cerebral endings of the analyzer systems represents a physical basis of the diverse grades of transfer from actual sensory perception and impressions to abstract-logical forms of concepts of reality and behavior patterns." Such are the phrases that allegedly bring us "closer to the solution of the cardinal question posed by Pavlov: what is the fine structure of the analyzers, and how do their various components interact?"

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Morphogenesis in Insects

Biochemical Aspects of Insect Development. P. S. CHEN. Karger, Basel, 1971 (U.S. distributor, Phiebig, White Plains, N.Y.). viii, 230 pp., illus. \$17.30. Monographs in Developmental Biology, vol. 3.

Recently developmental biologists have increasingly recognized the opportunities for genetic analysis of development afforded by that genetically best-known of all animals, Drosophila. At the same time, research on endocrine aspects of insect development has burgeoned, spurred in part by the encouraging possibility that hormone mimics may be valuable in the selective control of insects. A book on the biochemistry of insect development is therefore welcome, and P. S. Chen, an active contributor to this field for the past two decades, is well qualified to provide it. This concise volume takes up insect development stage by stageembryo, larva, metamorphosis, adult reviewing the biochemical knowledge of each, and concludes with a chapter on genetically based studies. The book is generally up to date and, with a bibliography of more than 900 titles, is a valuable source for the literature of the field. Endocrine aspects receive little emphasis, which is appropriate in view of the existence of several current reviews on insect hormones, and genetic aspects, in which the author has special interest, are emphasized. Although in this field of research, as in others, many investigations have suffered from technical inadequacy, many premature conclusions have been drawn, and many inferences have been legitimately revised in the light of new discovery, Chen studiously refrains from criticism and value judgment. This seems a pity

-some guidance through the jungle of papers, and personal opinion from an experienced worker, would have been welcome. Also a little disappointing is the limited amount of new interpretation and synthesis. Perhaps the boldest broad conclusion is the rejection of any massive alteration of the protein pattern at metamorphosis. Chen does not accept the concept, put forth by others, of gene-set switchover at metamorphosis. "Even in the higher Diptera, which have the most complete metamorphosis, the data do not imply a switchover from a larval set of genes to an adult set" (p. 96). Changing gene expression during development could be called the theme of this book, but Chen believes that the evidence indicates a less extensive and more gradual change in pattern of gene expression than has sometimes been assumed. This reviewer found the final chapter, on biochemical analysis of developmental mutants (chiefly Drosophila), the most interesting. Modern methods of nucleic acid and protein research are now being applied to this material, and significant results for developmental biology are to be expected.

The volume is regrettably expensive for its size, and would have benefited from better proofreading.

G. R. WYATT

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Books Received

A la Carte. Selected Papers on Maps and Atlases. Compiled by Walter W. Ristow. Library of Congress, Washington, D.C., 1972 (available from the Superintendent of Documents, Washington, D.C.). x, 232 pp., illus. \$4.

Advances in Experimental Clinical Psychology. Henry E. Adams and William K. Boardman, Eds. Pergamon, New York, 1972. x, 220 pp., illus. \$11.50. Pergamon General Psychology Series.

Advances in Psychobiology. Vol. 1. Grant Newton and Austin H. Riesen, Eds. Wiley-Interscience, New York, 1972. xiv, 302 pp., illus. \$16.50.

Analysis of Industrial Wastewaters. K. H. Mancy and W. J. Weber, Jr. Wiley-Interscience, New York, 1972. vi, 149 pp. Paper, \$6.95. Reprinted from Treatise on Analytical Chemistry, part 3, vol. 2 (Industrial Toxicology and Environmental Pollution and Its Control).

Antenatal Diagnosis. A symposium, Chicago, June 1970. Albert Dorfman, Ed. University of Chicago Press, Chicago, 1972. xii, 286 pp., illus. \$12.50. NICHD-eMntal Retardation Research Centers Series.

Aphid Technology. With Special Reference to the Study of Aphids in the Field. A meeting, Silwood Park, England, 1968. H. F. van Emden, Ed. Academic Press, New York, 1972. xiv, 344 pp., illus. \$18.50.

The Application of Micrometeorology to Agricultural Problems. L. P. Smith, Ed. Secretariat of the World Meteorological Organization, Geneva, 1972 (U.S. distributor, Unipub, New York). xiv, 74 pp. Paper, \$4. World Meteorological Organization Technical Note, No. 119. WMO, No. 298.

An Archaeological Perspective. Lewis R. Binford with a contribution by George I. Quimby. Seminar Press, New York, 1972. xii, 464 pp., illus. \$11.95. Studies in Archeology.

Archaeology under Water. George F. Bass. Penguin, Baltimore, 1972. 184 pp. + plates. Paper, \$1.95. Reprint of the 1966 edition.

Asbestos and Enzymes. Paul Brodeur. Ballantine, New York, 1972. xiv, 146 pp. Paper, \$1.25. Reprinted from The New Yorker

Atmospheric Transport Processes. Part 3, Hydrodynamic Tracers. Elmar R. Reiter, U.S. Atomic Energy Commission Office of Information Services, Oak Ridge, Tenn., 1972 (available as TID-25731 from National Technical Information Service, Springfield, Va.). viii, 212 pp., illus. Paper, \$3. AEC Critical Review Series.

Autistic Children. A Guide for Parents. Lorna Wing. Brunner/Mazel, New York, 1972. xiv, 158 pp. \$6.95.

Automated Multiphasic Health Testing.
Proceedings of a conference, Davos,
Switzerland, Sept. 1970. Engineering
Foundation, New York, 1972. 432 pp.,
illus. Paper, \$15. Engineering Foundation
Research Conferences.

