

Early evidence of the ballgame in Oaxaca, Mexico

Jeffrey P. Blomster¹

Department of Anthropology, George Washington University, Washington, DC 20052

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As a defining characteristic of Mesoamerican civilization, the ballgame has a long and poorly understood history. Because the ballgame is associated with the rise of complex societies, understanding its origins also illuminates the evolution of socio-politically complex societies. Although initial evidence, in the form of ceramic figurines, dates to 1700 BCE, and the oldest known ballcourt dates to 1600 BCE, the ritual paraphernalia and ideology associated with the game appear around 1400 BCE, the start of the so-called Early Horizon, defined by the spread of Olmec-style symbols across Mesoamerica. Early Horizon evidence of ballgame paraphernalia both identical to and different from that of the Gulf Coast Olmec can be seen on figurines from coastal Chiapas and the central highlands of Mexico, respectively. The Mexican state of Oaxaca, however, has yielded little data on early involvement in the ballgame. The discovery of a ballplayer figurine in the Mixteca Alta region of Oaxaca demonstrates the early participation of this region in the iconography and ideology of the ballgame. In lieu of an actual ballcourt, the focus may have been on the symbolic component of ballplayers and their association with supernatural forces, as part of emerging leaders' legitimization strategies.

ancient Mexico | social complexity | interaction | elite ideology

The ballgame constitutes a defining feature of ancient Mesoamerican civilization. The origin(s) of the multiplicity of activities subsumed under the term “ballgame” continues to prove elusive, with different early manifestations evident among regions. Although the earliest figural images of ballplayers come from West Mexico, and the first actual ballcourt discovered is in southern Chiapas, the first consistent imagery of ballplaying costume and paraphernalia emerged during the Early Horizon or San Lorenzo Horizon, 1400–1000 BCE[†] (1). During this time, similarities in ceramics, iconography, and figurines associated with the Olmec style appear at sites throughout Mesoamerica, although expressed differently in each region. Ballplayer figurines have been well documented for the Early Horizon from the Gulf Coast Olmec, as well as for the cultures of Central Mexico and southern Chiapas (Fig. 1). Sites in the modern Mexican state of Oaxaca have exhibited little Early Horizon ballplayer imagery. The recent discovery of a ballplayer figurine from the Mixteca Alta region of Oaxaca invites a reevaluation of ballgame origins and its related imagery in early Mesoamerica.

Previous Research

The importance of the ballgame to ancient Mesoamericans is reflected by the great quantity of known ballcourts, estimated at nearly 1300, distributed over 1000 sites (2). Although the rules of the game remain obscure, much attention has been paid to the ballgame as it manifests central themes of Mesoamerican civilization, especially the duality between life and death. The enactment of the ballgame is associated with celestial phenomena and origin narratives. Some of the richest visual and iconographic information on the ballgame comes from the Classic Maya civilization (CE 300–900), where the origin narrative, the *Popol Vuh*, invokes the ballgame as a contest between mortals and sinister underworld deities. The play of the ball in the court symbolized the movements of the sun and moon, representing the regeneration of life and the maintenance of cosmic order (3). The ballcourt itself represented a portal to the underworld, and

both the Maya Maize God and its royal impersonators dressed as ballplayers.

The ballgame did not operate in a vacuum but was tied with other social and political practices. The ballgame expressed cosmological concepts about how the world operated, and political leaders, responsible for providing life and fertility, were closely linked with this social practice. Not coincidentally, the ballgame appeared around the same time as rank or chiefly society and has been implicated as central to the processes of social differentiation (4, 5). The earliest depiction in monumental art of public leaders, the Early Horizon colossal heads of the Olmec, has been interpreted as sporting headgear related to the ballgame (6). Portable clay figurines of elites in ballplaying gear are found at the Olmec center of San Lorenzo as well as in contemporaneous societies across Mexico. In addition to its role in internal differentiation and mediation, the ballgame may also have functioned for external boundary maintenance (7). Although ballgame imagery, if not an actual court or game, was integral to select Early Horizon societies, the ballgame (with formal courts) was truly a pan-Mesoamerican phenomenon by the Late Formative (5). Thus, exploring the origins and spread of the ballgame is central to understanding the development of Mesoamerican civilization.

Pre-Early Horizon Evidence of the Ballgame

Numerous ballgames were played in Mesoamerica, five of which used a hard rubber ball (8); at least three variants of the rubber ballgame continue to be played (9). Increasing attention to ancient imagery reveals that other ritualized gladiatorial combat, including stone balls and boxing/wrestling, has often been subsumed under the term “ballgame” (10, 11). Noninstitutionalized athletic games may be as old as the first humans in the New World (12), reinforcing the idea that some types of ballgames could have existed without any formal ballcourt, just as other types of activities occurred on ballcourts (3, 4). The different games had varied origins; the focus here, however, is on the rubber ball games and related paraphernalia.

