but there is no well-developed treatment of the details of the glycolytic pathway and other main aspects of metabolism, no mention of anserine, carnosine, and carnitine, no discussion of myoglobin after its one-word entry on page 1. Meyerhof is quoted several times but briefly; Parnas is mentioned twice, Warburg once, Embden not at all. A basic and brilliant part of modern physiological chemistry is all but omitted. In the field of energetics and dynamics, things are not much different. Hill is quoted frequently, but is often present in name rather than in spirit. There is an original and personal chapter on thermodynamics by Podolsky, and the chapter on biophysics by Ramsey is a heroic effort to pull together some of the essentials. But a broad and systematic treatment of the contributions of the Hill school is missing, just as a treatment of the biochemical foundations laid by Embden and Meyerhof is missing. Has something gone astray?

Some of the omissions are clearly stated by the authors and are deliberate, because of limited space. Thus, Thesleff points out that the study of the effects of drugs on smooth and striated muscle is the largest area of pharmacology, and limits himself to effects related to bioelectrical properties; one chapter similarly introduces the subject of cardiac physiology and restricts the discussion to a few properties of the heart that are closely related to major currents in other areas of muscle physiology. By such restrictions, it has been possible to unite many different topics in a moderate space, but this teaches us that it is, apparently, not feasible to do so without grave omissions. However, we must also note the relative merits of this situation: many of the chapters deal with topics outside the more central or "fundamentalist" currents of muscle research, and these are less likely to be dealt with in other works.

Volume 1 may be the most successful. It is devoted to structure, and the series of chapters on fine structure, introduced in a scholarly treatise by Bennett and continued by several eminent authorities, is as informative as is possible under the circumstances. Volume 2, dealing with biochemistry and physiology, is afflicted most by the omissions referred to, but it contains excellent chapters; one of them, the chapter by A. G. Szent-Györgyi on the proteins of the myofibril, deserves mention for its wealth of well-presented material which is handled in limited space. Volume 3 discusses pharmacology and disease and contains much that deserves the interest of the "pure" scientist.

Yes, this work offers a great deal, and let us make good use of that. Still, I cannot help but feel that among the missing topics are many of the essentials.

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Eskimo Childhood and Interpersonal Relationships. Nunivak biographies and genealogies. Margaret Lantis. University of Washington Press, Seattle, 1960. xv + 219 pp. Illus. $4.75.

This latest publication in the distinguished monograph series of the American Ethnological Society is a collection of 18 brief autobiographical and biographical sketches of Eskimo residents of Nunivak, a small island in the Bering Sea with a total population of about 200.

The life histories were recorded in 1946 by the anthropologist Margaret Lantis, who has been engaged off and on since 1939 in a study of this community. They were obtained with the aid of interpreters and are presented here in English, with editorial commentary by Lantis and with supplementary genealogical information, notes made on a follow-up 10 years later, and psychological interpretations of Rorschach protocols, the last drawn from analyses by Eugenia Hanfmann, a clinical psychologist, and Alice Joseph, a psychiatrist. In the context of Lantis' several earlier publications on Nunivak Eskimo social organization, religion and ceremonialism, and cultural values, this volume contributes detailed information on the way in which the culture of the society has been experienced by some of its carriers and, thus, helps to round out her long-term study of the community.

Specialists in arctic anthropology will need no reviewer's reminder to consult the volume. To nonanthropological scientists, and to anthropologists not specially concerned with Eskimos, the Nunivak life histories present certain intriguing features. One is the evidence of personal strain suffered by members of a small community of arctic hunters in their efforts to satisfy personal wants in culturally conventional ways; this strain is revealed in the complaints recorded in the biographies and in the apparently high suicide and psychosis rate. Another interesting feature is the importance in youthful character formation of participation in community religious rituals, which are frequently mentioned in the autobiographies as significant early memories. And a third major feature is the documentation of the dramatic variability in personal fate of individuals who have lived in what has been a reasonably homogeneous culture. The latter point is worth pondering, for it bears on the question of the "penetrance" of culture: that is to say, on the degree to which knowing the cultural genealogy of the members of a population permits prediction of their life experience and behavior.