Basic Machine Principles. J. K. Iliffe. Macdonald, London; Elsevier, New York, ed. 2, 1972. x, 122 pp., illus. \$5.50. Computer Monographs.

Die Beherrschung der Mannigfaltigkeit. Philosophische Grundlagen der Taxonomie. Rolf Löther. Fischer, Jena, Germany, 1972. 286 pp., illus. Paper, 36 DM.

Bioceramics. Engineering in Medicine. A conference, Henniker, N.H., Aug. 1970. C. W. Hall, S. F. Hulbert, S. N. Levine, and F. A. Young, Eds. Interscience, New York, 1972. xii, 484 pp., illus. \$18. Journal of Biomedical Materials Research Biomedical Materials Symposium No. 2.

Biomedical Implications of Radiostrontium Exposure. Proceedings of a symposium, Davis, Calif., Feb. 1971. Marvin Goldman and Leo K. Bustad, Eds. U.S. Atomic Energy Commission Office of Information Services, Oak Ridge, Tenn., 1972 (available as CONF-710201 from National Technical Information Service, Springfield, Va.). viii, 404 pp., illus. Paper, \$6. AEC Symposium Series, 25.

Botany. An Ecological Approach. William A. Jensen and Frank B. Salisbury. Wadsworth, Belmont, Calif., 1972. x, 758 pp., illus. \$13.95.

British Marine Isopods. Keys and Notes for the Identification of the Species. E. Naylor. Published for the Linnean Society of London by Academic Press, New York,

(Continued on page 726)

1972. vi, 86 pp., illus. \$3.25. Synopses of the British Fauna, new series, No. 3.

Cape Cod. William Berchen and Monica Dickens. Viking, New York, 1972. 96 pp., illus. \$10.95. A Studio Book.

Cell Interactions. Proceedings of a colloquium, London, Nov. 1971. Luigi G. Silvestri, Ed. North-Holland, Amsterdam; Elsevier, New York, 1972. x, 314 pp., illus. Paper, \$16.50.

Cellular Activities during Ageing in Mammals. A Doctoral Thesis Submitted to the Faculty of Rockefeller University, New York, 30 March 1969. Caleb Ellicott Finch. MSS Information Corp., New York, 1972. xiv, 186 pp., illus. \$17.50.

The Central Business District. Raymond

The Central Business District. Raymond E. Murphy. Aldine-Atherton, Chicago, 1972. x, 194 pp., illus. \$8.95.

Chalcacingo. Carlo T. E. Gay. Drawings by Frances Pratt. International Scholarly Book Services, Portland, Ore., 1972. 120 pp. + plates. \$35.

The Changing Family. Its Function and Future. David A. Schulz. Prentice-Hall, Englewood Cliffs, N.J., 1972. xiv, 466 pp., illus. \$9.95.

Chemistry. A Study of Matter. Alfred B. Garrett, W. T. Lippincott, and Frank Henry Verhoek, Xerox, Lexington, Mass., ed. 2, 1972. xvi, 674 pp., illus., + index. \$12.

Chronic Obstructive Pulmonary Disease. A Manual for Physicians. National Tuberculosis and Respiratory Disease Association, New York, ed. 3, 1972. 116 pp., illus. Paper.

Circulatory Assist and Ballistocardiographic Studies. Proceedings of a meeting, Atlantic City, N.J., May 1971. David H. Jackson, Ed. Karger, Basel, 1972 (U.S. distributor, Phiebig, White Plains, N.Y.). viii, 112 pp., illus. Paper, \$10.95.

The Cod. Albert C. Hensen. Crowell, New York, 1972. x, 182 pp., illus. \$7.95.

Coloquios sobre Enseñanza Continuada en Medicina. A conference, Madrid, Sept. 1971. Enrique de la Morena and Ramirez Ruiz, Eds. Asociacion Cultural Hispano-Norteamericana, Madrid, 1972. 246 pp., illus. Paper, \$4.50.

Comparative Pathophysiology of Circulatory Disturbances. Proceedings of a conference, Santa Ynez Valley, Calif., Nov. 1971. Colin M. Bloor, Ed. Plenum, New York, 1972. xvi, 380 pp., illus. \$25. Advances in Experimental Medicine and Biology, vol. 22.

Computer Security Management. Dennis Van Tassel. Prentice-Hall, Englewood Cliffs, N.J., 1972. xiv, 220 pp., illus. \$10.50.

The Conduct of Science. Michael W. Friedlander. Prentice-Hall, Englewood Cliffs, N.J., 1972. xvi, 156 pp. Cloth, \$8.95; paper, \$3.95.

Conservation and Productivity of Natural Waters. A symposium, London, Oct. 1970. R. W. Edwards and D. J. Garrod, Eds. Published for the Zoological Society of London by Academic Press, New York, 1972. xvi, 318 pp., illus. + fold-out chart. \$17. Symposia of the Zoological Society of London, No. 29.

Contemporary Physics. An Introduction for the Nonscientist. Jerome Pine. McGraw-Hill, New York, 1972. xii, 528 pp., illus. \$10.95.

Culture Theory. David Kaplan and Robert A. Manners. Prentice-Hall, Englewood Cliffs, N.J., 1972. xii, 212 pp. Cloth, \$7.95; paper, \$3.25. Foundations of Modern Anthropology Series.

Current Topics in Biochemistry. A series of lectures, Bethesda, Md., Sept. 1971. C. B. Anfinsen, Robert F. Goldberger, and Alan N. Schechter, Eds. Academic Press, New York, 1972. xii, 256 pp., illus. Paper, \$6.95. National Institutes of Health Lectures in Biomedical Sciences.

