

Book Reviews

New Perspectives in Archeology. Sally R. Binford and Lewis R. Binford, eds. Chicago: Aldine Publishing Co., 1968. viii, 373 pp., index, 34 figures. U.S.\$9.75.

Reviewed by R. C. GREEN, *B. P. Bishop Museum*

Depending on the prehistorian and his interests, various essays in this collection will probably prove worthwhile as a stimulus to anyone considering new ways of gathering, ordering, and interpreting archaeological data. One unity, binding together the otherwise rather diverse papers, is the presentation of new means employed by some leading American archaeologists in the interpretation of their materials. The essays are not only diverse in content, but also encompass a wide range in chronological age and cultural stage, and draw on materials from a number of different regions in world prehistory. Yet for a Pacific and Eastern Asian archaeologist little in the volume is of substantive interest; no papers that must be read, no new information that must be digested. If one is to benefit from the book, therefore, a fairly good grounding in the areas, cultures, and materials dealt with is required in order to evaluate properly the potential of the new perspectives offered for one's own research in the Pacific or Eastern Asia, particularly as many of the new approaches outlined are of necessity schematic or exploratory.

Another unity would seem to lie in the introductory essays on "Archeological Perspectives" by L. R. Binford and "Explanations in Archeology" by Albert C. Spaulding, plus the introductory sections to parts I (Archeological Theory and Method), II (Investigating Variability in the Archeological Record: A Single Occupation Unit), and III (Investigating Variability in the Archeological Record: Variability among Occupation Units) by the editors. These and part IV, consisting of brief commentaries by some well known anthropologists on the original papers in the symposium on "Social

Organization of Prehistoric Communities," which formed the core for the essays in this book, constitute a second coherent statement. They delineate and discuss a philosophy of science and a theoretical approach based on it which is now often referred to as the "new" or processual approach in archaeology.

Although the papers by some of the authors do not always rest easily within the framework which the Binfords, as editors, have erected, there is sufficient application, particularly in the papers by Sally Binford on "Variability and Change in the Near Eastern Mousterian of Levallois Facies," James N. Hill on "Patterns of Form and Function at Broken K Pueblo," Stuart Struever on "Woodland Subsistence-Settlement Systems in the Lower Illinois Valley," and L. R. Binford on "Post-Pleistocene Adaptations," to illustrate some of the methods advocated by processual archaeology. Thus anyone concerned with acquiring knowledge of this approach in American archaeology would do well to read these essays in conjunction with the introductions to the sections and the two introductory essays. He may not come away convinced, but he will probably be stimulated to think more critically about research strategies in archaeology, and he will definitely have a better idea of what all the shouting is about.

Among the other papers, James R. Sackett's "Method and Theory in Upper Paleolithic Archeology," using the example of southwestern France, is representative of the new perspectives developing in that field which those working with flake industries in the Pacific and Asia could consider with profit. Those working with pottery, particularly sequential ceramic

assemblages, could benefit from attention to Robert Whallon Jr.'s article "Investigations of Late Prehistoric Social Organization in New York State."

Several other contributors, including Frank Hole ("Social Organization in Western Iran 8000-4000 B.C."), Kent V. Flannery and Michael D. Coe ("Social and Economic Systems of the Formative Period in Mesoamerica"), James Deetz ("The Inference of Residence and Descent Rules from Archeological Data"), William A. Longacre ("Some Aspects of Prehistoric Society in East-Central Arizona"), and H. D. Winters ("Value Systems and Trade Cycles of the Late Archaic in the Midwest"), are better represented by their writing along similar lines in other contexts. George L. Cowgill's essay, "Computer Analysis of Archeological Data for Teotihuacan in Mexico," is not only marred by transposed lines of type, but is not nearly so valuable as some of his contributions that have appeared elsewhere on the application of new statistical techniques and the use of computers to handle them. Finally, two examples of ethno-archaeology or ethnography for the sake of archaeology are included: one by Longacre and J. E. Ayers on a study of an abandoned Apache wickiup, the other by Bobby Jo Williams on a method for detecting small cultural differences reflecting variability among social units which is applied to house pattern data for the Bihor of India.

In sum, the essays are a mixed lot, useful as illustrations of recent trends in American archaeology, but not always the best available if one were to choose a set of selected readings to illustrate these trends. In addition, the book is poorly edited and proofread. One can't help concluding that in some ways the result is a classic non-book, which nonetheless succeeds

because it reflects exciting developments taking place in American archaeology in the 1960s.

As for new perspectives in interpretation, the reviewer would single out as the most enterprising that offered and rejected by Winter to deal with a "rather curious associational pattern" between the atlatl and female burials:

But we join with Webb in lacking enthusiasm for the interpretation of the atlatl as a ceremonial item associated with females. Nor are we quite willing to evoke a platoon of Amazons, or a succession of Boadiceas defending the Green River mussel beds against the onslaught of intruders, although history is legion with militant females who acquitted themselves well in combat.

The present reviewer also lacks enthusiasm for the militancy with which the tenets of the new archaeology are sometimes defended. Nor is he willing to evoke an older generation of archaeologists who have acquitted themselves quite well in battle to claim that the clash is merely a ceremonial fashion of passing interest. Because neither of these stances has any particular merit, he would instead regard the association between the academic generation to which most of the authors in this volume belong and their particular views on what is significant in archaeology as more correctly reflecting a very real change in training of American archaeologists which took place in the 1950s. In his view the new perspectives which that training provided were not only appreciated, but quickly applied, greatly enhancing the interpretive powers of all archaeologists in the 1960s who have been willing to utilize the new tools which this training made available in philosophy, theory, method, statistics, fieldwork, and the technology of the natural sciences.

The Archaeology of Ancient China, revised and enlarged edition. Kwang-chih Chang. New Haven: Yale University Press, 1968. xxv, 483 pp., 168 illustrations, 16 tables. \$15.00.