Three types of evidence have been recovered for the ballgame, the diversity in each reflecting the great variety of games: ceramic figurines and other images of ballplayers, ballgame equipment, and ballcourts. Primarily only the first kind of evidence has been recovered by archaeologists for the Early Formative, and in many regions figurines remain the only evidence of the ballgame, suggesting activities not dependent on formal ballcourts (13). The earliest excavated ballplayer figurines formed an arranged scene of eight objects, dating to 1700 BCE, from a shaft tomb at El Opeño, Michoacan (12). Five male figurines stand, with three holding sticks/bats for hitting the ball, perhaps representing a stickball game. Costume is minimal. Although all

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[†]E-mail: blomster@gwu.edu.

[†]All dates presented are calibrated or calendar years. The Early Formative is calibrated from 1900 to 1000 BCE, the Middle Formative from 1000 to 400 BCE, and the Late Formative from 400 BCE to CE 100. In Oaxaca, the final Early Formative ceramic phases—San José (Valley of Oaxaca) and Cruz B (Nochixtlán Valley)—correspond to the Early Horizon and date from 1150 to 850 in uncalibrated years, but, due to issues with the calibration curve, increase by 100 y for the calibrated range of 1400–1000 BCE (1).

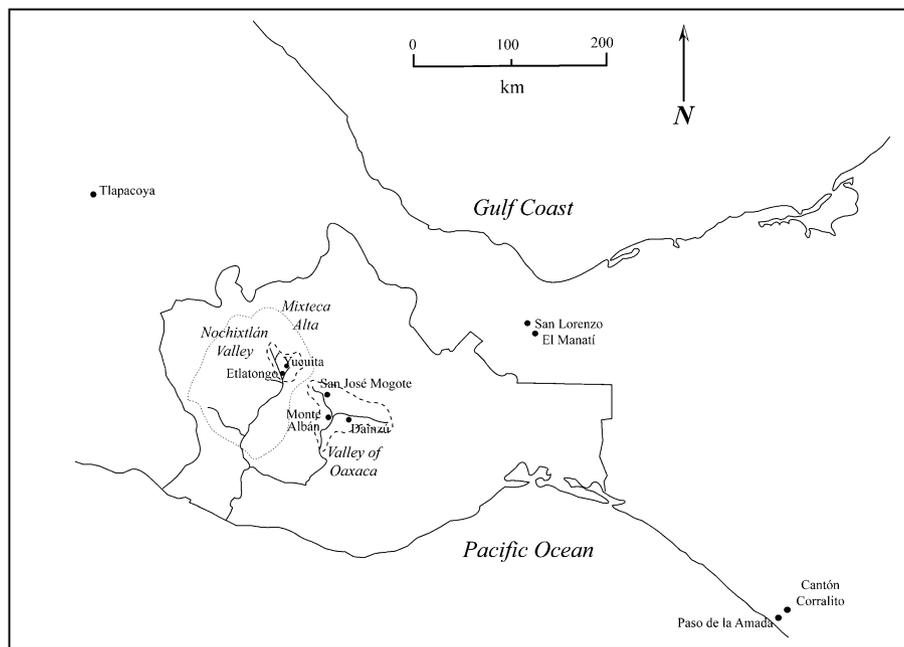


Fig. 1. Map of Oaxaca and adjacent regions of Mesoamerica, showing sites mentioned in the text.

five male figurines wear padding around the knee/lower leg, some appear to have mitts over their hands. They either wear short helmets/caps atop their heads or simply well-indicated hairdos. Three seated female figurines, lacking such paraphernalia, have been interpreted as spectators. A small basalt yoke or “yuguito” from this tomb is also the earliest excavated ballgame equipment, probably worn on the hand to either protect it and/or hit the ball (8). No evidence of a ballcourt has been found at this west Mexican site.

Located just southeast of the Olmec center of San Lorenzo in Veracruz, the water-logged site of El Manatí has yielded 14 rubber balls, ranging in diameter from 8 to 30 cm (14, 15). The balls were deposited at this Olmec shrine over hundreds of years, from 1600 BCE to the first half of the Early Horizon, and were found with ceramics comparable to those from contemporaneous San Lorenzo (15). The material comes from the rubber tree *Castilla elastica*, which occurs frequently along the coastal plains and southern region of Mexico and to the south, essentially matching the distribution of early balls and/or ballcourts (14).

Until 1995, evidence of Early Formative ballcourts remained absent in Mesoamerica, with the earliest ballcourts confined to the Middle Formative from Chiapas and coastal Guatemala (2, 4, 5), and less well-documented courts proposed for the Gulf Coast Olmec sites of La Venta, Tabasco, and San Lorenzo, Veracruz (5). The lack of early ballcourts does not imply a lack of a ballgame, as a current variant of the game can be played on a flat surface without erecting any standing architecture (9). Indeed, the expectation was that the earliest games were played on demarcated fields, not on constructed courts (13). This assumption was challenged by the discovery of an Early Formative ballcourt dating to 1600 BCE at Paso de la Amada, an early ceremonial center in the Soconusco region of coastal Chiapas (6). The earthen ballcourt, essentially two parallel range mounds with benches flanking a central alley, was constructed before, and possibly aiding, the emergence of ranked society at Paso de la Amada, associating formal ballcourts with complex societies (6, 16). The Paso de la Amada court is open-ended, lacking the characteristic “I” shape of later courts. No contemporaneous ballplayer figurines came from the site (5), indicating that costume and associated paraphernalia had yet to be codified and that

the ballgame had not yet assumed the significance seen during the subsequent Early Horizon. Hill and Clark (6) suggest that the ballcourt was part of a network of similar but undiscovered ballcourts in Early Formative Soconusco, with the ballgame interpreted as one facet of conflict and competition linked with hereditary leadership and nascent political inequality.

