

Book Reviews

Prehistory. Derek Roe. London: Macmillan, 1970. 288 pp., 6 maps, bibliography, 142 illustrations. \$6.50 (cloth).

Reviewed by DONALD J. MULVANEY, *Australian National University*

Half a century ago, Miles Burkitt was possibly the first to use the term *Prehistory* (1921) in the title of a book published in English. Now another Cambridge authority on the Palaeolithic has produced a similarly titled survey. While Roe's book testifies to the enormous growth in the scope and nature of prehistoric research during the interval, the volume has shrunk in size; although the presentation is clear, it is brief and selective in treatment both topically and geographically.

Roe aims "to offer a first introduction to the subject of prehistory, to the sequence of events . . . and to some of the ways in which they are studied" (p. 6). The book progresses from the Palaeolithic (chiefly of Africa and Europe) to the Iron Age (of Europe) in five chapters, with two additional chapters on the concept of prehistory and on modern techniques of analysis and interpretation. The illustrations are numerous and relevant, and the format is pleasing.

Pacific prehistorians will find that the orientation is European and emphatically British. Their entire region, the New World, and most of Asia are omitted, and the later the date, the more peripheral seems the social significance of the areas discussed. Some 217 sources are listed in

the bibliography; of these perhaps 92 deal exclusively with British archaeology while another 60 or more concern European issues. In addition, those works concerned with archaeological theory or scientific practice are predominantly by British authors. The book title is therefore misleading in its broad implications, although the author advances explanations for his approach.

The emphasis in the book is on stone typology and tool assemblages, while environmental matters are given less attention. There are many hints of new approaches (including the author's own research, which is mentioned only in passing), but the book contains much that appears unfashionable in these days of ecology, ethnographic example, and model-building. It is questionable whether "less happens" in the Palaeolithic than during major prehistoric periods (p. 32), or that Southeast Asia was not necessarily unprogressive (p. 47). It is unfortunate to find the "beaker folk" once again covering Europe (p. 158). In this book, culture and tool types appear largely synonymous, while art, which figured so prominently in Burkitt's prehistoric world, recedes into the background.

Aspects of Prehistory. Grahame Clark. Berkeley and Los Angeles: University of California Press, 1970. xiii, 161 pp., 4 plates, 23 figures, index. \$5.95 (cloth).

Reviewed by ROBERT DUNNELL, *University of Washington*

Aspects of Prehistory presents the substance of three lectures delivered by Grahame Clark in 1969 at the University of California at Berkeley. Treating major themes in world prehistory, the

lectures are derived from the author's reflections upon the writing of *World Prehistory: A New Outline* and its predecessor of similar title.

Most readers will find the substance of the

book familiar, at least implicitly. The real value lies in the fact that Clark has drawn all the bits and pieces together into a comprehensible whole. Tying together the three lectures, each represented by a chapter, is a single overriding thesis: man, in all his uniqueness, is part of the natural world and a product of natural processes, and thus prehistory is to be understood in those terms, as part of the evolution of the natural world and not profitably in a self-contained anthropomorphic fashion.

The first chapter, "The Relevance of World Prehistory," ostensibly treats the expansion of history to the preliterate past and beyond the confines of the Western tradition. This expansion is both a part of the increasingly comprehensive commonality among men and a means of understanding, in perspective, the diversity still present. "Expressed in a sentence, the significance of world prehistory is the contribution it is able to make to widening the perspectives of history in accord with the needs of today" (p. 40). But this is a superficial conclusion, for Clark succeeds most admirably in establishing the identity of past and present; the present is simply the current face of prehistory.

The establishment of this identity is a stepping-stone to the development of the main thesis in the second chapter, "Material Progress." Here technology, subsistence, and distribution of early man are shown as shaped by natural selection operating increasingly upon man's cultural rather than biological characteristics. Clark recognizes six "modes" of tool construction that are broadly applicable to pre-civilized development: Mode 1, pebble tools; Mode 2, bifacial tools; Mode 3, prepared-core flake tools; Mode 4, blade tools; Mode 5, microliths and composite tools; and Mode 6, ground stone tools. His arguments relating these "modes" to his main thesis are qualified and judicious. His treatment of near-civilized and civilized men is less structured, more simplified, and lacks depth.

In the final chapter, "The Dawn of Self-Awareness," he attends the appearance of peculiarly human attributes such as speech, religion, art, and an awareness of the world beyond immediate contact. Much of this chapter is devoted to emphasizing man's distinctiveness in these aspects, but the point of the chapter is quite the opposite. Clark argues succinctly that even these dramatically human characteristics are amenable to an evolutionary overview, that self-awareness too is an adaptive advantage favored by natural selection.

Without contending the main thesis of *Aspects of Prehistory*, which is well taken, there are a number of important objections that might be raised, especially in connection with the substantively oriented second chapter. The most persistent, and at least to this reader most damaging, difficulty is the failure to distinguish the development of new forms, the process stressed by Clark, from their diffusion in developed form. Surely the conditions under which new forms arise are far more restricted than those under which the new form, once developed, can spread. His suggestion, for example, that ethnographic peoples who "... combine the sowing of crops with the migratory habit..." (p. 90) are evidence of a gradual transition from hunting and gathering to agriculture and that sedentary settlement is not a precondition of agricultural subsistence belies this failure only too clearly. He does not consider the possibility that this particular combination may not be the product of development but rather of diffusion, or whether the peoples representing this combination are viable or becoming extinct. Numerous examples of similar oversimplification can be found in the treatment of peoples engaged in a productive kind of subsistence. Clark does not recognize that one of the products of the evolutionary process he describes is a new mechanism for change, one without analogue in the biological realm, which may well be the single most advantageous characteristic of man in the adaptive sense Clark considers. Early in prehistory, when diffusion plays a less important role, the effects of this failure are negligible, but it badly weakens the arguments as they pertain to civilized peoples.

