

the simplification of the stimulus conditions used in experiments and to a tendency to ignore the perception of complex and meaningful stimuli. This book by two Scandinavian psychologists may help to restore balance.

The authors' view is that perceptual experience is based on the integration of a multiplicity of cues interpreted with the aid of expectations and past experience. The percept that results is thought to consist of a spatiotemporal reference frame containing representations of objects and their relations. The authors begin the central section of the book with a consideration of the perception of the frame of reference and the perceiver's orientation within it. They then turn to the perception of objects, discussing the invariant appearance of objects under varying viewing conditions and the viewer's experience of their reality and permanence. They also consider the perception of movement and time as well as the use of auditory and tactual cues to localization and structure.

The book draws heavily on American as well as European work, and von Fieandt and Moustgaard do a good job of extracting the valuable contributions of other workers without any excess baggage. Unfortunately, little in the way of new insight emerges. The view that perception results from the integration of varied stimulus cues aided by expectations and knowledge is reasonable, but it is not terribly novel; one might have hoped for some attempt to consider the process whereby the integration takes place. Perhaps the authors have missed as much in their ignorance of the information processing approach to perception as some of us in the United States have missed in ignoring the more phenomenological European contributions.

The book includes chapters on psychophysics (by V. Sarris) and neurophysiology (by J. D. Mollon), a section on the basic perceptual experiences arising from each of the senses, and a section on personal and social factors in perception (with a chapter by R. O. Viitamäki). In these chapters the authors often seem to be reviewing the literature with little insight or novel organization, and the prose is often obfuscatory. But the chapters do provide a useful sense of history and some valuable discussions of contemporary European research as well as a good deal of basic material that is likely to be familiar.

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## Books Received

**Comparative Aspects of Lactation.** Proceedings of a symposium, London, Nov. 1976. Malcolm Peaker, Ed. Published for the Zoological Society of London by Academic Press, New York, 1977. xxxiv, 374 pp., illus. \$32.35. Symposia of the Zoological Society of London, No. 41.

**Contemporary Astronomy.** Jay M. Pasachoff. Saunders, Philadelphia, 1977. xvi, 588 pp., illus. + plates + appendices. \$15.95.

**Coyotes.** Biology, Behavior, and Management. Marc Bekoff, Ed. Academic Press, New York, 1978. xx, 384 pp., illus. \$34.50.

**The Declining Significance of Race.** Blacks and Changing American Institutions. William Julius Wilson. University of Chicago Press, Chicago, 1978. xii, 204 pp. \$12.50.

**The Determinants of Free Will.** A Psychological Analysis of Responsible, Adjustive Behavior. James A. Easterbrook with the assistance of Pamela J. Easterbrook. Academic Press, New York, 1978. xii, 260 pp. \$16. Personality and Psychopathology, 18.

**Ecological Effects of Pesticides.** Papers from a symposium, London, Sept. 1976. F. H. Perring and K. Mellanby, Eds. Published for the Linnean Society by Academic Press. New York, 1977. xii, 194 pp., illus. \$21.50. Linnean Society Symposium Series, No. 5.

**The Economic Growth Debate.** An Assessment. E. J. Mishan. Allen and Unwin, Reading, Mass., 1977. 278 pp. Cloth, \$18.75; paper, \$8.75.

**Edge-Colourings of Graphs.** S. Fiorini and R. J. Wilson. Fearon-Pitman, Belmont, Calif., 1977. vi, 154 pp., illus. Paper, \$12.50. Research Notes in Mathematics, 16.

**The Electronic Structure of Rare-Earth Metals and Alloys.** The Magnetic Heavy Rare-Earths. B. Coqblin. Academic Press, New York, 1977. xvi, 656 pp., illus. \$57.75.

**The Environment as Hazard.** Ian Burton, Robert W. Kates, and Gilbert F. White. Oxford University Press, New York, 1978. xviii, 240 pp., illus. Cloth, \$11; paper, \$6.50.

**Essentials of Geology.** Brainerd Mears, Jr. D. Van Nostrand, New York, 1978. xii, 420 pp., illus. \$13.95.

**Evaluation of Human Service Programs.** C. Clifford Attkisson, William A. Hargreaves, Mardi J. Horowitz, and James E. Sorensen. Eds. Academic Press, New York, 1978. xvi, 492 pp., illus. \$24.50.

**Experimental Neurobiology.** A Laboratory Manual. Bruce Oakley and Rollie Schafer. University of Michigan Press, Ann Arbor, 1978. xii, 366 pp., illus. Paper, \$12.95.