Reviewed by CHENG TE-K'UN, *University of Cambridge*

Students of Chinese archaeology who are familiar with the first edition of this book will welcome this new edition. It is revised with care and intelligence; new data are incorporated and controversial arguments eliminated or replaced by statements. It is substantially enlarged; the text is expanded by no less than 150 pages; the illustrations increased by about 120 maps and

figures; and there are more tables, all better organized, clear, and instructive. It is indeed "an improved as well as a newer book," and consequently its price is one hundred percent higher!

Five years have elapsed since the appearance of the first edition, and students of Chinese archaeology will be impressed by the vast

amount of new material which has become known in such a brief period of time. The development of man and culture in ancient China may now be viewed as a continuous sequence.

The increased information in pleistocene geology and palaeobiology sets a solid foundation for the understanding of the natural environment for Early Man in China. The many new discoveries of human fossils and palaeolithic industries bear witness that most of the river valleys were populated ever since the Pleistocene. There were several types of people, each practicing a culture of their own.

By the end of the Pleistocene, China was divided roughly into two cultural spheres. The Gobi Microlithic culture dominated the semi-arid north while the Pebble-flake culture held sway in the wooded south. In between them was the loess belt, which thrust with the prevailing wind into the Huangho basin from the northwest. The eastern portion of the loess territory constituted the Central Plain of China, and was soon developed into a busy center where some cultural mixing took place. It is glamorized in the book as the "Nuclear Area of North China."

The Nuclear Area occupies a small basin around the confluence of the three great rivers in north China, the Huangho, the Fenho, and the Weishui. It is bounded by the Shansi plateau in the north, the loess highlands in the west, and the Tsingling mountains on the south, but opens into the Huangho floodplain in the east. The prolonged coexistence and mixing of cultures in this area during the late Pleistocene and early Holocene finally brought forth a new era characterized by cereal cultivation and the

founding of village communities, and destined it to become the cradle of Chinese civilization.

The sections in this book on the earliest farmers and their expansion are almost completely rewritten and greatly enlarged. They serve to illustrate the introduction of agriculture and the development of the prosperous late neolithic culture in north China, from Yang-shao through Lung-shan into the historical period. The roots of the historical civilization in China were set firmly in its prehistoric past. The spread of agriculture and neolithic technology was far and wide, covering not only the provinces in China proper but also most of the adjacent regions in all directions. A world for the activities of the Chinese was founded long before the introduction of writing.

The same process may also be witnessed in the early historical periods of Shang and Chou. The relevant chapters are also vastly expanded. The civilization started in the Nuclear Area was again gradually expanded. The pattern was characterized more by cultural assimilations than through military conquests.

It seems reasonable to conclude that China was a world in itself and the rise of civilization there was a result of millennia of cultural mixing which was responsible for the growth of a uniform cultural tradition. The development consists of three successive stages, starting with the Pebble-flake and Gobi cultures, followed by the Yang-shao and Lung-shan farmers, and leading eventually to the historical Shang, Chou, and Han dynasties. The outline of this development is now set; the whole process will be elaborated and more clearly understood as further archaeological data are brought to light.

Prehistoric Animals and Their Hunters. I. W. Cornwall (with illustrations by M. M. Howard). New York: Frederick A. Praeger, 1968. 214 pp., index, list of suggested readings, 29 line drawings. \$7.50 (cloth).

Reviewed by KENT V. FLANNERY, *University of Michigan*

We are told in the introduction to this book that the late Dr. F. E. Zeuner of the University of London had planned for years to write a book on the animals of the Pleistocene as a companion volume for his *History of the Domestic Animals*. After his death the task was picked up by his long-time friend and colleague, I. W. Cornwall. The result is a systematic review of the wild animals of the Pleistocene, from the woolly mammoth and rhino to invertebrates and small game. Cornwall examines the habits and habitats

of the animals, how they were hunted, and some of the other ways in which they interacted with man. The book is written on a popular level (there are no bibliographic references) and is readable and non-technical. Miss Howard's delightful illustrations, many of them taken from Paleolithic man's own drawings of his animal contemporaries, are a nice addition.

The book is a blend of archaeological fact, ethnological data on animal use by hunter-gatherers, and speculative reconstruction. Its

best coverage is of Europe and Africa, although the New World and Asia are treated more briefly. Beyond short discussions of Peking Man and Java Man, there is not much coverage of the areas most likely to interest readers of *Asian Perspectives*—understandably, since not nearly as much is known about Paleolithic man in that part of the world.

One of the best chapters is the fourth, "Materials from the Animal Kingdom apart from Food." We hear a lot about ancient man's use of horn, antler, hide, sinew, hair, fat, and even glands for scent and pigment, but seldom learn the techniques by which such raw materials are converted into useful artifacts. Cornwall draws on ethnographic data to explain the tools and techniques used in processing these animal products.

I do have a few disagreements with some statements in the book, none of which is so serious as to undermine its utility. To begin with, Cornwall's discussion of the habitats of the animals (pp. 48–49) assigns unnecessarily restricted ranges to some species. Red deer and wild pig, for example, are not exclusively forest or woodland creatures; red deer do well on the treeless Scottish moors and pigs are found in similarly unwooded areas of Eurasia. Related to this point is my disagreement with Cornwall's acceptance of the so-called *Dama-Gazella* graph drawn by Zeuner and Dorothea Bate from the Mt. Carmel cave data. Such wide-ranging species as fallow deer and gazelle cannot be used to indicate climatic fluctuations. Tchernov's study of the microfauna from Israel has already cast serious doubt on the "climatic changes" once thought to have been reflected in the *Dama-Gazella* curve, and Arthur Jelinek's new excavations at Tabun Cave in Mt. Carmel

strongly indicate that the "faunal break" observed in the sequence there is an artifact of cultural activity, not climate (personal communication).

On page 172, *Sus cristatus* is singled out as the ancestor of the early Near Eastern domestic pigs. Their ancestor has been shown to be the Eurasian pig, *Sus scrofa*.

