The Olmec Legacy

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Updating Olmec Prehistory

The Olmecs (1150 to 500 BC), creators of ancient Mesoamerica's first stone monumental art, were seen by scholars as more advanced than contemporaneous societies, but highly enigmatic. Today, only two Olmec centers, on Mexico's tropical southern Gulf coast, have been partially excavated, but various new data and fresh perspectives are changing long-held assumptions. Evidence now supports the Olmecs' indigenous, rather than external, origins. Their world-famous art, once considered feline-dominated, expresses images now identified as crocodilians, shark-like fish, and serpents. Mutilated Olmec statues no longer seem testimony of iconoclasm by invaders but reflect internal ritual behavior. Even the long-held view of the Olmecs' "influence" upon other societies is being seriously debated. An Olmec legacy is nevertheless evident in later civilizations, particularly in Classic Maya monumental art and symbols of royal power.

Figure 1.
Stela II is unearthed at La Venta during one of Matthew Stirling's expeditions, initiated in 1938.
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The hot and humid lowland tropical forests of Mexico's southern Gulf coast seem an unlikely environment to have nurtured early steps to civilization in Mesoamerica. However, from ca. 1150 to 500 BC that region's riverine floodplains and adjacent low uplands were the domain of the Olmecs, whose magnificent stone monuments and ancient ruins lay hidden for centuries beneath jungle vegetation. Eight years of research, initiated there in 1938 by archaeologist Matthew Stirling, uncovered fabulous Olmec stone carvings, jade objects, and mound architecture (Figure 1). Coming from a region commonly thought inhospitable and marginal, the finds perplexed scholars. More perplexing was the great antiquity Stirling assigned to his discoveries. The sophistication of the Olmecs seemed out of place in both time and space. While their apparent precocity soon led scholars to perceive them as Mesoamerica's first civilization and "mother culture" to all of its later civilizations, the origins of their complexity, and of the Olmecs themselves, seemed puzzling.

Today, a half century later, access roads crisscross much of the area, and most of the tropical forest vegetation has been removed for cattle ranching, sugarcane production, and petroleum exploitation. In this new light, and with a greater understanding of early agricultural societies throughout Mesoamerica, scholars are reevaluating and clarifying many of the traditional interpretations regarding the Olmecs. While these ancient people were unquestionably precocious and the creators of many sophisticated works of art, their rise and fall, religion, interactions with other peoples, and the legacy they left to subsequent civilizations are understood differently today than generations of scholars have previously imagined.

Early Research and Perceptions

The foundations of Mesoamerica's great civilizations were laid during the Formative (or Preclassic) period. Primarily on the basis of marked extra-regional changes in certain common ceramic and figurine types, archaeologists have subdivided the Formative into Early (2000 to 900 BC), Middle (900 to 500 BC), and Late (500 BC to AD 100) periods. Within that span of >2000 years Mesoamerica witnessed the change from simple agrarian societies to state-level, urbanized population aggregates. Much of the evolution and spread of cultural complexity during the Early and Middle Formative has traditionally been credited to the Olmecs, commonly regarded as the dominant and influential cultural force of their age.
Olmec scholarship was initiated with Matthew Stirling's pioneering research in southern Veracruz and Tabasco states (Figure 4). Particularly significant were his 1942 and 1943 excavations at La Venta (Figures 12&13). Drawn to the site by the presence of Olmec colossal stone heads, thrones ("altars"), and stelae, Stirling and his associate Philip Drucker focused their investigations on a large plaza immediately to the north of the site's tall (32.3-m) earthen pyramid. Their finds were astounding. Excavating along the plaza's centerline, they uncovered colored clay floors, caches of polished jade celts, a carved stone sarcofagus in the form of an Olmec supernatural creature ("tigre"), and a large "log" tomb built of columnar basalt. Burial paraphernalia—jade jewelry and figurines—lay on the tomb floor. Excavations beneath a nearby platform mound revealed an immense (27-m²) serpentine mosaic pavement. The multitude of stone objects was extraordinary for a locale bereft of stone resources.

Whereas scholars now realize that those magnificent discoveries date to the culmination of Olmec complexity (ca. 700 to 500 BC), they were uncovered at a time when little else was known of the Olmecs, and dating was uncertain. The finds became an archetype for defining the Olmecs and for drawing comparisons with other early Mesoamerican societies, who consequently appeared less sophisticated. That perception strongly influenced archaeological interpretations throughout Mesoamerica for decades thereafter.
The Olmecs

The magnificent stone monuments found at Olmec sites make their society recognizable unique among Mesoamerica's early agriculturalists (Figure 7). Particularly striking are colossal heads, three-dimensional portraits in stone of various Olmec rulers. The motifs incorporated into many of their head coverings seem idiosyncratic to those individuals, i.e., as simple “naming” devices. Identified rulership is, in fact, perhaps the most important aspect of all forms of Olmec monuments. Those rulers are shown seated in the frontal niches of the great Olmec table-top thrones, shown seated and standing in three-dimensional statues, and depicted in bas-relief on large stelae.

