

tem. One is startled by the continual sharp transitions from neurophysiology to such broad topics as the effect of culture upon the evolution of the nervous system or the affect dynamics of the current world revolution. This is certainly no book for Occam's razor; it would be dulled within the first few pages, and Lloyd Morgan's canon overwhelmed by a human wave of rhetoric. Yet even the most critical of reviewers could not deny that the book is full of illuminating insights and stimulating conceptions.

The reviewer's task is complicated by the fact that volumes 2 and 3 have not been published and, consequently, are not available for reference and perspective. Nor is it made easier by the fact that any index or bibliography is apparently being reserved for the last volume. On the basis of volume 1, Tomkins' tour de force does not quite come off, but it does remain interesting and thought provoking. Few psychologists *could* write this book, and of those that *could* still fewer *would*, but many of them could read it with profit.

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Complex Ions

Absorption Spectra and Chemical Bonding in Complexes. C. K. Jørgensen. Pergamon, London; Addison-Wesley, Reading, Mass., 1962. xii + 352 pp. Illus. \$10.

Jørgensen provides a brief historical introduction, reviews the essential features of the theories of atomic structure and the ligand field, and then presents a rather complete summary of our present understanding of electronic energy levels and absorption spectra of complex ions. The research worker or graduate student who has some prior experience in, or knowledge of, the area and who wishes to broaden his knowledge and understanding will find this book especially useful. It should be noted, however, that two topics of considerable current interest—polarization and vibronic interaction studies—are touched upon only very briefly.

This book is not, and does not pretend to be, a self-contained presentation of the relevant theory and its application. Appreciative study will require some previous knowledge or con-

current study of quantum mechanics, group theory, and ligand field theory. Moreover, most readers will find that frequent consultation of the original literature is necessary, a procedure that is facilitated by the bibliography of more than 600 entries.

The rambling style of writing found in some sections and the many peripheral topics touched upon, sometimes in a superficial manner, detract from the book's effectiveness. Despite the author's suggestion in the preface that the reader may wish to consider the chapters in an order different than the one in which they are presented, it would be especially unfortunate if the introductory chapters discouraged some uninitiated readers from pursuing the sections more germane to the book's central theme. A much more crisp presentation of the material, the deletion of references to technical, theoretical terms that have little bearing on the main topic discussed (for instance, the reference to first- and second-order density matrices, which make their only appearance on pages 21 and 22, could well be omitted), and the inclusion of more references to standard texts would greatly improve the opening section. Among the attractive features, the many summaries of experimental data are outstanding. One whole chapter is devoted to the tabulation of spectral data.

This book will reward the careful and critical reader with both broadened knowledge and inspiration for further work.

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New Books

Biological and Medical Sciences

Allergy and Anaphylaxis as Metabolic Error. vol. 1, *Dual Response to Antigenic Stimulation*. Z. Z. Godlowski. Immunometabolic Press, Chicago, 1962. 468 pp. Illus.

Amino Acid Pools. Distribution, formation, and function of free amino acids. Proceedings of a symposium held at Duarte, Calif., May 1961. Joseph T. Holden, Ed. Elsevier, New York, 1962. 826 pp. Illus. \$21.50.

An Annotated Bibliography on the Origin and Descent of Domestic Mammals, 1900–1955 (*Fieldiana: Anthropology*, vol. 54, No. 1). Shimon Angress and Charles A. Reed. Chicago Natural History Museum, Chicago, Ill., 1962. 143 pp. Paper, \$2.75.

Approaches to the Genetic Analysis of

Mammalian Cells. Donald J. Merchant and James V. Neel, Eds. Univ. of Michigan Press, Ann Arbor, 1962. 105 pp. Illus. \$4. Seven essays based on lectures presented at the Michigan Conference on Genetics, University of Michigan, 1962.

Atlas de Thrombodynamographie. G. Marchal, M. E. Leroux, and M. Samama. Service de Propagande, Édition Information, Paris, 1962. 166 pp. Illus. NF. 60.

Bibliography of Fossil Vertebrates Exclusive of North America, 1509–1927. vols. 1 and 2. Alfred Sherwood Romer, Nelda E. Wright, Tilly Edinger, and Richard Van Frank. Geological Soc. of America, New York, 1962. vol. 1, 861 pp.; vol. 2, 776 pp.

Biological Transport. Halvor N. Christensen. Benjamin, New York, 1962. 141 pp. Illus. \$6.50.

Birth to Maturity. A study in psychological development. Jerome Kagan and Howard A. Moss. Wiley, New York, 1962. 394 pp. Illus. \$8.50.

Comprehensive Biochemistry. vol. 4, *Separation Methods*. Marcel Florkin and Elmer H. Stotz. Elsevier, New York, 1962. 297 pp. Illus. \$13.

Echinoderms. David Nichols. Hillary House, New York, 1962. 200 pp. Illus. \$2.50.

Explorations in Cognitive Dissonance. Jack W. Brehm and Arthur R. Cohen. Wiley, New York, 1962. 348 pp. \$7.95.

Haematology of Some South African Reptiles. Uys de Villiers Pienaar. Witwatersrand Univ. Press, Johannesburg, Union of South Africa, 1962. 315 pp. Illus. \$16.

Homogreffes Cutanées. Étude expérimentale. Georges Lejeune. Editions Arsacia, Brussels, Belgium; Librairie Maloine, Paris, 1962. 214 pp. Illus. Paper.

Ichthyology. Karl F. Lagler, John E. Bardach, and Robert R. Miller. Wiley, New York, 1962. 558 pp. Illus. \$12.50.

The Interpretation of Ultrastructure. Symposia of the International Society for Cell Biology, vol. 1. R. J. C. Harris, Ed. Academic Press, New York, 1962. 448 pp. Illus. \$14.

The Kidney. Medical and surgical diseases. Arthur C. Allen. Grune and Stratton, New York, ed. 2, 1962. 780 pp. Illus. \$26.50.

Longmore's Medical Photography. Peter Hansell and Robert Ollerenshaw. Lippincott, Philadelphia, ed. 7, 1962. 544 pp. Illus. \$15.

Maintaining Fishes. For experimental and instructional purposes. William M. Lewis. Southern Illinois Univ. Press, Carbondale, 1963. 110 pp. Illus. Paper, \$1.45; cloth, \$5.

Mineral Metabolism. An advanced treatise. vol. 2, pt. B, *The Elements*. C. L. Comar and Felix Bronner, Eds. Academic Press, New York, 1962. 643 pp. Illus. \$20.

The Morphology of Pteridophytes. The structure of ferns and allied plants. K. R. Sporne. Hillary House, New York, 1962. 192 pp. Illus. \$2.50.

The Nature of Psychotherapy. A critique of the psychotherapeutic transaction. Walter Bromberg. Grune and Stratton, New York, 1962. 118 pp. \$4.50.

Physiology and Biochemistry of Algae. Ralph A. Lewin, Ed. Academic Press, New York, 1962. 956 pp. Illus. \$32.