Early Horizon Ballgame Evidence

During the Early Horizon, competing chiefdoms throughout Mesoamerica interacted with each other, as well as with the socio-politically more complex San Lorenzo Olmec (1). The Olmecs’ level of socio-political complexity and impact on other contemporaneous societies remains highly contested (17–19). Recent chemical analyses through Instrumental Neutron Activation Analysis (INAA) have documented that ceramic vessels with and without Olmec-style iconography were crafted and disseminated by the San Lorenzo Olmec to chiefly societies in Central Mexico, Oaxaca, and Soconusco (20). Non-Gulf Coast societies made their own local emulations of Olmec symbols, but these were apparently not exchanged between regions. Subsequent petrographic analyses have supported the results of the INAA study (21), contradicting one petrographic study (22) that sought to overturn the INAA study’s results on the basis of an incomplete understanding of Gulf Coast geology (19). Additional INAA suggests that adjacent regions in Oaxaca may have exchanged vessels with extremely local designs, as opposed to Olmec-style ones, but the data for the one sherd in question do not match the confidence levels of the initial INAA study (17). On the basis of these compositional studies, the Olmec were deeply embedded in the creation and exchange of material displaying complex iconography and underlying cosmology. Some of these symbols relate to the ballgame and associated ideology of power relations.

During the Early Horizon, ballcourt ritual, paraphernalia, and social roles became codified (11). Ballgame costume is present on several pieces of monumental sculpture from San Lorenzo, a large urban center extending over 700 ha, possibly the capital of an early Olmec state (23, 24). San Lorenzo Monument 34 depicts a half-kneeling male figure with a thick protective belt and loincloth, under which a pair of trunks or shorts can be seen. The figure wears a pectoral, suspended from a thick neckband or

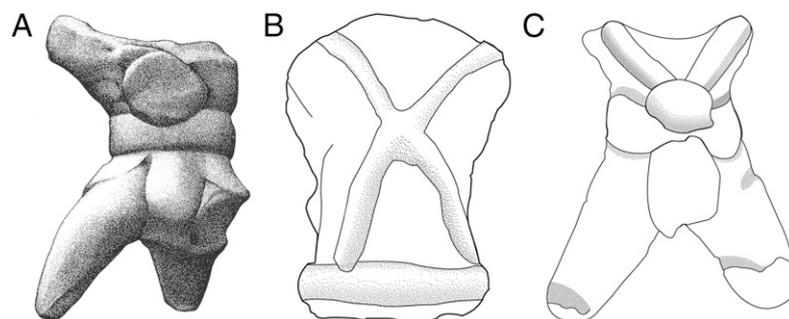


Fig. 2. Ballplayer figurines excavated at (A) San Lorenzo; height = 8 cm (courtesy of M. D. Coe, Yale University). (B) San José Mogote: back side of a torso with crossed bands; height = 7 cm. (C) San José Mogote: front of a figurine with pectoral, wide belt, and groin protector, height = 9.5 cm. (B and C were redrawn from ref. 34, figures. 11.11 and 11.40 by J. DiVirgilio, George Washington University).

collar, with detachable arms, which perhaps were arranged to show ballgame-related scores or other information. Monument 34 has been interpreted as an Olmec ruler in his role as a ballplayer (23). Found near San Lorenzo, Tenochtitlán Monument 1 features a similarly garbed ballplayer figure astride a prone figure with ankles bound together, a scene that has been interpreted as a ballplayer atop a bound captive (25, 26), indicating that the connection between the ballgame and captive sacrifice probably began with the Early Horizon Olmec.

Similar to the imagery in Monument 34, clay ballplayer figurines from Early Horizon San Lorenzo wear wide, thick padded belts and loincloths, bitumen stripes, and round pendants or pectorals interpreted as mirrors (23). As shown in Fig. 2A, the figurine's right arm is raised; examples with complete left arms are lowered and may be connected to the hip. Heads that attached to these figurines have headdresses, at least one of which sports a helmet with a flap masking the face except for the eyes (24). A second type of Early Horizon ballplayer figurine from San Lorenzo wears a mask (23, 24). Two types of ballplayer figurines have been interpreted as representing different types of ballgames or teams of players (24). An earlier (1500–1400 BCE) ballplayer figurine torso was also found at San Lorenzo (23). Early Horizon ballplayer figurines, in costumes identical to those from San Lorenzo, have also been found at various types of sites in the vicinity of El Manatí, but occur less frequently than at San Lorenzo, suggesting less direct participation in the ballgame and/or its associated rituals (27).