Olmec monuments are clustered in and around four large sites (Figure 2). Two of them, La Venta and San Lorenzo, are adjacent to major rivers and floodplains. To the west, in contrast, Laguna de los Cerros and Tres Zapotes are on upland plains extending outward from the Tuxtla Mountains. Their abundant monuments led to the discovery of each of the four sites and are one of several reasons leading archaeologists to believe that those sites were the major regional Olmec political-religious centers.

Some 150 km separate the westernmost center, Tres Zapotes, from the easternmost, La Venta. Spaced nearly equidistantly between those sites are

Figure 3.
View from the site of San Lorenzo onto the adjacent riverine floodplains.
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Laguna de los Cerros and San Lorenzo. It is clear from the distribution of the four centers across the varied landscape that each had potential control over somewhat different subsistence and natural resources. La Venta could exploit a major coastal estuary and also had access to both salt and tar (from natural oil seeps). San Lorenzo overlooks a large expanse of riverine floodplains rich in levee-land and oxbow lakes and had access to kaolin clay deposits, limestone, and powdered hematite (Figure 3). On the other hand, both Laguna de los Cerros and Tres Zapotes are near important basalt sources, exploitable for both grinding tools and stone for monuments. Those two centers are also close to the rich and varied flora and fauna of the Tuxtlas Mountains (Figure 5). The basin of the Río Papaloapan, one of Mexico's major river systems, lies <20 km west of Tres Zapotes and delimits the western extent of the Olmec domain. The major rivers adjacent to La Venta and San Lorenzo, and accessible to Tres Zapotes, undoubtedly provided those centers with important communication links to other areas.

Today's archaeological knowledge of the Olmecs comes almost exclusively from excavations of limited areas of La Venta and San Lorenzo. Both are riverine sites, constructed above the floodplains on low hilltops which the Olmecs leveled and remodeled over time. Originally hypothesized to have been vacant ceremonial complexes supporting only a small priestly population, recent research projects at those sites have actively sought and located abundant domestic remains, and the sites are better viewed as having been thriving
communities. However, despite the work of various research projects, the actual nature of the four major centers themselves and the layout and organization of their public mound architecture are poorly understood. Complicating such research is the fact that all four are large multi-component sites, with centuries of significant post-Olmec settlement and mound-building. Post-Olmec deposits frequently obscure all Olmec remains, and visible site size and mound configuration cannot be assumed to follow Olmec-period patterns (Figure 6). That, together with the lack of detailed chronologies, makes it currently impossible to generate comparative assessments of the relative size and power of individual centers at particular moments in the course of Olmec prehistory.

A surprising construction feature at both San Lorenzo and La Venta is their buried network of stone drain lines—long U-shaped rectangular blocks of basalt laid end to end and covered with capstones. The drain systems at San Lorenzo may have begun at man-made “lagunas” (ponds) within the settlement and ended at the edges of the hilltop. The engineering of the systems is matched only by the ingenuity in constructing the ponds themselves, for excavations have shown that the ponds had been made watertight by lining them with bentonite clay. The incorporation of monuments into the system at San Lorenzo implies that the ponds and drains had a sacred rather than mundane character. Monument 52 is a drainstone found “at the head of the main drain line.” The U-shaped drainstone is remarkable, for it is magnificently carved in low relief with the image of an Olmec supernatural being (Figure 8). Tri-lobe motifs, an
early symbol denoting “liquid,” appear in the supernatural’s headdress. Lobed water symbols also occur on Monument 9, a large stone basin sculpted in the form of a duck (Figure 9). The carving, found by Stirling in 1945,64,65 is notched on one side to accept the end of a drainstone and therefore had probably been placed at the termination point of a drain system, to receive the discharged water.

Also among the architectural features at both LaVenta and San Lorenzo are parallel earthen mound arrangements which excavators suggest were courts for the rubber-ball game.13,72 In the Americas such games have great antiquity, particularly among societies in the tropics, the source area of natural rubber. Rubber was produced on the Gulf coast in pre-Hispanic times, and it is not surprising that the Olmec also participated in such games. Amazingly, several rubber balls were recently discovered together with other Olmec objects (including more than two dozen carved wooden heads), preserved in the mud of an ancient spring at the site of El Manati, near San Lorenzo.33