Finally, I disagree with the following statement on page 45: "To man, the hunter, his animal contemporaries were the immediately all-important factor. Doubtless at all times, as now, the plant kingdom, in its proper seasons, contributed some more or less important items to his diet and industry. . . ." I suspect this reverses the order of importance, and underestimates the role of plant foods in the diet of Paleolithic man. All modern studies of hunter-gatherers (many of which are summarized in Lee and De Vore's *Man the Hunter*) indicate that, outside the arctic region, plant foods constitute 60 to 80 percent of the hunter's diet. This will certainly prove to be the case in the area of interest to readers of *Asian Perspectives*, as Chester Gorman's recent excavations at Spirit Cave in Thailand indicate.

Because of its easy, non-technical style, *Prehistoric Animals and their Hunters* can be read and appreciated by someone with no prior knowledge of prehistory or paleontology. It could easily be used in an introductory course on Pleistocene man, to familiarize the beginning student with the animal environment of the Stone Age. When the student asks for a more technical book, with bibliographic references and a powerful command of the paleontological literature, he can then be given Kurtén's *Pleistocene Mammals of Europe* (Chicago: Aldine, 1968).

Contes Malgaches en Dialecte Sakalava: Textes, Traduction, Grammaire et Lexique. Otto Chr. Dahl. Oslo: Instituttet for Sammenlignende Kulturforskning, Universitetsforlaget, 1968. 124 pp. Price not indicated.

Reviewed by PAUL OTTINO, *University of Paris*

This specialized study is of great interest for those interested in Madagascar. It should be read, however, in Malgache with the aid of the glossary and the footnotes which accompany the French translations of the texts.

Otto Chr. Dahl, the compiler and author, also wrote *Malgache et Maanjan, une comparaison linguistique* (Oslo: Egede Instituttet, 1951), which is without doubt the most useful work not only

on the official Malgache language (Merina), but also, and here lies its great interest, on its dialectal forms—especially Sakalava. This new contribution of Dahl's follows the massive contribution of Emil Birkeli, another Norwegian missionary, whose *Folklore Sakalava recueilli dans la region de Morondava* (*Bulletin de l'Académie malgache* [Tananarive], vol. VI, 1922–23) represents, with the French translations,

nearly 400 pages of texts covering the same west coast region of Madagascar from the town of Maintirano in the north to the Onilahy river in the south. In contrast, Dahl's work, shorter (124 pages) and easier to use, is divided into three parts: the eighteen tales of greatly varying lengths (pp. 18-104), preceded by grammatical notes (pp. 3-17) and followed by a glossary (pp. 105-122). In a brief preface and introduction, the author also situates the Sakalava country and the forms of oral expression of the region.

The grammatical notes on the Sakalava dialect, which includes elements already treated in *Malgache et Maanjan*, have the merit of summarizing in a general table the principal characteristics of a dialect spoken under variant forms by all the human groups of the west and north coast of Madagascar. The considerations on the demonstratives used as articles and on the verbal forms with the infix *om* give one some idea of the earlier form of the Malgache language. The entries in the glossary, arranged in order of word stem/roots (*foto teny*), permit one to rectify and sometimes to correct the French translations, which leave much to be desired. Though picturesque and cluttered with slang terms and expressions dating straight back to the military and colonial period (and in this sense constituting documents), these translations are also sometimes erroneous and can lead to real counter-meanings. To give but one example, the proper name Lahiebo (*Lahi/ebo*) of tale 10 is translated "*le vaurien*" or good-for-nothing fellow, whereas the exact meaning is—at least for this tale—the "*propre à rien*" or, as the author himself writes in the glossary under *ebo*, "the incapable, the inapt." (*Lahy* signifies man, male.)

The second great interest of the glossary is to provide definitions of specific words in use in the central and southwest parts of Madagascar (the customary vocabulary of the north and northwest is frequently different), which permits a better understanding not only of the texts gathered by the author, but also those published earlier by Birkeli. At the same time, this vocabulary gives very valuable details on the ways of life, the cultural categories, and the conceptual views of the universe of the populations of western Madagascar (Sakalava, Masikoro, Vezo), thus shedding more light on the ethnographic content of the tales.

This aspect appears in fact very rich. If a certain number of tales concerning "*le merveilleux*" or "wonderland," monsters, and ogres curiously give the impression (as do many Merina tales) of a society poorly adapted to an environment that they didn't know or poorly understood and perceived as hostile, other tales indicate, in reverse, a remarkable knowledge of the natural setting of the west coast. Tales 3, 10, 12, and 13 contain remarkable details on the ancient way of life of the honey and root gatherers and trappers of small animals. This manner of livelihood of the hunters-gatherers, which probably had its origin long before the Sakalava invasion of the 16th and 17th centuries, survives during famine periods or slack periods between seasons, but is maintained full time only by a few groups of Mikea living in the dry forests of Fiherenana between the Mangoky and Onilahy rivers. Tales 8, 10, 15, and 16 contain very precise information on the agricultural activities of the Sakalava and Masikoro, on the corn plantations grown on burnt-off areas, and on food preparation. Ethnographic data on the Sakalava way of life is found in tales 4, 6, 10, 14, 15, and 18, while texts 7, 10, and 11 constitute good documents regarding marriage and especially funerals.

It is a pity that the author does not provide, directly following his texts, ethnographic commentaries comparable to those of J. Faublée in his *Récits Bara* (Travaux et Mémoires de l'Institut d'Ethnologie, Paris, 1947). Isolated, the comparative notes that follow only tale 1 (a story greatly attested in all of Madagascar and not just in the northwest) do not have great meaning, especially since it is without doubt a Swahili version of an Arab tale.

The glossary conceals numerous terms which the author calls *krama* (preliminary note in glossary, p. 105). The use of the word *krama* (from Javanese *krama*, meaning: respectful language, as opposed to *ngoko*, familiar language) is not very satisfactory; actually, here the *krama* terms are strictly literary words found only in an oral literature, or sometimes in foreign words, for example, of Bantu origin, or among the words making up part of the special vocabulary of aristocrats and *ampanjaka* chiefs. This question of special vocabularies (literary, royal, funerary, etc.) in Madagascar deserves a study in itself.

An Ethnographic Bibliography of New Guinea. Department of Anthropology and Sociology, Australian National University. Canberra: Australian National University Press, 1968. 3 vols., paperback. \$A12.00.

