the suggestion (made by Renfrew) that Yahya had any political connection with the Elamites or anyone else, since there is no archeological evidence to support it. How such connection or lack of it would be manifested archeologically is not discussed. In view of the archeological evidence at Kültepe in Anatolia, which is equally uninformative but where written documents occur showing political arrangements, this point should be dealt with. In any event the fullest development of this production occurs between 2900 and 2600 B.C. according to the excavator and is thus too late to be directly relevant to the presence of proto-Elamite tablets at the site—evidence that might have political meaning. This is the period of Early Dynastic I and II in Sumer, a time of beginning contacts and conflicts with the dynasty of Awan in Elam. The author interprets the general state of affairs (that is, a pattern of production and consumption of a single product in different areas) as constituting evidence for the existence of a market network, in his terms. The further assertion is made that the "demand" from the Sumerian cities was communicated to Yahya by entrepreneurs. "Whatever profits existed in the transactions were principally in the hands of middlemen traders and the exploitive elite of Mesopotamia." With this statement are ruled out, with no further explanation or justification, all other trade models as discussed by Renfrew, Dalton, and Polanyi. The statement appears as arbitrary as those the author criticizes at the beginning of his article. This is unfortunate, for the matter of wide and diverse patterns of trade (as opposed to local exchange) is important and needs to be dealt with if we are ever to be able to define the kinds of information exchange occurring between cultural areas. By choosing the profit motive rather than some other factor Lamberg-Karlovsky brings us face to face again with the problem of the paradigm for economic anthropology as outlined by Dalton and the validity of transferred concepts in the context of ancient society.

The one case study among the archeologists that admits openly to the problem posed by the industrial-preindustrial paradigm is Johnson's "Locational analysis and the investigation of Uruk local exchange systems." In this paper Johnson attempts to apply locational analysis concepts to the study of exchange and settlement patterns in the Uruk period (3500 to 3150 B.C.) in southern Iraq and southwestern Iran. He recognizes that these concepts rest upon the assumption of economic maximization—"that decisions affecting the economic position of an individual or group are always made in order to maximize that position." Since other assumptions are possible (the maximization of political power, for example), the applicability of this maxim to non–money-market economies has been under debate for some time. To his credit Johnson recognizes this difficulty and attempts to deal with it by restating the assumption in such a way that it is no longer restricted to the modern market situation. He states that conditions favoring initial centralization are probably highly variable but that once centralization has begun "subsequent development of a central place hierarchy should proceed (1) to the extent that least effort considerations influence the spatial organization of production and distribution of goods and services, and (2) to the extent that the operation of other variables does not intervene in this process." In other words, since effort minimization may appear in varying degrees relative to economic maximization in the context of market, redistributional, or mixed economies the application of the model need no longer be restricted to the modern market situation. This modification of Walter Christaller's central place concept (*Central Places in Southern Germany*, 1966) makes the prediction of settlement distribution patterns impossible—a fact that affects the conclusions that may be drawn from an observed distribution pattern. Johnson has a healthy skepticism concerning the potentialities of locational analysis, pointing out that it asks many questions but answers few. Its main value lies in its ability to indicate unsuspected regularities in settlement data and to generate further hypotheses. The attempted application of the method to the Uruk materials is not entirely convincing but is a worthwhile effort. Its limitations are commented upon by Robert Adams in his concluding remarks. A four-level hierarchy of site size is established with a distribution pattern appropriate to a central place model. These data are interpreted as indicating the existence of a local exchange system, which is seen as a major factor in the formation of the pattern itself. The results are promising enough to encourage further study along these lines, with the hope that eventual modification of the basic assumptions in the light of the data may help to create a more acceptable paradigm for the application of the method.

Adams points out that the purpose of this volume is to present, and to encourage, a variety of directions of exploratory thinking by the various authors. With this goal I can agree. On the other hand, when he says that it is not the time to question the authors about their unexamined premises and contradictory assumptions I do not agree. It is exactly those aspects of their proposals that they should be encouraged to examine further, so that their conceptualization of problem and method will be logically sound, precise, and above all explicit. It is to be hoped (in part as a result of this conference) that they will address themselves to some of the basic problems already under discussion in economic anthropology (to say nothing of making use of, and respecting, well-established definitions in this area of study). In this way a much greater range of communication will be opened up, incorporating both the evidence and orientations of the field archeologist and the broader anthropological study of socioeconomic systems.

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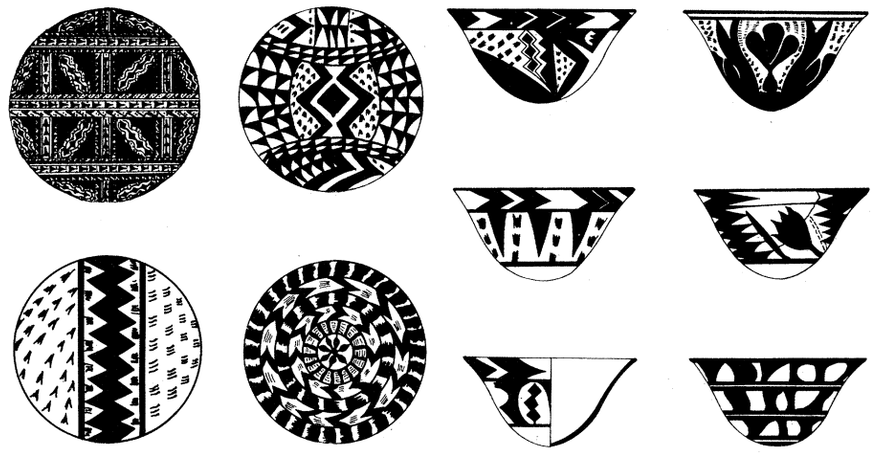
Old World Prehistory

The Neolithic of the Near East. JAMES MELLAART. Scribner, New York, 1976. 300 pp., illus. Cloth, $14.95; paper, $4.95. The World of Archaeology.

