The Olmec Phenomenon

Regional Perspectives on the Olmec. ROBERT J. SHARER AND DAVID C. GROVE, Eds. Cambridge University Press, New York, 1989. xxvi, 386 pp., illus. \$49.50. School of American Research Advanced Seminar Series. From a seminar, Santa Fe, NM, Nov. 1983.

Of the world's prehistoric cultures Olmec is one of the least understood in the public, and often the scholarly, imagination. The Olmec were an enigmatic race existing in a heartland along the swampy lowlands of the Mexican Gulf coast. During the Mesoamerican Formative period, between 1200 and 500 B.C., the Olmec created the large examples of earthen architecture, erected the monolithic stone heads, and carved the exquisite jade objects that have become their hallmark. Beyond the fact that objects created in the "Olmec style" are found all over Mesoamerica, little is known about the first of tropical North America's major cultural expressions.

In order to expand our understanding of Olmec culture, Sharer and Grove organized the seminar that generated this volume. The contributors represent a diversity of methodologies and views; in fact, at the seminar no consensus was reached as to what is Olmec. However, the diversity of opinion stimulated one of the most complete overviews of Formative period Mesoamerican civilization in existence.

Approaching the Olmec problem from scientific, humanistic, and ideological positions, the authors of the various chapters seek to define the term "Olmec" and to isolate the origins of the religious, artistic, and political systems that were to be the foundations of Mesoamerican civilization until the coming of the Europeans in the 16th century. Whereas the Olmec phenomenon has generally been regarded as a monolithic cultural expression, this volume tends to treat it as a major regional expression within a cultural landscape made complex through a large regional interaction sphere.

Among the opening papers are two much needed status reports on Olmec studies. Sharer's overview traces the origins of many of the commonly held beliefs about Olmec to the lack of extensive archeological investigation of the heartland and to our limited knowledge of settlement patterns in that area. Richard Diehl, by asking and answer-

ing the crucial questions of what we know and what we wish we knew in heartland Olmec archeology provides both the general reader and the scholar with the factual information necessary for following the arguments of the rest of the volume.

As essential as the status reports for the understanding of the Olmec phenomenon is the chapter by Gareth W. Lowe on the evolution of heartland Olmec material culture. Lowe painstakingly defines heartland Olmec through the categorization of objects known to have been produced in the Gulfcoastal heartland area. He further temporally organizes these material remains by classifying them as the products of Pre-Olmec (around 1500 to 1200 B.C.), Initial Olmec (1200 to 900 B.C.), and Intermediate Olmec (900 to 500 B.C.) societies. His efforts provide an easily comprehended and accessible source for understanding the origins and development of Olmec heartland culture.

Almost a companion and as necessary as Lowe's definition of the heartland Olmec is Grove's "Olmec: what's in a name?" Grove questions whether objects created in the Olmec style and bearing Olmec iconography but found outside the Olmec heartland, should be categorized as Olmec at all. He suggests that they would better be classified as products of regional developments that reflect a common belief system, of unspecified origins, with the heartland Olmec. In a later chapter, Grove backs up this sugges-

tion through an examination of the monuments and other material remains at the site of Chalcatzingo, located in the Mexican state of Morelos. Having conducted the most recent and most extensive excavations at this highland site, Grove relates insights that could only be the product of such a close association. He demonstrates that though there are certainly connections between Chalcatziingo and the heartland Olmec—the carving style and mutilation of monuments reflect a heartland pattern—the development of Chalcatzingo was a Formative period highland phenomenon and not Olmec.

Two chapters in the volume are devoted to ideology and its role in political organization. Michael Coe discusses the ideology of the Olmec heartland as reflected in such works of art as the Las Limas figure, and Joyce Marcus examines the origin of Zapotec chiefdoms through the iconography found on pottery recovered from burials. These authors' interpretations are similar in that both demonstrate that the iconography they examine reflects developing social stratification supported by the visual expression of ideology. The authors diverge, however, when they seek to explain the origins of the iconography they interpret. Coe believes that the iconographic system and the ideology it visualizes have their origins in the Olmec heartland and, are, with the rest of Olmec culture, a product of a quantum leap in development. In contrast, Marcus suggests that the similar iconographic patterns discovered in the valley of Oaxaca are a product of regional interaction between equal partners and developed slowly over time.

Much of the rest of the volume is devoted to examinations of the many regional cultures that up until now have been lumped

Figurines of the Guadalupe phase (850 to 700 B.C.) manifested in parts of the Valley of Oaxaca. The eye treatment, the earspools, and the carefully-made sandals displayed by these figurines "are all typical of this phase." Height of fragment at left, 8.4 centimeters. [From J. Marcus's paper in Regional Perspectives on the Olmec]





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Rubbing of one of four human figures engraved on a basaltic boulder, designated Monument 12, from Chalchupa, El Salvador. "The general style and several specific motifs seen in these figures . . . has produced a consensus . . . that Monument 12 represents Olmec inspriation." The monument thus "represents the most distant example from the Gulf coast of Olmec-style sculpture." [From R. J. Sharer's paper in Regional Perspectives on the Olmec, after D. Anderson, 1978]

under the category of Olmec. Through these examinations, the volume offers conclusive evidence of the cultural complexity of Formative-period Mesoamerica. The examinations also demonstrate that much of Formative period cultural development occurred independent of the Olmec heartland. In fact, much of what we currently label Olmec may well be the product of the interaction of the Gulf Coast heartland with other areas in the region.

