

BOOK REVIEWS

Préhistoire du Levant. Chronologie et Organisation de l'Espace depuis les origines jusqu'au VIe Millénaire. Edited by J. Cauvin and P. Sanlaville. Colloques Internationaux du Centre National de la Recherche Scientifique, No. 598, Paris, 1981, 606 pp., 325 Fr.

Jerusalem was situated in the center of ancient maps, not only for religious reasons, but because it is the meeting point of the three continents of the Old World. The crossroads through the Levant—Palestine and Syria of Biblical times—provided access for plants and animals, including man, to and from Africa, Asia, and Europe since well before the dawn of the Quaternary Period. Moreover, the peculiarly favorable conditions in this area led to very early plant and animal domestication that, in turn, led to the earliest sedentarism and then urbanization in the Old World. However, the once "Fertile Crescent" has been much abused by its inhabitants in the last millennium or two, and in the present decades it has become almost impossible to move about in the area because of the political and military "events" that plague it.

The editors of this volume organized a symposium in 1980 in Lyons with the support of the Maison de l'Orient Méditerranéen. This is another in a series of such meetings (e.g., London, 1969; Dallas, 1973; Nice, 1976; Tübingen, 1977) that has reunited largely the same group of researchers who have an ongoing interest in the prehistory of the Levant but who are not able to meet in their field area because of current politics. The meeting was dominated by French teams working in Syria and (formerly) Lebanon and by Israeli, American, and French colleagues working in Israel. A handful of Dutch, English, German, Syrian, and Turkish scientists also contributed to the symposium. Although the meeting focused on the Levant, information was presented for a broader area, from Asia Minor to the Zagros.

The papers (half of which are in French, the others in English, with abstracts in both languages) are organized into six sections. The first concerns general questions of Quaternary stratigraphy, biostratigraphy, and paleoenvironment in the Levant. The subsequent sections are devoted to the various prehistoric "periods": Lower, Middle, and Upper Paleolithic, Epipaleolithic, and aceramic Neolithic. The papers were submitted for publication in advance of the meeting and appear not to have been modified afterward, but each section was synthesized by the chairperson who incorporated the discussions. The second theme of the

meeting, spatial organization in prehistoric contexts, is treated in depth only for the Neolithic. Admittedly, evidence for the use of space, both intersite and intrasite, is very sparse for earlier periods given the scarcity or bias of excavated sites (e.g., more caves than open-air sites) and the excavation techniques commonly used.

In this short space I am forced to be eclectic and can mention only a few important themes and problems. The French team of J. Besançon, P. Sanlaville, and F. Hours, along with their English colleague, L. Copeland, have demonstrated a command of published and unpublished works and, for the most part, have recognized the need to establish a local and regional stratigraphy for the Levant that is independent of foreign concepts and terminology. Nevertheless, terms such as Günz, Mindel, Riss, and Würm do slip into their articles here and there. Even in the paper by Besançon, who appears to be leading the charge, these Alpine terms persist in his figures, perhaps anachronistically. These authors opt for a local scheme using letters and numbers, Q^o for the Holocene, Q¹, Q^{II}, Q^{III}, and so forth toward earlier Quaternary times. Their chronology is anchored as firmly as possible to the marine sequence for coastal Lebanon ably worked out by Sanlaville. However, they recognize only four transgressions prior to the Holocene in a time span that must encompass some 700,000 to 1,000,000 yr. Where are the other "glacial" events identified in the marine isotope record?

E. Tchernov has written a potentially very important article on "The Biostratigraphy of the Middle East," in which he discusses only faunas from Israel and Sinai. This article is marred, however, by the author's flagrant use, without apology or justification, of Alpine terms for Levantine stratigraphic units or events. Moreover, he proceeds to attach absolute ages to his biostratigraphy via the Alpine connection, but the dates that he uses are far out of line with contemporary ideas of European workers. For example, who can still honestly believe in an interglaciation labeled "Mindel/Riss" that lasted from 700,000 to 300,000 yr B.P.? Compounding the misery, all of his biozonation charts use a time axis labeled with a mixture of Alpine glacial units and archaeological "periods." Such a procedure makes it very difficult to get back to the basic data, which come from some 15-20 individual sites. Moreover, the spurious time scale makes Tchernov's numerous calculations (Table 6) of rates of extinction, immigration, and speciation next to meaningless.

H-P. Uerpmann has contributed a discussion of "major faunal areas of the Middle East," but it is based solely on ungulate mammals. S. Bottema and W. van Zeist have summarized admirably the regional pollen data, offering a very conservative interpretation which is appropriate to the sparseness of data from such a varied area. They emphasize that vegetation trends, and presumably climatic trends, were not parallel in time throughout Asia Minor, the Levant, and the Zagros.

