

Pre-Columbian Art at Dumbarton Oaks, No. 2

OLMEC ART AT DUMBARTON OAKS

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Karl A. Taube

Dumbarton Oaks Research Library and Collection
Washington, D.C.

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to come

*To the memory of Carol Callaway, Alba Guadalupe Mastache, Linda Schele,
and my sister, Marianna Taube—four who fought the good fight*

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Preface

Olmec art held a special place in the heart of Robert Woods Bliss, who built the collection now housed at Dumbarton Oaks and who, with his wife, Mildred, conveyed the gardens, grounds, buildings, library, and collections to Harvard University. The first object he purchased, in 1912, was an Olmec statuette (Pl. 8); he commonly carried a carved jade in his pocket; and, during his final illness, it was an Olmec mask (Pl. 30) that he asked to be hung on the wall of his sick room. It is easy to understand Bliss's predilection for Olmec art. With his strong preference for metals and polished stone, the Olmec jades were particularly appealing to him. Although the finest Olmec ceramics are masterpieces in their own right, he preferred to concentrate his collecting on jades.

As Karl Taube discusses in detail in this volume of *Pre-Columbian Art at Dumbarton Oaks*, Olmec jades are the most beautiful stones worked in Mesoamerica. Whether simple or elaborate, the shapes and inscriptions painstakingly worked in jade never overwhelm the presence of the stone itself. Variations in light change colors from almost blue to subtle gray to brilliant green and shift the sense of density of the material from translucent to deeply opaque or somewhere in between. This magical quality of jade must have been a principle reason why the stone assumed such importance so early in Mesoamerican culture, a status that had remained undiminished at the time of the Spanish arrival.

Although Olmec jades have an immediate, sensual appeal to modern tastes, the meanings they had to their makers have remained elusive. The hot and humid lowlands of Tabasco and Veracruz, the home of the Olmec, have not been inviting to archaeologists nor have they been kind to ancient remains more perishable than hard stone or fired clay. As Taube discusses in his introduction to the catalogue, it was not until the late 1950s that the Olmec were finally and securely recognized as earlier than the Maya and other, better-known cultures of ancient Mesoamerica.

We are thus still in the very early stages of learning about the people of this ancient culture and the art they produced. The great Mexican anthropologist Alfonso Caso referred to the Olmec as a "Mother Culture" from which all subsequent Mesoamerican civilizations sprang, a view shared by his colleague Miguel Covarrubias and only a handful of others at the time. We now know that the Olmec were not the only makers of art and culture in early Mesoamerica, but questions remain regarding the origins, spread, and influence of the Olmec art style, in distinction to the Olmec archaeological culture of the heartland. Important field research by archaeologists of Mexico, North America, and other nations is ongoing, building on the work of an earlier generation that included Matthew Stirling and Michael D. Coe, both personal friends and advisors to Robert Bliss.

The Olmec did serve as a "Mother Culture" in one sense, producing the seed from which the Bliss collection grew. The scholarship that Dumbarton Oaks has supported over the years has helped to advance knowledge of this ancient American culture and many others. Karl Taube and I offer this volume as one more contribution to this goal, cultivating the plant germinated by the seed of Robert Woods Bliss's first jade statuette.

Preface

Because so much basic work remains to be done, our view of the Olmec in ten or twenty years may be very different from what it is today. This fact, combined with our primary goal being a catalogue of the collection at Dumbarton Oaks, has encouraged us to avoid a detailed synthesis of research on the Olmec with all of the alternative points of view represented. Instead, Taube discusses the objects from his own unique and highly informed perspective. Many of his insights are new and intriguing, and some may be controversial, but all of them are original and engaging, making a significant contribution to Olmec scholarship in addition to providing the essential facts about the objects presented here.

As the current editor of the catalogue series, I wish to offer my personal thanks to some of the many people who helped make this volume possible, many of whom are thanked by Karl Taube in his acknowledgment. First and foremost, I thank Karl who took on and achieved this ambitious and sometimes daunting project. It has been a pleasure to work with him. I offer a most sincere appreciation to Angeliki Laiou, director of Dumbarton Oaks during the genesis and early growth of this work. Edward Keenan, the current director of Dumbarton Oaks, is thanked for his continuing support of the project. Very special thanks are extended to Marlene Chazan, director of the Financial Office, who was patient and generous with her time and resources in dealing with the sometimes tortuous financial details of working with this project.

The late Carol Hamill Callaway, assistant curator of the Pre-Columbian collection, was vital in moving the catalogue along with her energy and good humor. This was the last manuscript for Dumbarton Oaks on which she worked, and it is fitting that the volume is dedicated in part to her. Her successor, Loa Traxler, was valiant in plunging into a work in progress and succeeded remarkably well in helping to bring the project to closure. Warren Church also did great service to this work in his role as curatorial associate during 1997 and 1998. Bridget Gazzo, the librarian of Pre-Columbian Studies, has helped with innumerable bibliographic matters.

Photographer Joe Mills has admirably captured much of the evanescent qualities of jade, so difficult to reproduce. Russel Feather of the Smithsonian Institution's National Museum of Natural History and Paul Jett of the Freer Gallery have offered their vital technical skills. Janice Williams has assisted in a myriad number of ways, keeping track of files, correspondence, photographs, and the like. The staff of the Publications Department at Dumbarton Oaks, especially Glenn Ruby and Robin Surratt, were patient and caring in their ministrations to get the final manuscript into shape and in print.

I wish to offer very special thanks to Billie Follensbee, who served as an intern in Pre-Columbian Studies from 1997 to 1999, while she was a graduate student in the Department of Art History and Archaeology at the University of Maryland. A specialist in things Olmec, Billie was invaluable in working with pictures and texts, catching missteps in the production process, and in tracking a host of details. Her service above and beyond the call of duty is greatly appreciated, and her knowledge of Olmec art and archaeology made a crucial difference in speeding the project along.

Finally, thanks to the many scholars who have contributed to this volume in direct and indirect ways. These include scholars who have never crossed the threshold of Dumbarton Oaks, symposium participants, occasional visitors, fellows, and senior fellows of Pre-Columbian Studies. Their dedication to their subjects of interest and their goodwill and fellowship have not only sustained this project but also have enriched the experiences of all who work in Pre-Columbian Studies.

Jeffrey Quilter

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A number of individuals were of great help at Dumbarton Oaks, including the former, acting, and current directors of Pre-Columbian Studies, respectively, Elizabeth H. Boone, Richard A. Diehl, and Jeffrey Quilter; I especially want to thank Jeff for his editorial comments and suggestions. I am very grateful to former Assistant Curator Carol Callaway for her thoughtful assistance with the collection, editorial advice, and insights on some of my line drawings. Warren Church also kindly provided access to items in the collection at Dumbarton Oaks and editorial comments. In addition, Janice Williams, assistant to the director of Pre-Columbian Studies, has been of great help, both during my visits to Dumbarton Oaks and while I was writing this volume in California. Dumbarton Oaks photographer Joseph Mills was wonderfully responsive concerning camera angles and details, and his expertise and care have been instrumental in the quality of this volume. Billie Follensbee also supplied very useful comments and corrections concerning particular line drawings and called my attention to an additional Olmec stone mask in the Dumbarton Oaks collection. She also supplied valuable editorial suggestions. I also owe thanks to the former Assistant Curator, Loa Traxler, for her assistance in bringing this manuscript to publication.

I also wish to thank Russel Feather, gemologist in the Division of Mineralogy at the Smithsonian National Museum of Natural History, for identifying particular stones used in sculptures. Mineralogical identification of hematite and cinnabar pigments was kindly performed by Paul Jett of the Freer Gallery.

