resuming creative work in science after an interlude is next to impossible. The development of part-time opportunities and retraining facilities were frequently mentioned as partial solutions. These solutions were strongly rejected, however, by a small minority of feminists who believe that ultimately sex roles must be readjusted and that fathers must be willing to do their share of child-rearing.

Like most symposia this volume suffers occasionally from repetitiousness and from failure of different participants to focus on the same questions. On the whole, however, it makes interesting reading. The views presented are diverse, but the tone is generally sensible and realistic. Young women interested in careers in science will find the volume well worth reading. So will some of their teachers, counselors, parents, husbands, boy-friends, and male colleagues.

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The Dorset Eskimo

The Most Ancient Eskimos: The Eskimo Affinities of Dorset Culture Skeletal Remains. Lawrence Oschinsky. Canadian Research Centre for Anthropology, Ottawa, 1964. 112 pp. Illus. Paper, $3.

The phylogeny of Hyperboreans, some 200 years after Cranz speculated that Greenland Eskimos were close relatives of the Kalmuck Mongols, is still a problem that excites the imagination. Modern Eskimos are reasonably well described in terms of blood groups and gross anatomy. In certain respects they seem more closely related to the north Asian peoples than to their American Indian neighbors, although it is clear that all three are members of the great Mongoloid subdivision. But there is much physical and cultural diversity among them, and although Eskimo culture can be traced in archeological remains some 5000 years into the past, the biological identity of the early bearers of this culture is almost as unknown to us as their speech. In view of this, an author is justified in devoting a small book to a discussion of data on fragments of three human skeletons ascribed to the Dorset Eskimo culture of Arctic Canada (which is in no sense the oldest known Eskimo culture as the title of the book implies).

The Dorset case is a special one within the larger problem of the apparently fast-evolving Eskimo. This demonstrably Eskimo culture developed and flourished for perhaps two millennia in the central and eastern Arctic, but it never spread to the largest population centers in the west. Its origin and cessation are but dimly perceived, and more than one archeologist has thought he detected a spoor of Indian influence. Oschinsky's problem then is to find criteria for distinguishing Eskimos from Indians of 2000 years ago. The context of the problem is further explained in his introduction:

> The Indians who live and lived on the Eskimo frontier as the Beothuk, Montagnais-Naskapi, Cree, Arctic drainage Athabascans are hardly represented at all in the skeletal collections in museums. The Old Copper and Archaic Indian skeletons found in Canada are very few and in poor condition. The human osteological specimens from the Dorset culture are few as well.
>
> In the face of such intriguing difficulties, the challenge of determining the racial affinities of the Dorset people was accepted. If the conclusions presented below seem premature or unwarranted on the basis of so few specimens, it is hoped that the irritation thus engendered will provide a further stimulus to new field parties to find more specimens and thus put Dorset racial osteology on a firmer basis.

The book comprises 15 pages of text, 32 of tables in which predominate qualitative morphological observations on numerous small series of skulls—for example, Indians, Lagoa Santa, Brazil (6) and English, Medieval (24)—and 20 pages of illustrations. None of the tabular data is subjected to any test of statistical significance, and references to it in the text are limited to simple comparisons of two sets of figures, or of one set with the whole. One may wonder why Oschinsky has further weakened his presentation by, for instance, avoiding measurement in favor of describing the ascending rami of mandibles as "short broad," "long narrow," or "short narrow" (Table 14). Extensive quotes from earlier papers on the same subject by Oschinsky and others make up one-third of the text.

In short, this booklet, which apparently draws heavily on a monograph by Oschinsky and East that is in press, contributes little but some raw data and a plea for more recognition of discrete morphological variables in the racial identification of skeletons. With an argument such as this, it is unlikely that these bones will stimulate much contention: they "look" Eskimo, and that's that.

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For Western Naturalists

Mammals of the Pacific States: California, Oregon, and Washington. Lloyd G. Ingles. Stanford University Press, Stanford, Calif., 1965. xii + 506 pp. Illus. $10.

This attractive and useful volume is essentially a third edition of *Mammals of California* (1947), revised in 1954 as *Mammals of California and Its Coastal Waters*. It considers 233 species of mammals, compared with 204 in the second edition and 193 in the first. This increase is accounted for by the larger area covered, as well as by some recent nomenclatural changes and the inclusion of some introduced exotic forms, now established (for example, the nutria). Revision has served to rectify some of the shortcomings and inaccuracies of the earlier editions, but it also has introduced a few new ones. These are mostly small typos, sometimes more amusing than anything else. For instance, on page 159 the Panamint and Uinta Mountains should be capitalized; on page 20, Odontoceti is spelled two ways; Dr. Hooper (p. 490) will be surprised at his new name, Dr. Severaid (pp. 151, 493, and 504) may wonder at the spelling of his, and Dr. Osborn (twice on p. 7) would certainly have resented the extra letter on his. For that matter, *Synaptomys* (p. 478) may not approve being called the "northern bog hole."