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The New Age in Physics. Harrie Massey. Harper, New York, 1960. 342 pp. Illus. $4.25.

Sir Harrie Massey has set himself a task of enormous magnitude, but a task well worth attempting. In a very few pages he presents with skill and great insight a broad view of what is new and important in physics today.

The book begins with a summary of the historical development of our knowledge of atomic structure, which leads to a brief presentation of quantum mechanics and a look at solid-state physics with some of its current applications.

Next are two excellent chapters on special relativity and relativistic quantum theory. The latter may be the most successful part of the book in that it presents ideas far beyond the bounds of "common sense" in a way that should be intelligible to a wide audience.

Then follows a description of the experimental basis of nuclear physics and the theoretical models advanced to explain the observed results. There are two highly relevant sentences in this section which deserve quoting here and which should be displayed in large letters on the wall of every physics classroom: "As always, however, it is the experimental facts which demand the extraordinary interpretation. We are not concerned with speculative philosophy."

The author concludes by describing two experimental techniques of current interest—radio astronomy and artificial satellites. His treatment of satellites is especially valuable since he presents them in proper perspective as remote research stations in otherwise inaccessible regions.

I believe that *The New Age in Physics* will be of great value to those who have some background in classical physics and who have kept their elementary mathematics more or less up to date. Specifically, the book should be most rewarding to scientists in fields other than physics, also to engineers, teachers, physics students, and others who are willing to take the trouble to read with care a book that is densely packed with ideas. This may not be a "popular" book since it would seem to require some previous knowledge of physics. Though not a textbook, it would certainly make excellent supplementary reading in any elementary physics course.

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The Structure of the Eye. Proceedings of the symposium held 11–13 April 1960, during the 7th International Congress of Anatomists. George K. Smelser, Ed. Academic Press, New York, 1961. xv + 570 pp. Illus. $15.

The symposium brought together a large group of international authorities in the fields of the structure and biochemistry of the eye. Electron microscopic, histochemical, immunologic, and biochemical techniques were used to elucidate structural problems. These are not only of significance in ophthalmology but also serve as important model systems: for example, vitreous humor is one of the simplest and most accessible models of mucoid connective tissue; the cornea is one of the simplest and most regular examples of fibrous tissue; the retina can be used as an important model in many phases of neurophysiology; the lack of vascularization of the cornea allows biochemical studies to be made without interference from functions of the blood vessels; proteins of the lens have been used for a long time in studying basic problems of immunologic tissue specificity. In addition to basic structural and physiologic problems, topics discussed include ophthalmic embryology and teratology, radiation biology, and nutritional aspects. This book presents a good cross section of the newer trends in molecular biology and anatomy as applied to ophthalmologic problems.

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Land in British Honduras. Report of the British Honduras Land Use Survey Team. Colonial Research Publications No. 24. D. H. Romney, Ed. Her Majesty's Stationery Office, London, 1959. 2 vols., vii + 326 pp. Illus. + maps. 55s.

This 8800 square mile territory has in this study been divided into 25 subregions, and for each of them the climate, soils, and vegetation have been described and the present land use practice has been analyzed. There are sections on past land use (emphasis on the Maya), land tenure, land forms, and geology; appendixes containing further information on vegetation patterns and lists of plants and animals; and numerous, well-drawn figures and maps. Larger scale maps (1 to 250,000) are contained in a separate folder.

This almost encyclopedic treatment of land and land-people relationships in British Honduras is essential reading for any scholar, businessman, or administrator concerned with that territory.