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Years	Relative Chronology	Central Mexico	Oaxaca	Gulf Coast	West Mexico	Maya Highlands/Pacific Coast	Lowland Maya
1519	Late Postclassic	Aztecs <i>Tenochtitlán</i> <i>Tlaxcala</i>	Mixtec independent kingdoms <i>Mitla</i>	<i>Cempoala</i>	Tarascans	Maya independent city-states <i>Mixco Viejo</i> , <i>Iximché</i> , <i>Utatlán</i>	<i>Tulum</i> <i>Mayapán</i>
1200	Early Postclassic	Toltecs <i>Tula</i>	<i>Yagul</i>			<i>Cotzumalhuapa</i>	<i>Chichen Itza</i> (Toltec Maya)
900	Terminal Classic	<i>Xochicalco</i> and <i>Cacaxtla</i>	Monte Albán IIIb	<i>El Tajín</i>	Classic Veracruz		Tepue Phase <i>Uxmal</i> and <i>Puuc</i> sites <i>Palenque</i> <i>Tikal</i> <i>Yaxchilán</i>
600	Late Classic			<i>Remojadas</i>			
300	Early Classic	<i>Teotihuacan</i>	Monte Albán IIIa	<i>Cerro de las Mesas</i>		<i>Kaminaljuyu</i> Esperanza Phase <i>Kaminaljuyu</i>	Tzakol Phase <i>Copán</i> <i>Tikal</i> <i>Uaxactún</i>
A.D. B.C.	Proto Classic		Monte Albán II <i>Dainzú</i>			Miraflores Phase <i>Kaminaljuyu</i> <i>Izapa</i> <i>Kaminaljuyu</i> <i>Abaj Takalik</i>	Chicanel Phase <i>El Mirador</i> <i>Nakbe</i> <i>Cerros</i> <i>San Bartolo</i>
300	Late Formative	<i>Cuicuilco</i> <i>Ticomán</i> <i>Zacatenco</i>	Monte Albán I	<i>Tres Zapotes</i>		<i>Chupícuaro</i> <i>Santa Leticia</i> <i>Monte Alto</i> (Late Formative)	
600	Middle Formative	<i>Tlapacoyá</i>	Guadalupe	<i>La Venta</i> <i>Río Pesquero</i> <i>La Merced</i>	<i>Teopantecuanitlan</i> <i>Oxtotitlán Cave</i> <i>Juxtlahuaca Cave</i>		<i>Pijijiapan</i> <i>Xoc</i>
900	Early Formative	<i>Tlatilco</i> <i>Las Bocas</i>	San José Tierras Largas	<i>San Lorenzo</i> <i>San Lorenzo B</i> <i>San Lorenzo A</i> <i>Chicharras</i> <i>Bajío</i> <i>Ojochi</i> <i>El Manatí</i>	<i>Xochipala</i> <i>El Opeño</i> <i>Capacha</i>	Cuadros Phase Cherla Phase Ocos Phase Locona Phase	
1500			<i>San José Mogote</i> <i>Espiridión</i>			<i>Barra</i>	
2000		<i>Purron</i>					
2500	Archaic		<i>Martínez</i>			<i>Chantuto B</i>	
3000		<i>Abejas</i>	<i>Blanca</i>				

Chronological Chart of Mesoamerica (All dates are calibrated.)