Concluding chapters by Arthur A. Demarest and Paul J. Tolstoy divide Mesoamerica into eastern and western regions and examine the influence of Olmec on both. Tolstoy concludes that Olmec iconography, wherever it is found, is a "unitary phenomenon" and suggests that the solution to the Olmec problem will require a compromise between those scholars who view Olmec as an origin culture and those who see it as a product of "equal partners." In contrast, Demarest appears to lean toward a view of parallel Formative period development while recognizing that the heartland Olmec may have been the chief actor in that development. Demarest also notes that many of the Mesoamerican regions that until now have been thought of only as transmitters of Olmec culture were in fact its primary shapers and developers.

Regional Perspectives on the Olmec is the latest and most up-to-date compilation of information concerning the development of Mesoamerican Formative period culture in

particular and Mesoamerican civilization in general. It will be the fundamental reference on this topic for many years and will continue to be a source of information not only for Mesoamericanists but for all those who are interested in the development of primal civilizations wherever they occur.

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Hardware from Prehistory

Time, Energy and Stone Tools. ROBIN TORRENCE, Ed. Cambridge University Press, New York, 1989. viii, 124 pp., illus. \$44.50. New Directions in Archaeology. Based on a meeting, Minneapolis, MN, 1982.

As the most durable (and often the most abundant) traces of ancient human activities, stone tools are of particular interest to archeologists, for an understanding of how and why they were manufactured, maintained, used, and discarded, could provide more general insights into the behaviors and strategies of the people who produced them. Most such research within the last few decades has focused on methodological issues, including the development of techniques for identifying raw material sources and trading networks, reconstructing manufacturing techniques, and determining the functions or uses of individual tools. Only recently have analysts attempted to address more general issues of human behavior and technological organization. Such issues are the focus of this volume.

Most of the 11 chapters are revisions of papers that were first presented at the 1982 meeting of the Society for American Archaeology. At least five of the contributors have subsequently completed Ph.D. dissertations on their topics. These works have been repeatedly cited and form the nucleus of a rapidly growing body of literature, so it is good to see them in print at last.

Several themes link the papers. With one exception, all the contributors are studying prehistoric hunting and gathering societies, and most of them employ theoretical concepts derived from the study of present-day foraging peoples. One such concept, ultimately based on principles of evolutionary ecology, asserts that humans (and other organisms) strive to optimize their foraging behavior so as to maximize their intake of energy or nutrients while minimizing their expenditure of energy or time and minimizing risk. As Torrence notes in the introductory chapter, most of the contributions begin with the assumption that "tool-using, as for many other forms of behavior, was carried out in such a way as to optimize the expenditure of time and energy" (p. 2). For example, a particular technique of tool manufacture or resharpening may require more effort than another but at the same time may conserve raw material by extending the useful life of the tool. Increased time and energy devoted to tool manufacture must be balanced against decreased time and energy spent in acquiring raw material; the technique used will be the one that minimizes total energy expenditure. Such propositions may provide insights into such phenomena as changes from chipped stone to ground stone to metal technologies (Hayden, Boydston) and the use of tools with standardized shapes (Jeske, Myers).

A thoughtful evaluation of these applications is provided in the concluding chapter by Michael Jochim (one of the first archeologists to apply optimal foraging models to prehistoric hunter-gatherers). He points out that there are a number of unresolved problems. For example, optimization models require a measurable "currency." Energy intake can be measured in calories, but it is not clear that raw-material acquisition can be measured in a similarly straightforward way. Not only the amount of stone but also the relative quality, abundance, and accessibility of different types of stone are significant factors. Despite the limitations, he finds the studies exciting for "linking technology to the overall organization of behavior within a framework of economics and evolutionary ecology" (p. 111). I would agree.

A second theme is the application of a series of concepts derived from Lewis Binford's studies of technological organization among contemporary Nunamiut foragers in Alaska. Concepts such as curated and expedient technologies (Torrence), embedded procurement strategies (Morrow and Jeffries), logistical mobility patterns (Jeske, Lurie), and personal gear and site-specific facilities (Camilli) permeate the work. Binford has observed a number of interesting relationships between the organization of technology and mobility, settlement, and other behaviors. Several contributors seek to apply Binford's models to prehistoric technologies in order to infer the underlying mobility and exchange patterns, with intriguing results.

In general, the papers in this volume are innovative and stimulating. The specific results are sometimes inconclusive or weakly supported, as several cases involve very small samples or questionable statistics. Most of the papers are fairly technical and assume some familiarity with stone tool typologies and North American culture histories (the majority deal with North America, although Peru and Europe are also represented).

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