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New Books

Mathematics, Physical Sciences, and Engineering

Principles of Inertial Navigation. C. J. Savant, Jr., R. C. Howard, C. B. Solloway, and C. A. Savant. McGraw-Hill, New York, 1961. 264 pp. Illus. $9.75.

Principles of Manufacturing Materials and Processes. James S. Campbell. McGraw-Hill, New York, 1961. 683 pp. Illus. $9.75.

Progress in Aeronautical Sciences. vol. 1. Antonio Ferri, D. Kuchemann, and L. H. G. Sterne, Eds. Pergamon, New York, 1961. 289 pp. Illus. $12.50.

Progress in Operations Research. vol. 1. Russell L. Ackoff, Ed. Wiley, New York, 1961. 517 pp. $11.50. First volume in a new series designed to serve as basic reference works. Emphasis in volume 1 is on technical progress in inventory theory, linear and dynamic programming, queuing theory, sequencing theory, replacement theory, simulation, and gaming.

Pure Mathematics. A university and college course. vol. 2, *Algebra, Trigonometry, Coordinate Geometry*. Cambridge Univ. Press, New York, 1960. 447 pp. $6.50.

Relativistic Electron Theory. M. E. Rose. Wiley, New York, 1961. 315 pp. $9.50.

Science in Space. Lloyd V. Berkner and Hugh Odishaw, Eds. McGraw-Hill, New York, 1961. 468 pp. Illus. $7.

A Second Course in Statistics. Robert Loveday. Cambridge Univ. Press, New York, 1961. 166 pp. $1.85.

Sequential Decoding. John M. Wozencraft and Barney Reiffen. Technology Press and Wiley, New York, 1961. 79 pp. Illus. $3.75.

Simplified Calculus. F. L. Westwater. Macmillan, New York, 1961. 175 pp. Illus. $3.50.

Spaceflight Technology. Kenneth W. Gatland. Academic Press, New York, 1960. 380 pp. Illus. $11. Proceedings of the first Commonwealth Spaceflight Symposium, organized by the British Interplanetary Society, 1959.

Tables of the Hypergeometric Probability Distribution. Gerald J. Lieberman and Donald B. Owen. Stanford Univ. Press, Stanford, Calif., 1961. 733 pp. $15.

Tables of ln Γ [z] for Complex Argument. A. A. Abramov. Translated from the Russian by D. G. Fry. Pergamon, New York, 1960. 331 pp. $17.50.

Teach Yourself Atomic Physics. J. M. Valentine. Macmillan, New York, 1961. 192 pp. $1.95.

Theoretical Physics in the Twentieth Century. A memorial volume to Wolfgang Pauli. M. Fierz and V. F. Weisskopf, Eds. Interscience, New York, 1960. 338 pp. $10.

Theory of Elastic Stability. Stephen P. Timoshenko. McGraw-Hill, New York, ed. 2, 1961. 557 pp. Illus. $15.

Thermal Reactor Theory. A. D. Galanin. Translated from Russian ed. 2 (1958?) by J. B. Sykes. Pergamon, New York, 1960. 426 pp. Illus. $15.

Time-Harmonic Electromagnetic Fields. Roger F. Harrington. McGraw-Hill, New York, 1961. 491 pp. Illus. $13.50.

Tools of the Astronomer. G. R. Miczaika and William M. Sinton. Harvard Univ. Press, Cambridge, Mass., 1961. 302 pp. $7.75.

Transcendental and Algebraic Numbers. A. O. Gelfond. Translated from the Russian ed. 1 by Leo F. Boron. Dover, New York, 1960. 197 pp. $1.75.

Transmission of Information. A statistical theory of communications. Robert M. Fano. M.I.T. Press and Wiley, New York, 1961. 399 pp. Illus. $7.50.

Ultrasonics and Its Industrial Applications. O. I. Babikov. Translated from Russian. Consultants Bureau, New York, 1960. 230 pp. Illus. $9.75. Originally published in 1958 as a part of the "Physicomathematical Engineering Library."