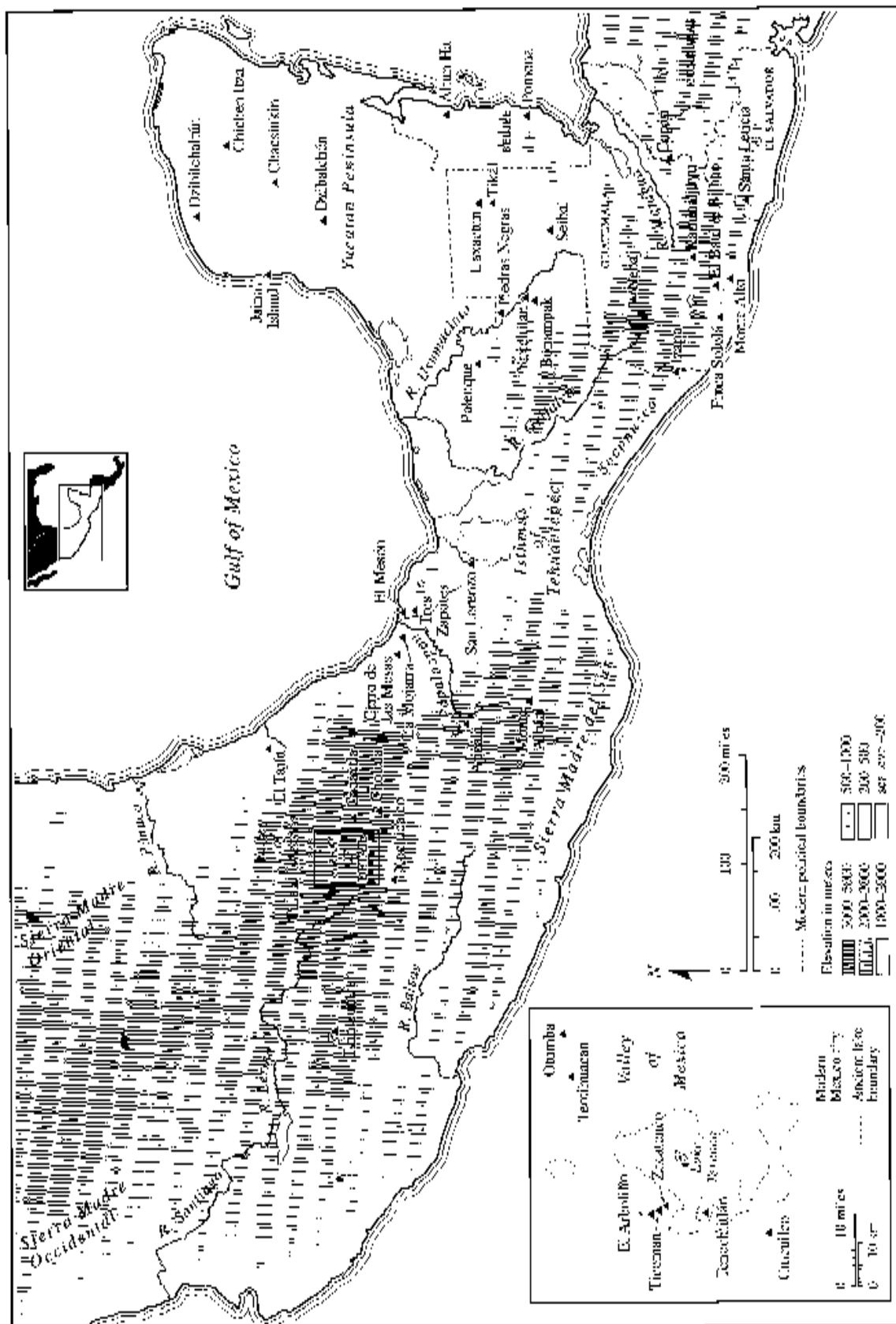


Fig. 1 Mesoamerican sites mentioned in text

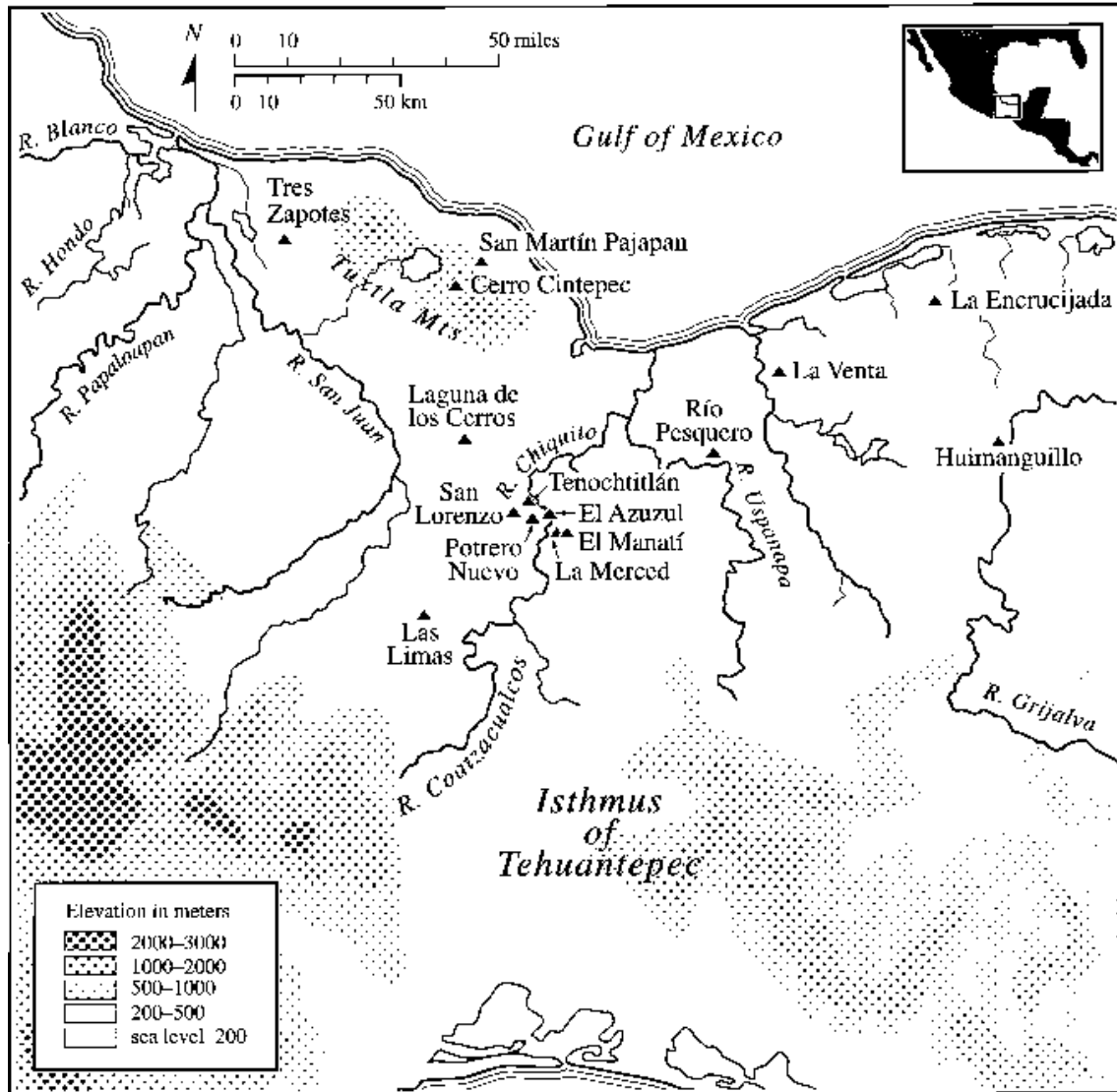


Fig. 3 Formative sites of the Olmec heartland

INTRODUCTION

THE ORIGIN AND DEVELOPMENT
OF OLMEC RESEARCH

Karl A. Taube

In 1912, when Robert Woods Bliss acquired a fine Olmec statuette as his first Pre-Columbian object, little was known of the Olmec and their relation to other cultures of ancient Mesoamerica. In fact, when Bliss purchased this jade sculpture (Pl. 8), it was described as Aztec. Decades earlier, José María Melgar y Serrano (1869) had published the first account of an Olmec monument, a colossal stone head, Monument A, at the site of Tres Zapotes, but Melgar y Serrano saw Africoid features and linked the figure to Africa, rather than recognizing it as a product of Pre-Columbian peoples. Subsequently, Alfredo Chavero (1887) also identified the head as Africoid, but additionally noted that a motif on the brow resembled certain Asian signs. To this day, the Olmec continue to be traced to such distant regions as Africa and China (van Sertima 1979; Thompson 1989; González Calderón 1991; Xu 1996).¹ The archeological evidence argues for an entirely indigenous development, however, and many Olmec traits are traceable to earlier cultures of Early Formative Mesoamerica. There simply is no material evidence of any Pre-Hispanic contact between the Old World and Mesoamerica before the arrival of the Spanish in the sixteenth century.

Following the publication of the Tres Zapotes sculpture, smaller portable sculptures of Olmec style were collected by connoisseurs. Among these objects were beautifully but also strangely carved stone axe heads, including the massive jadeite Kunz Axe (Saville 1929). But it was not until the 1925 explorations of Frans Blom and Oliver La Farge (1926) that the Olmec style was associated with a specific geographical area. Blom and La Farge were the first to publish on the large Olmec site of La Venta and a number of its important stone sculptures. In addition, they reported the remarkable monument from the summit of San Martín Pajapan, a fine sculpture in pure Olmec-style (Fig. 49a). In contrast to celts and other portable objects, these massive stone monuments precluded transportation over vast distances; instead, they clearly were carved in the local southern Gulf Coast region of Veracruz and neighboring Tabasco.

¹ Quite frequently, arguments for Old World contacts are based on superficial visual resemblances. A particularly egregious example appeared in *U.S. News & World Report* (Fenyvesi 1996). According to Shang scholar Han Ping Chen, one of the miniature jade stelae from La Venta Offering 4 contains a readable Chinese text (ibid.). It has been known for some time, however, that these miniature stelae derive from halves of incised celts cut along the central long axis. Two of the incised Offering 4 "stelae" are parts of the same incised celt, which portrayed a flying figure holding a knuckle-duster and maize ear fetish (see Cervantes 1969: fig. 11). As for the purported incised Shang text, it constitutes half of a frontally facing depiction of the Olmec Maize God. For a reconstruction of the entire figure, see Reilly n.d.: fig. 4.51.

Introduction

Although Blom and La Farge were the first to document a major corpus of Olmec monuments, they perceived these sculptures in terms of the better-known Classic Maya remains. Thus, although noting that some traits at La Venta could be compared with sculptures from the Tuxtla region of Veracruz, they believed that a number of La Venta monuments suggested a Maya identity: “The Maya features upon Stela 2, the standing figure with diagonal ceremonial bar and huge headdress, and in Altars 3 and 4, are so strong that we are inclined to ascribe these ruins to the Maya culture” (Blom and La Farge 1926: 90). But other researchers were beginning to define the Olmec as a distinct people and culture. As early as 1892, Francisco del Paso y Troncoso describes a number of ceramic figures from Puebla and Guerrero as “Olmec” in type (Paso y Troncoso 1892; Piña Chan 1989: 25). In a review of the Blom and La Farge publication, Hermann Beyer (1927) uses the term *Olmecan* to refer to a number of objects from the Gulf Coast region. Soon after, Marshall Saville (1929) provides a far more detailed discussion of the Olmec art style and its distribution. Saville (ibid.: 284) calls attention to the distinctive protruding lip commonly found on Olmec faces, which he describes as “tiger masks.” Due to the San Martín Pajapan monument, Saville argued that this style was centered in the southern Gulf Coast region: “This peculiar type of mask may be safely assigned to the ancient Olmecan culture, which apparently had its center in the San Andrés Tuxtla area around Lake Catemaco, and extended down to the coast of the Gulf of Mexico in the southern part of Vera Cruz” (ibid.: 285). Several years later, George Vaillant (1932) also used the term *Olmec* to refer to the jade Necaxa Statuette, which was previously considered Chinese (Fig. 43c). In addition, Vaillant called attention to many other sculptures of Olmec style, including related “baby face” forms.

The use of the term *Olmec* by Beyer, Saville, and Vaillant, is based primarily on geographic rather than temporal considerations. The name *Olmec*, or in Spanish *Olmeca*, derives from the contact period Gulf Coast culture documented by Fray Bernardino de Sahagún (1950–82, 10: 187–188) and other early colonial sources (Jiménez Moreno 1942). Given the poor understanding of ancient Mesoamerican chronology, it is not surprising that Vaillant (1932) included objects dating from the Early Formative to the Late Postclassic period in his discussion of the Olmec style. He considered the Olmec an ancient race that was forced by other developing peoples into the Gulf Coast and neighboring regions: “It seems possible that the bearded flat-nosed people [ancestral Olmec] may have been driven back through the rise of the Nahua and Maya tribes in early times and later achieved their artistic evolution in the Vera Cruz–Oaxaca–Puebla region.” (ibid.: 518) According to Vaillant, the ancient Olmec art style and the contact period Olmeca were one and the same. Although it is now clear that the striking art style of “tiger masks” and “baby faces” is far earlier than the contact period Olmeca, the Olmec appellation continues to this day. Many have bemoaned the naming of an especially early culture after a contact period people, but there is no confusion in current studies. In fact, the term *Olmec* is now far more commonly used for the Formative period culture (1200–500 B.C.) than for its historic namesake. In this volume, Olmec will refer specifically to the Formative period culture and its art style.

By the 1930s, a number of scholars recognized the southern Gulf Coast as the heartland of the Olmec style. Systematic excavation did not begin in this region until 1939, however, when Matthew Stirling launched a two-year project at Tres Zapotes. With support from National Geographic and the Smithsonian Institution, Stirling continued to work in this region until 1949. Along with Tres Zapotes, he engaged in excavations at Cerro de las Mesas, La Venta, and the great site of San Lorenzo (Coe 1968). From the beginning, Stirling (1940) was convinced of the antiquity and importance of the Olmec: “Present archaeological evidence indicates that their culture [Olmec], which in many respects reached a high level, is very early and may well be the basic civilization out of which developed such high art centers as those of the Maya, Zapotecs, Toltecs, and Totonacs” (ibid.: 333).

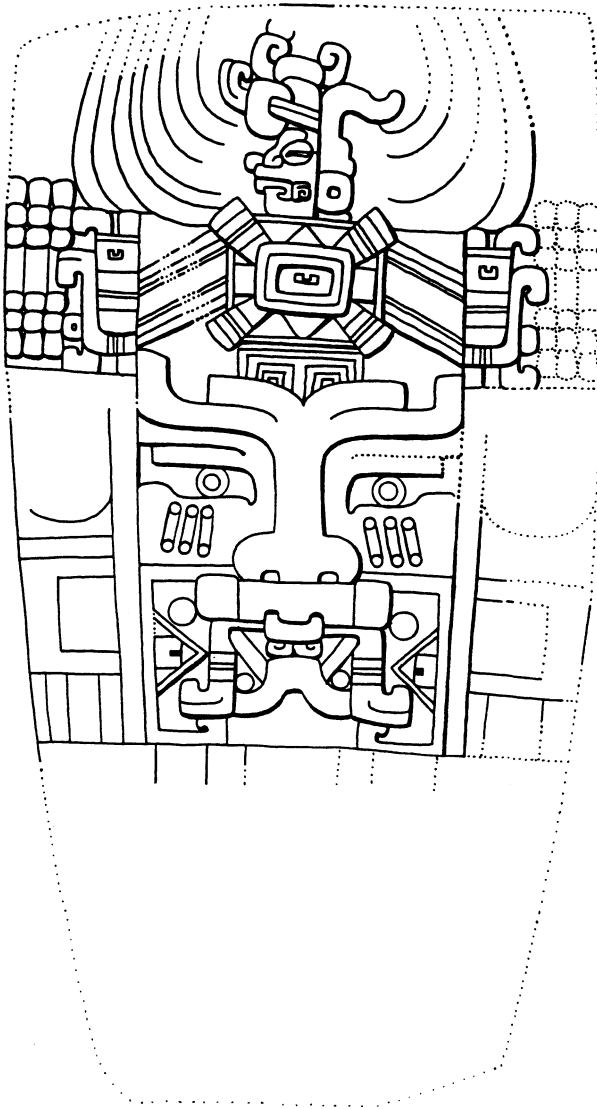


Fig. 1 Tres Zapotes Stela C. Drawing courtesy of James Porter.

