## **Observational Learning**

Social Learning and Cognition. TED L. Ro-SENTHAL and BARRY J. ZIMMERMAN. Academic Press, New York, 1978. xiv, 338 pp. \$15.

This volume is a comprehensive, scholarly presentation of the social learning perspective on human development, particularly as it applies to the acquisition of cognitive skills. Although the term "social learning" is broadly interpreted in developmental psychology, the authors of the book have a specific meaning in mind. Their theoretical approach stresses the central role of modeling processes in children's learning. In their view most of the important learning for children occurs as they observe the actions of others (hence, observational learning or learning from models). In the particular theory of modeling that they propose, there are a number of intervening cognitive events, such as attention, symbolic coding, and memory. Basically, the treatment accomplishes two purposes. It elaborates and updates the theoretical writings of Albert Bandura. And it reviews the research literature, expanding upon the review the authors contributed to the Psychological Bulletin several years ago.

My judgment is that the volume will become a classic because it collects in one place all of the fundamental arguments showing why structural models cannot account for cognitive change and why simpler associationistic models of learning are also inadequate. Among the empirical topics surveyed are moral judgment, concept learning, the acquisition of language rules, and problem solving.

The authors are likely to be faulted for placing too much emphasis on the monolithic role of modeling as the only construct that has consistent utility for explaining social influence. Those experts with a cognitive bent would argue that other processes-role relations, social comparisons, and social attributions-also occupy pivotal positions.

On the cognitive side, the major difficulty is that the authors fail to consider the rich interdependencies among cognitive skills and the major sequences of their acquisition. The authors acknowledge this problem early in the volume and attribute it to the unique characteristics of the research tradition within which they operate. The "social learning" tradition offers powerful experimental demonstrations of how specific cognitive skills can readily be changed through modeling. Cognitive psycholo-

gists, however, are typically more concerned with the sequences of skills that develop and, from an "informationtheoretic perspective," with the interrelatedness of component skills. To assess the development of sequences of skills it is necessary to have longitudinal data. To provide a richer account of how the different skills are related it is necessary to specify the logical or empirical underpinnings of each skill. Methodologies that take both these necessities into account are needed to replace the training study, which is the modal source of evidence relied upon in the volume.

On balance, one must recognize that any marriage between two fields in a social science inevitably occurs at the expense of glossing over details from each. Given this limitation, the authors have done a commendable job of outlining the compromise position and representing the two theoretical perspectives (behavioral and cognitive psychology) with clarity, subtlety, and accuracy.

STEVEN R. YUSSEN

Department of Educational Psychology, University of Wisconsin, Madison 53706

## **Books Received**

The Abuse of Power. The War between Downing Street and the Media from Lloyd George to Callaghan. James Margach. Allen, London, 1978 (U.S. distributor, Transatlantic Arts, Levittown, N.Y.). vi, 200 pp. + plates. \$11.50.

Adaptive Environmental Assessment and Management. C. S. Holling, Ed. Wiley-Interscience, New York, 1978. xx, 378 pp., illus. \$16.50. Wiley IIASA International Series on Applied Systems Analysis, 3.

The Bilingual Brain. Neuropsychological and Neurolinguistic Aspects of Bilingualism. Martin L. Albert and Loraine K. Obler. Academic Press, New York, 1978. xiv, 302 pp. \$19.50. Perspectives in Neurolinguistics and Psycholinguistics.

Biochemistry. N. V. Bhagavan. Lippincott, Philadelphia, ed. 2, 1978. xvi, 1364 pp., illus. Paper, \$25.

Children's Language. Vol. 1. Keith E. Nelson, Ed. Gardner Press, New York, 1978 (distributor, Halsted [Wiley], New York). xvi, 568 pp. \$23.50.

The Child's Understanding of Number. Rochel Gelman and C. R. Gallistel, Harvard University Press, Cambridge, Mass., 1978. xvi, 260 pp., \$13.50.

Chloroform, Carbon Tetrachloride, and Other Halomethanes. An Environmental Assessment. National Academy of Sciences, Washington, D.C., 1978. xiv, 294 pp., illus. Paper, \$8.75. Scientific and Technical Assessments of Environmental Pollutants.