Another disappointing feature is the failure to consider the effects of absolute population increase, changing population density, and changing rates of effective communication in treating the rapidly increasing rate of cultural change. Perhaps there has been a change in the rate of innovation within the human species, but surely a large part of this increase can be linked to population size and its consequences rather than to the ability of men to innovate.

Aspects of Prehistory is a humanistic argument for a science of man. The main thesis cannot be challenged. Natural selection and evolution are powerful tools for understanding prehistory, but in the demonstration of this point a lot is sacrificed, especially the evolution of nonbiological and nontraditional mechanisms for cultural change. This kind of oversimplification, the only

real flaw in the book, is perhaps unavoidable, but its effects are pervasive. It is difficult to say to what audience the book is directed, but I doubt

that anyone, whatever his specialized interests, will read the book and not gain considerably in perspective.

World Prehistory: A New Outline (Second edition, revised, of *World Prehistory*). Grahame Clark. Cambridge: Cambridge University Press. 1969. xvi, 331 pp., 17 plates, 10 maps, 22 tables and charts, bibliography, index. \$2.95 (paper).

Reviewed by JEROME JACOBSON, *City College, City University of New York*

Almost a decade after the appearance of its first edition, this handy paperback compendium of all prehistory still has its far-reaching field almost to itself. Indeed, no other soft-bound book exists—in English, at any rate—which attempts to distill the prehistoric archaeology of every major inhabited area. As such, it provides an inexpensive text for undergraduate courses in prehistory, although the volume is better suited as a reference handbook for graduate students, professionals, and the reading public.

For Asianists it is especially useful, since no other single work limns the prehistory of so many culture areas in Asia and the Pacific. Most of the fifty pages added to the 1961 version in this new and almost entirely revised edition are devoted to the East, and two of the chapters on Asia in the first edition have been expanded into four.

The first three chapters outline the biological evolution of the hominids in the ecological setting of the Pleistocene, then trace the development of Palaeolithic culture in Africa and Eurasia. The next two chapters deal with the origins of plant and animal domestication and the emergence of civilization in Southwest Asia. Chapters 6 and 7 describe the foundations and diffusion of European civilization from 6000 B.C. to late into the second millennium A.D.

The culture history of Africa, from Mesolithic Egypt to European colonization, is covered next, and is followed by a new, separate chapter on Holocene India through the Mauryan Empire. The new chapter on the Far East has separate sections on China, Southeast Asia-Indonesia-Philippines, Japan, and Northeast Asia. The concluding chapter, on the New World, follows coverage of Australasia and the Pacific.

New and especially helpful are the many charts and tables of radiocarbon dates, although these and other chronological data are not sufficiently integrated into the text. Footnotes, bibliographic references, names of most archaeologists, and minutiae are wisely omitted from the

clearly written, concise, and generally accurate accounts of each area. These accounts have been updated, along with the fine fifteen-page bibliography, to the end of 1967. Solid, if sometimes chronologically overlong, bridges take the reader across the divide between prehistory and history.

The more meticulous may object to the many misspellings or unusual renderings of proper nouns—for example, Fairservice for Fairservis, Maheshwa for Maheshwar, Bramagiri for Brahmagiri, Pātalipura for Pātaliputra, Huaco Prieta for Huaca Prieta, Nia for Niah, Nuka Hiva for Nuku Hiva, Huaxtecs for Huastecs, Kwatuitl for Kwakiutl. But more surprising in a work of this type is the absence of a single illustration of a stone tool or ceramic vessel, although one wonders whether this is a shortcoming or an achievement.

An unquestionable shortcoming, however, is the lack of a consistent point of view, a sense of the unity within diversity of the human condition through time and space that would have provided literary and synthetic cement for what remains essentially a catalog of culture sequences. The striking recent advances in the interpretation of prehistory by the culture process theorists or the neo-evolutionists, for example, are nowhere reflected. Instead, Professor Clark, a distinguished pioneer in ecological and economic interpretation of prehistoric remains in Europe, nevertheless retains the outworn view of prehistoric cultures as representatives of preconceived ideal stages labeled "Mesolithic," "Neolithic," "Chalcolithic," etc., rather than as functioning parts of evolving life systems. When cultural developments are explained at all, it is usually in terms of the "surplus theory," now recognized as inadequate or tautological by theoretical prehistorians in the Western Hemisphere.

The following specific comments, confined mainly to data presented by Clark on Asia and the Pacific, refer to passages found on the pages

indicated. Clark suggests on page 13 that the Iranian plateau marks the eastward extent of Advanced (i.e., Upper) Palaeolithic evidence, but he properly corrects this impression on page 51 with references to the Upper Palaeolithic in central and eastern Asia. Early *Homo sapiens* is not always found with typical Upper Palaeolithic assemblages (p. 13): the evidence from Niah, Borneo, is an important exception. Most students of the problem believe that climatic change in the Pleistocene-Holocene boundary in Southwest Asia was insufficient to spur the development of food production (pp. 23, 78). The appearance of a large village (Eynan) in the early Natufian should be included in a discussion of early Holocene cultural evolution in the Levant (p. 88). According to Mellaart, the reduction of metal from ore dates to the seventh millennium at Çatal Hüyük, long before its appearance in fifth millennium Mesopotamia (p. 109).

In India, hand axes are known from areas north as well as south (p. 40) of the Narmada River. And, from this reviewer's experience, the apparent concentration of hand axes in river valleys (p. 41) more likely reflects the routes of Holocene archaeologists rather than those of Pleistocene populations. The reviewer's recent research in central India tends to support Clark's impression that many aceramic microlithic industries in India may have resulted from Chalcolithic inspiration. However, lunates and

trapezoids are not found in typical Harappan blade assemblages, while lunates are found in assemblages which do not include blades removed by the "ribbon flake" technique employed by the Harappans. Evidence for microlithic industries earlier than the Harappan period comes from sources other than Rangpūr (p. 207).