Decision and Organization. A Volume in Honor of Jacob Marschak, C. B. McGuire and Roy Radner, Eds. North-Holland, Amsterdam; Elsevier, New York, 1972. x, 362 pp., illus. \$21. Studies in Mathematical and Managerial Economics, vol. 12.

The Discipline and Teaching of Nursing Process. An Evaluative Study. Ida J. Orlando. Putnam, New York, 1972. xiv, 126 pp. \$4.95.

Disinfestation of Fruit by Irradiation. Proceedings of a panel, Honolulu, Dec. 1970. International Atomic Energy Agency, Vienna, 1971 (U.S. distributor, Unipub, New York). viii, 178 pp., illus. Paper, \$5. Panel Proceedings Series.

Dissociation in Heavy Particle Collisions. G. W. McClure and J. M. Peek. Wiley-Interscience, New York, 1972. xiv, 198 pp. \$13.95. Wiley-Interscience Series in Atomic and Molecular Collisional Processes.

The Dynamic Structure of Cell Membranes. A colloquium, Mosbach/Baden, Germany, Apr. 1971. D. F. Hölzl Wallach and H. Fischer, Eds. Springer-Verlag, New York, 1971. iv, 254 pp., illus. \$15.

Ecological Aspects of the Nuclear Age. Selected Readings in Radiation Ecology. Vincent Schultz and F. Ward Whicker, Eds. U.S. Atomic Energy Commission Technical Information Service, Oak Ridge, Tenn., 1972 (available as TID-25978 from National Technical Information Service, Springfield, Va.). 588 pp., illus. Paper, \$6; microfiche, 95¢. Biology and Medicine (TID-4500).

The Economic Theory of Price Indices. Two Essays on the Effects of Taste, Quality, and Technological Change. Franklin M. Fisher and Karl Shell. Academic Press, New York, 1972. xvi, 118 pp., illus. \$6.95. Economic Theory and Mathematical Economics.

Economics of Engineering and Social Systems. J. Morley English, Ed. Wiley-Interscience, New York, 1972. xii, 322 pp., illus. \$17.95.

Educational and Psychological Measurement and Evaluation. Julian C. Stanley and Kenneth D. Hopkins. Prentice-Hall, Englewood Cliffs, N.J., ed. 5, 1972. xxiv, 520 pp., illus. \$9.95. Prentice-Hall Series in Educational Measurement, Research, and Statistics. Formerly titled Measurement in Today's Schools.

Encyclopedia of Instrumentation and Control. Douglas M. Considine, Ed. McGraw-Hill, New York, 1972. xxviii, 788 pp., illus. \$29.50.

Endemic Cretinism. Proceedings of a symposium, Goroka, New Guinea, Jan. 1971. Basel S. Hetzel and Peter O. D. Pharoah, Eds. Institute of Human Biology, Papua, New Guinea, 1971. viii, 134 pp.,

illus. \$45. Institute of Human Biology Monograph Series, No. 2.

Engineering Statistics. Albert H. Bowker and Gerald J. Lieberman. Prentice-Hall, Englewood Cliffs, N.J., ed. 2, 1972. xviii, 642 pp., illus. \$15.95.

Environmental Conservation. Raymond F. Dasmann. Wiley, New York, ed. 3, 1972. xiv, 474 pp., illus. Cloth, \$10.50; paper, \$6.95.

Environmental Geologic Atlas of the Texas Coastal Zone. Galveston-Houston Area. W. L. Fisher, J. H. McGowen, L. F. Brown, Jr., and C. G. Groat. University of Texas Bureau of Economic Geology, Austin, 1972. vi, 92 pp., illus., + maps. \$6.75.

Essays on Population Policy. Edwin D. Driver. Heath Lexington, Lexington, Mass., 1972. xvi, 204 pp., illus. \$13.50.

Evoked Potentials in Psychology, Sensory Physiology and Clinical Medicine. D. Regan. Wiley-Interscience, New York, 1972. xvi, 328 pp., illus. \$15.95.

Evolution of Genetic Systems. A symposium, Upton, N.Y., H. H. Smith, Ed. Gordon and Breach, New York, 1972. viii, 580 pp., illus. Cloth, \$20; paper, \$6.95.

Experimental Social Psychology. Text with Illustrative Readings. Chester A. Insko and John Schopler. Academic Press, New York, 1972. xvi, 562 pp., illus. \$10.95.

Explorations in Social Geography. Herbert G. Kariel and Patricia E. Kariel. Addison-Wesley, Reading, Mass., 1972. xviii, 398 pp., illus. \$10.95.

Exploring New Ethics for Survival. The Voyage of the Spaceship Beagle. Garrett Hardin. Viking, New York, 1972. xiv, 274 pp. \$7.95.

Functional Aspects of Parasite Surfaces. A symposium, London, Oct. 1971. Angela E. R. Taylor and R. Muller, Eds. Blackwell, Oxford, England, 1972 (U.S. distributor, Davis, Philadelphia). viii, 114 pp. + plates. Paper, \$10.50. Symposia of the British Society for Parasitology, vol. 10.

Fundamental Mathematics for Technical Students. Lee W. Davis. Canfield (Harper and Row), New York, 1972. xviii, 270 pp., illus. \$8.95.

The Fundamental Mechanisms of Shock. Proceedings of a symposium, Oklahoma City, Oct. 1971. Lerner B. Hinshaw and Barbara G. Cox, Eds. Plenum, New York, 1972. xx, 450 pp., illus. \$22.50. Advances in Experimental Medicine and Biology, vol. 23.

