



Review

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tions into technology and economy, settlement patterns and refuse disposal, necessitated by the state of available evidence, are undertaken to reveal the bones and lineaments of societies that are otherwise lost. Social organizations—including such things as “. . . the size of the social unit, its political organisation, its relations with its neighbours, and the range of roles and statuses held within it” (p. 10)—and their evolution are the actual subjects of archaeology. But is all this *new*? I think not. It is certainly “New Archaeology,” and indeed it is “good” archaeology; but what is the best “new” archaeology, after all, but the quintessence of what was the best “old” archaeology? The efforts of the earliest archaeologists and their immediate successors were directed, it can be argued, to the re-creation (if not always the explanation) of prehistoric societies and their evolution. From the beginning of systematic archaeology, emphasis was always on the “society” with its customs, institutions, religions and even modes of thought.

It may be fair to ask if what we have here are in fact new methods—better and more productive methods to be sure—for the analysis and explication of archaeological evidence left by past societies, rather than new theoretical approaches. All good archaeology has been “social” archaeology; I find, therefore, the label irrelevant, somewhat like “living biology” or “earth geology.” Societies, extinct or ancestral, are the subject matter of all forms of archaeology (if separate sub-disciplines really are required) and it is not necessary to qualify the definition of archaeology in this regard. Gordon Childe addressed the question in *Social Evolution* (1951, repr. 1963: 42–43): “The social traditions that determine culture are expressed in habits of thought and action, in institutions and customs . . . for all culture finds expression in action . . . in the material world. Some of the actions dictated by, and expressive of, culture effect durable changes in the material world. All such fall within the purview of archaeology.”

Renfrew's book is well produced and reasonably priced, although perhaps volumes of reprinted papers without new material might best be released in paperback. It is useful for the professional to have in one volume some of Renfrew's best and most provocative papers, and for the advanced student the book serves as an introduction to his thought. I would have appreciated a greater effort to bring the papers up to a uniform level of presentation and to eliminate anachronistic references and duplicate text and bibliography. This criticism, however, need not apply strictly to the volume under consideration.

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QUATERNARY COASTLINES AND MARINE ARCHAEOLOGY, edited by *P.M. Masters* and *N.C. Flemming*. Pp. 641. Academic Press, New York 1983. \$42

This unusual collection of 27 papers by 66 authors and

co-authors was originally presented at a symposium held in October 1981 at the Scripps Institution of Oceanography, La Jolla. The chapters of Section 1 review and synthesize information on sea level chronology, coastal forms and the processes of the shore zone, with particular reference to questions of submerged archaeological sites. Section 2 presents a set of field reports on submerged coastal sites in France, Sweden, the Aegean area, Israel and California that span much of the last 9000 years and are found at depths of over 10 m. Attention is given to preservational environments and site types. Section 3 is focused on the Beringian land bridge, its environmental history and the dating of low sea-level stands, as well as on the broader question of faunal and human migration from Siberia to North America. Section 4 presents a few papers on past and present coastal environments and related occupation in Australia and Spain. A comprehensive summary by the editors closes the volume.

The papers assembled in Section 1 predictably deal with a wide range of non-archaeological themes that nonetheless contribute to an appreciation of problems or methods. D.L. Inman, for example, presents a case study based on an area off the La Jolla coast, identifying end-Pliocene (about 2 million years), Last Interglacial (about 120,000 B.P.), and Postglacial (about 5000 B.P.) shorelines and their tectonic displacements, describing the submerged sediments and erosional forms due to stream and beach cutting at times of lower, glacial-age sea-level, and elucidating the role of sediment transport from the adjacent watersheds. The result is a basic strategy for mapping shoreline positions as a first step in charting a coastal archaeological survey. R. Berger outlines the effect of tree-ring calibration for radiocarbon dating and its implications for evaluating the chronology of coastal submergence during the last 9000 years. L.F. Marcus and W.S. Newman demonstrate that, although the waxing and waning of global glaciers have led to worldwide cycles of marine regression and transgression, a theoretical sea-level trace based on such glacial-eustatic cycles has general rather than specific applicability to any one coastal location. Local tectonic complications (faulting and warping), variable compression of broad or narrow coastal shelves under transgressive seas (hydroisostasy), as well as worldwide patterns of coastal adjustment (geoidal variations), have complicated the details. As a result, even on comparatively stable coasts, shorelines dating to about 5000 B.P. typically run from +4 m. to –6 m. in relative elevation. Absolute shoreline elevation consequently is not an acceptable means of dating either terraces or submerged sites. J.C. Kraft and others apply these insights and opt for an empirical approach that emphasizes identification of submarine erosional forms and sediment fillings. Fascinating examples are illustrated for the northeastern Aegean shores and the mid-Atlantic shelf off Delaware. Another study, by A. Raban, describes the soils and sediments of the Israeli coastal plain in terms of age and archaeological associations.

N.C. Flemming offers an important review of the preservation of submerged sites in different geological contexts on several, key world coasts—particularly in regard to their survival during a marine transgression. The results are surprisingly optimistic. Preservation is optimal in submerged

caves and solution sink-holes, as well as in estuarine lagoonal or peat deposits. But even a meter or so of covering sand appears to be adequate in many settings. These findings apply to scattered artifacts, middens, and burials or uncemented walls. Since the available technology allows recovery to 50 or 60 m., and surveying to depths of 100–150 m., the potential of underwater archaeology becomes apparent.