Early Indian plant domesticates include many indigenous species, a factor overlooked in the attribution of domestication in the subcontinent only to diffusion from the northwest (p. 208). Ahar, a West Indian Chalcolithic site, and the pre-Harappan levels of Kot Diji, in the Indus valley, are incorrectly listed as Harappan components in the chronological table (p. 219). Typical pre-Harappan and Harappan pottery is painted black-on-red, not the reverse (p. 211).

The section on China omits mention of the early domesticates as well as any estimates for pre-Shang Holocene chronology. Discoveries of probable early domestication in Thailand were made after this book went to press and will necessitate revision both in the evaluation of the East Asian sequence and in the nature of the origins of food production. Of more indirect but specific interest to Asian prehistorians is the omission from the section on Early Man in the New World of the important finds in Alaska and the northern Yukon published since 1961 by MacNeish, Giddings, and others.

Introductory Readings in Archaeology. Brian M. Fagan, ed. Boston: Little, Brown, 1970. 361 pp., figures, plates, index. \$4.95 (paper).

Reviewed by H. DAVID TUGGLE, *University of Hawaii*

At first glance this is a good collection of readings in archaeology. But a closer examination suggests that the initial enthusiasm is in response to the publication of any collection of readings in modern archaeology. The quality of this reader leaves something to be desired in organization, editorial introductions, and spirit of selection.

The selections (a total of thirty) are organized under the following headings: "What is Archaeology?" "Field Survey in Archaeology," "Time in Archaeology," "Archaeological Excavation," "Prehistoric Economies," "Artifacts," "Settlement Archaeology," and "Culture Change, Social Change, and Analogy." Given a reasonable presentation of the aims and theoret-

ical foundations of the discipline in the first section, the next three follow logically, but with the last four sections the organization breaks down. The editor makes no attempt to justify the organization, something which might be considered important to the beginning student. A section on prehistoric economies is included, but there is no hint of the possibilities of reconstruction of other aspects of cultural systems. Where is a section on prehistoric social organization or prehistoric ideology? And what kind of a category is one which includes culture change, social change, and analogy? The organization would drive a componential anthropologist mad.

In regard to the selections themselves, there

is first the matter of taste. For my money the articles are too conservatively chosen. In "What Is Archaeology?" there is Willey and Phillips instead of Taylor, Caldwell instead of Binford, and Deetz's anachronistic writing instead of Deetz's ground-breaking writing. Taste aside, other selections are poorly chosen. "Field Survey" includes two articles, both on air photography. "Time in Archaeology" has only one article on absolute dating, a fifteen-year-old piece on Carbon-14. And the two articles in "Archaeological Excavation" are both by Sir Mortimer Wheeler. While Sir Mortimer's embroidered reconstructions of history and his grand-scale excavations are fascinating, a balance with current American excavation concepts and theoretical context is badly needed. Prehistoric economies? No, on the basis of the articles included, this section should be entitled "Prehistoric Food and Miscellany." Economies are virtually nowhere to be seen. (Some of the articles are very valuable, but they have been misrepresented.)

The poorest selection has been made for "Culture Change, Social Change, and Analogy." Most of the articles on change are heavy-handed, pale, and dated. There is no ecology, no systems theory, nor are there explanatory concerns. The articles on inference and analogy should be in a separate section, and Binford's "Archaeology as Anthropology" belongs in the first section on the nature of archaeology.

But any quibble over selections might well be muted by the satisfactory use of editorial introductions and transitions. This may make or break a set of introductory readings, especially in the day of the do-it-yourself collection. Read-

ings are necessarily removed from the contemporaneous problems within the discipline that generated them. I believe that it is an editor's function to provide this context for the student, and in the present case it has not been done. The editorial efforts are meager indeed: a line or two for each section, a brief paragraph for each article, and no recommended readings. The comments that are provided are often less than helpful:

How do you find an archaeological site? This is one of the perennial questions encountered by the teacher of archaeology. The most effective way to answer this question is visually, with single-concept films. Therefore, the discussion here is confined to air photography. (p. 31)

Other editorial remarks are exasperating, as if the last decade of debate in American archaeology had never taken place. For example:

Artifact classification involves the placing of all artifacts in a collection site within a single set of classes based upon attributes that reflect the customs and concepts of the manufacturers. (p. 185)

I do not think the book will generally appeal to undergraduates. It is bland; there is no élan. The old *Archaeologist at Work* at least provided the glory of rich finds and the romance of lost cities. In its place could have been the stimulation of intellectual controversies and the romance of ideas.

Despite the criticisms the collection is by no means worthless. It fills a void. However, other readers are becoming available, thus providing a wider choice. It is hoped that competition may improve future editions of this reader.

The Origins of Civilization. Carroll L. Riley. Carbondale and Edwardsville: Southern Illinois University Press; London and Amsterdam: Feffer and Simons, Inc., 1969. xii, 243 pp., 96 illustrations, notes, index. \$8.50 (cloth).

Reviewed by CHESTER S. CHARD, *University of Wisconsin*

Had this book appeared a year or two sooner, and under other auspices, it might well have attracted attention and acclaim and enjoyed considerable sales. By one of those ironies of fate, the author was beaten to the draw by the Glamour Boy of world archaeology, Glyn Daniel, with his *The First Civilisations*, which had the additional advantages of promotion by leading publishers and subsequent appearance in paperback to compete in the textbook market.

Riley, a relative unknown on the international scene, was published only in hardcover by an obscure university press. His book deserves a better fate than it is likely to achieve.

Both works are addressed to the same reader as Childe's *Man Makes Himself*, Woolley's *The Beginnings of Civilization*, or Linton's *The Tree of Culture*: they are primarily descriptive syntheses for a more general audience, but from the hand of an experienced and reputable

scholar. They do not pretend to be theoretical studies of the level of Adams' *The Evolution of Urban Society* or Wittfogel's *Oriental Despotism*. Like Daniel, Riley views the world as a whole and accords equal attention to experiments in civilization in the New as well as the Old World. In addition, though, he devotes considerable space to the "secondary" civilizations of Anatolia, Crete, early Greece, Etruria, and Carthage, and in general manages to present somewhat more detail without burdening the reader or impairing his relatively fluent style. Riley limits himself to a three-page introductory statement on the nature of civilization and a mere six-page concluding discussion of process and interpretation; the rest is description. Daniel gives considerably more attention to these matters.