The Disputing Process. Law in Ten Societies. Laura Nader and Harry F. Todd, Jr., Eds. Columbia University Press, New York, 1978. xx, 372 pp. Cloth, \$20; paper, \$8.50. Dynamics of Marine Vehicles. Rameswar

Bhattacharyya. Wiley-Interscience, New York, 1978. xiv, 498 pp., illus. \$40. Ocean Engineering.

Electromagnetic Fields. Sources and Media. Alan M. Portis, Wiley, New York, 1978. xxiv, 776 pp., illus. \$22.95.

Electron Microscopy and Cytochemistry of Plant Cells. J. L. Hall, Ed. Elsevier/North-Holland, New York, 1978. xii, 444 pp., illus. \$93

Elementary Number Theory. Underwood Dudley. Freeman, San Francisco, ed. 2, 1978. xii, 250 pp. \$15. A Series of Books in the Mathematical Sciences.

Gastrointestinal Hormones and Pathology of the Digestive System. Proceedings of a symposium, Rome, July 1977. Morton Grossman, V. Speranza, N. Basso, and E. Lezoche, Eds. Plenum, New York, 1978. x, 326 pp., illus. \$35. Advances in Experimental Medicine and Biology, vol. 106.

Geodesy. Trends and Prospects. National Academy of Sciences, Washington, D.C., 1978 (available from the National Geodetic Information Center, Rockville, Md.). x, 86 pp. Paper.

Geodesy and the Earth's Gravity Field. Vol. 1, Principles and Conventional Methods. Erwin Groten, Ed. Dümmler, Bonn, Germany, 1979. vi, 410 pp., illus. Paper, DM 48. Dümmlerbuch 7837.

Handbook on Plasma Instabilities. Vol. 2. Ferdinand F. Cap. Academic Press, New York, 1978. xxii + pp. 459-1010, illus. \$28.50.

Handicapped Funding Directory. 1978-79 Edition. A Guide to Sources of Funding in the United States for Handicapped Programs and Services. Burton J. Eckstein, Ed. Research Grant Guides, Oceanside, N.Y., 1978. viii, 164 pp. Paper, \$14.50.

Immunology. Leroy E. Hood, Irving L. Weissman, and William B. Wood. Benjamin/ Cummings, Menlo Park, Calif., 1978. xii, 468 pp., illus. Paper, \$14.95.

Implicit Meanings. Essays in Anthropology. Mary Douglas. Routledge and Kegan Paul, Boston, 1978. xxii, 326 pp., illus. Paper, \$7.50. Reprint of the 1975 edition.

Learning Disabilities. A Psychological Perspective. Sylvia Farnham-Diggory. Harvard University Press, Cambridge, Mass., 1978. xii, 154 pp., illus. \$7.95. The Developing Child Series.

Learning in the Later Years. Principles of Educational Gerontology. Victor M. Agruso, Jr. Academic Press, New York, 1978. x, 150 pp. \$12.

The Least Is Best Pesticide Strategy. A Guide to Putting Integrated Pest Management into Action. Jerome Goldstein and Rill Ann Goldstein, Eds. JG Press, Emmaus, Pa., 1978. 206 pp., illus. Cloth, \$12.95; paper, \$6.95

The Management of Medical Practice. John McCormick, Ronald L. Rushing, and W. Grayburn Davis. Ballinger (Lippincott), Cambridge, Mass., 1978. xvii, 392 pp., illus. \$20.

Marine Ecology. A Comprehensive Integrated Treatise on Life in Oceans and Coastal Waters. Vol. 4, Dynamics. Otto Kinne, Ed. Wiley-Interscience, New York, 1978. xvi, 746 pp., illus. \$86.

Maturation of the Nervous Systems. Proceedings of a summer school, Amsterdam, July 1977. M. A. Corner, R. E. Baker, N. E. van de Poll, D. F. Swaab, and H. B. M. Uylings, eds. Elsevier, New York, 1978. xii, 426 pp., illus. \$71.25. Progress in Brain Research, vol. 48.