Along with Olmec-style objects, ballgame paraphernalia and ritualism spread to other parts of Mesoamerica during the Early Horizon. Although one site—Cantón Corralito, Soconusco—reflects close association with the San Lorenzo Olmec ballplayer costume, sites in Central Mexico—Tlapacoya and Tlatilco—represent something quite different. Before the Early Horizon in Soconusco, the ballcourt at Paso de la Amada was abandoned while ballplayer figurines appear for the first time at Early Horizon Cantón Corralito. After the decline of nearby Paso de la Amada, Cantón Corralito, became a large (~25 ha) town, interpreted as a Gulf Coast Olmec enclave due to the similarity of its ceramic assemblage with that of San Lorenzo (27). In addition to Olmec-style ceramics and figurines that have been sourced through INAA to the Gulf Coast, the ballplayer imagery on the Cantón Corralito figurines is virtually identical to examples from San Lorenzo, with thick protective belts, groin, neck, arm and leg padding, as well as large mirror pectorals (27). Although there are relatively few ballplayer figurines at Cantón Corralito compared with San Lorenzo, an additional Soconusco site—Aguiles Serdán—with Olmec-style figurines yielded no ballplayer figurines, reinforcing the perspective that only regional centers focused on the ballgame (5, 27). No Early Horizon ballcourt has been found in Soconusco; the associated paraphernalia and rituals may have been as important as the game itself.

In contrast, during the Early Horizon in Central Mexico, a distinctive group of figurines with elaborate costumes was identified by Coe (28) as ballplayers, with figures wearing thick padded belts and yokes, some of which also wear protective arm and knee bands. The costumes on these figurines, only a few of which have been excavated archaeologically at Tlatilco and Tlapacoya (29), show distinct regional differences, perhaps showing local versions in the game or the attendant rituals in lieu of the actual game. Some examples from Tlapacoya wear suspender-like vertical or crossed bands on the front torso, which support a complex yoke that projects from the body, distinct from but probably related to, the thick padded belts from San Lorenzo and Cantón Corralito. Crossed suspenders are not unique to Central Mexico; a ballplayer figurine excavated at San Lorenzo also has them on its front under the mirror pectoral (23). Some Central Mexican figurines also have tall, elaborate headdresses and ear flares, further distinguishing them from Olmec-style ballplayers. Many of the Tlatilco figurines, including those with the crossed suspenders on the torso, wear a thin belt or g-string around the lower waist, comparable to the buttocks belt still worn by modern ballgame players (9, 30), and also distinct from those at San Lorenzo and Cantón Corralito.

Oaxaca and the Ballgame

Until now, compelling evidence of an Early Horizon interest in the ballgame has been scarce from any site in the modern state of Oaxaca, Mexico. The state encompasses a wide range of cultures and environments, although most of the archaeological research has focused on the Valley of Oaxaca. Although a possible athletic/competitive use has been proposed as one of several possibilities for a flat space (20-m long × 7-m wide) demarcated by boulders at the open-air Archaic site (ca. 7000 BCE) of Gheo-Shih in the Valley of Oaxaca (18, 26), the nature and prehispanic origin of the feature have been challenged by scholars (31). Formal masonry I-shaped ballcourts do not appear until the Late Formative, concurrent with the rise of the Monte Albán state ca. 200–100 BCE (23), when 15 ballcourts appear at regional capitals or at regional boundary sites (7). The appearance of formal ballcourts coincides with the stone ballplayer reliefs at Dainzú, a second-tier site east of Monte Albán (10, 32).

The village of San José Mogote has been interpreted as the center of a small ranked society or chiefdom in the northwest arm of the Valley of Oaxaca during the Early Horizon (18). Villagers both created and imported vessels with Olmec iconography (20), and Olmec-style solid figurines (referred to as “tousured caciques”) have also been documented (33). Early Horizon ballplayer figurines,[‡] however, have not been found in

[‡]Only illustrated figurines from San José Mogote were considered, published primarily as photographs (33); some details are unclear.

primary contexts from the Valley of Oaxaca, with one possible exception (Fig. 2B). Found on the floor of House 10 at San José Mogote, a solid male torso, with limited modeling and a burnished “whitewashed” surface (33, 34), wears two thin strips of clay that cross on its back and serve as suspenders for a thin belt worn around the waist, which continues on all sides of the figurine. Comparison with Central Mexican ballplayers is illuminating. Less similar to the wide belts or yokes that hold “heavy equipment” on ballplayer figurines from Central Mexico, the narrow belt shown in Fig. 2B is more similar to a buttocks belt (30) from which loin-cloths or skirts may descend. The excavators (33) refer to the surface on which the suspenders cross over as the back, which also contrasts with the way Central Mexican and San Lorenzo figurines wear such suspenders—on the front. Although the figurine may be similar to buttocks-belt-wearing figurines from Tlatilco and Tlapacoya, some of which may be ballplayers, this small San José Mogote fragment cannot be clearly identified as a ballplayer.