Also, Daniel's historical sketch of archaeological investigations on the subject seems more to the point than Riley's attempt to squeeze the story of man from ape to the threshold of civilization into a prefatory twenty-six pages.

The Origins of Civilization is a thoughtful and competent work, as accurate as any general survey can hope to be as of the time it was written (ca. 1967), and has been published in a very attractive format. The author tells us in effect that he wrote the book because he thought it would be a rewarding experience. I am sure it was, and he deserves credit for a job well done. The book can be recommended to the general reader or to beginning students, and were it available in paperback would surely find good use in many classrooms.

The Archaeology of Early Man. J. M. Coles and E. S. Higgs. New York: Frederick A. Praeger, 1969. 454 pp., 12 plates, 183 figures, bibliography, index. \$16.00 (cloth).

Reviewed by JAMES R. SACKETT, *University of California, Los Angeles*

In this volume two well-qualified English specialists present a global survey of pre-neolithic archaeology designed for readers who wish to make a serious study of the Stone Age. The organization of its 450-page text is well suited to this purpose. The four chapters of Part I, altogether comprising 50 pages, deal with such background topics as pleistocene and early recent geology and chronology, the nature of relevant floral and faunal data, stone tool technology and typology, and alternate approaches to interpretation in current stone age research. Part II, a global survey of palaeolithic and mesolithic culture history, takes up the remainder of the book. Each of its twenty chapters focuses upon a distinct geographic region, beginning with a general summary of its archaeological sequence and then turning to a shorter but more detailed review of some of the principal sites upon which this sequence is founded. The fine organization of the book is complemented by a handsome format which includes over 180 excellent line drawings of artifacts, examples of prehistoric art, and maps. The bibliography is well balanced if somewhat thin; the index is detailed and conveniently subdivided into separate author, site, and topic sections.

It is surprising to find *The Archaeology of Early Man* described on its jacket as a "comprehensive survey of primitive behavior" that

should interest anthropologists and sociologists as well as prehistorians. The book is nothing of the kind, at least to the extent that this statement implies coverage of topics of current palaeo-anthropological interest like formal ecological and demographic models, the implications of primate field studies, and speculation concerning the evolutionary relationship between elements of human social organization and the rise of big-game hunting. To be sure, the conventional first-order behavioral inferences common to archaeological textbooks are present, such as that palaeolithic men took topography and the availability of natural resources into account when choosing sites to occupy. But even interpretation of this kind is clearly incidental to the real thrust of the book, which is to provide as full a review as can be encompassed within 400 pages of the substantive data of palaeolithic and mesolithic archaeology—stone and bone tools, art objects, hominid fossils, and associated plant and animal remains—and the manner in which they cluster within the spatial-temporal divisions of stone age culture history.

Judged in these terms the book may be considered a valuable contribution to the archaeological literature in English, in which it has in fact no current rivals for degree of comprehension or level of detail. From it the serious student can gain an intensive introduction to stone age archaeology as a whole, while

the professional should find it both a useful reference work and a good starting place for developing his knowledge of regions which hitherto lay outside his province of interest. But there are serious weaknesses which need to be pointed out. I do not refer here to relatively minor questions of fact and emphasis over which regional specialists may find themselves in disagreement with the authors (although the sum total of these may not be inconsiderable). Rather our concern lies with more fundamental matters which crosscut regional considerations and which may especially prove to be troublesome for the novice whose total knowledge of the Stone Age is, at least for the time being, to stem from this one book.

First, it largely neglects a most significant trend in modern research—the one, interestingly enough, which is most closely allied to current palaeoanthropological thinking on primitive behavior. This is the excavation of sites by means of broad horizontal exposures, a procedure designed to reveal how the contextual relations among artifacts, debris such as butchered animal remains, and features like hearths and house foundations reflect the activities and patterns of occupation which took place on their living floors. Several examples of this work were already available at the time of writing, such as the Magdalenian encampment at Pincevent and the Acheulian stone pavement of Latamne. Their absence here is particularly to be regretted in view of the fact that the generous format of this book is particularly well suited to illustrating the often spectacular results of this research.

Second, the contents of this volume entail grave theoretical issues which it in great part fails to elucidate, let alone help resolve. The treatment given theory in the interpretive discussion of Part I is quite inadequate as an introduction to these issues, and they receive almost no explicit consideration at all in Part II. They arise from the fact that, although they share a common terminology, archaeologists by no means find themselves in agreement today

about either the nature of variability in their data or its possible cultural meaning. As a result, classifications and reconstructions made by different prehistorians often differ markedly in conception and content even when they are couched in identical terms. The word "Levalloisian," for example, suggests to one archaeologist no more than a flake-producing technique that was practiced by artisans belonging to several different traditions. Yet in the mind of another it can assume the reified shape of a total culture-historical entity which pursued its own distinct evolution and which occasionally even generated new cultural offspring by somehow hybridizing with other such entities. To summarize the literature as the authors do without clarifying such theoretical differences serves only to perpetuate, if not further compound, the confusion which already surrounds so much of stone age culture history.

Finally, the book as a whole evidences signs of incompleteness and inconsistency of plan, as if it had been borne off by the printers while still unripe. The choice of illustrations is not everywhere in balance with the narrative, a particularly vexatious example of which is the failure to provide special drawings to accompany the rather involved introduction to artifact typology in Part I. The text itself retains many of the stigmata of a first draft. Save in its purely descriptive sections it is often clumsily written, to the extent, in fact, that the manner in which specialized terms are defined in some passages creates as much ambiguity as the failure to define them does in others. In view of such signs of negligence, it is tempting to suggest that even the inadequate treatment given to horizontal excavation and theoretical issues that was criticized above may constitute oversights rather than matters of conviction on the part of the authors. In any event, the seeming haste or carelessness with which it was produced mars this book's many fine qualities and makes it a somewhat ungenerous return for the considerable expenditure of money and effort it calls upon from the reader.