The publication of archeological research is a notoriously slow process. In many cases the excavation of a site or the surface survey of a region takes place over a number of years, and there is often a significant time lag (a decade or more is not unusual) between the completion of field research and the appearance of a full report. During the interim, scholars must rely on preliminary publications that briefly report the most significant or unusual findings and provide tentative interpretations of the data. Most of the archeological research that has contributed to our knowledge of the origin and spread of food production and the development of sedentary communities in the Near East has been conducted since 1950, and few final reports have appeared. In this book the British prehistorian James Mellaart attempts "to bring together in a coherent account" the fragmentary and widely scattered information on the subject (p. 7). The book focuses on the period from approximately 15,000 to 4000 B.C. and covers the area from the Balkans to Turkmenistan; a brief treatment of the transition from hunting and gathering to pastoralism and cereal cultivation in Egypt and the Sahara is also included.

Mellaart is particularly concerned with the chronological relationship of archeological assemblages and the geographical distribution of "cultures" or traditions. He constructs a chronological framework, based on stratigraphic evidence, artifact comparisons, and radiocarbon determinations, and proceeds to outline regional sequences. For each major site in the sequence (either the best-known or the most representative example for a given time and place) he summarizes the kinds of material recovered and gives the interpretations of the material that have been offered by the excavator or analyst. Although the published accounts are generally accepted without comment, Mellaart sometimes offers his own opinions on the nature of the historical relationships between assemblages or archeological cultures. The text is illustrated with 14 maps showing site locations and the distribution of archeological cultures, as well as the location of obsidian sources and of artifacts made of material from these sources. Photographs and line drawings of the archeological remains concentrate on representational art, architecture, and pottery.



"Eggshell ware" votive cups from the Early Ubaid (Ubaid 3, about 4500 B.C.) temples of Eridu in southern Mesopotamia, tentatively restored. [Drawings from *The Neolithic of the Near East*, after S. Lloyd and F. Safar, *Sumer* **4**, 115 (1948)]

For those who have some familiarity with Near Eastern prehistory, or for those who are well grounded in general prehistory and acquainted with the jargon used in artifact description, the book is useful. It provides a framework for a more thorough investigation of specific aspects of the archeological record in the Near East or of a particular regional sequence. The relative chronology is sound and a list of the radiocarbon dates employed is appended. The published sources on which the site summaries are based are clearly indicated, and the bibliography is conveniently arranged by region and topic. If the book is to be used for more than a general grasp of the available information, reference to the original sources is strongly recommended. The site summaries do not take into account variations in the size or nature of the archeological sample and provide no means of distinguishing between inferences that have a high probability of being valid and those that are tentative or even speculative. In some cases Mellaart's paraphrasing of the original reports is misleading or inaccurate. At least two of the line drawings, taken from published photographs, have significant errors: contrary to the drawings, the human figurine from Hajji Firuz Tepe (figure 128) has a concave chest and no indication of breasts and the voluptuous female figurine from Tepe Sarab (figure 39, left) has a belt decorated with fingernail incising which rather tightly binds her stomach and buttocks. Finally, some of the maps and architectural plans are difficult to interpret because of inadequate keys or captions.

Used with caution the book is an acceptable guide to the available literature. For most American prehistorians, however, it will present serious problems on an interpretative level. Mellaart implicitly and explicitly challenges many of the concepts, methods, and interpretations employed by Near Eastern archeologists working within an anthropological framework. He is concerned with the unique aspects of human culture and states that "we cannot classify man's behaviour patterns and predict what he will do even now, far less deduce how he should have reacted in the past" (p. 10). He tells us that "one should keep an open mind and study the evidence rather than advance premature theories about how things should have developed and where and then manipulate the evidence to suit" (p. 12). So much for hypothesis testing in archeology. His rejection of "global theory," by which he presumably means any attempt to discern regularities in human cultural development as well as specific models formulated to explain observed regularities, probably explains the absence from the text of any discussion of previous theories concerning why human groups first came to manipulate the animal species in their environment. He does, however, offer his own explanation of the changes in subsistence economy and settlement pattern documented in his book. In the final chapter he suggests that the processes that are usually referred to as domestication and urbanization are really a single entity. He first offers a new definition of the term "city." He totally rejects size as a criterion for this settlement type and substitutes economic dominance and "cultural achievement" (p. 278). Disregarding the problems introduced by the nature of the archeological sample, he provides a list of sites which, by virtue of their long occupation, can be assumed to possess the requisite economic and cultural status; included are Mellaart's own site, Çatal Hüyük, as well as Jericho, Mureybit, Tepe Guran, and Ali Kosh. The last-named site has an estimated population of 100 people (p. 82). He states that "each of these [sites] may be seen as the centre of a city-state, even if it had no dependent towns and villages, for it must have controlled territory, however small, for its economic needs" (p. 278). It was in these "cities" that the first attempts to control the reproduction of plants and animals took place, and it was in such centers that major innovations continued to be made. Mellaart's reputation for controversial interpretations of archeological data is unlikely to be diminished by the ideas set forth in this book.

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Great Achievements

The Story of Archaeological Decipherment. From Egyptian Hieroglyphs to Linear B. MAURICE POPE. Scribner, New York, 1975. 216 pp., illus. Cloth, $12.50; paper, $4.95.

Of all the intellectual activities that can be comprehended under the name of archeological scholarship, the decipherment of ancient scripts has perhaps been the most often described in books for the nonspecialist. The trouble with oft-told