The best possible candidate for an Early Horizon ballplayer figurine unfortunately comes from a San José Mogote tertiary context, encountered during profile scraping from part of the site occupied throughout the Formative (33). The figurine consists of unadorned legs attached to a torso, with a thick belt, groin covering/protector, and suspenders partially covered by a circular appliqué—probably representing a mirror pectoral (Fig. 2C). The costume is virtually identical to examples from San Lorenzo (Fig. 24), although the lack of any modeling on the conical legs is more typical of the Middle Formative; the most parsimonious dating of this figurine places it at the intersection of the Early Horizon and the Middle Formative. A massive support occupies much of the figurine’s back, quite different in its execution from the supports for other ballplayer figurines. A small fragment of an additional possible ballplayer figurine with a thick support on its back comes from an Early Horizon house floor at San José Mogote (33) and wears a thick belt and a mask. The small arms, however, are positioned in front of the torso, atop the belt, quite divergent from ballplayer poses. Although small limb fragments with “knee guards” have been reported as ballplayer figurines for the Early Horizon in the Valley of Oaxaca (33), these could pertain to costumes of ritual specialists. Indeed, the most probable ballplayer figurine from San José Mogote (Fig. 2C) does not wear knee guards.

No Early Horizon ballcourt has been found at San José Mogote, despite the substantial excavations by several projects at the site (34, 35). A stone yuguito was found in a late Early Horizon context, evincing actual ballgame costume/paraphernalia at San José Mogote (34). Although rare, ballplayer figurines do appear in the Middle Formative period in the Valley of Oaxaca, including one

torso each from San José Mogote and Fabrica San José (33) and two later examples from San José Mogote, both of which hold balls and wear buttocks belts (35).

Mixteca Alta and the Ballgame

Until recently, no early evidence for the ballgame has been found in the Mixteca Alta, a region northwest of the Valley of Oaxaca that some scholars have considered peripheral to Early Horizon socio-political complexity and interregional interaction (36). Excavations at the site of Etlatongo in the Nochixtlán Valley—the largest valley in the Mixteca—and subsequent laboratory analysis, concluded in 2011, have overturned previous misconceptions of the region. During the Early Horizon, the site expanded to ~26 ha, with evidence of higher-status houses and public space (37). During the Cruz B phase, Etlatongo was probably comparable in terms of socio-political organization to contemporaneous San José Mogote. Extensive evidence of interregional interaction has also been documented at Etlatongo; in fact, the more frequent types of foreign pottery suggest that Etlatongo may have had greater articulation with the Olmec than did the Valley of Oaxaca (17, 20, 37).

The Etlatongo excavations also yielded the earliest evidence of the ballgame for this region. A figurine torso, without its head and only the upper portions of the arms remaining (Fig. 3), came from one (Context 691) of a series of refuse deposits that formed a midden, placed over an abandoned Cruz B surface. In addition to Cruz B sherds, a shallow feature in the underlying floor yielded a carbon sample from between 1399 and 899 BCE, calibrated using two σ statistics, with an intercept on the calibration curve at 1122 BCE (38). Olmec-style figurines and pottery come from this same Cruz B time period and are contemporaneous with the Etlatongo ballplayer. Context 691 comes from the third of four consecutive higher-status Cruz B occupations in this part of the site, where houses of possible nascent leaders were placed on small platforms, marking them as architecturally distinct. Higher-status households, however, are overrepresented in the small Etlatongo sample (37). In the Valley of Oaxaca, high-status houses were not placed on platforms, an architectural arrangement reserved for public space (34). The keeper of the Etlatongo ballplayer had access to other exotic paraphernalia and symbols.

The Etlatongo ballplayer figurine is made from the most common Cruz B ceramic recipe: a coarse brown paste, with large and frequent nonplastic inclusions. Ceramic sherds with comparable paste subjected to INAA consistently demonstrate local manufacture (20). Many of the inclusions break the surface of this figurine, especially on its back. What appears in the photograph (Fig. 3A) to be a nipple on the right pectoral muscle is

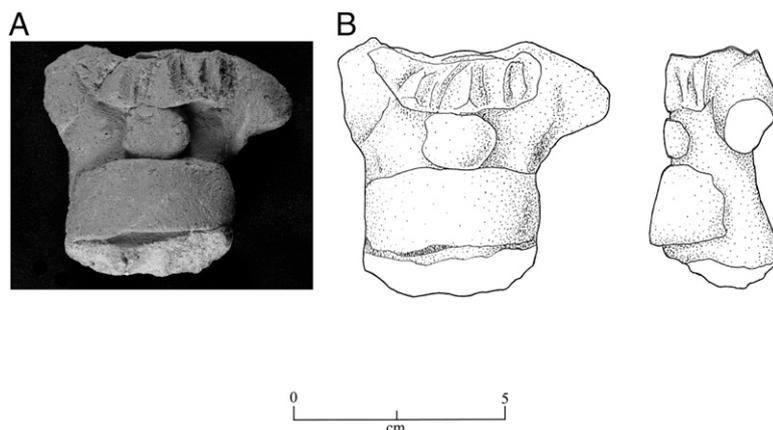


Fig. 3. Ballplayer figurine excavated at Etlatongo: (A) photograph; (B) front and left profile drawing. Areas without stippling are broken (inked by Z. Nacheinan, George Washington University).

simply a protruding inclusion. No slip remains on the surface, which was scraped and roughly smoothed.