During his first season at Tres Zapotes, Stirling had the good fortune to find Stela C, a monument that suggested that the Olmec were a very early Mesoamerican culture (Fig. 1). Whereas the front of the stela displays a face with strong Olmec features, the back bears a Long Count date, a calendrical system that was already well-known for the Classic Maya. Long Count dates typically begin with the highest unit of time, the Baktun, corresponding to roughly four hundred years. Although Stirling found only the base of the monument, he reconstructed the missing Baktun coefficient as seven, providing a complete date corresponding to 31 B.C. Although certain archaeologists of the time, particularly Mayanists, objected to such an early date, it is now evident that Tres Zapotes Stela C is actually a *post*-Olmec monument, carved some 400 years after the Olmec demise.

Stirling was not alone in his assertions of Olmec antiquity. In his early discussion of the Olmec style, Vaillant (1932: 519) noted that a hollow ceramic “baby face” figure from Gualupita, Morelos, in central Mexico, was discovered “under conditions of considerable age.” Although Vaillant (*ibid.*) considered the striking Olmec art style to be generally contemporaneous to the contact period Olmeca, he was in an excellent position to assess the Gualupita find. His pioneering excavations at Zacatenco, Gualupita, El Arbolillo, and Ticoman were fundamental in establishing the Formative chronology of the basin of Mexico (Vaillant 1930, 1931, 1932, 1935; Vaillant and Vaillant 1934). At

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Gualupita, other hollow Olmec-style “baby face” figures were also discovered (Vaillant and Vaillant 1934: figs. 14–15). The excavators noted the similarity of these hollow figures to solid figurines, some of which display Olmec features (ibid.: 50, 53; fig. 19, no. 3). One of the figurine types mentioned, Type D, was previously documented by Vaillant (1930: 114–119) at Zacatenco and other highland sites. Although Vaillant (ibid.) recognized these as early, the major site containing Type-D figurines was yet to be discovered. Beginning in 1936, brick workers at Tlatilco began discovering great numbers of these figurines along with vessels and other artifacts, some in pure Olmec-style (e.g., the basalt *yuguito* in the Dumbarton Oaks collection, Pl. 2). Conveniently located on what was then the outskirts of Mexico City, Tlatilco soon drew interested collectors who avidly purchased finds from local brick workers. One of the frequent visitors was the noted writer and artist Miguel Covarrubias, who with Stirling ranks as one of the great pioneers of Olmec studies. Like Stirling, Covarrubias was convinced of the great antiquity and importance of the Olmec, and he visited the Stirlings during their Gulf Coast excavations.

Aside from Central Mexico and the Gulf Coast, early remains with Olmec-style facial features also began to be discovered in Oaxaca. Alfonso Caso (1938: 94) recognized that in the earliest levels at Monte Albán, or Monte Albán I, a number of vessels displayed Olmec-style features. Subsequent excavations at the Monte Albán I site of Monte Negro further corroborated the association of the Olmec art style with Formative Oaxacan remains (Caso 1942b). It is now apparent that, like Tres Zapotes Stela C, these urns are post-Olmec (Scott 1978: 12). Nonetheless, the association of these Olmec-related vessels with what was then the earliest-known Zapotec phase convinced Caso that the Olmec were indeed a very early Mesoamerican culture.

By the early 1940s, excavations in the Gulf Coast, highland Mexico, and Oaxaca had led a growing body of scholars to believe that the Olmec were an ancient and widespread culture. In 1942, a watershed conference was held in Tuxtla Gutiérrez, Chiapas. Although devoted to the archaeology and ethnohistory of southeastern Mesoamerica, the meeting focused especially on the “Olmec problem,” that is, the cultural and temporal relation of the Olmec to other Mesoamerican cultures. The noted ethnohistorian Wigberto Jiménez Moreno (1942: 23) placed the remains at La Venta well before the Olmeca documented in early colonial texts. In his well-known position paper, Caso (1942a: 46) forcefully argued that the Olmec were indeed the *cultura madre* of Mesoamerica: “Esta gran cultura, que encontramos en niveles antiguos, es sin duda madre de otras culturas, como la maya, la teotihuacana, la zapoteca, la de El Tajín, y otras” (This great culture, which we encounter in ancient levels, is without doubt mother of other cultures, such as the Maya, the Teotihuacan, the Zapotec, that of El Tajín, and others) (ibid.: 46).

During the same session, Covarrubias (1942) noted that the Olmec art style is most closely related to the earliest examples of art from Teotihuacan, Maya, and the Zapotec. As a result of these and other papers, the conference concluded that the Olmec of La Venta constituted a very early culture in Mesoamerica (Mayas y Olmecas 1942: 75).

Not all scholars, however, agreed with the findings of the 1942 conference. Two of the best-known Mayanists, J. Eric S. Thompson and Sylvanus Morley, argued that the Olmec were not extremely early. In a long and detailed essay, Thompson (1941) suggested that the Olmec were actually a Postclassic culture sharing many traits with the Cotzumalhuapa style known for such sites as El Baul and Bilbao, Guatemala. According to Thompson (1941: 48), the famed colossal heads were actually very late: “Inconclusive evidence tends to place the colossal stone heads of the Olmec region about A.D. 1100–1450.” Thompson was particularly concerned with Tres Zapotes Stela C and its reputed early Long Count date. With little justification, Thompson argued that the dates appearing on Stela C, the jadeite Tuxtla Statuette, and El Baul Monument 1 are not identical to the Long Count system known for the Classic Maya, but instead, are based on a 400-day year.

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Although it is now clear that Thompson was off the mark in his dating of the Olmec, his opinions held considerable sway among fellow archaeologists. His friend and colleague Sylvanus Morley (1946: 40–41) aggressively questioned the dating of Tres Zapotes Stela C and other early non-Maya Long Count inscriptions in his popular work *The Ancient Maya*: “These doubtful, and indeed disputed, possibly earlier dates are by no means clear, however; they create a situation such as would arise if we were to find a Gothic cathedral dating from 1000 B.C., or a skyscraper with the year 1492 carved on its corresponding cornerstone—obvious anachronisms. These few scattering dates are only *apparently* very early, I believe, all of them having *actually* been carved at much later dates than they appear to represent” (ibid.: 40–41).

Morley’s tone is curiously polemic, as if he was personally offended that there could be Long Count dates before those of his beloved Classic Maya. Although not mentioning Stirling by name, Morley (ibid.) suggested that the reconstructed date of Tres Zapotes Stela C is essentially an epigraphic sleight of hand: “In the case of the Tres Zapotes monument, the first number at the left, 7, which makes it so unbelievably early, is *entirely missing in the original* and has only been *restored* as 7, out of the blue, by those who believe in the maximum antiquity of this carving” (ibid.: 41). Although Morley challenged the reconstructed Baktun 7 date, Stirling was entirely vindicated in 1969, when the upper half of Stela C was discovered. The upper portion of the monument clearly bore a Baktun 7 coefficient, making it one of the earliest monuments bearing a contemporaneous Long Count date (de la Fuente 1977a: 26).

Due to the arguments of Thompson, Morley, and others, the age of the Olmec remained in doubt until the late 1950s. Although many regarded the evidence provided by ceramic seriation and cross-dating with other, better-known cultures as compelling, it was the unexpected advent of radiocarbon dating that once and for all established the great antiquity of the Formative Olmec. The first published radiocarbon dates from the Olmec occupation of La Venta ranged from 1154 to 574 B.C. (Drucker, Heizer, and Squier 1959: 265). According to the excavators, Olmec occupation at La Venta occurred between 800 and 400 B.C. (ibid.). Subsequent excavations at the Olmec site of San Lorenzo provided even earlier radiocarbon dates. Here ten of the twelve samples corresponding to the florescence of the site ranged from 1150 to 920 +/- 140 B.C. (Coe and Diehl 1980, 1: 395–396). Combined with the relative dating methods of seriation and cross-dating, the radiocarbon dates provided convincing evidence that the Olmec were exceptionally ancient.² Moreover, more recent excavations have documented the development of the Olmec out of still earlier Formative cultures.

