explain to the uninitiated what archaeology is, what is known concerning the origins of the American Indian, and the truth behind a number of common popular fallacies concerning the American Indian. Chapters 4 through 9 take up, in order, the arts and industries by which the Indians are chiefly known to the archaeologist: stone, copper, bone and shell, pottery, basketry and cloth, and trade and commerce. A clear picture of the technologies involved, the degree of mastery of each, and integration and significance to a preindustrial economy is presented to the reader. The actual archaeology deals first with the earliest Indian inhabitants of North America as represented by the Folsom, Yuma, Sandia, and Cochise finds. An attempt is made to demonstrate possible intermediate horizons between these early lithic cultures and pottery-agricultural periods. A treatment of the later periods follows a fourfold areal division into (1) Southwest, (2) eastern North America, (3) Pacific slope, and (4) Far North, or Eskimo. Each of these major areas is again divided into several regions.

Criticisms are of two kinds: (1) of specific points of fact in sequential-distributional information or interpretation, and (2) of presentation and broader interpretation. Specifically, in the discussion of the Hohokam culture of the Southwest the chronology used follows Gladwin's earlier, rather than his more recent, estimates, but there is no reference to this point. In discussing the southeastern "Death Cult," Krieger's recent but radically different interpretation is not taken into consideration. In Georgia there is no substantial evidence for burial mounds in the Deptford period. The chronological position given for the Florida Crystal River culture is highly debatable. In southern Louisiana the Troyville period is put in the Burial Mound rather than the Temple Mound stage. This tends to obscure the important fact that the temple mound-plaza arrangement complex had its first appearance in the Southeast at this relatively early date, notwithstanding its association in the Troyville period with Marksville-Hopewell style pottery.

On a more general level, the book loses a great deal of its force as an introductory popular book by its failure to follow through on interpretations of cultural process. If the book is for the general reader, and if the book is to hew to the line of one set of historical interpretations—both avowed purposes of the authors—then certainly it should go further beyond the time-space cataloguing of cultural data than it has. For example, at several places in the discussion of the eastern United States we are taken right up to the point of what should be the pay-off reward for all this archaeological grubbing, only to be anticlimactically dropped. In speaking of the decline in craft arts in the late prehistoric periods in the Northeast, the authors make this interesting statement but go no further: "Thus there is a decline in terms of material remains, but this decline probably is not real. Certainly the improvements in the economy (agriculture), the possible social changes, and the probable lack of the need for tools and industries of the past mark a type of climax or florescence that cannot be grasped by archaeological techniques" (p. 258). But what does this technical and aesthetic decline, just preceding the historic horizon and also remarked upon again and again in several other subareas of the East, imply in social terms? With a minimum of inference from ethnography the lacunae of archaeology can be filled to show the late prehistoric period as the time of rising political confederacies and war alliances in the Northeast. These must, inevitably, have been the result of mounting population pressures correlated with the improved agricultural production so characteristic of the late prehistoric era all through the East. With the necessitated shift to organized war patterns the old religious emphasis of the East, much of it centering around the burial cult and its associated craft goods, disappeared. At least, this is one explanation, for which there is considerable supporting evidence, that the average reader might hopefully expect in a general book on the rise and growth of American Indian cultures.

GORDON R. WILLEY

Bureau of American Ethnology,
Smithsonian Institution, Washington, D. C.

Trinidad village. Melville J. and Frances S. Herskovits. New York: Alfred A. Knopf, 1947. Pp. viii + 351. (Illustrated.) $4.75.

This book is a worthy contribution to two phases, among others, of the study of human culture: It represents a workmanlike addition to the slowly accumulating literature of "modern," as opposed to "primitive," ethnology; and it demonstrates the intricate interweaving of African and European traits which is the result of the acculturation process in so many Negro groups of the New World.

The Trinidad village in question is Toco, at the extreme northeastern end of the island, and the population is almost entirely negroid. The community is rather isolated in terms of effective contacts with outside centers of cultural diffusion, and as a separate entity it is relatively new, having been settled for the most part within the past 50 years by people coming from other parts of Trinidad and Tobago. In these respects Toco offers a situation in which the immediate historical factors, if not "controlled," are at least known and assessable, which is an advantage in analyzing the dynamics of custom integration and social organization, while it also exhibits to a degree the cultural homogeneity of custom and physical type which is characteristic of peasant and folk cultures generally.

The field work was undertaken in 1939 as part of a long-term project with which the Herskovits name has been associated for some 20 years, namely, the study of the various adaptions in the New World of Negroes whose ancestors were transplanted from Africa in slavery. The differential stripping, retention, and reinterpretations of African cultural elements in the American setting is the center of interest in this book. As the reworking of native African culture is better understood, contributions to the general theory of cultural change are offered.

Using the concept of "cultural focus," the authors demonstrate that most of the formal aspects of African culture, including the institutional structure of social organization and religion, have disappeared in Toco. Yet, many of the basic orientations, particularly in family arrangements, religious groups such as the Shouters, witchcraft, the persistent power of ancestral spirits, etc., come directly from the African systems. In Toco they are in many cases so embedded in a matrix containing elements from other sources as to be unidentifiable to the casual observer. Nevertheless, such identification and understanding is a prerequisite to scientific analysis and prediction of the actual behavior of the people. The problem of Toco has its parallels not only in numerous other Negro communities of the Western Hemisphere, but also among the

millions of persons in Latin America who practice a mixed culture, derived from indigenous Indian, colonial Iberian, and modern European sources.