Shipwrecks and Archaeology: The Unharvested Sea. Peter Throckmorton. Boston: Little, Brown, 1969. vii, 259 pp., 44 illustrations, appendix, chapter notes and references, index. \$6.95 (cloth).

Reviewed by JILL CORDOVER, *University of Hawaii*

Peter Throckmorton has written a general book on shipwreck archaeology, proposing to introduce the amateur diver-archaeologist (often

treasure hunter) to "... what marine archaeology is all about. What are the wrecks like? Is it worthwhile to work on them?" (p. xi). This is a

well-written, readable book filled with adventure about the sea and the ships that traveled it for war and for trade. Intended as it is for the amateur, *Shipwrecks and Archaeology* does not completely succeed in its stated goals.

The first part of the book discusses the nature of shipwrecks and the oceanic processes which alternately preserve and destroy them. In this section Throckmorton describes wrecks of the recent, historical past. Each wreck is fascinatingly and painstakingly documented, but despite the great lengths to which he goes to criticize wreck-pillaging by amateurs, Throckmorton records numerous accounts of unsystematic salvage operations. This is an important failure of the book. Although survey procedure is discussed briefly in this section, emphasis is placed on artifact recovery. The implied rationalization for this treatment is that wrecks from the historical period need primarily to be identified, and survey is necessary only to aid identification. It is my concern that since artifacts are synonymous with treasure to many amateur divers, they may not necessarily be struck by the distinction between historic and prehistoric shipwrecks. In fact, whether such a distinction is even valid in terms of archaeological method warrents discussion.

Part II introduces systematic shipwreck archaeology with an account of the excavation of the Antikythera wreck off Greece in 1900. This section and the following one trace the development of shipwreck archaeology from 1900 to the present. Throckmorton discusses survey and excavation techniques and technology in relation to prehistoric wrecks. Here the concept of archaeological context is introduced. He explains the major contributions to this young science

beginning with Cousteau's development of the aqualung, Lamboglia's tape grid, and Tailleux's attempt at a photomosaic. Critics of the development of underwater archaeology cite as a major impediment the lack of control which the archaeologist in the ship has over the divers who are on the site. Throckmorton argues that the archaeologist should be a diver as well and that "... anyone could learn to dive who was reasonably healthy and did not suffer from severe claustrophobia" (p. 195).

Finally, the author looks at the future of underwater shipwreck archaeology and finds it bleak indeed. The cause of this pessimism is the ubiquitous amateur treasure hunter who, he argues, will destroy wrecks faster than techniques are developed and money is raised to excavate them. He mentions too that national governments are often reluctant to have their antiquities excavated by foreign divers. It would have been useful in this section to have discussed technological developments related to underwater archaeology, especially the possible adaptation for archaeology of electronic detection devices, underwater television, submersibles, and other developments by oceanographers and ocean engineers.

Throckmorton never adequately takes up his own final questions: Is it worthwhile to work on shipwrecks and what can we learn from them? An a priori assumption is made that shipwrecks should be surveyed and excavated, but the point is never explicitly discussed. This is important, for the amateur inclined toward treasure hunting needs to be convinced of the scientific validity of shipwreck archaeology. Otherwise, it may seem to him to be mere antiquarianism.

A History of Dyed Textiles; Dyes, Fibres, Painted Bark, Batik, Starch Resist, Discharge, Tie-Dye, Further Sources for Research. Stuart Robinson. Cambridge, Mass.: The M.I.T. Press, 1969. 112 pp., 50 plates, appendices, index. \$10.00 (cloth).

Reviewed by MARY ELIZABETH KING, *The Museum of Texas Tech University*

This slender volume and a companion volume on printed textiles were intended "as an outline history of decorated textiles and as comprehensive source books for the further study of this topic" (p. 6), an ambitious undertaking, to say the least. Unfortunately, although I cannot speak for the volume on printed textiles, the

present work does not accomplish its purpose. In the first place, dyeing and printing are hardly the only means of decorating textiles, but a more serious criticism is that the coverage of dyed textiles alone is both sketchy and uneven. Only 58 pages are actually text; the remainder are plates and appendices which contain the "further

sources for research." The bulk of the text deals with Old World material; as is too often the case with European publications (the work was originally published in Great Britain), the New World is given exceedingly short shrift. What little does appear on the Americas is either contradictory or wrong. I am, for example, unable to locate the "deserts of . . . the central American coastal strips" (p. 18).

The Classical World fares better geographically, but the author seems unaware of the most recent data on the domestication of plants and animals and on early textiles; his references are largely out-of-date. Asian coverage is spotty, with most attention being paid to Javanese batiks which, in fact, are given more space than dyestuffs themselves.

The important resist-dyeing technique of ikat occupies approximately a page under "Tie and dye," and the natives of Japan, Indonesia, Mexico, and Guatemala, among others, will be surprised to learn that "The technique . . . has largely fallen into disuse" (p. 79). The author goes into far more detail on the relatively simple technique of tie-dye on cloth, and gives no idea of the technical difficulties of producing the elaborate double and weft ikat patterning so often found in Indonesian and Indian fabrics.

The section entitled "Preservation and identification of ancient fibres" devotes exactly two paragraphs to fiber identification and says, in essence, that one can distinguish between animal and vegetable fibers with "an ordinary magnifying-glass" (p. 19).

The book is meant to be a source book for students, but many of the most tantalizing bits of information are totally without provenience or reference. One example will serve, quoted in its

entirety: "Some peoples pattern a piece of fabric by covering it with strips of wet or heatproof materials. It is then held over a fire until the unprotected portions are singed or smoked brown" (p. 22). Who? Where?

