCHMIDT
- PETER H. SCHILLER 717 The effects of V4 and middle temporal (MT) area lesions on
visual performance in the rhesus monkey
- BERTRAM R. PAYNE, 747 Visual cortex damage-induced growth of retinal axons into
HEATHER A. FOLEY, the lateral posterior nucleus of the cat
AND STEPHEN G. LOMBER
- J.B. TROY, 753 Effect of ambient illumination on the spatial properties of
J.K. OH, AND the center and surround of Y-cell receptive fields
CH. ENROTH-CUGELL
- MICHAEL H. ROWE 765 Spatial receptive-field structure of cat retinal W cells
AND JAMES F. COX

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

Volume 10

July/August 1993

Number 4

CONTENTS

Research Articles

- LAWRENCE K. CORMACK, 585 Disparity-tuned channels of the human visual system
SCOTT B. STEVENSON,
AND CLIFTON M. SCHOR
- ROBERT N. JINKS, 597 Photoreceptor cells dissociated from the compound lateral
W.J. BRAD HANNA, eye of the horseshoe crab, *Limulus polyphemus*. I: Structure
GEORGE H. RENNINGER, and ultrastructure
AND STEVEN C. CHAMBERLAIN
- W.J. BRAD HANNA, 609 Photoreceptor cells dissociated from the compound lateral
EDWIN C. JOHNSON, eye of the horseshoe crab, *Limulus polyphemus*, II: Function
DEBORAH CHAVES, AND
GEORGE H. RENNINGER
- ARKADIUSZ KAZULA, 621 Regulation of melatonin and dopamine biosynthesis in chick
JERZY Z. NOWAK, AND retina: The role of GABA
P. MICHAEL IUVONE
- SHAO-MING LU, 631 The brain-stem parabrachial region controls mode of response
WILLIAM GUIDO, AND to visual stimulation of neurons in the cat's lateral geniculate
S. MURRAY SHERMAN nucleus
- ROLAND KERN, 643 Interactions of local movement detectors enhance the detection
HANS-ORTWIN NALBACH, of rotation. Optokinetic experiments with the rock crab,
AND DEZSÖ VARJÚ *Pachygrapsus marmoratus*
- JAMES L. MILLER AND 653 Phototransduction and adaptation in rods, single cones, and
JUAN I. KORENBROT twin cones of the striped bass retina: A comparative study
- FREDERICK R. PRETE AND 669 Appetitive responses to computer-generated visual stimuli by
ROBERT J. MAHAFFEY the praying mantis *Sphodromantis lineola* (Burr.)
- M. TENNANT, 681 Survival of ganglion cells which form the retino-retinal
S.R. BRUCE, projection during optic nerve regeneration in the frog
AND L.D. BEAZLEY
- STEVAN M. DAWIS AND 687 Light-evoked changes in near-infrared transmission by the
MICHELANGELO ROSSETTO ON and OFF channels of the anuran retina
- DAVID M. SHERRY, 693 Glycine in the lizard retina: Comparison to the GABA system
ALEX MICICH, AND
STEPHEN YAZULLA

Contents continued on inside back cover



CAMBRIDGE
UNIVERSITY PRESS