Reviewed by DAVID B. EYDE, *University of Hawaii*

This set of books, which is certain to become the bible of those who do library research on the native peoples of New Guinea, is the result of a decade of work on the part of many people at Australian National University. Miss Helen Woodger and Dr. Diane Barwick were the principal directors, according to the preface by Dr. J. A. Barnes. The bibliography concentrates on ethnography, but the most important references dealing with prehistory, physical anthropology, and language are included. The first volume lists references by author, giving the title and full bibliographic references. The second is organized by area. First it notes those items which deal with New Guinea in general; then there are sections which present the material more specifically concerned with Papua, the Trust Territories, or West Irian. Finally, there is a detailed breakdown for the administrative districts of Papua and New Guinea. There is no similar breakdown into districts for West Irian, which would have been useful. Items in this volume are listed by author and date of publication as given in volume I. In the third volume, the same material is rearranged according to the proper names of recognized ethnic groups, linguistic groups, and geographic area. The potential confusion which could result from the overlap of these names is avoided by extensive cross-listing between headings. Here again, items are listed by author and date of publication.

For its topic and area, this bibliography will replace C. R. H. Taylor's *A Pacific Bibliography*. The latter, indispensable for work in the smaller Pacific Islands, has never been completely satisfactory for New Guinea. It is incomplete for

non-Austronesian speakers, and the fact that it makes no further classification of ethnic groups below the level of a single island is a considerable handicap when the island is New Guinea. The new bibliography eliminates these problems.

The coverage of West Irian is especially to be welcomed. Much of the comparative work on New Guinea in English ignores West Irian. Perhaps this bibliography will bring to the attention of English-speaking scholars the fact that New Guinea does not end at the Indonesian border.

The bibliography is complete only through 1964. This means that some of the most important work published on, for example, the Highlands, is not referenced. In his preface, Dr. J. A. Barnes says that it is hoped supplements will be published to cover more recent years. This is certainly to be desired.

With careful use of the District Index and the Proper Names Index it is possible to find the references to geographically contiguous or culturally related peoples, but such a task could be immensely simplified by the inclusion of an ethnographic map showing the location of the groups listed in the Proper Names Index, District Lines, and a rough classification into culture areas. Granted that there would be gaps, such a map would enhance the utility of the bibliography. Perhaps one can be included in a supplement.

In sum, this bibliography represents a great deal of effort, is comprehensive for its area and topic of coverage, and will be indispensable for the anthropologist concerned with New Guinea.

Archaeology on the Island of Mo'orea, French Polynesia. Roger C. Green, Kaye Green, Roy Rappaport, Ann Rappaport, and Janet Davidson. Anthropological Papers of the American Museum of Natural History, vol. 51, pt. 2. New York: American Museum of Natural History, 1967. U.S.\$4.00.

Reviewed by MICHAEL D. SEELYE, *University of Hawaii*

This monograph includes a series of seven papers, the results of archaeological investigations on the island of Mo'orea, French Polynesia. Collaborating on the first systematic archaeological excavations to be undertaken in the Society

Islands, Roger Green and his associates are to be congratulated for a solid contribution to Pacific and Polynesian archaeology. Investigating the 'Opunohu Valley, the largest and most important valley on the island of Mo'orea, the articles

provide an excellent framework of Mo'orean prehistory. Investigation focused on two areas within the confines of the valley: coastal and inland sites. The authors' results are initial attempts to outline a developmental sequence based on archaeological and historical data. More important, they generate testable hypotheses on a number of problems that must be considered if a better relationship between local and regional chronologies is to result.

Janet Davidson, in her article, "Excavations of Two Round-ended House Sites in the Eastern Portion of the 'Opunohu Valley," examines the structural information yielded by round-ended houses. These data are then discussed in terms of how round-ended houses fit into the sequence of occupation in the valley. Unfortunately, radiocarbon dates appear to have been contaminated, and lack of any evidence of earlier structures complicates their relative positioning. At present it is impossible to reconstruct at what point round-ended houses became important. Her detailed description provides a good basis for later comparative studies.

Roger Green discusses one of the oldest interests in Pacific archaeology—religious structures. His treatment of the "Survey and Excavation at Selected Religious Structures in the Eastern Portion of the 'Opunohu Valley" suggests a developmental series of *marae* which modifies and expands Emory's 1933 classification. Various *marae* are examined and placed into his typological sequence. Frequent mention is made of Green's earlier article "Moorean Archaeology: A Preliminary Report" (*Man*, 1961, pp. 171-172). In this earlier outline religious structures are classed as Group III with various subtypes. Careful reading of the present article suggests that some modification of the 1961 proposal has been made. While no major change between the two is evident, I would have preferred an appendix to the second article, listing each type with complete definitions. The present arrangement forces the reader to extract type definitions at various points in the text, none of which are stated precisely the same way as those of 1961. One also might ask a theoretical question at this point: in this typology, which is quite specific, what happens if an intermediate variety of *marae* is found, either in the 'Opunohu Valley or elsewhere on Mo'orea? Despite these criticisms, Green's excellent presentation furnishes a useful

reexamination of earlier *marae* classification and provides evidence that previous sequences must be reconsidered. His methods might be applied successfully in other areas of Polynesia.

"Description of Test Excavations in Coastal Sites" and "Analysis of Coastal Deposits for Midden Context" by Roy and Ann Rappaport and "Descriptive Excavations" by Rappaport, Rappaport, and Green contain mostly descriptive statements. Many of the coastal excavations were disturbed and the test pits disappointing. The artifact analysis and discussion rely upon comparison of functions and methods of manufacture with material from various parts of Polynesia. Because of the diversity of material represented, the discussion is valuable in focusing upon relationships that are often ignored in many site reports.

One of the most unusual aspects of this monograph is the use of ethno-historical materials. In discussing interpretations of round-ended houses, religious structure, settlement patterns, and final conclusions, Roger and Kaye Green have made a considerable effort to consult and examine historic sources for data relating to the 'Opunohu Valley. Fortunately, the early discovery and exploration of the Society Islands has generated many early records of contact situations. In many cases the authors have been able to document material, religious, social, and political activities within the valley. Combining the two fields has allowed a check, and Green has quite clearly demonstrated the usefulness of this approach. Readers interested in knowing how detailed an analysis was made should consult the April 1968 issue of the *New Zealand Journal of History*, in which Roger and Kaye Green's article, "The Significance of Certain Historical Records for Religious Structures (*marae*) of the Windward Society Islands," discusses the importance of historical data.