(Continued on page 438)

New Cyclic Nucleotide cCMP, [5-3H(N)]-20–30Ci/mmol NET-600

Cell Wall Biosynthesis CDP glycerol, [glycerol-2-3H(N)]-5–10Ci/mmol NET-595 CDP ribitol, [ribitol-5-3H]-5–15Ci/mmol NET-589

> Assay of dUTPase **dUTP, [**5-3H(N)]-15–25Ci/mmol NET-608



*RNA Labeling in vivo* **Uridine,** [5,6,5'-<sup>3</sup>H]-60–75Ci/mmol NET-599

DNA Synthesis in vitro dCTP, [5,5'-3H]-40-60Ci/mmol NET-601

*RNA Synthesis in vitro* **ATP,** [2,8,5'-<sup>3</sup>H]-45–60Ci/mmol NET-591

Not for use in humans or clinical diagnosis.



549 Albany Street, Boston, Mass. 02118 Call toll-free: 800-225-1572 (In Massachusetts and International: 617-482-9595)

NEN Chemicals GmbH: D-6072 Dreieich, W. Germany, Postfach 401240, Telephone: (06103) 85034, Telex: 4-17993 NEN D

NEN Canada Ltd., 2453 46th Avenue.

Lachine, Que. H8T 3C9, Telephone: 514-636-4971, Telex: 05-821808

Circle No. 56 on Readers' Service Card

## **BOOKS RECEIVED AND**

## **BOOK ORDER SERVICE**

(Continued from page 400)

Membranes and Their Cellular Functions. J. B. Finean, R. Coleman, and R. H. Michell. Illustrated by T. A. Bramley. Blackwell, Oxford, ed. 2, 1978 (U.S. distributor, Halsted [Wiley], New York). x, 158 pp. Paper, \$10.95.

Messages from the Stars. Communication and Contact with Extraterrestrial Life. Ian Ridpath. Harper and Row, New York, 1978. xii, 242 pp. \$10.

Metabolic Surgery. Henry Buchwald and Richard L. Varco, Eds. Grune and Stratton, New York, 1978. xii, 318 pp., illus. \$29. Modern Surgical Monographs.

The Neutrophil. Function and Clinical Disorders. Seymour J. Klebanoff and Robert A. Clark. North-Holland, Amsterdam, 1978 (U.S. distributor, Elsevier, New York). xxviii, 810 pp., illus. \$148.

New Trends and Developments in Vaccines. Papers from a symposium, Brussels. A. Voller and H. Friedman, Eds. University Park Press, Baltimore, 1978. x, 324 pp., illus. \$29.50.

The Next Fifty Years in Space. Patrick Moore. Drawings by Andrew Farmer. Taplinger, New York, 1978. 144 pp. Paper, \$7.50. Reprint of the 1976 edition.

Nitrates. An Environmental Assessment. National Academy of Sciences, Washington, D.C., 1978. xxvi, 724 pp., illus. Paper, \$15.25. Scientific and Technical Assessments of Environmental Pollutants. No Easy Answers. The Learning Disabled

**No Easy Answers.** The Learning Disabled Child. Sally L. Smith. National Institute of Mental Health, Rockville, Md., 1978 (available from the Superintendent of Documents, Washington, D.C.). xiv, 132 pp. Paper, \$3.25. DHEW Publication No. (ADM)77-526.

**Oral Contraceptives.** Vol. 2, 1978. Michael Briggs and Maxine Briggs. Eden Press, St. Albans, Vt., 1978. xii, 186 pp. \$16. Annual Research Reviews.

The Order Microsauria. Robert L. Carroll and Pamela Gaskill. American Philosophical Society, Philadelphia, 1978. xii, 212 pp., illus. Paper, \$15. Memoirs of the American Philosophical Society, vol. 126.

Peripheral Metabolism and Action of Thyroid Hormones. Vol. 2, 1977. D. B. Ramsden. Eden Press, St. Albans, Vt., 1978. viii, 294 pp. \$24. Annual Research Reviews.

**Permafrost.** USSR Contribution. Papers from a conference, July 1973. Translated from the Russian. Frederick J. Sanger and Peter J. Hyde, Eds. National Academy of Sciences, Washington, D.C., 1978. xxvi, 866 pp., illus. Paper, \$18.

**Personnel for Health Care**. Case Studies of Educational Programmes. F. M. Katz and T. Fülöp, Eds. World Health Organization, Geneva, 1978 (U.S. distributor, WHO Publications Centre USA, Albany, N.Y.). 260 pp., illus. paper, \$10.50. Public Health Papers, 70.