The figurine depicts subtle pectoral muscles, indicative of a male torso. Due, however, to their general lack of primary sexual characteristics, Early Horizon figurines in Oaxaca are difficult to assign to a biological sex, leading to a reliance on secondary sexual characteristics, which may be problematic due to an emphasis in some early figurines on showing age rather than sex (37). Although much of the body is covered by costume, a slender abdominal area extends below the belt, and the locations for two legs can be seen in the breakage below it (Fig. 3*B*). With the remaining fragment, it is not possible to determine if this figurine had a support, as do most ballplayers.

The evidence that this figurine depicts a ballplayer derives from the costume. The figure wears a wide, thick belt that covers nearly the entire abdominal area, extending to the lower chest. The belt extends along the figurine's left side, but not onto its back. A thick neckband or collar, with indentations suggesting additional elaboration, descends from the missing neck area. From this collar, a round pectoral is suspended—probably the same kind of iron-ore mirror worn by other Early Horizon ballplayers. These costume elements are identical to those on Olmec-style figurines from San Lorenzo and Cantón Corralito, but substantially different from those at Tlapacoya and Tlatilco. Although the arms are largely absent, the pose corresponds with Olmec ballplayer figurines from San Lorenzo and Cantón Corralito: the right arm is raised, and the left arm is lowered (compare with Fig. 24).

The discovery of a ballplayer figurine at Etlatongo documents an early interest in ballplaying or, in lieu of the discovery of any contemporaneous ballcourts, at least its paraphernalia in Oaxaca. Given the extensive excavations at contemporaneous sites in the Valley of Oaxaca, it seems unlikely that an Early Horizon ballcourt will be found. A masonry ballcourt does occur at Etlatongo, but 1500 y after the ballplayer figurine. In the large sample of Early Horizon figurines from Etlatongo, this ballplayer torso is unique (although, as in the Valley of Oaxaca, limbs have been found with potentially related costume elements). Interest in ballplaying and/or its paraphernalia was not widespread at early villages in Oaxaca, and, at Etlatongo, the higher-status context of this figurine supports interpretations that ballplaying iconography may have been part of the power strategies of nascent leaders (39). The discovery of a ballplayer figurine at Etlatongo, interpreted as a regional center in the Nochixtlán Valley, further supports that an Early Horizon interest in ballplaying was focused on such centers (as also seen at San José Mogote), which also exhibited sustained contact with Gulf Coast Olmec imagery.

Much of the ballgame regalia featured in art throughout the temporal and spatial range of Mesoamerica was probably not worn during the actual game, but primarily in associated ceremonies occurring before or after the game (8). Whether or not some version of the ballgame was played during the Early Horizon at Etlatongo, clearly ballplayer iconography was channeled by nascent leaders as part of a larger interest in foreign imagery and cosmology. In the Late Formative and beyond in Oaxaca, ballplayers were sculpted in public space (Dainzú) or painted in an elite tomb (Tomb 5, Cerro de la Compañía); however, ballgame imagery was rarely expressed in widely accessible portable art (figurines), reinforcing its restricted access. Such imagery was a trope reserved for leaders and elites throughout Mesoamerica, the origins of which in Oaxaca can be seen with the Etlatongo figurine.

The choice of pose and costume crafted for this figurine is also significant. The arrangement of the arms and the paraphernalia depicted on the Etlatongo ballplayer visually links it with distant Gulf Coast Olmec symbols and cosmology, as well as with the ideology encoded by the costumes of early rulership (39). Central

Mexican costumes may also have been inspired by similar pan-Mesoamerican phenomena, as both Olmec style iconography and figurines have been documented at the sites of Tlatilco and Tlapacoya (29), but variations in ballplayer regalia may relate to regional differences and affiliations as well as to differences in games.

Conclusions

In Oaxaca, the appearance of formal I-shaped ballcourts ca. 200/100 BCE has been linked with the creation of a Monte Albán state game and other state institutions (18). Formal ballgames and attendant rituals, however, date from the Early Horizon. Although an earlier earthen ballcourt comes from Soconusco, and earlier rubber balls come from pre-Early Horizon Olmec deposits at El Manatí, the appearance of consistent ballplayer costume and regalia is an Early Horizon transformation, visible on both monumental sculpture at San Lorenzo and ceramic figurines, including the one from Etlatongo. Elements of Early Horizon ballgame paraphernalia (thick waist belts and yokes, collars and headdresses) persisted in various configurations throughout the trajectory of the ballgame in Mesoamerica. Even in the Late Formative ballplayer imagery from Dainzú, older elements such as thick padded belts meshed with new and regionally distinct Oaxacan features, such as a helmet with bars that covers the player's face.

Scholars agree that the ballgame was closely associated with rulership, with ballcourts an important venue for the kinds of social differentiation that took place during the Middle and Late Formative throughout Mesoamerica (4, 5). If the later ballgame represented institutionalized ritual combat with important referents in both local and regional socio-political conflict and competition (10), the glimpses of the Early Horizon version of the game provided by figurines and sculptures shows the early linkage between elite power and ballplaying. The ballgame and sacrifice were intertwined in later societies (3); similar principles regarding blood sacrifice as affirming the covenant between humans and the supernatural were first embedded in the Early Horizon version of the ballgame, as seen in Tenochtitlán Monument 1. Indeed, these roles and attendant paraphernalia may have been more important than the game itself, as evinced by the lack of evidence for Early Horizon ballcourts.