Fundamentals of Pattern Recognition. Edward A. Patrick. Prentice-Hall, Englewood Cliffs, N.J., 1972. xxiv, 504 pp., illus. \$18. Prentice-Hall Information and System Science Series.

Fundamentals of Physical Chemistry. Wayne E. Wentworth and S. Jules Ladner. Wadsworth, Belmont, Calif., 1972. xii, 564 pp., illus. \$11.95.

Galaxies. Harlow Shapley. Revised by Paul W. Hodge. Harvard University Press, Cambridge, Mass., ed. 3, 1972. xii, 232 pp., illus. \$10. Harvard Books on Astronomy.

Gardening Ants, the Attines. Neal A. Weber. American Philosophical Society,

(Continued on page 726)

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BOOKS RECEIVED

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Philadelphia, 1972. xx, 146 pp., illus. \$8. Memoirs of the American Philosophical Society, vol. 92.

General Zoology. Tracy I. Storer, Robert C. Stebbins, Robert L. Usinger, and James W. Nybakken. McGraw-Hill, New York, ed. 5, 1972. xii, 900 pp., illus. \$10.95

Geology of Soils. Their Evolution, Classification, and Uses. Charles B. Hunt. Freeman, San Francisco, 1972. xii, 344 pp., illus. \$12.50. A Series of Books in Geology.

Glycolipids, Glycoproteins, and Mucopolysaccharides of the Nervous System. Proceedings of a symposium, Milan, July 1971. Vittorio Zambotti, Guido Tettamanti, and Mariagrazia Arrigoni, Eds. Plenum, New York, 1972. xii, 334 pp., illus. \$17.50. Advances in Experimental Medicine and Biology, vol. 25.

Good Schools. H. P. Schoenheimer. Behavioral Publications, New York, 1972. 128 pp. Cloth, \$8.95; paper, \$4.95.

Growth Centers in Regional Economic Development. A conference, Austin, Tex., Nov. 1969. Niles M. Hansen, Ed. Free Press, New York; Collier-Macmillan, London, 1972. xvi, 298 pp., illus. \$12.95.

Growth, Nutrition, and Metabolism of Cells in Culture. Vol. 1. George H. Rothblat and Vincent J. Cristofalo, Eds. Academic Press, New York, 1972. xiv, 472 pp., illus. \$24.

A Guide to Behavioral Analysis and Therapy. Robert Paul Liberman. Pergamon, New York. 1972. xiv, 344 pp., illus. Cloth, \$9.50; paper, \$5.50. Pergamon General Psychology Series.

Handbook of Chlorination. For Potable Water, Wastewater, Cooling Water, Industrial Processes, and Swimming Pools. Geo. Clifford White. Van Nostrand Reinhold, New York, 1972. viii, 744 pp., illus.

High-Energy Electromagnetic Processes in Condensed Media. M. L. Ter-Mikaelian. Wiley-Interscience, New York, 1972. x, 458 pp., illus. \$27.50. Interscience Tracts on Physics and Astronomy, No. 29.

Hillslope Form and Process. M. A. Carson and M. J. Kirkby. Cambridge University Press, New York, 1972. viii, 476 pp., illus. \$19.50. Cambridge Geographical Studies, No. 3.

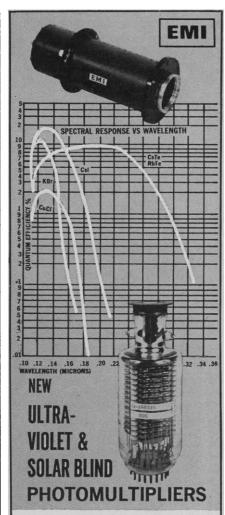
Human Factors in Highway Traffic Safety Research. T. W. Forbes, Ed. Wiley-Interscience, New York, 1972. xxii, 420 pp., illus. \$19.95. Wiley Series in Human Factors.

Human Figure Drawings in Adolescence. Mollie S. Schildkrout, I. Ronald Shenker, and Marsha Sonnenblick. Brunner/Mazel, New York; Butterworths, London, 1972. x, 152 pp., illus. \$8.95.

The Human Senses. Frank A. Geldard. Wiley, New York, ed. 2, 1972. xiv, 584 pp., illus. \$12.50.

Identification of Systems. Daniel Graupe. Van Nostrand Reinhold, New York, 1972. xii, 276 pp., illus. \$14.95.

The Illusion of Equality. Murray Milner, Jr. Jossey-Bass, San Francisco, 1972. xvi, 172 pp. \$8.50.



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In the Beginning. An Introduction to Archaeology. Brian M. Fagan. Little Brown, Boston, 1972. xviii, 356 pp., illus. \$9.50.

Inorganic Chemistry of Vitamin B₁₂. J. M. Pratt. Academic Press, New York, 1972. x, 348 pp., illus. \$18.75.

International Bibliography of the Social Sciences. Bibliographie Internationale des Sciences Sociales. 1970 International Bibliography of Social and Cultural Anthropology. Vol. 16. International Committee for Social Sciences Documentation. Tavistock, London; Aldine, Chicago, 1972. lx, 292 pp. \$15.

International Symposium on Sulphur in Agriculture. Symposium International sur le Soufre en Agriculture. Versailles, Dec. 1970. Institut National de la Recherche Agronomique, Versailles, 1972. x, 412 pp., illus. Paper, 50 F. I.N.R.A. Publication 72–1.