The Soconusco and the Early Formative Origins of the Olmec

Although the Olmec were extremely early, they by no means appeared *ex nihilo*, like some wondrous mushroom, out of the swampy Gulf Coast lowlands. Many of the more fundamental Olmec traits, such as social hierarchy, ceramics, food production, monumental architecture, craft specialization, the ball game, dedicatory offerings, and the restricted use of jade and other rare, exotic goods already were present among earlier Formative peoples. Although similar and contemporaneous developments were surely occurring in the Olmec heartland, the incipient Formative period is best documented for the nearby coastal piedmont region of southern Chiapas and neighboring Guatemala, often referred to as the Soconusco (Blake 1991; Blake et al. 1995; Ceja Tenorio 1985; Clark 1991, 1994; John Clark and Michael Blake 1989, 1994; Coe 1961; Green and

²In this catalogue, all radiocarbon dates and chronology are based on the more widely used uncalibrated radiocarbon years rather than “corrected” radiocarbon dates calibrated with dendrochronology, which tend to be several centuries earlier for the Formative Olmec period.

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Lowe 1967; Love 1991; Lowe 1975). Clark and Blake (1989) aptly term the Early Formative people of this region Mokaya, a Mixe-Zoquean word for “the people of corn.” But although maize is documented at Mokaya sites, it probably was not the primary staple. The ears of recovered specimens are small and relatively unproductive, and chemical analysis of Mokaya human bone collagen reveals that type C-4 pathway plants, such as maize, were not a significant part of the local diet (Blake et al. 1992; Clark and Blake 1989: 389).³ Thus, although the Mokaya were sedentary villagers engaged in food production, they probably practiced a mixed economy of farming, hunting, fishing, and collecting wild resources (Clark and Blake 1989).

Along with settled village life and food production, ceramics constitute one of the defining traits of the Mesoamerican Formative period. In the south coastal region, pottery first appears in the earliest Mokaya phase, known as Barra (1550–1400 B.C.). But although this pottery is among the first known for Mesoamerica, it is already surprisingly sophisticated, with a wide variety of forms and surface decoration (see Clark 1994: fig. 3.2). Noting the lack of Barra-phase plain ware, Clark and Blake (1994) suggest that the fancy ceramics were used as serving vessels in competitive feasting, such as occur in traditional “big man” societies of Melanesia. Early pottery may thus have been carefully made and decorated because it was linked to activities that gained prestige for the sponsors of such feasts.

By the following Locona phase (1400–1250 B.C.), there is evidence of a chiefdom level of social stratification in which—unlike big men societies—high social status was inherited rather than achieved. A Locona-phase burial from El Vivero contained a child wearing a circular mica mirror on its forehead, quite probably a sign of high rank (Clark 1991: 20–21; see Pl. 28). At Paso de la Amada, a great apsidal structure more than twelve meters in length has been interpreted as a chiefly residence (Blake 1991; Clark 1994: 34–35). A greenstone celt, quite probably jade, was buried as a dedicatory offering in the center of the earliest house construction (Blake 1991: 40, fig. 11a). It will be noted that greenstone celts constitute one of the more important dedicatory cache items of the Middle Formative Olmec (see Pls. 21–23). Paso de la Amada also contains a Locona-phase ball court, one of the earliest-known ball courts in ancient Mesoamerica (Hill n.d.).

The Olmec of Early Formative San Lorenzo

Archaeological excavations by Michael Coe and Richard Diehl (1980) and Ann Cyphers (1997, 1999) at San Lorenzo, Veracruz, have provided crucial insights into the Early Formative development of the Olmec. Composed of the San Lorenzo plateau and the nearby sites of Tenochtitlán and Potrero Nuevo, San Lorenzo appears to have been the preeminent Early Formative Olmec center and quite possibly for then-contemporaneous Mesoamerica as a whole. The Ojochi phase (1500–1350 B.C.) marks the earliest pottery at San Lorenzo, and is roughly contemporaneous with the Mokaya Barra phase ceramics, of which it shares many traits (Blake et al. 1995: 168). The nearby site of El Manatí reveals that, by the Ojochi phase, elaborate rites concerning water, rain, and, likely, agriculture were already being performed in the Olmec heartland. A freshwater spring at the base of Cerro Manatí was a locus of ritual activity that included the deposition of offerings in the water during much of the Early Formative period. Among the earliest items placed in the

³Early Formative maize, roughly contemporaneous with the Mokaya Locona phase (1400–1250 B.C.), also has been documented for central coastal Guatemala and western El Salvador (Arroyo 1995: 205). The term *C-4 pathway* refers to a complex relationship between a number of distinct plants and body metabolism and is used in analyses of human bone collagen to determine ancient diets. Type C-4 plants, such as maize, tend to naturally derive from relatively arid environments. In lowland Mesoamerica, maize is the most likely C-4 plant to be found in skeletal remains, including those of the Olmec.

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sacred spring were fine jadeite celts and rubber balls (Ortíz and Rodríguez 1994: 78, 86; 2000). Although no Early Formative ball court has yet been documented for the Olmec heartland, these rubber balls indicate that the ball game was present even before the florescence of Olmec civilization.⁴ But of perhaps even greater significance are the offerings of jadeite. Although jadeite is best known for the Middle Formative Olmec, the El Manatí finds reveal that jade and probably much of its attendant symbolism were present as early as the Ojochi phase.

In many respects, the following Bajío phase (1350–1250 B.C.) at San Lorenzo is a continuation of Ojochi, although with the appearance of new vessel forms and evidence of increased population. In addition, it appears that public architecture was being constructed atop the San Lorenzo plateau (Coe and Diehl 1980, 2: 144; Coe 1981b: 124). However, Chicharras (1250–1150 B.C.) marks a sharp change from the previous two phases and constitutes the true beginning of Olmec civilization. During this “proto-Olmec” phase, the great San Lorenzo plateau appears to have been greatly modified (Coe and Diehl 1980, 1: 150). Figurines displaying Olmec facial characteristics appear for the first time, along with figurines of belted ballplayers (*ibid.*: figs. 303, 305). In addition, a basalt sculpture fragment found in Chicharras-phase contexts suggests that the long-distance transportation and carving of stone monuments—one of the most striking traits of the San Lorenzo Olmec—was already occurring during the Chicharras phase at San Lorenzo (*ibid.*: 246; Coe 1981b: 128).

The San Lorenzo phase (1150–900 B.C.) constitutes the great period of occupation at the site. Among the more striking hallmarks of the San Lorenzo-phase Olmec are basalt colossal heads; ten colossal heads are currently known for San Lorenzo. Given the importance of these grand sculptures, it is somewhat fitting that they may well have contributed to the present appearance of the central plateau. In plan, the surface of the San Lorenzo plateau surface is strikingly symmetrical, with pairings of projecting ridges and steep arroyos. Ann Cyphers (n.d.a.) suggests that the original placement of these heads in two flanking north-south lines eventually caused the plateau to erode into the series of peninsulas and gullies visible today. In other words, much of the symmetry observed at the plateau may derive from natural processes after the San Lorenzo-phase florescence.

While they are outstanding sculptures in their own right, the colossal heads and other massive basalt monuments at San Lorenzo are especially impressive when one considers the effort required for their transport. Although weighing up to forty metric tons, these monuments did not come from nearby stone quarries. Instead, the stone derived from the flanks of Cerro Cintepec, an aerial distance of some sixty kilometers from San Lorenzo (Coe and Diehl 1980, 1: 294). Replicative studies of the megaliths of Neolithic Europe provide some perspective on the logistics involved in the transport of such massive monuments. During an experiment performed in 1979 at Bougon, France, some 250 men were required to pull and lever a block weighing thirty-two tons a distance of forty meters (Mohen 1989: 176–177). Aside from such modern replicative experiments, megaliths of similar size were still being transported in traditional Southeast Asian societies as late as the twentieth century. The detailed ethnography of Nias by Schröder (1917) describes the moving of the last major megalith of South Nias, a funerary monument dedicated to the ailing ruler Saonigehe. It

⁴The widespread evidence of the ball game during the Early Formative period, including at Paso de la Amada, El Manatí, San Lorenzo, Tlatilco, and El Opeño, Michoacán, suggests that versions of this game were already present during the preceding Archaic period (7000–2000 B.C.). It has recently been noted that the stone-lined feature at Gheo Shih, Oaxaca, dating to the fifth millennium B.C., is probably a simple, open-ended ball court (Taube 1992c: 1065; Miller and Taube 1993: 27). A possible I-shaped ball court, strikingly similar to Mesoamerican examples, has recently been reported for coastal Peru at the Initial Period site of Moxeke, dating from approximately 1600 to 1200 B.C. (Pozorski and Pozorski 1995).



Fig. 2 The moving of the stone of Saonigeho in 1914 in South Nias. Photograph courtesy of the Rijksmuseum voor Volkenkunde, Leiden, photo no. 551Fa92B.

required 325 men laboring four days to pull the monument, approximately nine tons, four kilometers from the quarry to the village (Feldman 1985: 61). As in the case of the San Lorenzo plateau, the stone was transported up a steep hill to the village (Fig. 2). The ability of San Lorenzo rulers to amass and organize the work force required to transport the monuments from Cerro Cintepec constitutes a public testimony of their personal power and leadership. Cyphers (n.d.) suggests that the prevalence of knotted ropes in San Lorenzo sculpture alludes to both the movement of stone monuments and the prowess of the ruler. Aside from denoting the political skill and power of the ruler, the ponderous movement of these great monuments across the landscape may have been an important social and material statement concerning the territorial domain of the San Lorenzo and later La Venta polities.

