

carbonyl compounds, esterification and hydrolysis, carboxylation and decarboxylation, saturated rearrangements, aromatic substitution, and polymerizations.

Waley gives a clear though elementary exposition of most of the highlights of organic reaction mechanisms. After each organic topic, he briefly describes the pertinent enzymic mechanisms. In general these latter discussions are rudimentary as a result of the inherent lack of information on enzymic mechanisms but also because the author greatly emphasizes the necessary background of organic mechanisms. The general topics are quite suitable for a discussion of organic reaction mechanism, but some are not very pertinent to enzymic mechanisms; for example, Waley's 34-page discussion of the mechanisms of aromatic substitution, one of the fascinating areas of organic chemistry, contains only 1½ pages pertinent to enzymic reactions. On the other hand, oxidation-reduction mechanisms, a most pertinent subject, are given only rudimentary treatment in the chapter on carbonyl reactions.

Mechanisms of Organic and Enzymic Reactions is a presentation of basic groundwork rather than a probe at the research frontier of all the area it treats. That the author refers to only ten papers published later than 1959 in this book published in 1962 attests the truth of this statement. The author presents clearly the highlights of organic reaction mechanisms and the beginnings of enzymic mechanisms in an elementary form. His book should interest those who are novices in both areas.

MYRON L. BENDER

Department of Chemistry,
Northwestern University

Text and Reference Source

A Hundred Years of Geography. T. W. Freeman. Aldine, Chicago, 1962. 335 pp. \$6.95.

The aim of this book, whose author is reader in geography at Manchester University, is to provide a synoptic view of the development of academic geography during the past century. In British geography Freeman discerns six successive trends, which begin with the encyclopedic compilations of 19th-century travelers and which end with

the current tendency towards systematic specialization, based on detailed local study. These trends are outlined in chapter 1 and then discussed chronologically in three subsequent chapters, special emphasis being placed on the work of individual geographers whose biographies appear in a short appendix. In chapters 5 through 10 Freeman changes from a chronological treatment to a discussion of the value of the regional approach in geography and of the major systematic fields. Along with his treatment of physical, economic, social, and political geography, he devotes a special chapter to the development of cartographic techniques and their application in national atlases. A final chapter provides a summary of the themes outlined in chapter 1 and an indication of the probable trend of future research; here the author's views are expressed in this phrase: "many ideas and new techniques are not new, but merely taken up again after an interval of years and more effectively developed."

According to the publishers, this book is intended to be an introductory text and a reference book. It fulfills both aims, not least because books on the history of modern geography are few in number. As a text, it provides a coherent and well-written survey of a broad field, by an experienced geographer, although its value might have been enhanced by a clearer statement of the purpose of modern geography as it is revealed in recent methodological writings. As a reference book, it provides a straightforward account of the growth of geography in Britain and its relationship with contemporary thought in Europe and America. Here Freeman makes a notable contribution; he may not be a provocative writer, but he has a broad command of the literature, and his book deserves to be widely read.

RONALD H. BUCHANAN

Queen's University,
Belfast, Northern Ireland

Note

Food for Thought

The professional and the nonprofessional alike will find in *Nutrition in a Nutshell*, written by Roger J. Williams (Doubleday, Garden City, N.Y., 1962. 171 pp. 95¢), a convincing account of

why nutrition is important not only for the body as a whole but for its multitude of parts—the cells and tissues that make up the body. Williams discusses qualitative and quantitative nutritional needs, the results of faulty nutrition, nutritional supplements, nutrition education, the personal responsibility for being well nourished, keeping up-to-date on nutrition, and avoiding food faddism.

His advice for being well nourished is most general but carefully explained: (i) Don't be a hypochondriac or a worry-wart; (ii) diversify your diet; (iii) use and cultivate your body wisdom; (iv) avoid too much refined food; and (v) use nutritional supplements when, on the basis of informed opinion, it seems desirable.

RUTH M. LEVERTON

Agricultural Research Service,
U.S. Department of Agriculture

New Books

General

The Cubeo. Indians of the Northwest Amazon. Irving Goldman. Univ. of Illinois Press, Urbana, 1963. 313 pp. Illus. Paper, \$4.

Parts and Wholes. The Hayden colloquium on scientific method and concept. Daniel Lerner, Ed. Free Press (Macmillan), New York, 1963. 192 pp. Illus. \$4.95.

Point to the Stars. Joseph Maron Joseph and Sarah Lee Lippincott. McGraw-Hill, New York, 1963. 96 pp. Illus. \$3.95 (juvenile).

Producing, Harvesting, and Marketing High Quality Southern Timber. Eleventh annual forest symposium. William C. Hopkins, Ed. Louisiana State Univ. Press, Baton Rouge, 1962. 117 pp. Illus. \$4.

Psychology. The science of mental life. George A. Miller. Harper and Row, New York, 1962. 399 pp. Illus. \$6.95.

The Sonjo of Tanganyika. An anthropological study of an irrigation-based society. Robert F. Gray. Oxford Univ. Press, New York, 1963. 195 pp. Illus. \$6.

Star Gazing with Telescope and Camera. George T. Keene. Chilton, Philadelphia, 1962. 128 pp. Illus. Paper, \$1.95.

The Study of Rockets, Missiles, and Space Made Simple. Walter B. Hendrickson, Jr. Doubleday, Garden City, N.Y., 1963. 157 pp. Illus. Paper, \$1.45.

University Research and Patent Policies, Practices, and Procedures. Publ. No. 999. Archie M. Palmer. Natl. Acad. of Sciences—Natl. Research Council, Washington, D.C., 1962. 299 pp. Paper, \$5.

The Weather Handbook. H. McKinley Conway, Jr., Ed. Conway Publications, Atlanta, Ga., 1963. 255 pp. Illus. \$15. Weather summaries for 100 cities in the U.S. and for 160 outside the U.S.