International Virology 2. Proceedings of a congress, Budapest, June 1971. Joseph L. Melnick, Ed. Karger, Basel, 1972 (U.S. distributor, Phiebig, White Plains, N.Y.). xii, 344 pp., illus. \$26.50.

Interplanetary Flight and Communication. N. A. Rynin. Translated from the Russian edition. Published for the National Aeronautics and Space Administration and the National Science Foundation by the Israel Program for Scientific Translations, Jerusalem, 1971 (available from National Technical Information Service, Springfield, Va.). Vol. 1, No. 3, Radiant Energy. Science Fiction and Scientific Projects. vi, 134 pp., illus. N72-18827. Vol. 2, No. 4, Rockets. vi, 208 pp., illus. N72-22885. Vol. 2, No. 6, Superaviation and Superartillery. iv, 216 pp., illus. N72-22884. Vol. 3, No. 7, K. E. Tsiolkovskii. Life, Writings, and Rockets. viii, 106 pp., illus. N72-20957. Vol. 3, No. 8, Theory of Space Flight. vi, 340 pp., illus. N72-22809. Vol. 3, No. 9, Astronavigation. Theory, Annals, Bibliography. iv, 236 pp., illus. N72-22645. Each vol., paper, \$3; microfiche, \$.95.

An Introduction to Acoustical Holography. B. P. Hildebrand and B. B. Brenden. Plenum, New York, 1972. xii, 224 pp., illus. \$14.50.

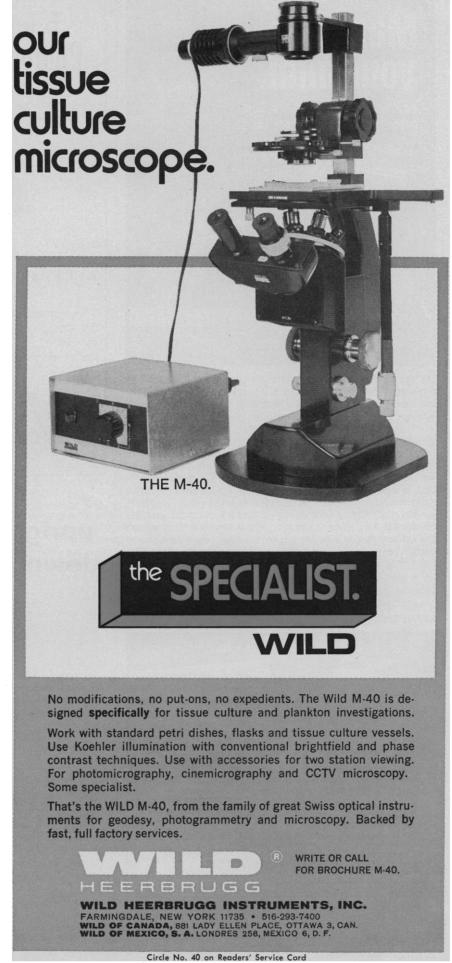
Introduction to Chemistry. Joseph C. Muhler, Charles S. Rohrer, and Ernest E. Campaigne. Xerox, Lexington, Mass., 1972. xvi, 534 pp., illus. Paper, \$8.50.

Introduction to Glass Science. Proceedings of a symposium, Alfred, N.Y., June 1970. L. D. Pye, H. J. Stevens, and W. C. LaCourse, Eds. Plenum, New York, 1972. x, 722 pp., illus. \$32.

An Introduction to Industrial Organic Chemistry. Peter Wiseman. Wiley-Interscience, New York, 1972. x, 336 pp., illus. \$12.95.

An' Introduction to Modern Optics. Ajoy K. Ghatak. McGraw-Hill, New York, 1972. xx, 368 pp. + plates. \$9.95.

Introduction to PL/I Programming for Library and Information Science. Thomas H. Mott, Jr., Susan Artandi, and Leny



Struminger. Academic Press, New York, 1972. xviii, 232 pp., illus. \$9.85. Library and Information Science.

An Island Called California. An Ecological Introduction to Its Natural Communities. Elna S. Bakker. Illustrated by Gerhard Bakker, Jr., and Philip Hyde. University of California Press, Berkeley, 1972. xiv, 362 pp. Paper, \$2.95. Reprint of the 1971 edition.

The Jahn-Teller Effect in Molecules and Crystals. R. Englman. Wiley-Interscience, New York, 1972. xx, 350 pp., illus. \$24.95. Wiley Monographs in Chemical Physics.

Jamaica and Its Butterflies. F. Martin Brown and Bernard Heineman. Illustrated by Marjorie Statham Favreau. Classey, London, 1972 (U.S. distributor, Entomological Reprint Specialists, Los Angeles). xvi, 478 pp. \$44.

Keratius. Their Composition, Structure and Biosynthesis. R. D. B. Fraser, T. P. MacRae, and G. E. Rogers. Thomas, Springfield, Ill., 1972. xii, 304 pp., illus. \$16.75. American Lecture Series No. 845.

Kinetics of Electrode Processes. Tibor Erdey-Grúz. Wiley-Interscience, New York, 1972. 482 pp., illus. \$27.50.

Laboratory Exercises for General Astronomy. Linda Kelsey, Darrel Hoff, and John Neff. University of Iowa Department of Physics and Astronomy, Iowa City, 1971 (available from University of Iowa Campus Stores, Iowa City). Variously paged, illus., + charts. Paper, \$3.

A Laboratory Study of Vertebrate Zoology. H. Duane Smith and Clayton M. White. Burgess, Minneapolis, Minn., ed. 3, 1972. x, 130 pp., illus. Spiral-bound, \$4.50.