**Pesticides.** Preparation and Mode of Action. R. Cremlyn. Wiley, New York, 1978. x, 240 pp., illus. + plates. \$29.95.

Public Program Analysis. Applied Research Methods. Theodore H. Poister. University Park Press, Baltimore, 1978. xiv, 626 pp., illus. \$19.95.

The Pursuit of Hope. Miriam Ottenberg. Rawson, Wade, New York, 1978. xiv, 238 pp. \$9.95.

Research in Pediatric Surgery. P. P. Rick-

ham, W. Ch. Hecker, and J. Prévot, Eds. Urban & Schwarzenberg, Baltimore, 1978. vi, 214 pp., illus. \$24.50. Progress in Pediatric Surgery, vol. 12.

Rodent Malaria. R. Killick-Kendrick and W. Peters, Eds. Academic Press, New York, 1978. xxvi, 406 pp., illus. \$39.75.

The Rorschach. A Comprehensive System. Vol. 2, Current Research and Advanced Interpretations. John E. Exner. Wiley-Interscience, New York, 1978. xvi, 448 pp., illus. \$32.95.

Science: The Basic Skills. L J. Campbell and R. J. Carlton. Illustrated by David and Maureen Embry. Routledge and Kegan Paul, Boston, 1978. x, 230 pp. Paper, \$7. Secondary Science Series.

The Scientific Basis of Flocculation. Proceedings of a NATO Advanced Study Institute, Cambridge, England, July 1977. Kenneth J. Ives, Ed. Sijthoff & Noordhoff, Alphen aan den Rijn, The Netherlands, 1978. vi, 370 pp., illus. \$33.50. NATO Advanced Study Institutes Series E, No. 27.

**Set Theory**. Thomas Jech. Academic Press, New York, 1978. xiv, 622 pp. \$53. Pure and Applied Mathematics.

Sex-Related Cognitive Differences. An Essay on Theory and Evidence. Julia A. Sherman. Thomas, Springfield, Ill., 1978. xii, 270 pp. Cloth, \$16.25; paper, \$12.25.

The Silent Pulse. A Search for the Perfect Rhythm That Exists in Each of Us. George Leonard. Dutton, New York, 1978. xiv, 210 pp. \$8.95.

Silicones under the Monogram. A Story of Industrial Research. Herman A. Liebhafsky. Sybil Small Liebhafsky and George Wise, Eds. Wiley-Interscience, New York, 1978. xvi, 382 pp., illus. \$22.25.

Small Fruit Culture. James S. Shoemaker. AVI Publishing Company, Westport, Conn., ed. 5, 1978. x, 358 pp., illus. \$19.

**3rd Soviet-Swedish Symposium on the Pollution of the Baltic**. Stockholm, Sept. 1975. Anders Åkerblom, Ed. Published for the Royal Swedish Academy of Sciences by Universitetsforlaget, Oslo 1978 (U.S. distributor, Columbia University Press, New York). 294 pp., illus. Paper, \$25. Ambio Special Report, No. 5.

Three-Phase UHV AC Transmission Research. Prepared by General Electric Company. Electric Power Research Institute, Palo Alto, Calif., 1978. Variously paged, illus. Paper, \$11. EPRI EL-823.

Transition Metal Organometallics in Organic Synthesis. Vol. 2. Howard Alper, Ed. Academic Press, New York, 1978. xii, 188 pp., illus. \$19. Organic Chemistry, vol. 33.

Transmission Lines for Communications. C. W. Davidson. Halsted (Wiley), New York, 1978. vi, 218 pp., illus. \$22.50.

**Treatise on Analytical Chemistry**. Part 1, Theory and Practice. Vol. 1. I. M. Kolthoff ane Philip J. Elving, Eds. Interscience (Wiley), New York, ed. 2, 1978. xxx, 882 pp., illus. \$57.95.

Tree Fruit Production. Benjamin J. E. Teskey and James S. Shoemaker. AVI Publishing Company, Westport, Conn., ed. 3, 1978. xii, 412 pp., illus. \$20.

The Tricentennial People. Human Applications of the New Genetics. Papers from a symposium, Dubuque, Iowa, Oct. 1975. Iowa State University Press, Ames, 1978. xii, 102 pp. Paper, \$4.25.

Women, Science, and Society. Joan N. Burstyn, Ed. University of Chicago Press, Chicago, 1978. iv, 218 pp., Paper, \$4; to institutions, \$5. Signs, vol. 4, No. 1.