Turning to archaeology, we learn that the number of known Lower Paleolithic sites is increasing. The early Lower Paleolithic site of 'Ubeidiya (Israel) no longer stands alone at its cultural level, given the recent discovery of sites of similar age in coastal Syria.

Concerning the Middle Paleolithic, more controversy seems to arise rather than to be resolved through recent studies. A. J. Jelinek, who has contributed a major reinterpretation of the sequence in et-Tabun Cave (Israel)—see also *Science* 216, 1369–1375 (1982)—points out in his synthesis of the Middle Paleolithic papers that two major postulated chronological discrepancies seem to exist. The Mousterian succession in et-Tabun from Type D to C does not seem to apply to the Negev nor to Lebanon. In the Negev the earlier, more primitive Type D persists up to the transition with Upper Paleolithic traditions. In Lebanon Type C seems to occur much earlier than at et-Tabun, being directly overlain by littoral deposits correlated with marine isotope stage 5a (ca. 85,000 yr B.P.). In Tabun Type D is younger than stage 5a and Type C is ca. 51,000 yr old. Jelinek suggests that, since the dating is not firm, the Lebanese marine deposits may correlate with stage 3 instead of 5a, but the controversy was not resolved during this meeting.

Contributions on the Upper Paleolithic (U.P.) span site-specific artifact analysis to regional studies dealing with the utilization of space, from Ksar 'Aqil in Lebanon to the Negev and Sinai. In his synthesis A. E. Marks reiterates that (1) the debut of the U.P. in the Negev is now firmly dated ca. 45,000 yr B.P., (2) there appear to be two distinct traditions in the south, but not at Ksar 'Aqil, and (3) specific activity loci recognized in Mousterian sites no longer are evident in U.P. sites, at least in the Negev.

The Epipaleolithic, broadly speaking the transition between mobile hunter-gatherers and sedentary villagers with domesticated plants and animals, was synthesized by M-C. Cauvin. This cultural episode coincides with the span of time from the last glacial maximum to the dawn of the Holocene and comprises three traditions: Kebaran (19,000–14,000 yr B.P.), Geometric Kebaran (14,000–12,000 yr B.P.), and Natufian (12,000–10,300 yr B.P.). This sequence passes from the first mere suggestions of permanent constructions, to definite structures, to the first villages where utilization of cereal grains is documented. There is also a considerable increase in site size throughout this

period, especially in the Geometric Kebaran. The Natufian level of organization appears to occur throughout the area from the Nile to the Euphrates, with some local variants, according to the consensus of those gathered in Lyons.

The extensive section on the Neolithic and that on the preceding Epipaleolithic depict scenes of growing consensus among the researchers involved, and it is here that (in the words of J. Cauvin) the scientific fertility of this symposium is evident. Fruitful and animated confrontations among the scientists working the various countries revealed the extent of agreement in their results, as well as revealing those areas where more work is needed.

On the whole, this set of papers is excellent and important. It is real "state-of-the-art" material and has been published in timely fashion by those who are intimately involved. In spite of growing consensus, problem areas remain, and the latter seem the least tractable for the more ancient periods. Clearly the scarcity of sites, some of which have not been excavated completely or with modern methods, is at cause as much as the political barriers that separate the current workers. This volume is an appropriate place for budding Near Eastern scholars to begin, and will be an essential reference for all prehistoric and Quaternary students of the eastern Mediterranean area.

WILLIAM R. FARRAND
Department of Geological Sciences
The University of Michigan
Ann Arbor, Michigan 48109

The Middle Stone Age at Klasies River Mouth in South Africa. By Ronald Singer and John Wymer, Univ. of Chicago Press, Chicago, 1982, vi + 234 pp., 72 figs.

This volume contains a detailed descriptive report on excavations at the important paleolithic coastal sites near Klasies River Mouth (KRM) in South Africa. During two lengthy field seasons in 1966–1967 and 1968, seven caves and rockshelters along a 2-km stretch of shoreline were investigated. KRM yielded a complex of stratified archaeological deposits spanning the Upper Pleistocene sequence for southern Africa. These finds indicate occupation by human groups bearing both Middle and Late Stone Age industries. The presence of mollusk shells in the lowest levels constitutes some of the earliest evidence known for human exploitation of marine resources.

In Chapter 1, the KRM sites are placed into their regional context, and the caves are divided into two groups based on their proximity. The first group, or "Main Site," includes Cave 1, Shelter 1A, Cave 2, Shelter 1B, and Cave 1C. Caves 3/4 and Cave 5 make up the second site group. The caves and shelters vary