

books OF THE WEEK

THE AMERICAN HEALTH EMPIRE: Power, Profits and Politics—Barbara and John Ehrenreich—Random House, 1971, 279 p., \$7.95. A report from the Health Policy Advisory Center (Health-PAC), analyzes in particular the New York City health system and the various institutions, organizations and enterprises that participate in it.

ANNUAL REVIEW OF NUCLEAR SCIENCE, Vol. 20—Emilio Segre, J. Robb Grover and H. Pierre Noyes, Eds.—Annual Reviews, 1970, 613 p., illus., \$10. Topics of review articles range from neutron capture gamma-ray spectroscopy, the quark model, automatic spark chambers, to heavy cosmic ray nuclei, and pionic atoms.

BEYOND MALTHUS: Population and Power—Neil W. Chamberlain—Basic Bks., 1971, 214 p., \$6.95. Labor economist considers the pressures of the population explosion on different groups within society, explores the impact of population growth on the structure of governments, of businesses, and on the conduct of international relations.

THE BIOSPHERE: A SCIENTIFIC AMERICAN Book—Freeman, 1970, 134 p., photographs, diagrams, \$6.50. Articles cover the energy cycles of the earth and of the biosphere; the cycles of water, carbon, oxygen, nitrogen and mineral; the process of human food, energy and inorganic materials production.

COMPLEX VARIABLES APPLIED IN SCIENCE AND ENGINEERING—Harold Wayland—Van Nostrand Reinhold, 1970, 350 p., diagrams, paper, \$9.50. Addressed to undergraduate engineers and applied scientists, shows how analytic function theory is brought to bear on the solution of the common second-order linear differential equations of mathematical physics.

COMPUTERS IN ELECTROCARDIOGRAPHY—Josef Wartak, M.D.—Thomas, C. C., 1970, 250 p., \$19.50. Designed to give nonmedical specialists a basic knowledge about ECG, and to familiarize the physician with the basic concepts and techniques underlying the complex system of computer-assisted processing of electrocardiograms.

ELEMENTS OF ENTOMOLOGY: An Introduction to the Study of Insects—Harold Oldroyd—Universe Bks., 1970, 312 p., 50 photographs, drawings, \$7.95. Provides a coherent introduction to the complexity of the insect world, emphasizes evolution and natural history, insect adaptation and organization.

ENVIRONMENT, POWER AND SOCIETY—Howard T. Odum—Wiley-Interscience, 1971, 331 p., diagrams, \$9.95. Concentrates on giving the general reader a macroscopic view of the world's ecosystem. The book deals with the principles of energy and energy flow to the natural and manmade systems of the environment; it presents phenomena of the biosphere in diagrams in an attempt to show how the flow of economic, political and social power affects the biosphere.

ERIK H. ERIKSON: The Growth of His Work—Robert Coles—Little, Brown, 1970, 440 p., \$10. A biographical assessment of the psychoanalytic work of Erikson, of his concern with the relationship between the individual and social change. The author gives the essence of the psychoanalytic and historical research as well as the ethical reflections of the clinician and teacher.

EXPLORING OCEAN FRONTIERS: A Background Book on Who Owns the Seas—Francis and Walter Scott, preface by Jacques Piccard—Parent's Magazine Press, 1970, 220 p., photographs, drawings, \$4.95. Concerned with conservation and the best use of ocean resources, the book shows the development of the law of the sea, from early explorations to the latest UN resolutions.

GENETICS OF THE EVOLUTIONARY PROCESS—Theodosius Dobzhansky—Columbia Univ. Press, 1971, 505 p., diagrams, \$10.95. Surveys the major developments in biological science relevant to the biological theory of evolution. Addressing the general reader as well as the professional scientist, the author presents ideas with necessary examples, not with a miscellany of literature references.

HANDBOOK OF MATERIALS AND PROCESSES FOR ELECTRONICS—Charles A. Harper, Ed.—McGraw-Hill, 1970, 1344 p., illus., \$33.50. Sourcebook, provides authoritative information, data and selection guidance on materials and processes in the electronics and electrical industries, including semiconductors, thin films, thick films, metals joining of electronics circuitry, and photofabrication.

THE INFINITE RIVER: A Biologist's Vision of the World of Water—Random House, 1970, 269 p., \$6.95. Composed of events and features of many major river systems, the book describes the great variety and persistence of the multitude of life forms that exist in water, and how the water system worked before man began to destroy it.

NUCLEAR REACTOR INSTRUMENTATION (IN-CORE)—James F. Boland—Gordon & Breach, 1970, 229 p., diagrams, prof. \$7.50. An AEC monograph, deals with the interaction of radiation with matter; radiation effects on electrical circuits; measurements of pressure, displacement and liquid level; flow and temperature instrumentation; neutron and gamma flux measurements; and instruments for reactor transient tests.