Although four major centers can be identified, the remaining political hierarchy within the Olmec domain is poorly understood. Detailed surface surveys to determine regional settlement distributions and hierarchies have yet to be carried out around the four centers. About a dozen sites are known within the Olmec domain which contain a few monuments and some mound architecture, and those may represent second-level centers. However, the farmers, the majority of the Olmec population, probably would have lived in villages and hamlets lacking monumental art and public mound architecture. Those settlements are far more difficult to discover in a region of dense grasses, sugarcane, and centuries of alluvial deposits. Thus, the current understanding of the Olmecs is biased toward large centers, monumental art, and impressive ritual offerings. Beyond the knowledge that the achievements at the centers were supported by a population subsisting primarily on slash-and-burn maize agriculture, little more can be said of general lifeways or subsistence practices.14,59

**Origins of the Olmecs**

When archaeologists renewed excavations at LaVenta in 1955 and still found no clear local antecedents to that site’s sophisticated material culture, they nonetheless recognized that the missing precursors might be found elsewhere on the site or within the Olmec domain.8,26 However, others perceived the “absence” differently and looked to distant areas of Mesoamerica where Olmec-like artifacts had been found, hypothesizing origins there.16,28,33,56 Because the Olmec territory had barely been explored, such pronouncements were unquestionably premature. The Olmec’s antecedents became much clearer two decades ago, when excavations at San Lorenzo uncovered a lengthy stratigraphic record which included more than four centuries of pre-Olmec occupation showing an in situ evolution into the basic complex of ceramics and stone art that archaeologists identify as Olmec.11,13,33,48 Comparably early materials have recently been recovered from sites on ancient river levees near LaVenta.59

Linguists now suggest that the Gulf coast ancestors to the Olmecs were speakers of a proto-Mixe–Zoquean language6 and therefore linguistically related to contemporaneous peoples of the Pacific coast of Chiapas, Mexico. Such a probable relationship is also supported by strong similari-
ties between the early pottery of San Lorenzo and of coastal Chiapas at ca. 1500 BC.\textsuperscript{7,11,13,47} Because scholars once thought the Olmecs had spoken a Mayan language,\textsuperscript{4,10} it is interesting to note that by 700 BC some Maya-like “influences” do appear in Gulf coast pottery.\textsuperscript{2} It is not implausible, therefore, that the Olmecs’ language underwent some “Mayanization.”

Monuments, Warfare, and Revolutions

Although warfare and disputes between Olmec centers or with neighboring societies undoubtedly occurred, such events are not currently evident in the archaeological record. The one data set that has customarily been interpreted as reflecting such violence—monument mutilation\textsuperscript{11,13,26,31,61}—has in all probability been misunderstood. The Olmecs’ magnificent stone monumental art is nearly always found purposely damaged and mutilated (Figure 7). Heads and arms are missing from statues of rulers, faces have been ground away from bas-relief carvings, and massive fragments have been knocked off table-top thrones. Only the colossal portrait heads survived relatively unscathed. The mutilation of the monuments has customarily been attributed to non-Olmec invaders or to internal Gulf coast revolutions. The iconoclasms is often said to have occurred twice during the Olmecs’ prehistory, once ca. 900 BC and again ca. 500 BC—coincident with the end of the Early and Middle Formative periods.

However, the monument destruction follows a very regular pattern over many centuries and across great distances and seems to have been a relatively continuous rather than sporadic act. It seems more probable today that monument breakage was carried out by the Olmecs themselves for symbolic, sacred, or ritual purposes.\textsuperscript{34} Many monuments are associated with specific rulers, and some evidence indicates that a ruler’s monuments may have been destroyed at his death.\textsuperscript{33,35} Two of the colossal stone heads at San Lorenzo were recently found to have been resculpted out of large rectangular Olmec thrones,\textsuperscript{37} which implies that some throne mutilation may actually have been a functional, requisite step in converting them into colossal portrait heads.

External Relations

Many of the Early Formative ceramics and Middle Formative greenstone objects labeled as Olmec in museums, archaeological collections, and books, were actually found at sites far distant from the Gulf coast. Such
artifacts are similar in form and iconographic motifs to those used by the Olmecs, and for decades they have been interpreted as representing influences or trade emanating from the Olmecs.\textsuperscript{4,8,9,15,26,70} Implicit in those interpretations is the belief that the Olmecs originated and dispersed those motifs and objects. Some scholars are now seriously questioning the traditional interpretation.\textsuperscript{20,35,37,40} They point out that the artifacts in question are not uncommon and always constitute an integral part of local assemblages. This perspective treats the objects as locally created manifestations of a common Mesoamerican symbolic substratum which each society, including the Olmecs, used and modified somewhat differently. It does not presume a priori that the motifs and artifacts are in any way associated with the Olmecs, nor does it necessarily credit the Olmecs with influencing societal evolution across Mesoamerica. The newer non-traditional perspective can be called multi-regional as opposed to the long-standing Gulf coast-centric view. Whichever position one takes, current archaeological data and dating methods lack the precision to resolve the issue.