The appearance of leaders wearing costumes removed from normal daily activity represents a shift in the ontology of rulership, with early Olmec leaders at San Lorenzo shown as physically powerful combatants but, increasingly through time, in vestments that illustrate their abilities to channel divine authority (39). In lieu of truly coercive authority, scholars such as Clark (39) have noted that the Olmec displayed and manipulated both monumental and portable art objects for covert control of ideology that focused on the privileged role of nascent leaders in controlling supernatural forces. Such principles lay at the foundation of the power structures in the state that emerged 1000 y later in Oaxaca at Monte Albán (31). The frequency of supports on Early Horizon ballplayer figurines further suggests that they were arranged in scenes. Costume and paraphernalia depicted on ballplayer imagery represent early props and identities that nascent rulers monopolized. The scarcity of ballplayer figurines in subsequent phases in highland Oaxaca (see above) suggests their continued importance in such strategies before the emergence of the Monte Albán state.

More formalized ballgame paraphernalia may represent a level of contact between elites of distant regions that was largely lacking before the Early Horizon. Costumes signaled mutually beneficial relationships, as evinced by the identical ballplayer costumes in the Gulf Coast and Soconusco. Variations in ballplayer costume between the Gulf Coast and Central Mexico reflect the complexity of Early Horizon interaction, with great differences in how elements were accepted or reinterpreted between regions. In both regions,

however, the underlying symbolism of ballplayers referenced power and fertility, linking figurines in both the Gulf Coast and the Valley of Mexico (30). Similar costume differences can potentially be seen on a smaller scale within Oaxaca. The Etlatongo figurine clearly exhibits a costume and pose inspired by Olmec-style ballplayers, as does one ballplayer figurine from San José Mogote (Fig. 2C). The San José Mogote figurine illustrated in Fig. 2B, perhaps showing a ritual specialist rather than specifically a ballplayer, is more linked with Central Mexican costumes. It has been proposed that the earliest Lowland Maya ballplayer images represent negotiation between contrasting ethnic and geographic entities (40); a similar phenomenon may be reflected by the differences and similarities in ballgame paraphernalia both between distant regions during the Early Horizon and between neighboring societies in Oaxaca. The contemporaneous appearance in Oaxaca of Olmec-style figurines, pottery decorated with complex iconography, and ballplayer figurines materialized both a transformed cosmology and an ontology of society, with different regional impacts in the Nochixtlán Valley and the Valley of Oaxaca. Indeed, the substantially lesser impact of Olmec-style objects on

artifact assemblages throughout Oaxaca compared with Soconusco suggests the degree of local negotiation involved with the adoption and transformation of such concepts and materialities.

The Mesoamerican ballgame clearly had antecedents before the Early Horizon, as shown by an earlier ballcourt, rubber balls, and figurines. The Etlatongo ballplayer figurine, however, demonstrates the spread of a more codified version of the ballgame during the Early Horizon. Just as the Olmec synthesized and packaged many preexisting elements of what became Mesoamerican civilization, they may also have invested the ritual ballgame with the cosmological, religious, and socio-political structures that informed the many variants of it in the subsequent two millennia of Mesoamerican societies.