It is widely recognized that the great colossal heads of San Lorenzo, La Venta, and other Olmec sites are portraits of individual rulers. The careful and subtle sculpting of the eyes, mouth, and other features creates the impression that one is viewing the faces of specific, living individuals. As Michael Coe (1989b: 77) notes, portraiture is very rare in the ancient New World and is largely restricted to the Olmec, Classic Maya, and Moche of northern Peru. In direct contrast to the roughly contemporaneous people of Teotihuacan, the Classic Maya publicly proclaimed the names and deeds of their kings in monumental sculpture. Colossal heads and thrones strongly indicate that a cult of individual rulership was already fully present at Early Formative San Lorenzo. Although it is uncertain whether the Olmec were at a chiefdom or state level of social complexity, the cost required in the carving and transport of these great stones points to marked social stratification with strongly centralized rulership. The comparison by Timothy Earle (1990) of the Olmec to the highly stratified, complex chiefdoms of Hawaii may be especially apt. Earle (*ibid.*: 76) notes that in

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contrast to states, the leaders of complex chiefdoms have very generalized roles, including political, religious, military, administrative, and economic functions. Like the great Hawaiian chiefs, Olmec rulers were surely active players in all these domains.

The great power and status of the Olmec rulers at San Lorenzo sharply contrast with what is known about other regions of Early Formative Mesoamerica. In no other area, including the Valley of Mexico, Oaxaca, and the Chiapas Soconusco, is there evidence of such marked social differences and control of wealth and surplus. In a version of the circumscription scenario proposed by Robert Carneiro (1970) for the central Andean valley systems, Coe and Diehl (1980, 2: 147–152; Coe 1981a) suggest that the appropriation of the extremely fertile, annually flooded levee lands by an emergent elite led to the marked differences in status, power, and wealth observed at Olmec San Lorenzo. But although the control of these productive lands implies that farming was central to the San Lorenzo economy, it is uncertain what crops were grown. Coe and Diehl (1980, 2: 144) cite the common appearance of metates and manos as evidence of corn preparation, although virtually no macrobotanical remains of maize were recovered during their excavations.⁵ According to Coe and Diehl (*ibid.*), the San Lorenzo Olmec probably grew a variety of staples, including manioc and other root crops as well as maize.

Investigations in the vicinity of La Venta, Tabasco, have documented maize from at least the beginning of the Early Formative period and perhaps as early as 2250 B.C. (Rust and Leyden 1994). William Rust and Barbara Leyden (*ibid.*: 192, 199) note that maize use had begun to increase notably by 1150 B.C., and sharply grew to even greater importance during the Middle Formative apogee of La Venta (ca. 900–500 B.C.). This pattern of increasing maize use is also reflected in Olmec art and iconography. Although maize symbolism can be documented for Early Formative San Lorenzo, it is far more pervasive during the Middle Formative period of La Venta (Taube 1996).

Ann Cyphers (1999: 165) notes that the manipulation and control of water was an essential component of elite power at San Lorenzo: “The rhythms of the Olmec environment have everything to do with water in all of its manifestations. Rain, fluvial systems, and the water table were all aspects that the elite sought to control one way or another.” The ritual importance of water, and by extension, agriculture, is clearly expressed by an elaborate system of basalt drains and related stone sculptures atop the San Lorenzo plateau. Ramon Krotser (1973) argues that these stone drains were used in Olmec water rituals and reflect the basic Mesoamerican concern with water and fertility. Similarly, Coe and Diehl (1980, 1: 393) suggest that this hydraulic system was used in rites of rain magic and propitiation dedicated to water deities. A stone-lined drain from the Middle Formative site of Teopantecuanitlán, Guerrero, indicates that such systems indeed were used in agricultural rites. The drain both enters and exits a masonry sunken court lined with four explicit representations of the Olmec Maize God (see Fig. 46a; Martínez Donjuán 1994: fig. 9.10). Fitted with this drain, the courtyard could have been easily filled and emptied of water to serve as a pool for ritual use.

The systems of stone drains in the monumental architecture of San Lorenzo, La Venta, Teopantecuanitlán, and other Olmec sites recall the elaborate drains appearing in two of the greatest Andean temples, the Early Horizon Castillo at Chavín de Huantar (ca. 900–200 B.C.) and the Akapana of Middle Horizon Tiwanaku (ca. A.D. 500–900). It has been suggested that drains in both of these structures were ritually regulated, and with rushing water they may have even created thunderous acoustic effects (Lumbreras, González, and Lieter 1976; Kolata 1993: 111–116). According to Alan Kolata (1993), the Akapana symbolized a great watery mountain. With its highly de-

⁵One exception is a small conical ceramic item containing the impression of a fragmentary cob. Dating to the San Lorenzo B phase, the object is in the collection of the Peabody Museum of Natural History, Yale University.

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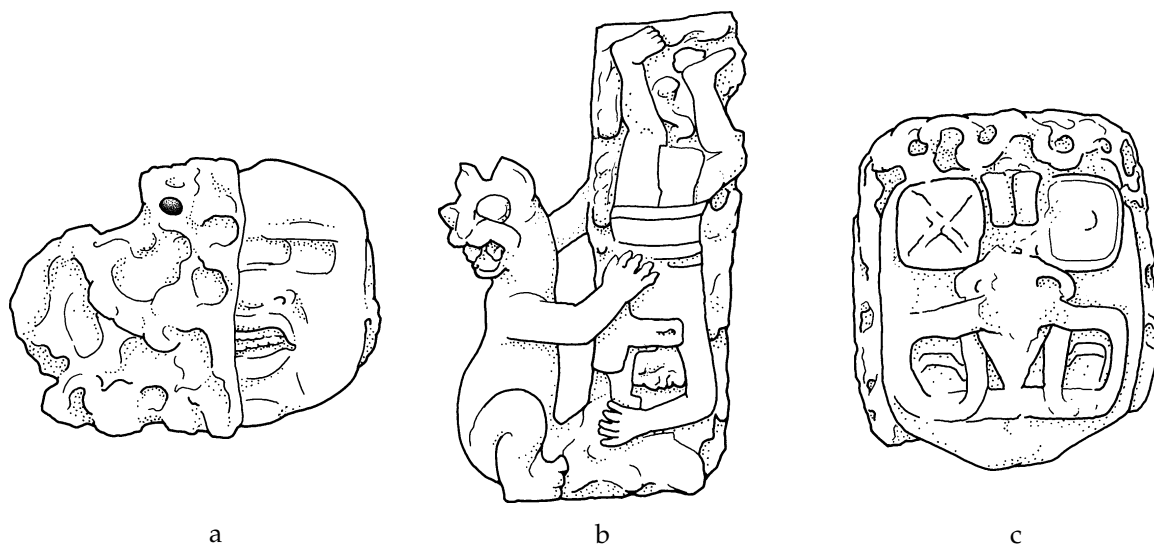


Fig. 3 The convoluted cloud or rock motif on Early Formative Olmec stone sculpture. (a) Head with a basin at the top. Note the hole for releasing liquid on the proper right side of the head. San Lorenzo (after Cyphers 1996b: 64); (b) Jaguar attacking a descending man. San Lorenzo (after Cyphers 1996b: 63); (c) Head with a basin at the top. Laguna de los Cerros Monument 1 (after de la Fuente 1977a: no. 70). Drawings are by Elizabeth Wahle.

veloped system of stone drains, the San Lorenzo plateau also may have embodied the concept of a fertile, water-filled mountain. San Lorenzo may indeed have been an original *altepetl*, or “water-mountain,” the Postclassic Nahuatl term for a town or city.

Aside from the ceremonial regulation of the drains, the San Lorenzo Olmec also performed water rites on a smaller, almost miniature scale. Excavations by Ann Cyphers (1996b: 63, 64) at San Lorenzo have uncovered several monuments with curiously irregular and convoluted designs resembling clouds or water-worn stone. One of the sculptures portrays a split face with one half covered by the convoluted motif (Fig. 3a). It is noteworthy that regions of the convoluted side project out farther than the anthropomorphic face, revealing that this motif is not post-carving mutilation. The top of the head contains a basin with a hole running to the irregular, proper right half of the face. Liquid poured into this chamber would run in intricate patterns down the system of gullies, pits, and furrows. Another, recently excavated stone sculpture contains a basin surrounded by the convoluted motif. Fluid from a central container would pour down the gulleys in riverine fashion until passing through two holes penetrating to the underside of the monument.⁶ Another still more remarkable monument portrays a squatting jaguar clawing a descending male wearing a bird headdress (Fig. 3b). In this case, the convoluted form appears as a background to the descending figure; the peculiar dentition of this jaguar is also common in portrayals of the Olmec Rain God (Fig. 15b–c). The convoluted stone motif also occurs on Monuments 1 and 2 from Laguna de los Cerros, which are great heads topped with shallow basins (Fig. 3c). At least one, if not both, of these monuments portrays the Olmec Rain God. Like the two San Lorenzo monuments, these basins were probably for liquid that would trickle down the sides of the heads.⁷

⁶ The author observed this still-unpublished sculpture at the Museo Comunitario de San Lorenzo Tenochtitlán in December 1995. Although currently erected upright as if a stela, the central basin and two piercing holes reveal that the monument was to be set flat, much like a rectangular altar.