Lectures on Current Algebra and Its Applications. Sam B. Treiman, Roman Jackiw, and David J. Gross. Princeton University Press, Princeton, N.J., 1972. x, 362 pp., illus. Cloth, \$14.50; paper, \$6.95. Princeton Series in Physics.

The Legacy of George Ellery Hale. Evolution of Astronomy and Scientific Institutions, in Pictures and Documents. Helen Wright, Joan N. Warnow, and Charles Weiner, Eds. M.I.T. Press, Cambridge, Mass., 1972. viii, 294 pp. \$17.50.

Location in Space. A Theoretical Approach to Economic Geography. Peter E. Lloyd and Peter Dicken. Harper and Row, New York, 1972. xii, 292 pp., illus. \$10.95.

Man-Machine System Experiments. Henry McIlvaine Parsons. Johns Hopkins University Press, Baltimore, 1972. xiv, 634 pp., illus. \$17.50.

Mantle and Core in Planetary Physics. Proceedings of the International School of Physics "Enrico Fermi," course 50. Varenna, Italy, July 1970. J. Coulomb and M. Caputo, Eds. Academic Press, New York, 1972. xiv, 280 pp., illus. \$17.50.

Mathematical Models in Ecology. A symposium, Grange-over-Sands, England, Mar. 1971. J. N. R. Jeffers, Ed. Blackwell, Oxford, England, 1972 (U.S. distributor, Davis, Philadelphia). viii, 398 pp., illus. \$21.

Mathematical Models in Linguistics. Maurice Gross. Prentice-Hall, Englewood Cliffs, N.J., 1972. xiv, 160 pp., illus. Cloth, \$8.95; paper, \$4.50.

The Mathematical Papers of Isaac Newton. Vol. 5, 1683–1684. Edited by D. T. Whiteside with the assistance in publication of M. A. Hoskin and A. Prag. Cambridge University Press, New York, 1972. xxiv, 628 pp., illus. \$65.

Medical Engineering. Projections for Health Care Delivery. Robert F. Rushmer. Academic Press, New York, 1972. xiv, 392 pp., illus. \$17.50.

Medicine and Public Health in the People's Republic of China. Joseph R. Quinn, Ed. National Institutes of Health, Bethesda, Md., 1972. xii, 306 pp., illus. Paper. Publication of the John E. Fogarty International Center for Advanced Study in the Health Sciences Geographic Health Studies Program.

Methods in Computational Physics. Advances in Research and Applications. Vol. 11, Seismology: Surface Waves and Earth Oscillations. Bruce A. Bolt, Ed. Academic Press, New York, 1972. x, 310 pp., illus. \$24.

The Minnesota Messenia Expedition. Reconstructing a Bronze Age Regional Environment. William A. McDonald and George R. Rapp, Jr., Eds. University of Minnesota Press, Minneapolis, 1972. xviii, 338 pp., illus., + map. \$22.50.

Molecular and Cellular Repair Processes. A symposium, Baltimore, June 1971. Roland F. Beers, Jr., Roger M. Herriott, and R. Carmichael Tilghman, Eds. Johns Hopkins University Press, Baltimore, 1972. xviii, 270 pp., illus. \$17.50. Johns Hopkins Medical Journal, supplement No. 1.

Myocardiology. Proceedings of a meeting and a conference, Stowe, Vt., June 1970. E. Bajusz and G. Rona, Eds. University Park Press, Baltimore, 1972. xii, 836 pp., illus. \$29.50. Recent Advances in Studies on Cardiac Structure and Metabolism, vol. 1.

Natural Science Books in English, 1600–1900. David M. Knight. Praeger, New York, 1972. x, 262 pp., illus. \$22.50. Illustrated Books Series.

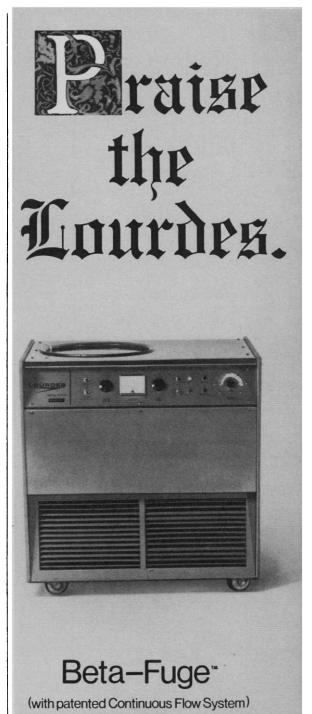
Nebraska Symposium on Motivation, 1971. James K. Cole, Ed. University of Nebraska Press, Lincoln, 1971. xii, 304 pp., illus. Cloth, \$6.95; paper, \$3.25. Current Theory and Research in Motivation, vol. 19.

The Neurobiology of the Amygdala. Proceedings of a symposium, Bar Harbor, Me., June 1971. Basil E. Eleftheriou, Ed. Plenum, New York, 1972. xxvi, 820 pp., illus. \$29.50. Advances in Behavioral Biology, vol. 2.

Nutrients and Eutrophication. The Limiting-Nutrient Controversy. Vol. 1, Special Symposia. Proceedings of a symposium, East Lansing, Mich., Feb. 1971. G. E. Likens, Ed. American Society of Limnology and Oceanography, Lawrence, Kansas, 1972. x, 328 pp., illus. Paper, \$8.

Old World Archaeology. Foundations of Civilization. Introductions by C. C. Lamberg-Karlovsky. Freeman, San Francisco, 1972. x, 260 pp., illus. Cloth, \$10; paper, \$4.95. Readings from Scientific American.