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- Pool CA (2007) *Olmec Archaeology and Early Mesoamerica* (Cambridge Univ Press, Cambridge, UK).
- Taladoire E (2001) *The Sport of Life and Death: The Mesoamerican Ballgame*, ed Whittington EM (Thames & Hudson, New York), pp 96–115.
- Schele L, Miller ME (1986) *The Blood of Kings: Dynasty and Ritual in Maya Art* (Kimball Art Museum, Fort Worth, TX).
- Fox JG (1996) Playing with power: Ballcourts and political ritual in southern Mesoamerica. *Curr Anthropol* 37:483–509.
- Hill WD (1999) Ballcourts, Competitive Games and the Emergence of Complex Society, PhD dissertation (Univ of British Columbia, Vancouver).
- Hill WD, Clark JE (2001) Sports, gambling, and government: America's first social compact? *Am Anthropol* 103:331–345.
- Kowalewski SA, Feinman GM, Finsten L, Blanton RE (1991) *The Mesoamerican Ballgame*, eds Scarborough VL, Wilcox DR (Univ of Arizona Press, Tucson), pp 25–44.
- Scott JF (2009) *Blood and Beauty: Organized Violence in the Art and Archaeology of Mesoamerica and Central America*, eds Orr HS, Koontz R (Cotsen Institute of Archaeology Press, Los Angeles), pp 99–115.
- Leyenaar TJJ (1978) *Ulama: The Perpetuation in Mexico of the Pre-Spanish Ball Game Ullamalitzli* (Brill, Leiden, The Netherlands).
- Orr HS (2003) Stone balls and masked men: Ballgame as combat ritual, Dainzú, Oaxaca. *Ancient America* 5:73–104.
- Taube KA, Zender M (2009) *Blood and Beauty: Organized Violence in the Art and Archaeology of Mesoamerica and Central America*, eds Orr HS, Koontz R (Cotsen Institute, Los Angeles), pp 161–220.
- Oliveros JA (1992) *El Juego de Pelota en Mesoamérica: Raíces y supervivencia*, ed Uriarte MT (Siglo Veintiuno Editoriales, Mexico City), pp 39–51.
- Ekholm SM (1991) *The Mesoamerican Ballgame*, eds Scarborough VL, Wilcox DR (Univ of Arizona Press, Tucson), pp 241–249.
- Filloy Nadal L (2001) *The Sport of Life and Death: The Mesoamerican Ballgame*, ed Whittington EM (Thames & Hudson, New York), pp 20–31.
- Ortiz Ceballos P, Carmen Rodríguez M, Delgado A (1997) *Las investigaciones arqueológicas en el cerro sagrado Manatí* (Universidad Veracruzana, Xalapa, Mexico).
- Clark JE (2004) *Mesoamerican Archaeology: Theory and Practice*, eds Hendon JA, Joyce RA (Blackwell, Malden, MA), pp 43–72.
- Blomster JP (2010) Complexity, interaction and epistemology: Mixtecs, Zapotecs, and Olmecs in Early Formative Mesoamerica. *Ancient Mesoamerica* 21(1):135–149.
- Marcus J, Flannery KV (1996) *Zapotec Civilization: How Urban Society Evolved in Mexico's Oaxaca Valley* (Thames & Hudson, New York).
- Neff H, et al. (2006) Smokescreens in the Provenience Investigation of Early Formative Mesoamerican Ceramics. *Lat Amer Antiq* 17:104–118.
- Blomster JP, Neff H, Glascock MD (2005) Olmec pottery production and export in ancient Mexico determined through elemental analysis. *Science* 307:1068–1072.
- Cheatham D, et al. (2009) Petrographic analyses of Early Formative Olmec carved pottery. *Mexicon* 31:69–72.
- Stoltman JB, Marcus J, Flannery KV, Burton JH, Moyle RG (2005) Petrographic evidence shows that pottery exchange between the Olmec and their neighbors was two-way. *Proc Natl Acad Sci USA* 102:11213–11218.
- Coe MD, Diehl RA (1980) *In the Land of the Olmec* (Univ of Texas Press, Austin).
- Cyphers A, Di Castro A (2009) *The Art of Urbanism: How Mesoamerican Kingdoms Represented Themselves in Architecture and Imagery*, eds Fash W, López Luján L (Dumbarton Oaks Research Library and Collection, Washington, DC), pp 21–52.
- Medellín A (1960) Monolitos inéditos olmecas. *La Palabra y El Hombre* 16:75–97.
- Taube KA (1992) Uses of sport. *Science* 256:1064–1065.
- Cheatham D (2010) *America's First Colony: Olmec Materiality and Ethnicity at Canton Corralito, Chiapas, Mexico*. PhD dissertation (Arizona State University, Tempe).
- Coe MD (1965) *The Jaguar's Children: Pre-Classical Central Mexico* (Museum of Primitive Art, New York).
- Niederberger Betton C (1987) *Paleopaysages et Archeologie Pre-Urbaine du Bassin de Mexico* (Centre D'Etudes Mexicaines et Centramericaines, Mexico City).
- Bradley DE (2001) *The Sport of Life and Death: The Mesoamerican Ballgame*, ed Whittington EM (Thames & Hudson, New York), pp 32–39.
- Joyce AA (2010) *Mixtecs, Zapotecs, and Chatinos: Ancient Peoples of Southern Mexico* (Blackwell, Malden, MA).
- Bernal I, Oliveros A (1988) *Exploraciones arqueológicas en Dainzú, Oaxaca* (Instituto Nacional de Antropología e Historia, Mexico City).
- Marcus J (1998) *Women's Ritual in Formative Oaxaca: Figurine-making, Divination, Death and the Ancestors* (Museum of Anthropology, Univ of Michigan, Ann Arbor).
- Flannery KV, Marcus J (2005) *Excavations at San José Mogote I: The Household Archaeology* (Museum of Anthropology, University of Michigan, Ann Arbor).
- Fernández Dávila E, Gómez Serafín S (1997) *Historia del Arte de Oaxaca*, Vol. 1: *Arte Prehispánico*, eds Dalton Palomo M, Loera y Chávez V (Instituto Oaxaqueño de las Culturas, Oaxaca, Mexico), pp 79–105.
- Marcus J (1989) *Regional Perspectives on the Olmec*, eds Sharer RJ, Grove DC (Cambridge Univ Press, New York), pp 148–197.
- Blomster JP (2004) *Etlatongo: Social Complexity, Interaction, and Village Life in the Mixteca Alta of Oaxaca, Mexico* (Wadsworth, Belmont, CA).
- Stuiver M, Reimer PJ (1983) University of Washington Quaternary Isotope Lab Radiocarbon Calibration Program Rev. 3.03A, MAC Test Version #6. *Radiocarbon* 35: 215–230.
- Clark JE (1997) Arts of government in Early Mesoamerica. *Annu Rev Anthropol* 26: 211–234.
- Cohodas M (1991) *The Mesoamerican Ballgame*, eds Scarborough VL, Wilcox DR (Univ of Arizona Press, Tucson), pp 251–288.