will require the most earnest attention if we are to increase our national competence in science and technology while keeping the universities intellectually vigorous and administratively independent.

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Sea Shells of Tropical West America.

Marine mollusks from Lower California to Colombia. A. Myra Keen.

Stanford University Press, Stanford,
Calif., 1958. x + 624 pp. Illus.

\$12.50.

Myra Keen's book truly fills a longfelt need, for prior to its appearance there was no adequate handbook dealing with the mollusks of the area it covers.

Like R. Tucker Abbott's American Sea Shells, with which it will inevitably be compared and to which it serves as a companion volume as far as the west coast of tropical North America is concerned, this volume necessarily deals with only the commoner and larger mollusks of the littoral region and the shallow waters. About 1650 species are briefly described, and of these, approximately 1500 are illustrated. Most of the figures are in blackand-white, but 11 species are superbly depicted in color. It is a pity that better use was not made of these fine color plates through portrayal of more than one species on a plate. However, the author is to be commended on the arrangement of the volume; the illustrations are grouped together as text figures so that, in almost all cases, the descriptions and illustration of a species fall on the same page or on opposite pages. Another valuable feature of this volume is the frequent use of keys to the genera of the larger families and, occasionally, to the subgenera and even to species within a genus.

The smaller species are only cursorily mentioned, since, to have included all of the many species that have been described in some of these groups would have considerably increased the volume of the book. In such groups as the Eulimidae, the Rissoacea, the Vitrinellidae, the Caecidae, the small Cerithidae, and most of the Pyramidellidae, only representatives of the genera are illustrated; in most cases the illustrations are accompanied by keys. For the Epitoniidae there is a key to the genera

and subgenera, and all known species are listed (though not described), but only 58 percent of them are illustrated; this is somewhat unfortunate, since species of this family are frequently found in collections because of their rather striking appearance.

A number of valuable appendices follow the main body of the text; these include a short two-page glossary of terms, a series of useful keys to the superfamilies of pelecypods and to superfamilies and families of gastropods, and a valuable list of sources for the figures used. I might mention here that about 70 type specimens are illustrated in this book for the first time. The valuable 30-page bibliography and the index are followed by four pages of addenda that give some final changes and corrections made by Keen while the book was in page proof; most of the changes and corrections are the result of Keen's examination of types in the British Museum.

Both professional malacologists and marine biologists, as well as amateur collectors who gather shells on the sandy beaches and rocky shores of the west coasts of Mexico and Central America, owe a debt of gratitude to Myra Keen for this extremely useful and authoritative reference book. I hope that someone equally gifted will be induced to write a similar volume on the Caribbean molluscan fauna.

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Lucien Rudaux and G. de Vaucouleurs. Revised by Z. Kopal. Prometheus Press, New York, 1959 (order from Putnam's, New York). 506 pp. Illus. Until 1 Jan., \$12.50; after 1

Larousse Encyclopedia of Astronomy.

Jan., \$15.

This beautifully produced volume is a pleasure both to read and to behold. It is, as the name states, an encyclopedia—a 500-page quarto volume—and its double columns are very liberally interspersed with 806 excellent photographs and drawings, as well as 12 beautiful color plates.

Instead of containing an alphabetically arranged collection of short articles, the text is arranged by chapters in much the same manner as has become conventional for college textbooks—that is, an introduction followed by chapters that discuss the earth, the solar system, and

so forth. This arrangement greatly enhances the readability, for once the reader has looked up a particular subject in the very adequate index, he will plunge into the text only to find, half an hour later, that he has long since covered the point in question and has read on for pages on allied subjects. While the authors have included practically no mathematics, they have not hesitated to provide word explanations or drawings of astronomical phenomena, and whatever can be made clear in this fashion is well taken care of. There is a profusion of numerical and tabular informationfor example, a list of 184 lunar craters, 20 maria, and 13 mountain ranges, all identified on an accompanying plate.

All in all, this is an excellent reading and reference volume for interested high-school and beginning college students, for parents whose children ask embarrassing questions, and even for the professional astronomer who likes to have a handy elementary reference book at his elbow.

There is one shortcoming which must be mentioned, however. Aside from certain rather limited revisions made recently by Kopal, the text was apparently written about 1946. It is disappointing to find that no photographs taken with the 200-inch telescope are reproduced, that only two or three pages are devoted to radio astronomy, and that very little of the results of rocket, satellite, or balloon astronomy are covered. The inclusion of Russell's table of 1942 showing the evolution of the sun from spectral type dK8 through dG2 to type B9 seems a little quaint.

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A Reader's Guide to the Social Sciences. Bert F. Hoselitz, Ed. Free Press, Glencoe, Ill., 1959. 256 pp. \$2.95.

Well over 100 years ago Auguste Comte dreamed of a synthesis of social science. Peter Odegard has stated that the mood of the postwar generation is one of specialization and integration among the major disciplines. Hoselitz and his colleagues have performed a service by implementing, in part, Comte's concept and Odegard's observation with a book that provides something more than a thumbnail review of the development of the literature of social science. The book represents a point of departure for further, more