On the Track of Unknown Animals. Bernard Heuvelmans. Translated from the French edition (Paris, 1962) and abridged by Richard Garnett. Illustrated by



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Optical and Acoustical Holography. Proceedings of a NATO Advanced Study Institute, Milan, May 1971. Ezio Camatini, Ed. Plenum, New York, 1972. xii, 436 pp., illus. \$26.

Organometallic Reactions. Vol. 3. Ernest I. Becker and Minoru Tsutsui, Eds. Wiley-Interscience, New York, 1972. xii, 434 pp., illus. \$26.

Perception in Everyday Life. S. Howard Bartley. Harper and Row, New York, 1972. x, 326 pp., illus. Paper, \$3.95.

The Periodic Table of the Elements. R. J. Puddephatt. Oxford University Press, New York, 1972. x, 84 pp., illus. Paper, \$1.95. Oxford Chemistry Series.

Pesticide Chemistry. Proceedings of a congress, Israel, Feb. 1971. A. S. Tahori, Ed. Gordon and Breach, New York, 1972. Vol. 2, Insecticide Resistance, Synergism, Enzyme Induction. viii, 302 pp., illus. Vol. 3, Chemcal Releasers in Insects. viii, 228 pp., illus. Each vol., \$12.50.

Physics in the Twentieth Century. Selected Essays. Victor F. Weisskopf. M.I.T. Press, Cambridge, Mass., 1972. xvi, 368 pp., illus. \$7.95.

The Physics of Electronic and Atomic Collisions. A conference, Amsterdam, July 1971. T. R. Govers and F. J. De Heer, Eds. North-Holland, Amsterdam; Elsevier, New York, 1972. xii, 496 pp., illus. \$39.50.

Physics of Rare Earth Solids. K. N. R. Taylor and M. I. Darby. Chapman and Hall, London, 1972 (U.S. distributor, Barnes and Noble, New York). xii, 308 pp., illus. \$23.75.

The Physiology of Lactation. A. T. Cowie and J. S. Tindal. Williams and Wilkins, Baltimore, 1971. viii, 392 pp., illus. \$23.75. Monographs of the Physiological Society, No. 22.

Plastics History U.S.A. J. Harry Du-Bois. Cahners, Boston, 1972. xiv, 448 pp., illus. \$15.

PL/C. A Processor for PL/1. R. Clay Sprowls. Canfield, San Francisco, 1972. viii, 248 pp., illus. Paper, \$5.95.

Politics, Policy, and Natural Resources. Dennis L. Thompson, Ed. Free Press, New York; Collier-Macmillan, London, 1972. viii, 452 pp., illus. \$12.95.

Proceedings of the Amsterdam International Conference on Elementary Particles. June 1971. A. G. Tenner and M. J. G. Veltman, Eds. North-Holland, Amsterdam; Elsevier, New York, 1972. viii, 472 pp., illus. \$39.50.

Product Planning. A. Edward Spitz, Ed. Auerbach, Princeton, N.J., 1972. xvi, 424 pp., illus. Cloth, \$11.95; paper, \$7.

Psychological Perspectives. Family Planning in Korea. Bom Mo Chung, James A. Palmore, Sang Joo Lee, and Sung Jin Lee with the assistance of Hoon Koo Lee, Sang Chin Choi, Il Je Sung, Jong Seung Lee, Sung Soo Park, and Ae Doh Cho. Korean Institute for Research in the Behavioral Science, Seoul, Korea, 1972. 532 pp. \$10.

The Psychology of Death. Robert Kastenbaum and Ruth Aisenberg. Springer, New York, 1972. xii, 498 pp. \$11.95.

The Psychology of Humor. Theoretical

Perspectives and Empirical Issues. Jeffrey H. Goldstein and Paul E. McGhee, Eds. Academic Press, New York, 1972. xxii, 294 pp., illus. \$11.95.

Psychosomatic Medicine in Obstetrics and Gynaecology. Proceedings of a symposium, London, Mar. 1971. Norman Morris, Ed. Karger, Basel, 1972 (U.S. distributor, Phiebig, White Plains, N.Y.). xvi, 638 pp., illus. \$42.

Pulmonary Emphysema and Proteolysis. Proceedings of a symposium, Duarte, Calif., Jan. 1971. Charles Mittman, Ed. xxviii, 562 pp., illus. \$21.45. City of Hope Symposium Series.

PVC Technology. W. S. Penn. W. V. Titow and B. J. Lanham, Eds. Wiley-Interscience, New York, ed. 3, 1972. xii, 546 pp., illus. \$39.95.

Racial Attitudes in America. Analyses and Findings of Social Psychology. John C. Brigham and Theodore A. Weissbach, Eds. Harper and Row, New York, 1972. xiv, 402 pp., illus. Paper, \$6.95.

Radiopharmaceuticals from Generator-Produced Radionuclides. Proceedings of a panel, Vienna, May 1970. International Atomic Energy Agency, Vienna, 1971 (U.S. distributor, Unipub, New York). viii, 206 pp., illus. Paper, \$6. Panel Proceedings Series.

Readings in Living Systems. Julius S. Greenstein. Canfield, San Francisco, 1972.

x, 190 pp., illus. Paper, \$3.50.

Recent Trends in Social Learning
Theory. Proceedings of a symposium,
Mar. 1969. Ross D. Parke, Ed. Academic
Press, New York, 1972. x, 114 pp., illus.
\$7.95

Research and Clinical Studies in Headache. An International Review, Vol. 3. A symposium, Florence, Italy, May 1970. A. P. Friedman, Ed. Karger, Basel, 1972 (U.S. distributor, Phiebig, White Plains, N.Y.). x, 378 pp., illus. \$39.20.

