that Adams in his report on the ceramics discusses an apparent elite-class funerary ritual, drawing inferences of a sociopolitical nature. So it is also that Willey, in the concluding report, ends with a short section dealing with questions of process. Indeed, as work proceeded at Altar, more descriptive goals were altered with more attention given to cultural matters. Thus, for example, an initial concern with the relation of the Altar sequence to those of other regions of the lowlands developed into a concern with Altar as a possible trading center.

The Altar reports are, then, a mix of the old and the new. Because of this they will, I think, disappoint a number of problem-oriented archeologists whose primary interests lie in the realm of cultural process. This will be unfortunate. While I, too, would like to see more done with the Altar data beyond description, it must be recognized that there is always a need in archeology for detailed data. It is only when such data are available that we are able to pose the right sorts of hypotheses, which then can be tested. Equally important, without such data we are in no position to examine, critically, conclusions about sociocultural processes drawn by others.

In sum, then, we have here a major contribution to the archeology of the Maya lowlands. It may not please every taste, but it establishes some valuable new precedents in Maya archeology. Further, it has already served to pose new hypotheses for further investigation, and it will be valuable for this purpose into the future.

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Sedimentology

Sedimentary Structures of Ephemeral Streams. M. DANE PICARD and LEE R. HIGH, JR. Elsevier, New York, 1973. xvi, 224 pp., illus. $27.50. Developments in Sedimentology 17.

Geologists interpret ancient sedimentary rocks with greatest accuracy when they can match rock outcrop or cores and modern sediments of known origin feature for feature. Information on specific modern sedimentary environments and processes is accruing, but many environments have received little attention. This book will be valuable to sedimentologists because it describes illustrates, and explains the origin of a large number of sedimentary structures in qualitative terms for an environment that has received little previous study. Inasmuch as ephemeral streams are more common than perennial ones in the 25 percent of the earth's surface that has an arid to semiarid climate, ephemeral streams are an important sedimentary domain.

Largely on the basis of data from ephemeral streams in the Uinta Basin of northeastern Utah, the authors describe 42 categories of erosional, transportational-depositional, and postdepositional structures and 14 bedding types. The following information is given for each: name and synonyms, description, a photograph (or photographs), abundance in each of 29 streams studied in detail, origin, likelihood of preservation in rocks, occurrence in other sedimentary environments, environmental significance, and important references. The book includes a description of vertical sequences typical of point bars and channel bars, and concludes with an overview of the significance of sedimentary structures of ephemeral streams compared with other sedimentary environments.

The 138 photographs are a major contribution of the book. Most are close-up views of excellent quality. Many of the sedimentary structures illustrated by Picard and High can be found also in the two atlases of sedimentary structures with English texts that have been published in the last ten years. However, this book is more useful than the atlases for its discussion of the origin, occurrence, and likelihood of preservation of each structure found in ephemeral streams. The authors are keen observers and have sharp eyes for detail. They are perhaps the first to stress the distinction between continuous and discontinuous horizontal lamination as principal bedding types, and astutely point out the common error of many workers who have confused primary streaming lineation with secondary parting lineation.

The book will not satisfy quantitative sedimentologists, because no data on hydraulic parameters, channel geometry, or sediment size are given. The authors make no apology for this omission, and in fact criticize some reports of quantitative laboratory studies as "sometimes clouded by jargon and excessive mathematics." Their qualitative treatment is strong enough to offset this omission, and they have drawn heavily on flume studies to explain the origin of various features.

In physical appearance the book is of high quality. An index is missing, but the table of contents is sufficiently detailed to make one superfluous.

The book will be very useful to the specialist in fluvial sedimentology, to the generalist interested in sedimentary structures, and to the student interested in the identification, description, and origin of some common and some uncommon sedimentary structures.

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Morphometrics

Form and Pattern in Human Evolution. Some Mathematical, Physical, and Engineering Approaches. CHARLES OXNARD. University of Chicago Press, Chicago, 1973. x, 218 pp., illus. $12.50.

Oxnard has produced an unusual and exciting treatment of the methodology of describing and analyzing biological shapes and patterns. His title is somewhat misleading in that human evolution is discussed only to the extent that most of the illustrative examples are based on the bones of primates. The methods and techniques he describes apply equally well to any discipline where the external shape or internal fabric of an object or set of objects must be described and interpreted. The book should thus be of value to a wide range of people who work with morphology in its broadest sense.

The methods to which Oxnard devotes most attention are those which he has personally found effective in his many pioneering studies of structure and function of the primate skeleton. They are basically the methods most useful in discerning patterns and relationships not readily assessable by the unaided eye or the unaided mind. Chapters are devoted to multivariate statistical analysis, clustering techniques, experimental stress analysis using photoelastic properties, and optical data processing. The presentation is definitely not in cookbook style, nor is there any pretense of being comprehensive in coverage. Rather, the reader is introduced to each general method by a reasonably nontechnical discussion of its basic objectives and strategy and is given ample geometric analogies and