The text is accompanied by excellent line drawings and photographs. Other than plate 21, which has been turned sideways, the visual presentation provides a useful adjunct to the well-written text. The monograph provides a model for others to follow in fullness, scope, and depth. As the first in-depth study of prehistoric Pacific settlement patterns in a localized situation, *Archaeology on the Island of Mo'orea, French Polynesia* should be a basic reference for any serious student of Polynesian prehistory.

Polynesian Culture History: Essays in Honor of Kenneth P. Emory. Genevieve A. Highland, Roland W. Force, Alan Howard, Marion Kelly, and Yosihiko H. Sinoto, eds. Bernice P. Bishop Museum Special Publication 56. Honolulu: Bishop Museum Press, 1967. 597 pp., bibliography of Kenneth P. Emory, index, general bibliography, 71 figures, 3 maps, 22 tables. \$16.50.

Reviewed by T. STELL NEWMAN, *State Parks Division, Hawaii*

Twenty-five leading Polynesian specialists contributed articles for this volume honoring the seventieth birthday of Kenneth Emory. The range of interests reflected is truly remarkable, especially when one considers that all are linked to the central theme of Polynesian culture history. Perhaps the best way to illustrate this diversity of interest is through a simple listing of the volume contents.

The Foreword was written by Roland W. Force and the Preface by Genevieve A. Highland. These are followed by "Kia Ora Keneti [Biography of Kenneth P. Emory]," by Bengt Danielsson, and a Bibliography of Kenneth Pike Emory.

The articles proper are, in order, "Polynesian Origins and Migrations: A Review of Two Centuries of Speculation and Theory," by Alan Howard; "Revisions and Adulterations in Polynesian Creation Myths," by Dorothy B. Barrère; "Homogeneity and Hypertrophy: A Polynesian-Based Hypothesis," by Margaret Mead; "New Perspectives on Polynesian Voyaging," by Ben R. Finney; and "Material Evidence of the Bird-Man Concept in Polynesia," by T. Barrow.

Other essays are R. C. Green's "The Immediate Origins of the Polynesians"; "A Commentary on the Study of Contemporary Polynesia," by Alexander Spoehr; "A Linguistic Assessment of the Historical Validity of Some of the Rennellese and Bellonese Oral Traditions," by Samuel H. Elbert; "Effect of Heterogeneity in the Lexicostatistical Test List: The Case of Rotuman," by George W. Grace; "The Past Twenty Years in Polynesian Linguistics," by Bruce Biggs; "Onomastically Induced Word Replacement in Tahitian," by Ralph Gardner White; and "Artifacts from Excavated Sites in the Hawaiian, Marquesas, and Society Islands: A Comparative Study," by Yosihiko H. Sinoto.

Also included are "Archaeology on Coral Atolls," by Janet Davidson; "Archaeology and the Society Islands," by José Garanger; "Some Problems with Early Descriptions of Hawaiian Culture," by Marion Kelly; "The Lei Niho Palaoa," by J. Halley Cox; "Poi Making," by Mary Kawena Pukui; "Friendship Pacts in Ancient Tahiti," by Douglas Oliver; and "Early

'Āti of the Western Tuamotus," by Paul Ottino.

The volume concludes with "Observations on Methods Used in Assembling Oral Traditions in the Marquesas," by H. Lavondés; "Preservation and Evolution of Form and Function in Two Types of Tongan Dance," by Adrienne L. Kaepler; "Sea Creatures and Spirits in Tikopia Belief," by Raymond Firth; and "An Island Changes Its Religion: Some Social Implications of the Conversion to Christianity on Bellona Island," by Torben Monberg.

Although many of the authors report on areas of rather specialized interest, almost all articles include summaries of existing knowledge on the subject. Several of the contributions are seminal review articles of broad subject areas, written with a great deal of expertise. Of these, the most useful in understanding the background of present knowledge of Polynesian culture history are undoubtedly the articles of Howard, Biggs, and Green. These three contributions, and particularly that of Howard, will certainly become standard reference articles, for they presently provide the best entry into Polynesian studies for the new student and non-specialist.

A number of the articles report the results of recent field research, such as those of Sinoto, Kaepler, Ottino, Monberg, Lavondés, and Elbert, and will now become important as readily available materials for comparative studies. The article by Davidson is a careful assessment of the archaeological potential for coral atolls. She notes that atolls can, in many cases, provide archaeologists with challenging and rewarding excavations. Garanger has produced the clearest statement of the past and present of Society Islands archaeology that is currently available, while Finney reports the results of experimental research on Polynesian voyaging and casts some welcome new data into a well-trodden arena.

In an article that should be widely read by Polynesian culture historians, Kelly points out that acculturation occurred so rapidly in Hawaii that even very early observations of native culture may be reporting a culture already in the process of change through the influence of the Europeans. It might be that Kelly has found a

weak spot in Polynesian culture history, for this problem may be far more general than is presently realized.

Only the article by Sinoto provides a substantial degree of descriptive material from archaeological excavations. He succeeds in producing an admirable synthesis of the ways in which formal analyses and type artifacts have been used to plot the culture history of the Marquesas, Hawaiian, and Society Islands. It must be pointed out in passing, however, that an apparent error occurred in the production of Figure 7 since fishhooks C and H appear to be reversed from what the caption indicates. Fishhook C

seems to be the Hawaiian fishhook, although it is labeled Marquesan, and fishhook H seems to be the Marquesan fishhook, although it is labeled Hawaiian. The other articles in the volume are too numerous to be individually critiqued in the space allotted for a review; suffice it to say that all are quite good, but not quite of the excellence of those individually cited here.

I am certain that *Polynesian Culture History* will stand for many years as a basic source book on Polynesian culture history. In honoring Dr. Emory, the contributors and editors should be proud to have produced such a masterful statement of the status of Polynesian culture history.