Science and Society, 1600-1900. Peter Mathias, Ed. Cambridge University Press, New York, 1972. viii, 166 pp. + plates. \$10.50.

Science, Psychology, and Communication. Essays Honoring William Stephenson. Steven R. Brown and Donald J. Brenner, Eds. Teachers College Press, New York, 1972. xxviii, 464 pp., illus. \$12.50. Foresight Books in Psychology.

The Search for Organic Reaction Pathways. Peter Sykes. Longman, London, 1972. xii, 248 pp., illus. Paper, £1.90.

Secondary Analysis of Sample Surveys. Principles, Procedures, and Potentialities. Herbert H. Hyman. Wiley, New York, 1972. xiv, 348 pp., illus. \$11.95. Seed Biology. Vol. 1, Importance, De-

velopment, and Germination. T. T. Kozlowski, Ed. Academic Press, New York, 1972. xiv, 416 pp., illus. \$26.40. Physiological Ecology.

Selected Measurement Methods for Plutonium and Uranium in the Nuclear Fuel Cycle. Clement J. Rodden, Ed. U.S. Atomic Energy Commission Office of Information Services, Oak Ridge, Tenn., ed. 2, 1972 (available as TID-7029 (2nd. ed.) from National Technical Information Service, Springfield, Va.). xvi, 440 pp., illus. \$6.

Selected Papers of Cecil Frank Powell. E. H. S. Burhop, W. O. Lock, and M. G. K. Menon, Eds. North-Holland, Amster-

SCIENCE, VOL. 177

dam; Elsevier, New York, 1972. xiv, 456 pp., illus. \$27.50.

Setting National Priorities. The 1973 Budget. Brookings Institution, Washington, D.C., 1972. xxii, 468 pp. Paper, \$3.50.

Socialization and Social Class. Alan C. Kerckhoff. Prentice-Hall, Englewood Cliffs, N.J., 1972. vi, 170 pp. \$5.95.

Solving Problems in Advanced Calculus, 1. R. P. Gillespie. Oliver and Boyd, Edinburgh, 1972. viii, 156 pp., illus. Paper, £ 1.50. Solving Problems in Mathematics, No. 8.

Some Common Flowering Plants of Uganda. E. M. Lind and A. C. Tallantire. Oxford University Press, New York, ed. 2, 1972. vi, 260 pp., illus. Paper, \$4.50.

Staged Cascades in Chemical Processing. P. L. Thibaut Brain. Prentice-Hall Englewood Cliffs, N.J., 1972. xii, 276 pp., illus. \$14.50. Prentice-Hall International Series in the Physical and Chemical Engineering Sciences.

Statistical Computer Performance Evaluation. Proceedings of a conference, Providence, R.I., Nov. 1971. Walter Freiberger, Ulf Grenander, Barry H. Margolin, and Rhett F. Tsao, Eds. Academic Press, New York, 1972. xviii, 514 pp., illus. \$15.

Die Strahlengefährdung des Menschen in der gegenwärtigen Zilvilisation. George Fuchs. Akademie-Verlag, Berlin, 1971. 512 pp., illus. 58 DM.

The Structure and Function of Nervous Tissue. Vol. 5, Structure III and Physiology III. Geoffrey H. Bourne, Ed. Academic Press, New York, 1972. xvi, 584 pp.. illus. \$32.

Surface and Defect Properties of Solids. Vol. 1. A Review of the Literature Published between Jan. 1970 and Apr. 1971. M. W. Roberts and J. M. Thomas, senior reporters. Chemical Society, London, 1972. viii, 264 pp., illus. £6. A Specialist Periodical Report.

The Teenager in a Drugged Society. A Symptom of Crisis. Celia Spalter Deschin. Rosen, New York, 1972. 182 pp. \$3.99.

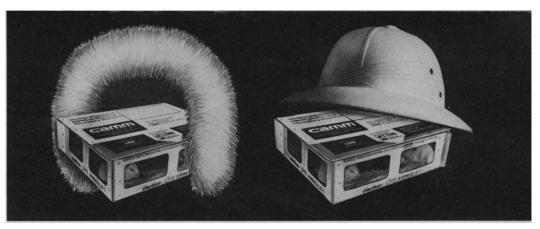
Telling Tongues. Language Policy in Mexico. Colony to Nation. Shirley Brice Heath. Teachers College Press, New York, 1972. xx, 300 pp., illus. \$10. Publications of the Center for Education in Latin America, Institute of International Studies.

That Most Distressful Nation. The Taming of the American Irish. Andrew M. Greeley. Quadrangle, Chicago, 1972. xxx, 282 pp., illus. \$7.95.

Theory of Science. Attempt at a Detailed and in the Main Novel Exposition of Logic with Constant Attention to Earlier Authors. Bernard Bolzano. Edited and translated from the German edition (Sulzbach, 1837) by Rolf George. University of California Press, Berkeley, 1972. xlviii, 400 pp., illus. \$16.

U.S. Foreign Policy and Peru. Daniel A. Sharp, Ed. Published for the Institute of Latin American Studies by the University of Texas, Austin, 1972. xxvi, 486 pp. \$10. Special Publication of the Institute of Latin American Studies.

Vacationscape. Designing Tourist Regions. Clare A. Gunn. University of Texas Bureau of Business Research, Austin, 1972. x, 238 pp., illus. Paper, \$8. Studies in Tourism-Recreation, No. 1.



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