I object strongly to the condescension shown to "primitive man": "Since his whole life was . . . closely ruled by fear, religion, taboo, ritual, magic and other unknowns, it is rare that one finds even a limited scientific approach to dyes" (p. 22), hardly a Lévi-Straussian approach.

Four appendices—I. Notes and references for further reading; II. Museums and centers with collections of textiles; III. Libraries and book-sellers; and IV. Educational aids—may serve as a beginning point for many readers. They are, however, most complete for Great Britain and have curious gaps and errors elsewhere. For instance, the Smithsonian Institution is listed first under New York and again, differently, under Washington, D.C.; obscure U.S. historical societies are listed, but only a single Latin American museum is included, and that not the magnificent National Museum of Anthropology in Mexico City. Only seven institutions are listed for the entire Asian and Pacific area—four in India, two in Japan, and one in Hawaii. Numerous typographical errors, incomplete bibliographic references, and incorrect institution names make the appendices less useful than they might be.

The author relies heavily on the excellent *CIBA Review* for his information and illustrations. Virtually my only reason for turning to this book would be the lack of access to the *CIBA Review* itself, but the volume might serve as a brief, beginner's introduction to the enormous field of dyed textiles.

Food in Antiquity: A Survey of the Diet of Early Peoples. Don and Patricia Brothwell. New York: Frederick A. Praeger, 1969. 248 pp., plates. \$8.50 (cloth).

Reviewed by P. BION GRIFFIN, *University of Hawaii*

Food in Antiquity is billed on the cover flyleaf as "the first comparative study of human diet." The authors "attempt to survey briefly, but on a world-wide scale, the diets of earlier peoples" (p. 13). Unfortunately, the book achieves these goals only for the tea and crumpet set. As a synthetic contribution to the fields of archaeology, ethnohistory, or nutrition, the work is neither scholarly nor enlightening. Instead, we have an "ethnoculinary miscellany." The authors

argue (p. 14) that archaeological study of "dietary economics" (their work, in part) is worthwhile since "certain diets are undoubtedly better for body health and performance." Undoubtedly.

No anthropological framework ties the book together. Instead, the chapters are sensibly arranged by a food classification. After a broad and chatty introduction, the following subjects are discussed: vertebrates; invertebrates; sugars;

fungi; cereal crops; vegetables; fruits and nuts; olives, oils, herbs, and condiments; drinks; diet and disease.

Each chapter reviews, selectively and casually, the archaeological and literary evidence available. The reader is given a good overview of the foods used during man's history and appreciates the diversity of his diet. The book does suffer a few major faults that are of concern even to the lay reader. These include serious misstatements, ethnocentric comments, and an incredible lack of referencing of specific statements. Representative of the first two flaws is a passage about cannibalism (p. 23):

From the glowing recommendations of recent cannibals, human flesh is known to be tasty to eat, and is certainly no less nutritive than that of other mammals . . . it seems far more likely [than lust for human flesh or protein deficiency] that the cycle of events leading to such flesh-eating began with the need to defend group rights to hunt and collect in given territories . . . [with the fallen eaten].

On page 27 we learn that no hunting-gathering cultures could have a food bias. But archaeological data suggest that Neanderthals and likely *Homo erectus* were selective hunters. Later in the text, hunters are stated to suffer more day-to-day survival anxieties than agriculturalists. Aside

from polar hunters, such a generalization is untenable, though difficult to measure.

The domestication of plants and animals is a most current topic of research among scholars throughout the world. Again the reader is given a poorly researched, referenced, and interpreted body of information. While editorial constraints may have influenced the reference style, it is inadequate for the browser or for the student. Moreover, following a précis of the "pet" theory of domestication with a comment that Egyptians made cats a tasty meal "in times of great need" (p. 37) serves only to titillate the dilettante.

On the positive side, the book is good as an informal guide to the development of food-use practices. A vast coverage is realized. The lay reader seeking a knowledge of food origins and different cultural practices related to food will not be disappointed. To such a reader the style is quite readable. As an anthropology teacher I am a bit unhappy about the many misconceptions presented, but find this a common fault in lay literature. Unhappily, the book will never match series-mates *Mexico* by Michael Coe, or *Early India and Pakistan* by Sir Mortimer Wheeler. I must confess to having not placed my copy with my professional books, but as a conversation piece with my cookbook collection.

PERIODICALS

World Archaeology, Vol. 1, nos. 1, 2, 3. Roy Hodson and Colin Platt, executive eds. London: Routledge and Kegan Paul, 1969-1970. \$8.00 annual subscription.

Reviewed by P. BION GRIFFIN, *University of Hawaii*

"*World Archaeology* is a new journal, international in range and in scholarship. Deliberately flexible in approach, and admitting no restriction of period or of place, the journal aims to synthesize the best contemporary thought on matters of common interest to archaeologists the world over" (Editorial note, Vol. 1, no. 1.) The first three numbers of the journal are an optimistic beginning toward meeting the stated goals. The journal has steadily improved, providing top quality articles from many countries. The topical approach seems to be a solid idea; unification makes each issue a more interesting and valuable addition to one's holdings. Issue no. 1 discusses "recent work and new approaches," no. 2 "techniques of chronology and excavation," and no. 3 features "analysis." Vol. 2, no. 1 covers "early man." Future issues

planned include "urban archaeology," "subsistence," and "cultural survival." Most valuable perhaps is the diversity brought to each topic. The internationality and the range in point of view reflect the editors' good judgment.

The Vol. 1, no. 1 essays by Glynn Isaac, Michel de Bouard, and F. R. Hodson exemplify the breadth of focus around one topic. "Studies of early culture in East Africa" by Isaac is a critical synthesis. The new approaches now used are reviewed. These include geophysical measures of time, temporal assignments of fossils, palaeoenvironmental and geographical reconstructions, statistical treatment of artifact assemblages, and, much to our advantage, living floors and activity areas. The paper is completed by a discussion of "Stages in cultural development." Isaac, in considering occupation sites—

the "living floors" of the Leakeys—argues (p. 8) that archaeologists can attempt to reconstruct the numbers of individuals in a social group, settlement pattern, economic activity, territory, and "... patterning of inter-group contacts..." Such an argument is to be praised. Palaeolithic archaeologists are now beginning these attempts. The more discussion on the topic the better.