THE OLD MOON AND THE NEW—V. A. Virsoff—Barnes, A. S., 1970, 286 p., photographs, diagrams, \$8. Selenologist presents what has been known about the moon up to 1969, incorporating Soviet findings and Orbiter photographs, and adds a postscriptum after the first landings and investigation of lunar rocks and soil.

PATTERNS OF REPRODUCTIVE BEHAVIOR: Collected Papers—Desmond Morris—McGraw-Hill, 1971, 528 p., photographs, drawings, \$12.95. Reports on research into the mating behavior of particular species, such as the ten-spined stickleback, the river bullhead, zebra and cutthroat finches, mannikins, and the green acouchi.

THE PHARMACOLOGY OF SYNAPSES—J. W. Phillis—Pergamon Press, 1970, 358 p., plates, illus., \$16. Chronicles the development of neuropharmacology during the past 10 years. Of particular importance are chapters on central nervous pharmacology with author's account of the results obtained with the microiontophoretic technique of drug application.

PHYSICAL PRINCIPLES OF BIOLOGICAL MEMBRANES: Proceedings of Coral Gables Conference, 1968—F. Snell and others, Eds.—Gordon & Breach, 1970, 435 p., illus., prof. \$15. Reports on progress in the application of experimental techniques and theoretical methods.

PHYSICS AND BEYOND: Encounters and Conversations—Werner Heisenberg, transl. from German by Arnold J. Pomerans—Harper, 1971, 247 p., \$7.95. Through conversations with leading physicists, reflecting half a century of developments in atomic physics, the author shows a basic correlation of elements in man as in nature, and demonstrates that science is rooted in conversations that are not confined to science alone but include human, philosophical and political problems.

THE RADIATION-INDUCED DECOMPOSITION OF INORGANIC MOLECULAR IONS—Everett R. Johnson—Gordon & Breach, 1970, 144 p., diagrams, \$14.50. Brief survey of effects of high-energy radiation on solids, general phenomena of decomposition, and discussion of research reported on specific classes of compounds.

SCIENCE AND TECHNOLOGY IN ASIAN DEVELOPMENT—UNESCO—UNIPUB, N.Y., 1970, 216 p., tables, paper, \$5. Papers of 1968 Conference present country reports, studies on prerequisites for application of science and technology, suggestions for improvement of science education, and science policy.

THE SELF-LEARNING SOCIETY—Donald W. Stotler—Northwest Library Service, 1970, 133 p., illus. by Howard L. Glazer, paper, \$2.95. Proposes alternatives to the present institutional structure of formal schooling through the development of multi-use learning centers. Describes the design and functioning of seven new institutions: community center, cultural, research, vocational, outdoor, polity and cosmological center.

SOCIAL GROUPS OF MONKEYS, APES AND MEN—Michael R. A. Chance and Clifford J. Jolly—Dutton, 1971, 224 p., photographs, diagrams, \$11.50. Scholarly work presents the latest findings and theories of research into primate behavior, especially as it relates to primordial forms of social organization, indicating a basic biological imprint common to all primates.

THE SPACE-AGE PHOTOGRAPHIC ATLAS—Ken Fitzgerald—Crown Pubs., 1970, 246 p., 409 photographs and maps, \$7.95. A look at the world from space, based on photographs from Gemini and Apollo spacecraft. Moving from continent to continent, the descriptions analyze characteristic details of geographic, geologic, climatological and topographical features.

THE STEAM YACHTS: An Era of Elegance—Erik Hofman—DeGraff, 1970, 272 p., photographs, drawings, \$18.50. Describes and gives technical specifications of some 120 of the larger privately owned yachts.

SURFACE ACTIVE ETHYLENE OXIDE ADDUCTS—N. Schönfeldt, transl. from German—Pergamon Press, 1970, 940 p., diagrams, tables, \$32. Updated by the author during translation, the book covers the field of nonionic surfactants, their technological applications, preparation, physical properties, colloidal behavior and manufacture.

TISSUE INTERACTION DURING ORGANOGENESIS—Etienne Wolff, Ed.—Gordon & Breach, 1970, 225 p., illus., \$17.50; paper \$7.50. Draws together the most recent work by specialists in the field, from discussion of inductive mechanisms in organogenesis of the kidney, to application of immunological techniques.

TORNADO: A Community Responds to Disaster—James B. Taylor, Louis A. Zurcher and William H. Key—Univ. of Wash. Press, 1971, 189 p., photographs, \$6.95. The authors, participants as well as specialists in clinical and social psychology and sociology, reconstruct the sights, chaos, struggle of survival and renewal that followed the Topeka, Kansas, 1966 tornado disaster.

THE WILDERNESS WORLD OF THE GRAND CANYON: "Leave it as it is"—Ann and Myron Sutton—Lippincott, 1971, 241 p., 50 photographs by Philip Hyde, \$8.95. Exploring the Canyon and ideas of how it can be conserved in the changing times of today and tomorrow, the authors combine 40 years of experience in studying the geology, ecology, history, archaeology and scenery of the Canyon.

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