While ceramic motifs and greenstone objects may not represent Olmec influences, it is notable that late in the Middle Formative period, perhaps after ca. 700 BC, monumental art executed to Olmec stylistic canons was present at a limited number of sites on the Pacific slopes of southern Mesoamerica (southern Mexico, Guatemala, and El Salvador)\textsuperscript{1,30,31,46,52} and in west-central Mexico.\textsuperscript{32,35,38-40,50} The adoption of monumental art in the south, for whatever reasons, may have initiated a monument tradition there.\textsuperscript{54} In contrast, in central Mexico it was clearly an ephemeral phenomenon, for later cultures lack such monuments.
Religion and Cosmology

The Olmecs’ religion included cosmological beliefs common to many Formative period societies and can be partially reconstructed from consistent patterns in the iconography found on Early Formative pottery and Middle Formative greenstone objects. The cosmos incorporated two basic realms: the world of humans—the Earth’s surface—and an extra-dimensional otherworld, a realm with both celestial and underworld aspects that was the abode of supernatural forces. Peoples across Mesoamerica believed that certain geographic features of their landscape were sacred, particularly mountains, caves, clefts in the Earth’s surface, and bodies of water. Such features were thresholds to the otherworld and its supernatural forces. Sacred landmarks were also symbolically replicated and incorporated into the building programs of the ceremonial centers.

Early identifications of feline features and jaguar deities in the art of the Olmecs seemed logical when first proposed, but were incorrect and thus led to decades of misunderstanding of the complex iconography. The most recent research suggests that the motifs on Early Formative pottery primarily depict two very un-feline supernatural animals which are represented both as semi-naturalistic creatures and as highly abstracted motifs. They apparently represent the two major aspects of the Earth’s surface upon which humans live: land and water. Land seems to have been conceptualized as a crocodilian floating in the primordial sea, and the motifs predominant in pottery depict that crocodilian or caiman-like Earth/earthly fertility supernatural. It is most commonly rendered as a stylized abstraction consisting only of its head in right profile (eye, flame-like supraorbital plate, and upper mandible) and one foot or paw (Figure 10). The supernaturals’ upper mandible was used alone as a common symbol for the Earth’s surface (Figure 7). The carved stone sarcophagus, which Stirling unearthed at La Venta, represents one of the finest portrayals of this saurian (Figure 10).

The second supernatural is associated with water, appropriately characterized by a fishlike body. Interestingly, it often has two sharklike features, a black U-shaped eye and a large protruding front tooth. Because it is normally executed as a highly abstracted motif, it was only recently identified (Figure 11). Actual sharks’ teeth found in ritual context at La Venta, together with some iconographic evidence, suggest that this supernatural may have been related to ritual bloodletting.

The cosmology, rendered in material form and used to graphically sanctify various groups or activities within society, evolved concurrently with social complexity. By 900 BC it began to reflect a transformation under way in Mesoamerican societies, the emergence of more powerful elite groups. A third supernatural animal, the serpent, became important at that time, but only in the artistic media controlled by those elite groups. The serpent was a symbol closely associated with rulership.

Whatever Happened to the Olmecs?

The end of the Olmecs may seem puzzling, but only because the archaeological stratigraphic record for that period on the Gulf coast, ca. 500 to 300 BC, is almost nonexistent. Their demise, however, may have been

Figure 11.
Top, San Lorenzo Monument 38, the image of the shark-like fish supernatural carved in bas-relief on a 1.3-m-long stone slab.
Bottom, one of the highly stylized pottery motifs used to symbolize the fish supernatural.
nothing more than evolutionary. Viewing the archaeological record is akin to viewing an incomplete photographic record of someone’s life. In one snapshot you may see a teenager, and in the next an adult who looks somewhat like the teenager but the transition is missing. When did the teenager end and the adult begin? The Olmecs are known and identified by a series of specific pottery types, figurines, and monuments. It is not unlikely that over several centuries those “defining” characteristics were gradually replaced by new material features and social symbols, the Olmecs simply evolving out of their Olmecness. The next glimpse of Gulf coast prehistory shows us Tres Zapotes again, which continued to be occupied and which maintained a modified monument tradition, as one descendant of the Olmecs. Even the Classic period Maya appear to carry an Olmec legacy in their cultural baggage, particularly in their basic cosmos, use of monumental art to communicate political cosmology, and use of certain symbols of royal power in art and hieroglyphs.27,38,58

Figure 13.
Cache of pre-Columbian jade relics. The multi-colored objects were unearthed by Stirling’s second expedition in 1942. The first expedition collected a spectacular 782 jade objects.
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Figure 12 (opposite page).
Matthew Stirling carefully frees jade objects from the red cinnabar and traces of organic material that marks the position of a burial; a jade necklace, pendants, earplugs, and axeheads lie on the tomb floor.
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