**Frisbee Player's Handbook.** Mark Danna and Dan Poynter. Parachuting Publications, Santa Barbara, Calif., 1978, 188 pp., illus. + disc. \$8.95.

**Functional Anatomy of Marine Mammals.** Vol. 3. R. J. Harrison, Ed. Academic Press, New York, 1977. x, 428 pp., illus. \$34.25.

**Future Energy Alternatives.** Long-Range Energy Prospects for America and the World. Roy Meador. Ann Arbor Science, Ann Arbor, Mich., 1978. x, 198 pp., illus. Cloth, \$9.95; paper, \$6.95.

**Generalized Thermodynamics.** Laszlo Tisza. MIT Press, Cambridge, Mass., 1977. xii, 384 pp., illus. Paper, \$6.95. Reprint of the 1966 edition.

**Gestosis-Index in Relation.** Hans Weber. Organization Gestosis Press, Basel, 1977. 116 pp., illus. Paper 20 SwF.

**Guides des Plantes Dangereuses.** Anne-Marie Debemas and Pierre Delaveau. Mal-

oine, Paris, 1978. 192 pp., illus. + plates. 68 F.

**Handbook of Simplified Solid-State Circuit Design.** John D. Lenk. Prentice-Hall, Englewood Cliffs, N.J., ed. 2. 1978. xvi, 430 pp., illus. \$16.95.

**Mind Beyond the Body.** The Mystery of ESP Projection. D. Scott Rogo, Ed. Penguin, New York, 1978. 366 pp. Paper, \$2.95.

**Modern Aspects of Electrochemistry.** No. 12. J. O'M. Bockris and B. E. Conway, Eds. Plenum, New York, 1977. xii, 326 pp., illus. \$32.50.

**Muted Consent.** A Casebook in Modern Medical Ethics. Jan Wojcik. Purdue University, West Lafayette, Ind., 1978. x, 164 pp. Paper, \$3.25. Science and Society, vol. 1.

**Mycotoxins in Human and Animal Health.** Proceedings of a conference, College Park, Md., Oct. 1976. Joseph V. Rodricks, Clifford W. Hesseltine, and Myron A. Mehlmán, Eds. Pathotox Publishers, Park Forest South, Ill., 1977. xviii, 808 pp., illus. \$38.

**Nonverbal Behavior and Communication.** Aron W. Siegman and Stanley Feldstein, Eds. Erlbaum, Hillsdale, N.J., 1978 (distributor, Halsted [Wiley], New York). xiv, 400 pp., illus. \$19.95.

**The NSF Science Development Programs.** National Science Foundation, Washington, D.C., 1977. Two volumes. Vol. 1, A Documentary Report. xviii, 78 pp., illus. Paper. Vol. 2. Budgets, Statements of Goals, and Grantees' Summaries of Grant Impact. viii, 222 pp. Paper.

**Ordinary Differential Equations.** Tyn Myint-U. North-Holland, Amsterdam, 1977 (U.S. distributor, Elsevier, New York). xii, 296 pp. \$18.50.

**Origins of Agriculture.** Papers from a conference, 1973. Charles A. Reed. Ed. Mouton, The Hague, 1978 (U.S. distributor, Aldine, Chicago). xvi, 1014 pp., illus. \$64.

**The Origins of Knowledge and Imagination.** Jacob Bronowski. Yale University Press, New Haven, Conn., 1978. xiv, 146 pp. \$7.95. Yale University Mrs. Hepsa Ely Silliman Memorial Lectures.

**The Ovary.** Vol. 3, Regulation of Oogenesis and Steroidogenesis. Lord Zuckerman and Barbara J. Weir, Eds. Academic Press, New York, ed. 2. 1977. xx, 458 pp., illus. \$34.

**Pathophysiology of Carcinogenesis in Digestive Organs.** Proceedings of a symposium, Tokyo, 1976. Emmanuel Farber and 5 others, Eds. University Park Press, Baltimore, 1977. xvi, 442 pp., illus. \$47.50.

**Primate Conservation.** H. S. H. Prince Rainier III of Monaco and Geoffrey H. Bourne, Eds. Academic Press, New York, 1977. xviii, 658 pp., illus. \$39.50.

**Quantum Fluids and Solids.** Proceedings of a symposium, Sanibel Island, Fla., Jan. 1977. Samuel B. Trickey, E. Dwight Adams, and James W. Dufty, Eds. Plenum, New York, 1977. x, 474 pp., illus. \$47.50.