The case studies of Section 2 begin with early Neolithic occupations (7000–5000 B.P.) on the submerged shelf off Roussillon, France. The sites were located on a former gravel bar or island and are associated with cardial-impressed pottery. Particularly interesting is the identification of evidence for subsistence activities now under more than 3 m. of water: domesticated sheep and cattle; wild boar, deer, aurochs and birds; coastal and deep-sea fishing as well as mollusk collecting. A detailed series of submarine studies off the Brittany coast by D. Prigent and others presents both sediment analyses and a range of included terminal Paleolithic to Gallo-Roman non-primary materials. Recent coastal erosion in Israel has removed nearshore sands to make a variety of submerged Neolithic and younger sites accessible, as described by A. Raban, while E.E. Wreschner describes one such site now in the surf zone. A methodology for systematic excavation of a nearshore Neolithic site in the Aegean, off Kyra Panagia, is given by N.C. Flemming, who also suggests criteria as to degree of reworking. Core sampling off the well known Peloponnesian site of Franchthi Cave by J. Gifford showed that Neolithic sites are located several hundred meters offshore under 2–6 m. of later marine deposits, at depths of up to 10 m. The more standard case of Paleolithic artifacts associated with high shorelines or old sea caves is illustrated for Korfu by A. Sordinas. Work by L. Larsson in the straits between Sweden and Denmark revealed that extensive areas, now submerged at –5 to –8 m., were settled before 8000 B.P. Finally, P.M. Masters reports on a mapping and diving survey off the San Diego coast that discovered 22 new sites in addition to 12 previously reported. They span the last 10,000 years and include rock or cobble reefs at –3 to –5 m., sediment-covered kelp beds at –12 to –19 m., and the slopes of submarine canyons as deep as –31 m. The reef sites, however, represent secondary, reworked materials, while the kelp beds and possibly the canyon sites represent incidental losses from (or of) prehistoric seafaring craft.

The contributions on the Beringian land bridge (Section 3) are less easy to classify. They include a detailed paper on dating of the Postglacial rise of sea level by D.A. McManus and others; a valuable review of dating the ice-free corridor along the eastern foothills of the Canadian Rockies by B.O.K. Reeves; an up-to-date summary of the late Paleolithic archaeology of northeastern Siberia by N.N. Dikov; a critical review of purported glacial-age sites in California by C.W. Meighan; an unimpressive statement on the dating of early human fossils in that region by J.L. Bada and R. Finkel; a paleoenvironmental and biotic assessment of the Channel Islands and the water gap to California by D.L. Johnson; and a survey by J.M. Adovasio and others of the materials from Meadowcroft Cave, Pennsylvania, one of the best candidates for early human occupation in the Americas, about 16,000 B.P. These data are of evident in-

terest for the peopling of the New World, but the collection is of mixed quality and lacks a comprehensive overview.

Finally, Section 4 can also be characterized as a medley, although far shorter. The paper by A.J. Barham and D.R. Harris on the Torres Strait, between Australia and New Guinea, is of considerable biogeographical interest but lacks direct archaeological connections. That by N.B. Tindale presents some surface artifacts from raised beaches in southern Australia which are then used as a basis to claim a peopling of the continent as early as 100,000 years ago. The chapter by G.N. Bailey on coastal middens in northern Australia and Cantabrian Spain deals with continuities and discontinuities in the records of coastal occupation.

The impression obtains that the original symposium was a non-stop paper session, allowing little time for discussion or synthetic reflection. Too many indifferent papers distract from the important contributions and the conception of a bigger picture. The basic strategy of the organizers is clear, but within the context of the final product Sections 3 and 4 seem superfluous. To me they appear to dilute the potential impact of this expensive but modestly produced volume in developing a methodology for the emerging subfield of marine archaeology. The editors have unquestionably produced a major reference work, but they have not made that extra effort to draw a rich experience together into an integrated statement on geo-archaeological processes, on ideal study procedures, and on potential applications for the understanding of past human activities in coastal environments.

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ANCIENT EGYPTIAN FAIENCE. AN ANALYTICAL SURVEY OF EGYPTIAN FAIENCE FROM PREDYNASTIC TO ROMAN TIMES, by *Alexander Kaczmarczyk* and *Robert E.M. Hedges*, with a Foreword by *P.R.S. Moorey* and an Appendix by *Pamela Vandiver*. Pp. x + 587, figs. 46 (charts, line drawings, and plates), tables 44, map 1. Aris and Phillips Ltd., Warminster 1983.

It is a pleasure to welcome this book to the growing number of studies that judiciously apply analytical techniques to archaeological material. In this instance, almost 1200 analyses were carried out on Egyptian faience objects selected because of their accessibility (nearly all in the Ashmolean Museum), wide chronological and geographical distribution, and well documented provenances. The authors have organized the wealth of information resulting from their research into 5 sections, with a sixth in the form of the long Appendix A on Egyptian faience technology.

Section 1 comprises explanatory matter and methodological concerns. In Section 2 are presented the elemental components of faience glazes, each element treated extensively in an individual subsection. Of particular interest to me were the discussions of ore sources and workshop interdependence for minerals, with the intriguing observation made that in