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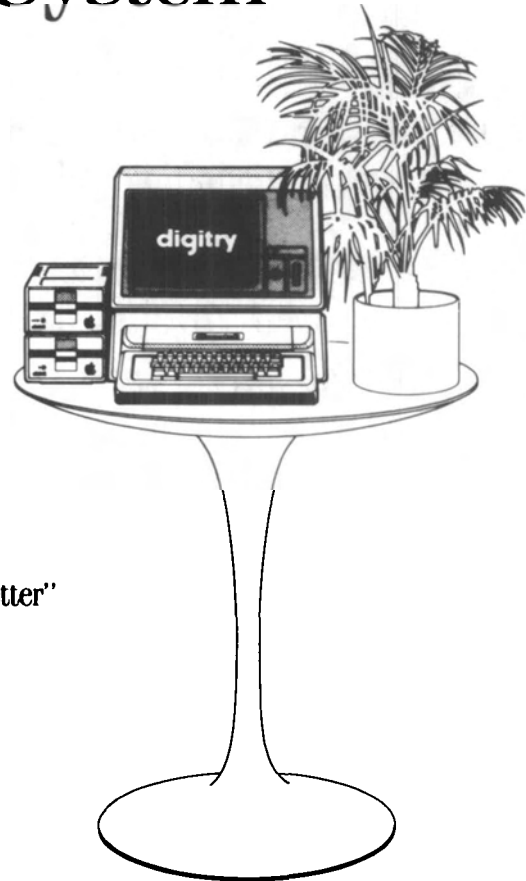
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# The Behavioral and Brain Sciences

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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.

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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.

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# The Behavioral and Brain Sciences

To appear in Volume 8, Number 3 (1985)

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, NY 10022.

## **CNS-immune system interactions: Conditioning phenomena**

**Robert Ader and Nicholas Cohen, *University of Rochester***

There is evidence from different disciplines that the brain can influence immune responses. Recent animal studies show that suppression and enhancement of immunity can be behaviorally conditioned. The effects of conditioning in the drug treatment of autoimmune disease illustrate the biological impact of conditioned changes in immunological reactivity. Such effects may be mediated by elevations in adrenocortical steroid levels. Apart from being able to regulate itself, it appears that the immune system is integrated with other psychophysiological processes and can be modulated by the brain.

**With Commentary From** H Anisman & RM Zacharko; RE Ballieux & CJ Heijnen; AJ Cunningham; BT Engel; HD Kimmel; W Klosterhalfen & S Klosterhalfen; S Revusky; HD Veldhuis & D De Wied; JM Weiss; and others.

## **An immunoreactive theory of selective male affliction**

**Thomas Gualtieri, *University of North Carolina*, and Robert E. Hicks, *University of Alabama***

Males are selectively afflicted with the neurodevelopmental and psychiatric disorders of childhood. Prior literature has pointed to psychosocial differences, genetic factors, and to male "complexity" and relative immaturity, but it is here hypothesized that male fetal antigenicity induces a state of maternal immunoreactivity that can lead either directly or indirectly to fetal damage. This immunoreactive theory, derived from studies of the sex ratio, is the only explanation consistent with the greater occurrence of pregnancy complications and certain neurodevelopmental disorders after prior pregnancies.

**With Commentary From** M Adinolfi; CP Benbow; C-G Berglin; A Bukovsky & J Presl; RM Gorczyński; KB Hoyenga; AR Jensen; J Money; S Ohno; E Taylor & M Rutter; and others.

## **Associations across time: The hippocampus as a temporary memory store**

**J. N. P. Rawlins, *University of Oxford***

All recent memory theories of hippocampal function have incorporated the idea that the hippocampus is required to process items only of some qualitatively specifiable kind, and not items from some complementary set. In contrast, it is now proposed that the hippocampus is needed to process stimuli of all kinds, but only when those stimuli need to be associated with other events that are temporally discontinuous. Analyses of new and existing data show that quantitative variations of temporal discontinuity and temporary memory load selectively affect hippocampally damaged animals. The hippocampus seems best described as a high-capacity, intermediate-term memory store.

**With Commentary From** NJ Cohen & M Shapiro; SA Deadwyler; JA Gray, LE Jarrard; HJ Markowitsch; BL McNaughton & CA Barnes; DS Olton; CP Shimp; G Winocur; ML Woodruff & DL Whittington; and others.

**Among the articles to appear in forthcoming issues of BBS:** Multiple book review of A Grünbaum, *The foundations of psychoanalysis*

DH Ballard, "Cortical connections and parallel processing: Structure and function"

MB Berkinblit, AG Feldman, & OI Fukson, "Adaptability of innate motor patterns and motor control mechanisms"

G Goldberg, "Supplementary motor area structure and function"

A Harrington, "Nineteenth century ideas on hemisphere difference and 'duality of mind'"

J Hartung, "Matrilineal inheritance"

D Holender, "Semantic activation without conscious identification in dichotic listening, parafoveal vision, and visual masking"

GW Humphreys & LJ Evelt, "Are there independent lexical and nonlexical routes in word processing?"

B Libet, "Unconscious cerebral initiative and the role of conscious will in voluntary action"

DR Vining, Jr., "Social versus reproductive succession: The central theoretical problem of human sociobiology"

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