

rather say: no one has yet begun to reread the sources with these subjects in mind. Letters, diaries, state papers, business records must be consulted anew before we can say that we know or that we cannot know how people generally behaved in these matters at any time or place.

Meanwhile, Brinton's book will have to serve as a general introduction to the terrain and its pitfalls. The author's colleagues will point out some errors of fact (for example, Shaw's ascribing the poverty of the poor to a deficiency of the Life Force), some neglect of special studies (for example, Percy Scholes on the Puritans and Music), and some lapses of judgment (for example, the supposition that Matthew Arnold wrote "in those rosy Victorian times"). But accepting the effort to write a history of morals in the same spirit of courageous modesty as the author's, professional and lay readers alike must recognize in Brinton's book the first outlines of a great subject. If Lecky's similar work covering a relatively short span gave historians some notion of what could be done, Brinton's gives, by its oversights as well as its merits, an equally good notion of what ought to be done.

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American Universities and Federal Research. Charles V. Kidd. Harvard University Press, Cambridge, Mass., 1959. xii + 272 pp. \$6.

The expansion of federal support for scientific research is inevitable. The reason is that the traditional functions of government—maintaining order, providing for national defense, and promoting general welfare—can no longer be carried out without a vast understructure of scientific knowledge. The federal government undertakes to secure a large part of the scientific knowledge it needs by contracting with the colleges and universities of the country to carry out research projects. This book addresses itself to the central problems created by these contractual relationships—problems of reconciling the federal government's need for scientific knowledge with the traditional nature and activities of higher education.

These contract relations have been sources of anxieties both to government agencies and to universities, and a number of inquiries and reports have addressed themselves to the subject. It is no disparagement of the previous studies to say that this book, itself profiting from its predecessors, supersedes them and will become a starting point for all future discussions of the subject. Kidd writes with the authority he has gained not only from his associations and contacts with such government agencies as the National Institutes of Health, the National Science Foundation, and the Department of Agriculture, but from extensive contact with universities and from travel and observation abroad. In addition to this basic equipment of confident knowledge, the author brings to the discussion a refreshing degree of courage and candor, infusing with stimulating opinion and observation the statistics which are so often the lifeless material of such studies.

It would be difficult to improve on the author's statement of the central problems created by federal support of research in the universities. Such support, he believes, has "set in motion irreversible forces that are affecting the nature of universities, altering their capacity to teach, changing their financial status, modifying the character of parts of the federal administrative structure, establishing new political relations, and changing the way research itself is organized." No one would deny that these are formidable consequences, and that the author is justified in saying "the wisdom with which these forces are guided and controlled by the universities and by the federal government will have a major influence not only on the capacity of the nation to defend itself, but on the economic growth of the nation and the preservation of the essential values that underlie our society."

To the exploration of this thesis Kidd brings logical analysis and organization, as well as a vast amount of pertinent information. Here are some of the questions he undertakes to answer: What research does the federal government want done? What funds does it have to support such research, and how and by what agencies are these funds distributed? What conditions are imposed upon universities which seek or accept grants, and are these conditions compatible with prop-

er university functions? What is the effect on universities of their growing dependence upon federal research support as reflected in their teaching, their independent research, and their self-direction? How does the flow of federal funds into universities affect university finances generally? What is the effect of federal research contracts on university organization and operation? What are the consequences of federal support for graduate students, and how does such support affect the supply of future scholars? How does the favoring of science affect other sections of the curriculum? How, above all, is the relationship affecting the freedom of the universities?

Everyone in government or in the universities who is concerned about such matters can only be grateful to Kidd for the factual data, the considered opinions, and the actual experiences which have been assembled to answer not only these broad questions but dozens of others more specific. The university administrator who has been worried about the effect on teaching of the emphasis on research, the distortion of faculty salaries, and growing overhead costs will find his problem clearly stated here, as well as some worthwhile observations for his comfort or guidance.

An outstanding feature of the author's treatment is the concern he shows for the basic values of our society, democracy, equality of opportunity, and particularly intellectual freedom, as these values may be affected by the changing relations between the federal government and the universities. Kidd regards freedom as the one characteristic which makes universities different from all other research organizations. Policies, either from within or without, which have the effect of restricting freedom can only be suspect. Indeed, one gets the impression that Kidd is a little more concerned about the freedom of the universities than he is about whether the federal government secures the fruits of scientific research—a conclusion which, if correct, can only be entertained when the needs of government are not overwhelmingly urgent. Fortunately, says Kidd, the policies governing the administration of federal research programs are no great threat to the freedom of the universities. These policies, however, as Paul E. Klopsteg says in this book's excellent foreword,

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 long-felt 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 black-and-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 Vitri-
nellidae, the Caecidae, the small Cerithiidae, 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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Larousse Encyclopedia of Astronomy.

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 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 information—for 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