Computer Analysis of Chronological Seriation. Frank Hole and Mary Shaw. Rice University Studies, vol. 53, no. 3, 1967. 166 pp. n.p.

Reviewed by CHARLES T. KEALLY, *Sophia University, Tokyo*

Hole and Shaw provide the first extensive evaluation and comparison of seriation techniques and the performance of various kinds of data used for seriation. They evaluate the Brainerd-Robinson (1951) technique and the Ascher and Ascher (1963) computer program that works with it, the Meighan (1959) and Dempsey-Baumhoff (1963) techniques, and two new techniques, Permutation-Search and Type-Percentage, developed during their research. They evaluate four sets of data: the Ali Kosh-Tepe Sabz ceramics, flint assemblage and all other artifacts, and the Pa Sangar palaeolithic flints.

These data are of known stratigraphic order and are well controlled for factors of non-temporal change. The foreknowledge of the data behavior makes possible measurement and comparison of the relative capabilities of various ordering techniques to match the true order. The deviation is measured by a statistic called an "error coefficient." At the same time a "matrix norm" statistic compares the approximation of a data set to the ideal lenticular model.

However, the error coefficient requires independent knowledge of the true order, which is rarely available. In the absence of this statistic, the system devised for this study attempts the best order inherent in the data. Good results will be obtained only if the data are well suited to seriation, that is, if they follow a lenticular pattern of change. But the authors find they can give no certain method of predicting this behavior in the data, although they suggest the Meighan technique as generally useful for that purpose.

The authors provide a discussion of various proposed ways for calculating the matrix norm and error coefficient and the reasons for their particular choices for these two statistics. Then, using the chosen methods of calculation, they make a detailed and thorough study of the performance of the several seriation techniques and data sets.

They find that a Brainerd-Robinson correlation matrix gives better results than a Presence-Absence matrix. They obtain their best orderings with Permutation-Search and get a better final order if the input data are ordered first by the Meighan technique. This latter technique proves to be a relatively accurate means for seriation. The ceramic data set seriates well, but the Pa Sangar flints do not give good results. The 10 cm arbitrary levels used to excavate the latter seem to discriminate units finer than the archaeological ones present in the site. When these 10 cm cuts are grouped into 40 cm units, these data seriate correctly.

But the most important contribution of this study is the computer program, PHOENIX, without which these evaluations would have been impossible. The authors describe it as simple, appropriate, convenient, and extendable (p. 89); as capable of doing "virtually any task demanded by seriation" (p. 67). PHOENIX is worthy of this description; it provides a number of easily selected options for input format, computation and ordering technique, and output display. Moreover, in contradistinction to other works on computer methods for seriation, this

study provides a lucid and complete program listing and user's guide (appendices C and D).

However, this study is only a beginning, a foundation from which to begin further studies

of seriation techniques and theory. Nevertheless, the authors rightly conclude that seriation works—but cannot be used “uncritically or universally” (p. 84).

Prehistoric Japanese Arts; Jomon Pottery. J. Edward Kidder, with contributions from Teruya Esaka. Tokyo and Palo Alto: Kodansha International Ltd., 1968. 308 pp., 429 plates, maps, figures, charts, site list, bibliography, notes, index, glossary. \$27.50 (cloth).

Reviewed by RICHARD PEARSON, *University of British Columbia*

Jomon Pottery is a sumptuous, magnificently illustrated, carefully documented guide to the ceramics of Japan from their inception up to the beginning of elaborate cereal cultivation. Professor Kidder guides the reader through the welter of stylistic types of bowls, jars, pedestaled vessels, bottles, spouted vessels, incense burners or lamps, legged vessels, and special forms by means of charts, photographs, and distribution maps. For the appreciation of the aesthetic achievements of the Jomon and the incredible range of prehistoric ceramic technology, the book is second to none.

Following the introductory section on the history of Jomon archaeology, the work is divided into sections according to the five-stage period classification in current use. Kidder traces detailed stylistic links from the earliest Jomon in Kyushu and Honshu to the florescence of Middle Jomon in the Chubu area of Honshu into the final stages of Jomon in the Tohoku region. He outlines the possibility of contact with the neolithic cultures of continental China. Such contact is indicated by rare painted skeletonized figures applied to Katsuzaka type pottery before firing (pp. 94, 95). One radiocarbon date for Katsuzaka (p. 287) places it in the middle of the third millennium B.C. Probably this date is too late for the Yang Shao; perhaps the relationship is with the painted pottery found in Lungshanoid assemblages rather than with the Yang Shao. It also seems to me that an equally good case can be made for a genetic relationship between the Lungshanoid and the black, polished, angular pottery of the late Jomon of Kyushu. Kidder points out in the final section that the

decline of the Middle Jomon culture of central Honshu coincides with the expansion on the east coast of the shell-mound populations, and the increased reliance upon fishing.

Professor Teruya Esaka of Keio University has contributed sections on decoration techniques, radiocarbon-dated sites, Jomon chronology, and design and shape incidences. In the Preface, Professor Esaka states that “This book presents a full and representative survey of the latest material and research on Jomon culture” (p. 8). His statement reminds one at once of the generally non-anthropological nature of Japanese archaeology. Part of the problem, which has been reiterated so often, is the lack of quantification, or of concern for sampling. In addition, I still see no signs of systematic inquiry into the ethnographic correlates of the pottery or the testing of the relative power of various explanations. Seriation, with all its weaknesses, leads one to the formulation of testable hypotheses concerning the nature of the sequence (cf. Dunnell, “Seriation Method and its Evaluation,” *American Antiquity* 35:305–318). The narrative of the present work seems to jump from pot to pot, most of the examples being taken from the Kanto and Tohoku areas.

Despite these drawbacks, which are endemic in the field of Jomonology, the reader will be greatly impressed by the increase in information and interpretation in comparison to Professor Kidder's *The Jomon Pottery of Japan* (1957). As Professor Esaka points out, “it will be many years indeed before a book as complete and comprehensive as this will be attempted again—if it ever will” (p. 8).