⁷ Although not of such irregular and organic form, a combination of carved cups and gullies is also found at Chalcatzingo. David Grove (1987b: 166–167) suggests that these cups, carved in bedrock and boulders, were used in Middle Formative water rituals. One example, MCR-8, has gullies running to and passing from cups in a linear fashion. According to Grove (*ibid.*) this small model may represent Cerro Chalcatzingo with its two principal water runoffs. The

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The San Lorenzo sculpture of the jaguar and its human victim (Fig. 36) suggests that the liquid poured upon this monument was sacrificial blood rather than water, with the blood libation ritually expressing the clawing of the victim. One monument at Chalcatzingo portrays a raining cloud above an avian jaguar devouring a human, as if this act constituted a form of rainmaking (Taube 1995: fig. 24). In later Mesoamerica, particularly bloody forms of human sacrifice—including scaffold sacrifice and decapitation—often constituted forms of rain ritual (Taube 1988b; 1992b: 24). It may well be that all Olmec monuments with the convoluted motif were for sacrificial blood offerings. In fact, Alfonso Medellín Zenil (1971) interpreted Laguna de Los Cerros Monuments 1 and 2 as Olmec versions of the Aztec *cuauhxicallis*, stone receptacles for sacrificial hearts.

Excavations at El Manatí demonstrate the presence of human sacrifice among the Early Formative Olmec. Human infants were among the many San Lorenzo–phase offerings placed in the site’s spring. According to Ponciano Ortíz and María del Carmen Rodríguez (1994: 84, 88–89), these child sacrifices are probably an early form of the Aztec practice of offering children to the gods of water and rain (see Sahagún 1950–1982, 2: 42–44; Durán 1971: 157, 164–165). Durán (1971: 164) mentions that girls thrown into the water at Pantitlan were dispatched with a small spear of the type used for killing ducks. Among the more intriguing items found at El Manatí is a wooden spear painted red and tipped with a shark tooth point (Ortíz and Rodríguez 1994: fig. 5.24). As in the case of the Late Postclassic Aztec rite at Pantitlan, this object may have been used as a device for child sacrifice.

It has been noted that the San Lorenzo sculpture known as Tenochtitlán Monument 1 portrays a ballplayer atop a bound captive (Taube 1992c; Miller and Taube 1993; Bradley and Joralemon 1993). The seated upper figure wears the costume typical of Olmec ballplayers, including a mirror pectoral and, most importantly, the thick, protective belt used to strike the ball with the hip. The playing of hip ball with padded belts was by far the most common form of the Mesoamerican ball game and continues to be played in Sinaloa to this day (see Leyenaar and Parsons 1988: 13–35). The San Lorenzo monument indicates that as with later Mesoamerican peoples, human sacrifice was to the Olmec an important component of their ball-game ritual. Their game was deeply embedded in rain ritual and symbolism, much as if the ball game itself was a rainmaking act, with the din of the bouncing ball representing thunder. A great many Early Formative ballplayer figures wear masks of the Olmec Rain God (Fig. 15b–c; Bradley 1991: fig. 4; Taube 1995: 100). The offering of rubber balls at El Manatí also suggests the identification of the ball game with rain and water ritual. The aforementioned sunken court at Teopantecuanitlán provides the most compelling evidence for the relationship of the Olmec ball game to water and agricultural fertility. Along with the stone drain and images of the Olmec Maize God, the court also contains a miniature symbolic ballcourt formed of two long and low parallel mounds (Martínez Donjuán 1994). A remarkable Formative vessel in the form of a ball court contains a drain for water to pass from the spout into the ball court basin, essentially a miniature form of the Teopantecuanitlán sunken court and drain (Borhegyi 1980: fig. 4a–b).

The identification of ball courts with water and agricultural fertility is well-documented for the later Classic Maya (Schele and Freidel 1991).⁸ Stephen Houston (1998) notes that many Classic

pits and channels appearing in Olmec stone sculpture may well have been used for receiving sacrificial blood. In his account of early colonial Nahuatl religious practices in Guerrero, Ruiz de Alarcón notes that in rites of mountain worship, penitential blood was placed in small pits “like saltcellars” carved in rock (Coe and Whittaker 1982: 81).

⁸ On the Late Classic Tablet of the Foliated Cross at Palenque, Kan Bahlam stands dressed as the Tonsured Maize God atop growing maize sprouting from a zoomorphic mountain epigraphically labeled *yaxal witz nal*, or “greening maize mountain.” The stepped cleft from which the maize emerges closely resembles a ballcourt profile, recalling the ballcourt within the Teopantecuanitlán court. Linda Schele and David Freidel (1991) have discussed the close relation of the Classic Maya Maize God to ball court imagery.

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Maya models, or *maquetas*, of ball courts are supplied with channels to allow liquid to pour into the sunken courts. The ball game is also widely identified with agricultural fertility in Late Postclassic Central Mexico. Among the fertility gods appearing in conjunction with the ball game are Tlaloc, Xochipilli, Xochiquetzal, and the maize god, Cinteotl (Stern 1949: 69). The *Codex Chimalpopoca* describes the last lord of Tula, Huemac, playing ball against the rain and lightning gods, the Tlaloque (Bierhorst 1992: 156). In one episode of the Aztec migration legend, the Aztec construct a ball court at Coatepec. From the center of this miraculous court a spring emerges, allowing the Aztec to irrigate their fields (Stern 1949: 65). According to Theodore Stern (*ibid.*: 70–71), the relationship of human sacrifice to the ball game was directly involved with agricultural fertility in Postclassic Mesoamerica. Rather than being a relatively recent development, the identification of the ball game with agricultural fertility was already highly developed among the Formative Olmec.

At approximately 900 B.C.—equivalent to the beginning of the Middle Formative period—the site of San Lorenzo suffered a significant decline, including the general cessation of monument transport and carving. The reasons for this remain unknown. Coe and Diehl (1980, 1: 188, 387) have interpreted the mutilation of stone monuments on the Group D ridge as a sign of cataclysmic destruction, possibly by invasion or revolt, at the end of the San Lorenzo phase. Excavations by Cyphers (1994: 61, 66) at Group D suggest that these monuments formed part of a monument workshop, and reflect recarving and reuse rather than iconoclastic mutilation. In a similar vein, James Porter (1989) notes that at least two, and possibly more, of the colossal heads at San Lorenzo were recarved from Olmec thrones. But although the breaking of stone monuments at San Lorenzo may reflect the process of recarving rather than invasion or revolt, the actual events leading to the demise of this site remain poorly understood. Cyphers (1996a: 70–71) suggests that the demise of San Lorenzo may have been partly related to volcanic events in the Tuxtla Mountains. According to her, these tectonic episodes may not only have covered the region with ash, but perhaps more importantly, changed the river courses surrounding the site of San Lorenzo.

The Olmec of Middle Formative La Venta

For the Middle Formative period, La Venta, Tabasco, constitutes the best-known Olmec site. It should be borne in mind that this was not a simple shifting of capitals, however. La Venta also has a strong Early Formative component, although it probably was not of comparable greatness to San Lorenzo. In addition, San Lorenzo and La Venta are by no means the only important Formative sites in the Olmec heartland. Laguna de los Cerros and Tres Zapotes are other major Olmec centers still awaiting intensive archaeological scrutiny. It is quite possible that like the Classic Maya, the Olmec region was a politically complex landscape broken into competing polities with frequently shifting alliances and conflicts. But although it is uncertain that La Venta was the Middle Formative “capital” for the Olmec, it was one of the largest sites. By far the best-known portion of La Venta is Complex A, oriented directly toward the great pyramid known as Complex C. Several field seasons of excavations at Complex A have provided a detailed understanding of its monumental architecture and elaborate ceremonial activity (Drucker 1952; Drucker, Heizer, and Squier 1959). Among the most striking traits of Complex A is its elaborate concern with bilateral symmetry, reflected not only in a series of central and paired mounds, but also in the placement of caches and massive offerings buried within the complex. Quite probably, this powerful statement of symmetry alludes to the concept of centrality and the world axis.⁹

⁹ In the Central Andes, contact-period beliefs describe the ancient Middle Horizon site of Tiwanaku as the middle place, but again in terms of bilateral symmetry. Known in Aymara as *Taypikala*, meaning “stone in the center,” Tiwanaku marks the place where the creator god Viracocha divided the world into two sides: “the sacred place of origin for the