This book is intended not as a scientific treatise, but as a general reference for field workers, laymen, or students interested in western American mammals. Ingles, now head of the Life Science Division at Fresno State College, has for years taught a course in mammalogy, and his book has been thoroughly tested by his students in the field and laboratory. It should serve admirably as a guide in a beginning course.

An introductory section deals with mammals in general, their place in ge-

ologic history, their ecological and distributional aspects, and principles of their classification, with an artificial generic key to the skulls of the included forms. Most of the book is concerned with accounts of the various species. Here are practical keys for the identification of forms, together with range maps and sketches to emphasize diagnostic characters. And, where appropriate, data on habits, physical traits, special adaptations, ways of life, habitats occupied, and the species' status in the ecosystem are included. Appendixes, which are quite repetitious, deal with the collection and preparation of study skins, a check list of the species treated, and a table of dental formulas; in addition to these, there are brief treatments of the principles of classification, a guide to the pronunciation of selected generic names, and an illustrated section on scats, all of which might profitably be deleted.

Some students and instructors will miss any reference to subspecies, except in the case of the deer; this may be desirable, however, at this level. The book is profusely and adequately illustrated, with photographs, drawings, figures of skulls and anatomical features, and sketches of footprints; of all these, the photographs as a group are particularly good. A selected bibliography (168 references) and a good index complete the volume. It should have a wide appeal among naturalists and vertebrate biologists of our western states.

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Kinship and Social Organization

Choiseul Island Social Structure. Harold W. Scheffler. University of California Press, Berkeley, 1965. xiv + 322 pp. Illus. $7.

The kinship aspects of social organization are an old but increasingly specialized interest of social anthropologists. It is common to begin the classification of kinship systems by recognizing that people everywhere reckon descent from their ancestors in one or another of three ways: unilineally, where there is an emphasis upon relationship through either the male or female line; bilineally, where emphasis is placed on connection through males in some and females in other situations; or bilaterally, where kinship ties with the families of both parents are recognized equally.

The matter becomes more complex as patterns within these basic classifications are examined. Probably unilineal systems have been studied most until recently. Now attention has turned to an examination of the variety of patterned relationships commonly classified as bilateral. This has resulted in new interpretations of the data, a proliferation of new concepts, redefinitions of older terminology, and considerable disagreement about the results.

Scheffler, in a technical report to fellow specialists, makes a sound contribution with this analysis of kinship data from Choiseul Island, British Solomon Islands. His thesis is complex, owing to the highly technical problem and to a lip-smacking verbosity that seems to savor saying much the same thing in several ways. Nevertheless, careful reading and rereading are rewarding: much is learned about Choiseul Island social life and the data are used to illuminate theoretical problems of bilateral kinship.

The Choiseul Islanders recognize bilateral descent and, in Scheffler's scheme, these explicit verbalized kin ties are an ideology or dogma. He acknowledges that such data may be used to construct differing models of social structure depending on the analytical perspective, but a more meaningful model than others, he argues, will develop from an examination of the rhetorical use of the dogma of bilateral descent in day-to-day social transactions. [Could not this apply equally to unilineal systems?] This is a major theme that runs through this study of how the people of Choiseul seek personal ends by using the dogma of kinship, more or less skillfully, to persuade others in transactions involving land tenure, leadership, marriage, group affiliation, and religion.

In Choiseul, self-interest is paramount, its expression expected, but controlled by the need for group acceptance and support. The rules for behavior are neither unambiguous nor backed by legal or moral forces that would require their observance. Changing conditions make social transactions ever unique, so that men must decide which rules have ascendency in each situation. Prestige and its concomitants accrue to the most skillful rhetorician.

Scheffler has good data, his inferences are properly qualified, his speculations are labeled clearly. He concludes with a discussion of the theoretical implications of his study.

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Undergraduate Textbook

Physical Principles of Chemistry. Robert H. Cole and James S. Coles. Freeman, San Francisco, 1965. x + 795 pp. Illus. $12.

The Department of Chemistry at Brown University has for many years been a pioneer in studying and modifying the undergraduate curriculum for those students who plan to major in chemistry. The present text by Robert H. Cole, a professor at Brown University, and James S. Coles, formerly a professor at Brown University but now president of Bowdoin College, is an illustration of advanced thinking about undergraduate problems. The authors state quite frankly that this book is based on a syllabus used for sophomores at Brown, that it should be useful for juniors in many institutions, but that many freshman students would be well qualified to use it. These statements well illustrate the problems facing college teachers today.

The treatment of physical chemistry in this book is intermediate between that given in the larger books used by many departments at the junior and senior level and that given in books normally designed for sophomores. The first seven (out of 22) chapters are devoted to atomic and molecular theory. The treatment is essentially nonmathematical and in some respects does resemble that given in the best freshman textbooks. It is, however, more rigorous in most respects, and it is very clear and concise. Atomic and molecular weights, the nucleus, matter and radiation, quantum principles, molecular constitution, and the solid state are considered in successive chapters. This part of the