The semipopular style presumably required of a commercially published report makes for relatively smooth reading, at the expense, however, of the omission of details of method and data which would be of interest to specialists. The latter type of material will doubtless appear in more technical publications.

JOHN GILLIN

University of North Carolina, Chapel Hill

Fossil vertebrates from western North America and Mexico. E. L. Furlong, *et al.* (Contributions to Paleontology, Publ. 551.) Washington, D. C.: Carnegie Institution of Washington, 1946. Pp. iv + 195. (Illustrated.) $2.50, paper; $3.00, cloth.

The latest volume of Contributions to Paleontology covers the years 1943–46 and includes eight articles on fossil fishes, birds, and mammals.

Three papers by Lore Rose David, entitled "Use of Fossil Fish Scales in Micropaleontology," "Some Typical Upper Eogene Fish Scales from California," and "Upper Cretaceous Fish Remains From the Western Border of the San Joaquin Valley, California," demonstrate the use of fossil fish scales in stratigraphic correlation and in paleoecology. This author states that it is nearly always possible to recognize families, genera, and often species on the basis of differences in scale sculpture—a point that might be disputed by some ichthyologists. The recognition of characines, for instance, in marine Upper Cretaceous deposits, is of considerable importance if the scale identifications are certain.

"A Review of the Pleistocene Birds of Fossil Lake, Oregon," by Hildegarde Howard, is a well-documented account of all the known bird remains from this rather famous Upper Pleistocene locality. Although there is a general resemblance between the avifauna of this deposit and that now living about the fresh-water lakes of Oregon and California, interesting examples of subspecific differences are present which indicate subdivisions of a chronocline. Unexpected members of the fauna include a flamingo and a jaeger.

The history of the badgers in North America has been greatly clarified by E. Raymond Hall in a contribution entitled "A New Genus of American Pliocene Badger, With Remarks on the Relations of Badgers of the Northern Hemisphere." The new genus, *Pliotaxidea*, is based on skull fragments originally referred to *Taxidea* and a recently discovered skull from Oregon, all of Pliocene age. It is now apparent that the Asiatic and American badgers have been separated since possibly the Upper Miocene, with *Pliotaxidea* close to the *Taxidea* line and *Parataxidea* of the Asiatic Pliocene close to the ancestral stock of *Meles*. There is no evidence of intercontinental migration within this subfamily subsequent to the early Pliocene.

To the nonspecialist, at least, the taxonomy of the North American fossil antilocaprids presents a rather confusing picture. This is due partly to the difficulty of differentiating true taxonomic characters from those associated with age and sex, and this problem is evident in a paper by E. L. Furlong, "The Pleistocene Antelope *Stockeros conklingi* From San Josecito Cave, Mexico." The exact distinction between *Tetrameryx* and *Stockoceros* is not completely clarified, although the author states that "*Stockoceros* is at least subgenerically distinct from *Tetrameryx*." A second contribution by the same author deals with the "Generic Identification of the Pleistocene Antelope From Rancho La Brea." This antilocaprid is removed from the genus *Capromeryx* and is assigned to the new Pleistocene genus *Breameryx* on the basis of apparently distinguishing dental and skull characters. It would appear that the antilocaprids offer a very fertile field for quantitative taxonomic study.

"A Miocene Mammalian Fauna From Beatty Buttes, Oregon" is described by Robert E. Wallace. The assemblage is probably Upper Miocene (Barstovian) and presumably includes grassland and woodland forms such as *Merychippus* and *Dromomeryx*. It is very similar to that found at two other Upper Miocene localities in Oregon, Sucker Creek and Skull Springs.

BOBB SCHAEFFER

The American Museum of Natural History, New York City

Mammals of eastern Asia. G. H. H. Tate. New York: Macmillan, 1947. Pp. xiv + 366. (Illustrated.) $4.00.

The new volume in the Pacific World Series represents exactly the type of handbook that should have been available to the personnel of the U. S. forces in China during the war, and thus exactly the need the series was designed to meet. Dr. Tate was co-author with J. E. Hill and T. D. Carter of *Mammals of the Pacific world*, which described the mammals of the Pacific and Australasian islands, and the two volumes form much the sort of naturalist's Baedeker for which we may hope there will be a continuing demand. The production of such volumes is one of the duties of naturalists and one of their functions that deserves active support.

In a brief introduction the mammals as a zoological group are presented to the nonzoological reader, some account of their adaptations to the conditions of existence are given, and the use of scientific names is explained. A glossary at the end of the book supplements this chapter.

A second general chapter, which is an essay on the geography of eastern Asia, interestingly sets forth one of the two frames of reference of animal geography, namely, the climatically dominated ecological-vegetational matrix in which animals find their most obvious natural associations of range. The reviewer has elsewhere been occupied at length with the subject of ecological animal geography, and it is gratifying to have this kind of introduction to the systematic account of the mammals.

The systematic account occupies 325 pages of the book. This forms a most accessible account of some of the more strikingly unfamiliar types of mammals. The insectivores include the tree shrews (now commonly placed with the primates), the hedgehogs and some of their primitive relatives, and a wealth of moles and shrews; the bats are extremely varied, including both the fruit-eating and insectivorous suborders and six families; the pangolins, or scaly anteaters, are represented by two types; the flying lemur occurs in the more southern parts of the territory considered; the lemurs are represented by the slow lorises; there is a large variety of monkeys; and the gibbons represent the higher tailless apes. The carnivores range from familiar furbearers in Siberia, belonging to well-known American types, to the remarkable