Bouard reports on "The Centre for Medieval Archaeological Research, University of Caen." The description of the Centre's program is certainly not outside the issue topic. The historical approach and concomitant field procedure is of interest to more "anthropological" archaeologists in North America and Oceania. While we might quarrel with the statement (p. 62) that "Medieval archaeology . . . must remain an auxiliary science of history," we are enthusiastic about what seems to be decent culture history and an interdisciplinary team of researchers.

The Hodson essay is an admirable discussion of the use of multivariate analysis techniques for describing the behavior of large corpora of archaeological data. The techniques themselves are emphasized, not the archaeological problem. In this case the reader benefits, since grasping the use and potential of multivariate statistics is no simple task. Average-link cluster analysis is applied to fifty lithic assemblages (Upper Palaeolithic). The clustering of one hundred copper and bronze tools according to behavior of spectral elements is also studied. The ideas that strike the reader about possible treatments for his own data are many and exciting. Hodson continues in Vol. 1, no. 3 to expose us to the use of multivariate statistics, and his work is accompanied by essays by James Doran and by J. M. Graham.

Graham's and Doran's thoughts are especially valuable. In "Discrimination of British Lower and Middle Palaeolithic handaxe groups using

canonical variates" Graham wishes "... to see if the 38 assemblages can be satisfactorily distinguished purely by the 8 measured variables" (p. 321). Instead of trying to produce a typology, Graham offers a scheme of perhaps considerably more interest. If archaeologists can find the measures to "discriminate between assemblages," likely tests of social distance of communication among social units can be devised.

Doran, in "Systems theory, computer simulations and archaeology," reviews general systems theory and cybernetics, and points out weaknesses in their use. Particularly emphasized is the difficulty of bringing formal mathematical rigor to archaeological applications. The suggestion that simulations may be useful is most to the point. We archaeologists would be well advised to examine simulation done by the sociologists and to produce problems worthy of study.

Of special interest in the United States is the so-called processual school. William Rathje, in issue no. 3, offers "Socio-political implications of lowland Maya burials: methodology and tentative hypotheses," a paper that would be considered processual. Rathje suggests (p. 417) a change in "... recruitment of political and religious functionaries from the whole Maya population to the recruitment of officials from small ascribed segments of the population." The idea is one of the freshest breaths in Maya archaeology in recent years.

Hopefully the journal *World Archaeology* will continue to produce these new thoughts and critical comments. The publication schedule ("thrice yearly") and the professional editorial board promise well. The advisory board is international, though a bit lacking in younger American archaeologists.

The journal itself is of quality production—good paper, convenient size (approx. 19 × 25 cm), and nice format.

SERIES

Aborigines in Australian Society

This set of five brief reviews is intended by the review editors to introduce a new monograph series called *Aborigines in Australian Society*, published by the Australian National University Press, Canberra, and sponsored by The Social Science Research Council of Australia.

Asian Perspectives does not commonly review books on subjects like ethnology, social anthropology, community development, or applied anthropology. In keeping

with past interests, the journal's primary concern remains archaeology and pre-history, and these subjects will continue to receive extensive review treatment. However, there seemed to be some value in at least acquainting the readers of this journal with the existence of this new series and in giving short summaries of the contents and scope of the first monographs. There is little doubt that these monographs will be consulted widely by scholars and administrators interested in policies dealing with the advancement of native peoples in the Australasian region.

The series is unique in presenting detailed views on problems of Aboriginal-white relations in terms of special disciplines other than anthropology. In the past it has been mainly the anthropologists who have been consulted with respect to Aboriginal affairs, but in an era of rising economic expectations by native peoples and issues like "ethnic identity," the views of economists (H. P. Schapper), sociologists (Ronald Taft, John L. M. Dawson), political scientists (C. D. Rowley), and demographers (F. Lancaster Jones) are now being heard. Some of these volumes are scholarly and objective in intent, like F. Lancaster Jones' discussion of changes in the Aborigine population of Australia, while others are more polemical in approach, most notably H. P. Schapper's discussion of Aboriginal affairs in Western Australia. But all of these volumes will provide an important resource for debate and possibly even for future social planning in Aboriginal affairs.

The Structure and Growth of Australia's Aboriginal Population. F. Lancaster Jones. Aborigines in Australian Society 1. Canberra: The Australian National University Press, 1970. 44 pp., tables, maps, bibliography.

Reviewed by RICHARD A. GOULD, *University of Hawaii*

As the first in a new series of monographs sponsored by the Social Science Research Council of Australia, this short volume by F. Lancaster Jones is packed with significant information on the changing demographic status of Australian Aborigines. Although there is a brief discussion of pre-contact demography, the main emphasis here is with documenting the phenomenal rate of population growth among Aborigines following the drastic declines which occurred shortly after the arrival of Europeans in Australia. A painstaking review of Aborigine vital statistics leads Jones to project a rate of population increase of about 3 percent until

1981, leading to a total then of about 150,000 individuals. Jones concludes: "If these trends continue there is every possibility that by the turn of the century Australia's Aboriginal population will have recovered to the number estimated by Radcliffe-Brown to have been in Australia at the time of first European settlement." The author declines to speculate on the factors which have led to this rapid recovery, but his detailed and careful presentation of evidence for this growth of population will certainly generate an interest in and a search for those factors by scholars interested in problems of Aborigine acculturation.

Attitudes and Social Conditions. Ronald Taft, John L. M. Dawson, and Pamela Beasley. *Aborigines in Australian Society 2.* Canberra: The Australian National University Press, 1970. 191 pp., tables, diagrams, bibliographies.

