

instances the predicted findings do not appear and the failure is dismissed a bit too readily. Very often what is intended as a crucial test of the theory is not such because of ambiguities in the design of experiments.

One critical study where a predicted relationship did not occur leads the author to search for an explanation. He suggests that the failure to find greater disruption from maternal-censure cues might be due to the existence of two different reactions to HC-LN mothers, one an active coping style and the other an avoidance strategy. A further series of studies is done, with the perceived-parental-relations groups subdivided into what the author terms open and closed adaptation styles, which appear to him to be analogous to the modes of coping shown by "process" and "reactive" schizophrenics. This further breakdown into subgroups does prove valuable, as a number of interesting group differences are found on behavioral measures analogously related to psychopathological response styles. The book closes essentially with the revised hypothesis, that while aversive maternal control (HC-LN) is a necessary condition for schizophrenic development, there are two possible adaptations to this pattern, one closed and the other open, and that these will correlate with a social learning history associated with either a reactive-paranoid psychosis or a process-nonparanoid one.

There is much ingenuity, hard work, and ambition in this book, but it is still a developmentally oriented study carried out cross-sectionally. There are some interesting correlations between perceived maternal control and concurrent laboratory performance, but the connection is highly inferential and at times forced. It is particularly interesting that at a time when many researchers in psychopathology view familial forces from a social system perspective, Heilbrun offers a more simplified hypothesis of a disturbed, unilateral mother-child relationship. It is also interesting that while so much current research is on high-risk samples of pre-schizophrenics, because of the great difficulty of separating antecedent from consequent events, Heilbrun feels comfortable drawing etiological conclusions concerning schizophrenia from correlational data obtained on largely non-disturbed college students.

This does not mean that the desire of the author to integrate and synthesize a wide body of disparate research data

is not admirable; it is. But the attempt seems at times over-inclusive and forced, as if the really interesting pieces of information contained in the book are not a sufficient contribution to this field. The author writes as if he needs to forge a comprehensive theory of schizophrenia, but his data do not warrant the definitive theoretical conclusions he presents. He has not shown that aversive maternal control is a necessary condition for schizophrenic development. Such a theory would require far more than any one investigator might do in a lifetime. He has demonstrated that retrospective reports of parent-child relations appear to be a useful anchor in personality research. Through much ingenious experimental work and synthesis of prior literature, he can suggest the potential relevance of his findings for schizophrenic development. These suggestions may very well serve as a source of interesting hypotheses and methods for future students of schizophrenia. But as proof of a social learning theory of the etiology of schizophrenia, they are extremely limited and tangential.

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## New Journals Received

**Chemical Engineering Communications.** An International Journal of Chemical Engineering and Applied Chemistry. Vol. 1, No. 1, 1973. Six issues per volume. Editor: Cornelius J. Pings (California Institute of Technology, Pasadena). Gordon and Breach Science Publishers, One Park Ave., New York, N.Y. 10016. To individuals, \$17.50; to libraries and institutions, \$49.50.

**Energy Policy.** Vol. 1, No. 1, 1973. Four issues a year. Editor: John A. G. Thomas. IPC Science and Technology Press Ltd., 32 High St., Guildford, Surrey, England. \$36.40.

**Intervirology.** The Journal of the Virology Section, International Association of Microbiological Societies. Vol. 1, No. 1, 1973. Two volumes a year. Editor: Joseph L. Melnick. S. Karger AG, Arnold-Böcklin-Strasse 25, CH-4000 Basel 11, Switzerland. Vol. 1, \$30; to members of national societies of microbiology, \$20.

**Molecular Biology Reports.** Vol. 1, No. 1, June 1973. One issue every six to eight weeks. Editor: H. Bloemendal (University of Nijmegen, the Netherlands). D. Reidel Publishing Co., P.O. Box 17, Dordrecht, Holland. Each vol., \$59.50; to individuals, \$25.50.

**Pramāṇa.** A Journal of Physics. Vol. 1, No. 1, 1973. Two volumes a year. Editor: S. Ramaseshan (National Aeronautical

Laboratory, Bangalore, India). Indian Academy of Sciences, Bangalore 560006, India. To institutions and libraries, \$30; to individuals, \$20.

## Books Received

**Academic Computers in Service.** Charles Mosmann. Jossey-Bass, San Francisco, 1973. xiv, 186 pp. \$8.50. Jossey-Bass Series in Higher Education.

**Accounting and Society.** Ralph W. Estes. Melville (Wiley), New York, 1973. xvi, 412 pp. Cloth, \$8.95; paper, \$5.95. Melville Series on Management, Accounting, and Information Systems.

**Advanced Calculus.** Wilfred Kaplan. Addison-Wesley, Reading, Mass., ed. 2, 1973. xviii, 710 pp., illus. \$15.75.

**Advances in Cancer Research.** Vol. 17. George Klein, Sidney Weinhouse, and Alexander Haddow, Eds. Academic Press, New York, 1973. xii, 448 pp., illus. \$27.50.

**Advances in Chemical Physics.** Vol. 23. I. Prigogine and Stuart A. Rice, Eds. Interscience (Wiley), New York, 1973. x, 358 pp., illus. \$22.50.

**Agricultural Adjustment in Developed Countries.** Food and Agriculture Organization of the United Nations, Rome, 1972 (U.S. distributor, Unipub, New York), xii, 204 pp., illus. Paper, \$4.

**Air Pollution.** Virginia Brodine. Harcourt Brace Jovanovich, New York, 1973. xvi, 206 pp., illus. Paper, \$3.95. Environmental Issues Series.

**Amino-Acids, Peptides, and Proteins.** Vol. 4, A Review of the Literature Published during 1971. G. T. Young, reporter. Chemical Society, London, 1972. xvi, 498 pp., illus. £9. A Specialist Periodical Report.

**Anatomy of the Chicken and Domestic Birds.** Tankred Koch. Illustrated by Erwin Rossa. Edited and Translated from the German by Bernard H. Skold and Louis DeVries. Iowa State University Press, Ames, 1973. viii, 170 pp. \$7.95.

**The Animal in Man.** Lorus and Margery Milne. Mc-Graw-Hill, New York, 1973. viii, 250 pp. \$7.95.

**Annual Review of Pharmacology.** Henry W. Elliott, Ronald Okun, and Robert George, Eds. Vol. 13. Annual Reviews, Palo Alto, Calif., 1973. viii, 520 pp. \$12.

**Arctic Life of Birds and Mammals.** Including Man. Laurence Irving. Springer-Verlag, New York, 1972. xii, 192 pp., illus. \$14.

**The Auditory Periphery.** Biophysics and Physiology. Peter Dallos. Academic Press, New York, 1973. xii, 548 pp., illus. \$32.50.

**Basic Structural Behaviour via Models.** Barry Hilson. Halsted (Wiley), New York, 1973. xiv, 114 pp., illus. \$8.50.

**Biological Psychiatry.** Joseph Mendels, Ed. Wiley-Interscience, New York, 1973. xii, 528 pp., illus. \$24.95.

**Biology of Hydra.** Allison L. Burnett, Ed. Academic Press, New York, 1973. xvi, 466 pp., illus. \$29.

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