A Selected and Annotated Bibliography of Korean Anthropology. Eugene I. Knez and Chang-Su Swanson. National Assembly Library, Republic of Korea, 1968. x + 235 pp., author index, title index, 1 map. n.p.

Reviewed by RICHARD J. PEARSON, *University of British Columbia*

This bibliography, based on the collections of the Orientalia Division, Library of Congress, Washington, contains sections on general references; ethnology and social anthropology; material culture, including archaeology and fine arts; linguistics; and physical anthropology. A section in the front contains a résumé of the cultural periods of Korea, while sections after the references include an author index, a title index, and a map of Korean archaeological sites. The cutoff date for the 537 entries is 1965.

Archaeologists will find that of a total of 262 main entries in archaeology and material culture, approximately 80 are included in the 1947 bibliography of Gordon Hewes (*Archaeology of Korea: A Selected Bibliography*, Research Monographs on Korea Series F, no. 1). Further materials omitted from the present volume are also to be found in Yi Ki-Baek, 1968, *An Introduction to Korean History*, Korean National Assembly; various issues of *Asian Perspectives* (not included by Knez and Swanson); and Kim Won-yong, 1964, "Table of Prehistoric Sites," *Archaeological and Anthropological Papers of Seoul National University*, volume 2. L. Sample's fine digest of the Japanese literature in her

doctoral dissertation, "Culture History and Chronology in South Korea's Neolithic," now available on microfilm, contains a discussion of much of the material presented by Knez and Swanson.

Personally, I am not sure of the rationale of expending so much effort on bibliography based on a collection which is so incomplete, even in regard to key references. For instance, the publication series Yujok Palgul Pogo [Archaeological Report Series] from Pyongyang, published in many volumes, is cited only by volume 4 (p. 104). Editorially, there are problems with the place names, so important for archaeologists, which are given in mixed Japanese and Korean readings. Perhaps someone in Korea could make these consistent with modern geography.

However, the romanized and translated titles and abstracts do make this bibliography a useful introduction to the field, particularly for the older materials. I would now urge the Library of Congress and other scholarly agencies to make a concerted effort to keep up with new Korean materials, both from the north and the south, since the field is moving very rapidly.

Die Religionen der Südsee und Australiens. Hans Nevermann, Ernest A. Worms, and Helmut Petri. Stuttgart, Berlin, Köln, Mainz: W. Kohlhammer Verlag, 1968. 329 pp. n.p.

Reviewed by INEZ DE BEAUCLAIR, *Institute of Ethnology, Academia Sinica*

The work under review forms the fifth volume of the series "The Religions of Mankind," edited by Christel Matthias Schroeder.

Nevermann deals with Polynesia, Micronesia, and Melanesia. For Polynesia he forces his material into a type of cultural-historical framework widely accepted earlier in this century, but which recent linguistic and anthropological advances are calling more and more into question. Nevermann divides Polynesian religious history into five periods: (1) Period of the Manahune (earliest wave of Polynesian settlers), beginning around the first century A.D. Deified chieftainship and high gods were lacking, the fertility cult was especially important, and "religion and ethics are still separated" (!);

(2) First Ariki Period, that of "god-like aristocracy," which reached its peak in the eighth century A.D. Real priests replace earlier shamans, and Tane assumes the place of the highest deity; (3) Second Ariki Period, in which the Tangaroa cult spread out from a cult in the Society Islands between the tenth and fourteenth centuries; (4) Third Ariki Period, marked by the growth of various local cults and the decline of high-god cults, preparing the way for the final period, which began around the end of the eighteenth century; (5) Period of Christianization.

In his treatment of Micronesia, Nevermann seems to have overlooked not only more recent sources, but also more important earlier ones. It is surprising that for the religion of the

Western Carolines he draws from material relating to the atolls and not to Yap, which was the religious center of the widespread archipelago.

Melanesian materials are not forced into any particular framework, and the treatment is interesting. The final chapter on cargo cults deserves special mention.

Despite Fr. Worms not being a trained

ethnologist, this posthumous publication presents new insights into Australian aboriginal religion, drawn from Worm's long association with the people. Textual commentary by Petri adds to the clarity of the presentation, and Petri's closing chapter on problems of religious acculturation of the Australian aborigines is clear and thought-provoking.

Geschichte und Sozialordnung der Sherpa. Michael Oppitz. Beiträge zur Sherpa-Forschung, Teil 1, Friedrich W. Funke, editor. Innsbruck, München: Universitätsverlag Wagner Ges. M.B.H., 1968. 170 pp., charts, figures, maps, plates, tables, bibliography, English summary, indices. n.p. (cloth).

Reviewed by INEZ DE BEAUCLAIR, *Institute of Ethnology, Academia Sinica*

The book under review is the first of a series of six volumes, edited by Dr. Friedrich W. Funke, professor at the University of Cologne, comprising contributions to Sherpa research. This series presents the results of Nepal-Himalaya research carried out from 1963 to 1968. The studies focus on the religious life, land utilization and social structure, material culture, and art and physical anthropology together with medical observations. A supplement deals with the Sherpa and their neighbors. Printing and illustrations, some in color, are of high quality.

Around the fifteenth century, a group of about fifty persons left their homes in the Kokonor region under the pressure of the Mongols, crossed the Himalaya, and migrated westward (p. 103). Reaching almost the border of Kashmir, they were threatened by Islamic peoples. So, they turned to the east again, and settled in Nepal, where they amount at present to thirteen thousand people. It is a most

remarkable feature of these Nepalese Sherpa that they keep in village monasteries documents dealing with the history of their clans; this history is interwoven with mythology showing Indian conceptions. There are also documents referring to dealings with the Nepal government. The script for the older documents is Tibetan, but from the year 1791 they are written in Nepali. The genealogical histories, not without the help of mythology, cover about nine hundred years. The western Sherpa living among the Tibetans, with whom Furer-Haimendorf deals, are not in possession of documents. The Sherpa are organized in exogamic patrilineal clans and subclans; both polyandry and polygamy occur. One would wish for an introduction, as this is the first volume of a series. The reading of pages and pages in italics (pp. 25-57) is fatiguing, but well worth the effort. The book is a welcome contribution to our knowledge of the Sherpa.