Reviewed by RICHARD A. GOULD, *University of Hawaii*

This volume presents three studies of attitudes of white Australians toward Aborigines and vice versa and of conditions among Aborigines living in Sydney. The first of these essays, Taft's "Attitudes of Western Australians towards Aborigines," is a sociological analysis based on questionnaires used to elicit the opinions of white Australians in the city of Perth, in "Bigtown," a community of about 5000 people, and "Smalltown," a rural community with a population of about 1500 people. The results of the survey showed that the white citizens of Perth exhibit a greater shared tolerance toward the Aboriginal minorities in their midst than was the case for either of the two other communities surveyed. Included with this paper are appendices showing the types of questionnaires used in the study.

Dawson's paper, "Aboriginal Attitudes towards Education and Integration," is an analysis of attitudes toward education and integration shared by Aborigines living at Green Valley, a suburb of Sydney, and Wallaga Lake Aboriginal Reserve, about 240 miles south of Sydney. As in the case of Taft's study, the primary data consist of a series of questionnaires, which are shown in the appendices to the paper. However, Dawson subjects his data to more complex analysis involving a variety of statistical correlations, and he applies his results more explicitly to hypotheses current in the literature of

sociology. The findings of this study are complicated and cannot be adequately summarized here, except to say that various aspects of traditional Aboriginal culture were found to be significant in adversely influencing the development of attitudes toward education and integration into white Australian society.

"The Aboriginal Household in Sydney" by Beasley is a survey of Aboriginal life-styles in different parts of Sydney. It includes topics like the importance of kin ties in residential arrangements, employment, movement to and within the city by Aborigines, schooling, income, crowding, and other matters related to the living arrangements of Aborigines within the city. The results of this study show a varied pattern of adjustment, with some areas of intense overcrowding and high rents alongside other situations where some Aborigines have managed to become established within communities of people with relatively low incomes. It was noted that Aborigines who were newly arrived from country areas in New South Wales tended to have the greatest difficulties in finding regular employment and adjusting to city life generally. The general impression one gets from this study is that the plight of the urban Aborigines of Sydney is certainly difficult and stands in need of improvement, but it is not as dire or extreme as some earlier reports tended to indicate.

Aboriginal Settlements: A Survey of Institutional Communities in Eastern Australia. J. P. M. Long. *Aborigines in Australian Society 3.* Canberra: The Australian National University Press, 1970. 225 pp., tables, diagrams, maps, bibliography, index.

Reviewed by RICHARD A. GOULD, *University of Hawaii*

J. P. M. Long's monograph describes the results of a year-long survey of government settlements, missions, and other institutions in eastern Australia where Aborigines currently reside. His report includes short histories of these settlements, the composition of the Aborigines living in them (i.e., how many are half-caste as opposed to full-blood and such vital

statistics as the age and sex distributions, births and deaths, and populations of these groups), and such items of present interest as employment, the nature and condition of dwellings, rations, and health facilities. Most of the volume is concerned with documenting these institutional facilities, but the final chapter examines the author's proposition that "... the achieve-

ment of equality (of Aborigines with caucasoid Australians) does entail the disappearance of isolated and protected communities maintained and managed solely or largely by distinct agencies of government responsible for the provision of

special services to people of Aboriginal descent." This volume also includes brief appendices on welfare policies and settlements in Western Australia, Northern Territory, and South Australia.

The Destruction of Aboriginal Society: Aboriginal Policy and Practice, Vol. I. C. D. Rowley. *Aborigines in Australian Society* 4. Canberra: The Australian National University Press, 1970. 430 pp., tables, maps, bibliography, index.

Reviewed by RICHARD A. GOULD, *University of Hawaii*

Rowley's monograph is the first in an ambitious series of three volumes surveying the history and present condition of Aborigines in Australian society. This volume documents the history of Aboriginal and European contact from the earliest days of settlement and frontier expansion up into the 1960s, and it stands as the most detailed and extensive survey of this kind ever encountered by this reviewer.

In his survey Rowley distinguishes between what he calls "settled" and "colonial" Australia, in which differing administrative approaches toward Aborigines were applied. Then, too, there were different policies toward Aborigines tried at different times in the various states and by the Commonwealth Government, all adding to the complexities of the picture. The author reveals a complicated mosaic of sometimes contradictory policies and approaches toward

Aboriginal affairs. For example, Rowley points out how immigration policies have always received more support from white Australians as a way of obtaining labor than the training of Aborigines for employment: "From the time of the yearly settlements until now, the first priority in stimulating population growth and economic development has been allotted to European migration. The Aboriginal population has probably greater economic potential on a per capita expenditure basis. They are already here, and most of them want to live and work where few migrants will stay. The question of a comparable level of priority, on the grounds of the most hard-headed economic self-interest, can hardly be avoided." In sum, Rowley's first volume in this series sets the stage for asking and answering the difficult questions connected with Aboriginal advancement.

Aboriginal Advancement to Integration: Conditions and Plans for Western Australia. H. P. Schapper. *Aborigines in Australian Society* 5. Canberra: The Australian National University Press, 1970. 196 pp., map, diagrams, tables, index.

Reviewed by RICHARD A. GOULD, *University of Hawaii*

H. P. Schapper's volume is perhaps destined to be the most controversial of the monographs reviewed in this series. It is a sweeping critique of past and present attitudes and approaches toward the integration of Aborigines into Australian society in the state of Western Australia, with an equally sweeping set of proposals to remedy the problems and injustices which exist. The volume includes a series of appendices on such topics as Aboriginal health, schooling and education, crime and delinquency, employment, housing, population, and family characteristics.

The entire volume is based on the premise

that, in Schapper's words, "Unless and until there is specific recognition that acculturation within a sub-culture is acculturation for that sub-culture, programs will be irrelevant, wasteful, and may worsen the situations they endeavour to rectify." Schapper sees the present existence of a Department of Native Welfare in Western Australia as an obstacle to Aboriginal integration, and he calls instead for the setting up of a Social Planning Council and increased government services such as job training, housing, and schooling. This volume will certainly be at the center of future debates concerned with Aboriginal acculturation and integration.