**Receptors and Hormone Action.** Vol. 2. Bert W. O'Malley and Lutz Birnbaumer, Eds. Academic Press, New York, 1978. xvi, 602 pp., illus. \$46.

**Regional Nuclear Fuel Cycle Centres.** 1977 Report of the IAEA Study Project. International Atomic Energy Agency, Vienna, 1977 (U.S. distributor, Unipub, New York). Two volumes. Vol. 1, Summary. viii, 128 pp., illus. Paper, \$10. Vol. 2, Basic Studies. xiv, 308 pp., illus. Paper, \$22.

**Remote Sensing.** A Handbook for Archeologists and Cultural Resource Managers. Thomas R. Lyons and Thomas Eugene Avery. Na-

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## BOOKS RECEIVED

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tional Park Service, Washington, D.C., 1977 (available from the Superintendent of Documents, Washington, D.C.). viii, 110 pp., illus. Paper, \$3. Contribution No. 4 of the Chaco Center.

**Research on Urban Hydrology.** Vol. 1, State-of-the-Art Reports from Australia, Canada, U.S.S.R., United Kingdom, U.S.A. M. B. McPherson, Ed. Unesco, Paris, 1977 (U.S. distributor, Unipub, New York). 186 pp. Paper, \$10.75. Technical Papers in Hydrology, 15.

**Sea Squirts of the Atlantic Continental Shelf from Maine to Texas.** Harold H. Plough. Drawings by Mareile Fenner. Johns Hopkins University Press, Baltimore, 1978. x, 118 pp. \$20.

**Soil Organisms as Components of Ecosystems.** Proceedings of a colloquium, Uppsala, Sweden, June 1976. U. Lohm and T. Persson, Eds. Swedish Natural Science Research Council (NFR), Stockholm, 1977. 614 pp., illus. Paper, \$31. Ecological Bulletins No. 25.

**Solar Energy.** Proceedings of a symposium, Geneva, Aug. 1976. World Meteorological Organization, Geneva, 1977 (U.S. distributor, Unipub, New York). Ivi, 654 pp., illus. Paper, \$26. WMO—No. 477.

**Structural Principles of Unsaturated Organic Compounds.** With Special Reference to X-ray Structure Analyses of Coloured Substances. Siegfried Dähne and Siegfried Kulpe. Akademie-Verlag, Berlin, East Germany, 1977. 128 pp., illus. Paper, 24 M. Abhandlungen der Akademie der Wissenschaften der DDR, Jahrgang 1977, No. 8N.

**Superconductivity.** N. G. Basov, Ed. Translated from the Russian edition (Moscow, 1976) by G. D. Archard. Consultants Bureau (Plenum), New York, 1977. x, 168 pp., illus. Paper, \$32.50. The Lebedev Physics Institute Series, vol. 86.

**Technologies for Rural Health.** Papers from a meeting, London, Dec. 1976. The Royal Society, London, 1977. iv, 188 pp., illus. + plates. £6.45. Also published in *Proceedings of the Royal Society of London*, series B, vol. 199, No. 1134.

**Tectonics of Asia.** Emile Argand. Translated from the French edition (1924) and edited by Albert V. Carozzi. Hafner (Macmillan), New York, and Collier Macmillan, London, 1977. xxviii, 218 pp., illus. + loose map. \$18.95.

**Theory of Nonlinear Operators.** Constructive Aspects. Proceedings of a summer school, Berlin, Sept. 1975. Reinhard Kluge and Wolfdietrich Müller, Eds. Akademie-Verlag, Berlin, East Germany, 1977. 416 pp. Paper, 48 M. Abhandlungen der Akademie der Wissenschaften der DDR, Jahrgang 1977. No. 1N.

**This Land Was Theirs.** A Study of North American Indians. Wendell H. Oswalt. Wiley, New York, ed. 3, 1978. xx, 570 pp., illus. \$16.95.

**Topics in Numerical Analysis III.** Proceedings of a conference, Dublin, Aug. 1976. John J. H. Miller, Ed. Published for the Royal Irish Academy by Academic Press, New York, 1977. xiv, 478 pp., illus. \$44.90.

**Topos Theory.** P. T. Johnstone. Academic Press, New York, 1977. xxiv, 368 pp., illus. \$34.25. L.M.S. Monographs. 10.

**Understanding and Programming Computers.** Samiha Mourad. Exposition, Hicksville, N.Y., 1978. xii, 316 pp., illus. \$10. An Exposition-University Book.