The Vermilion Bird: T'ang Images of the South. Edward H. Schafer. Berkeley and Los Angeles: University of California Press, 1967. 351 pp., 7 plates. U.S.\$11.00.

Reviewed by RICHARD PEARSON, *University of British Columbia*

The Vermilion Bird is a highly ambitious attempt to explore T'ang dynasty attitudes toward the reconquered southern areas of China, largely uncontrolled since the Han. The author states that his aim "is not so much to 'conceptualize' the past, but rather to reveal the past, without sacrificing accuracy, in a vivid, lively, and sensuous fashion" (p. 2). His abundant primary source material comes from T'ang poetry. While the approach is predominantly literary, the book contains both material and

approaches highly useful to anthropologists and archaeologists. Several aspects are particularly important.

The first of these is the author's broad review of the ethnic groups in south China during the T'ang. The south was divided into two major divisions, the east, called Lingnan (modern Kwantung and Kwangsi), and Annam (modern Tongking and some portions to the south). Lingnan was further divided into four administrations: Kuang—which contained Canton—

Kuei, Jung, and Yung. The inhabitants of the period fall into two groups: the Hua (Chinese) and Man (aboriginals). Historical accounts and biographies in Schafer's work show the actual attitudes of these Chinese to the aborigines. The author's account gives one the impression of lucidity and careful, critical evaluation, in contrast to the somewhat ponderous, uncritical treatments of Han dynasty accounts of roughly the same area.

From the literary sources Schafer has assembled an impressive account of the valuable trade items from the south. These include valuable stones, neolithic adzes (sought for their magical properties), musical stones, mineral colors for painting, cinnabar, talc, steatite, soapstone, white lead, coral, coal, pearls, medicinal orchid roots, Job's tears, southern hardwoods, areca nuts, dates, fan palms, bamboos, banana linens, lichees, and kumquats.

The major groups of Chinese in the area are enumerated, and their interrelated roles in

Nam-Viet, the south, are explored. One of these groups was the military garrisons, which caused little disturbance to the local inhabitants during the consolidation of the Han but entered more into the society of the south during the T'ang. Others were merchants or agents, government administrators, exiled court personalities who took with them enough personal resources for subsistence, settlers who reached the south in considerable numbers during the T'ang, and south Chinese creoles who were raised in Nam-Viet, reaching positions of power through the examination system.

This is a book that should be welcomed by anthropologists and archaeologists, since it opens up a subsidiary approach to the culture history of mainland Southeast Asia that few scholars in the social sciences would attempt to expound because of the difficulty in handling the sources. In addition to its meticulous and rigorous scholarship, *The Vermilion Bird* is a model of imagination, taste, and good writing.

Fijian Material Culture: A Study of Cultural Context, Function, and Change.
Alan Richard Tippet. Bernice P. Bishop Museum Bulletin 232. Honolulu: Bishop Museum Press, 1968. 193 pp., 26 figures. n.p. Paper.

Reviewed by BRUCE PALMER, *Fiji Museum*

In this illuminating study, Dr. Tippet attempts to determine the changing contexts of a limited number of artifacts by setting up a functional typology for each of these and analyzing them with their ethno-historical contexts with regard to persons and institutions. The case studies he chooses comprise clubs, canoes and boats, turtle nets, and houses.

This study is long overdue, and the author brings to it an intimate knowledge of Fijian language and life derived from long association with Fijians in various parts of the group. Dr. Tippet rightly points out the limits of morphological classifications which have imposed their obvious restraints on the full study of a particular group of artifacts. In breaking away from this, he gives a much clearer insight into the dynamics associated with the use of the artifact. A reading of his discussion of *Na Buki Vesa* (The Tying of the Ceremonial Sash) is a prerequisite for those who wish to understand the significance of turtle fishing and its relationship to chiefly custom. Likewise, Dr. Tippet's sections on the social functions of weapons and petty warfare are necessary reading for those who dwell too much on museum specimens.

For all the scholarship and care that Dr. Tippet has shown in his study, one feels that he has pleaded his case too well. The approach he adopts is necessary; there is no question about that. Despite this, one needs a widened series of morphological, artistic, and distributional studies to support the contextual understanding demonstrated by the author. For instance, Dr. Tippet provides a functional typology of houses, covering most of Fiji. Yet, as a result of this, several questions are left unresolved. What is the range of building styles within the one village on Kadavu? How representative is any one village for Kadavu in general? Or any other village on the island?

The most serious omission (for the archaeologist, at least) is the almost complete absence of detail on *yavu* or house foundations. Apart from brief references, one might be excused for thinking that housemounds were non-existent in Fiji. Current archaeological studies suggest that the shape, size, height, and make-up of housemounds were significant and indeed, this seems to be the case in contemporary Fijian villages. Similarly, we need to know more about

the artistic treatment of all the clubs included in Dr. Tippet's functional typology.

In short, there is a pressing need for a reconciliation among all sorts of typologies. Each serves a purpose and no particular one is more important than another. The relative importance depends on the needs of the researcher. Perhaps as a result of Dr. Tippet's study, the way is now open for a new generation of students to undertake such a reconciliation of the artifact categories chosen by the author. Certainly this would be a massive study, but a worthwhile one.

Minor quibbles remain. The drawings of the clubs are less than pleasing, and both they and the muddy club plates hardly encourage one to investigate further the art of the Fijian wood-

carver. One might sigh with regret that the plates showing dreary rows of clubs said to be displayed in the Fiji Museum were ever included in the bulletin. Even at the time that the manuscript went to press the displays had been consigned to oblivion. This, I suppose, emphasizes one of the major points of Dr. Tippet's thesis, that morphology alone is a limiting factor in current artifact studies.

This bulletin is an important contribution to Fijian and Oceanic studies. Its relevancy is immediate to all those interested in material culture and the society which produced it. Dr. Tippet's study is sympathetic, penetrating, and an object lesson to fieldworkers who seek a clearer understanding of cultural dynamics.