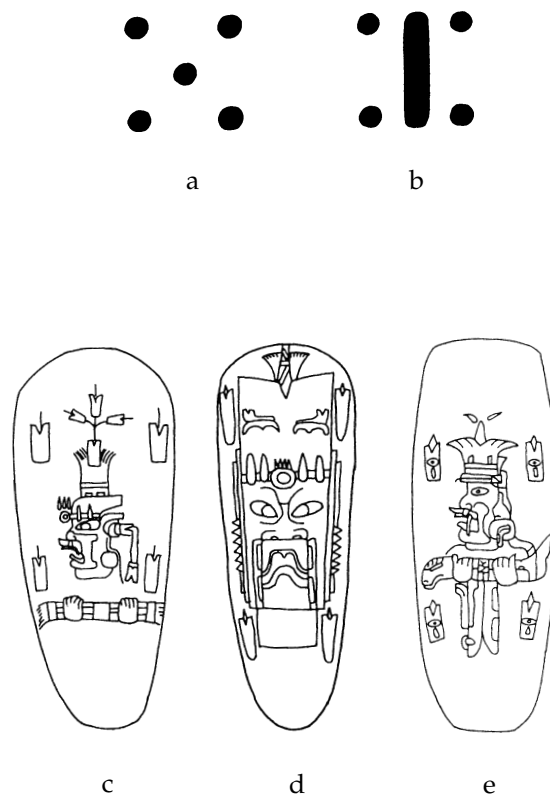


Fig. 4 Representations of centrality and the four quarters. (a) The Mesoamerican quincunx; (b) The Olmec bar-and-four-dots motif; (c–e) Incised jade celts with the Olmec Maize God as the central axis of the bar-and-four-dots motif. Drawings courtesy of Linda Schele.

Joyce Marcus (1989: 172–173) and Frank Kent Reilly (n.d.: 227–228) note that for the Olmec, the bar-and-four-dots motif represents the quarters of the cosmos and the central *axis mundi*, here rendered as a vertical bar (see Fig. 53a–g). This is in contrast to the related Classic and Postclassic Mesoamerican quincunx, which appears not as a bar but as a central dot surrounded by four others delineating the corners (Fig. 4a). For the Olmec sign, the two pairs of dots flanking either side of a vertical bar express centrality through bilateral rather than quadrilateral symmetry (Fig. 4b). In this regard, the bar-and-four-dots motif closely reflects the human body, with the four limbs oriented at the sides of the central torso. For the Olmec, the human body was both a reflection and expression of the cosmos.

One of the more prominent features of Complex A is the area created by Mounds A-4 and A-5, low and long parallel earthworks that together define much of the central part of the complex. According to Reilly (n.d.: 206), the two mounds may have delineated a great ball court. In support of this interpretation, a sculpture of a belted ballplayer was found on the inner side of Mound A-5 during excavations in 1955 (see Drucker, Heizer, and Squier 1959: 111 and 202–204; pl. 52a–c); the figure wears a prominent mirror pectoral, a common trait of Early Formative Olmec ballplayers (Coe and Diehl 1980, 1: 394). Although Mounds A-4 and A-5 may well allude to an Olmec ball

physical universe, but also the central point of partition of the social world into two complementary halves” (Kolata 1993: 7). The great U-shaped structures of Initial Period coastal Peru are probably also statements of centrality expressed through bilateral symmetry. The Old Temple at Chavín de Huantar, a relatively late form of the U-shaped structure, contains a central cross-shaped chamber containing the vertically placed Lanzón sculpture as a symbol of the *axis mundi* (Burger 1992: 136–137). In the Central Andes, the use of bilateral architecture to represent centrality is probably related to the widespread presence of dual social organization. However, as in the case of La Venta Complex A, such architecture is also well-suited for ceremonial processions along a central axis.

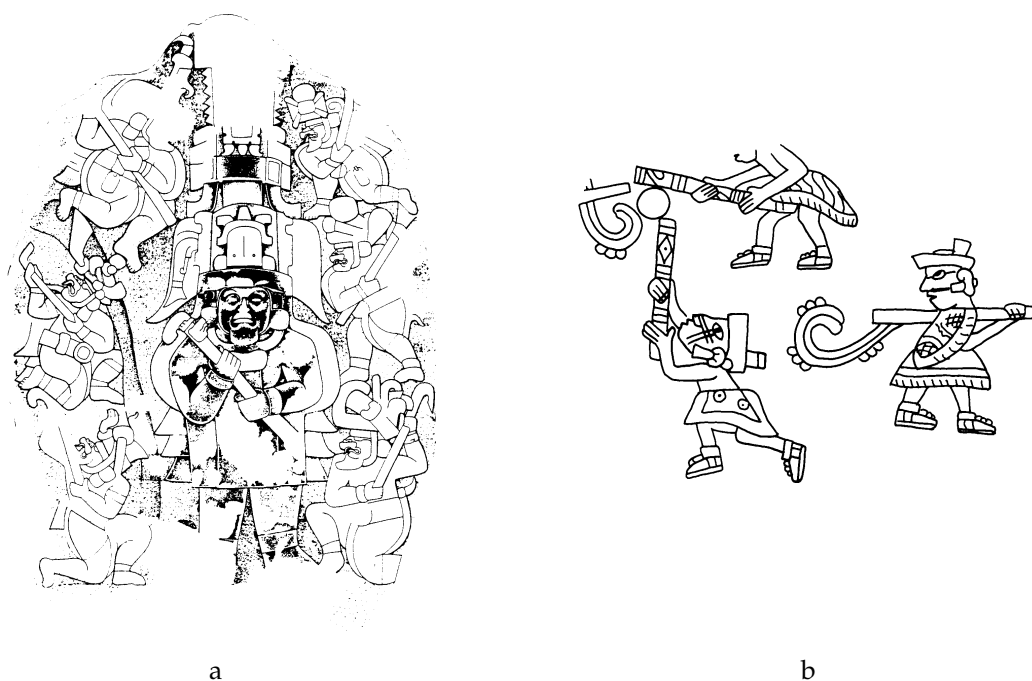


Fig. 5 A comparison of figures from La Venta Stela 2 and Tepantitla Mural 2, Teotihuacan. (a) Central ruler with a tall headdress flanked by supernaturals wielding curving sticks. La Venta Stela 2. Drawing courtesy of James Porter; (b) Detail of stickball players. Tepantitla Mural 2 (after de la Fuente 1995: fig. 2).

court, it is by no means certain that their area served as a real court for ball games. A low tumulus designated Mound A-3 occupies much of the central court area and would, therefore, certainly impede play. According to Philip Drucker and his fellow excavators (1959: 115), Mound A-3 probably dates to the earliest construction phase of Complex A. In addition, Mounds A-4 and A-5 would define a court of some sixty-five meters in length, an exceptionally large area for a Mesoamerican ball court.

Although the long, parallel mounds of Complex A are poorly suited for hipball, this may not have been the only ball game played by the La Venta Olmec. Aside from hipball, forms of stickball, or “shinny,” were already present in Mesoamerica during the Early Formative period. In fact, hipball may have included sticks or clubs for striking the ball. At El Manatí, the two rubber balls corresponding to the fluorescence of San Lorenzo were found with wooden staffs (Ortíz and Rodríguez 1999: 249). These same bladed or paddlelike staffs were found with many of the contemporaneous wooden busts (see *ibid.*: figs. 7–8). It is quite possible that the busts portray ballplayers. Ortíz and Rodríguez (*ibid.*: 246) note that three busts had circular pectorals, recalling the mirror pectorals commonly appearing with San Lorenzo ballplayers (see Coe and Diehl 1980: figs. 329–330 Vol.1, 466, 499). Although the Early Formative ballplayer figurines from El Opeño, Michoacán, wear kneepads and sometimes appear in positions typical of hipball, many wield clubs as well. A curving, paddlelike stone example of one such club was also discovered at the site (Fernando 1992: nos. 58–66).¹⁰ In the Early Postclassic reliefs from the Great Ball Court at Chichen Itza, the ballplayers appear with clublike instruments along with kneepads and thick belts (see

¹⁰ Although of a much later date, similar stone paddlelike clubs were excavated in the vicinity of the ball court at the Hohokam site of Tres Alamos, Arizona (Tuthill 1947: pl. 28). According to Tuthill (*ibid.*: 41–42) these items were used in the ball game, and he cites possible wooden examples from the Hohokam site of Casa Grande.

Tozzer 1957: fig. 474). A sixteenth-century scene of stickball with ritual drinking appears in the *Codex Xolotl*, a manuscript from the region of Tezcoco (Taube 2000b: fig. 26).

La Venta Stela 2 portrays a series of supernatural figures with thick belts and curving clubs that closely resemble the shinny sticks used in native ball games of North America as well as those of the Tarahumara of Chihuahua (Culin 1907: 616–647). The bent ends of these La Venta clubs are well-suited for striking a ball lying close to the ground (Fig. 5a). Wielding a more elaborate form of the club, the central ruler on the stela also wears a complex, tall headdress, quite like the cylindrical headdresses known for Early Formative ballplayer figurines (see Coe 1965a: figs. 151–152). The positions of the flanking figures—probable forms of the Olmec Rain God—are notably similar to those of the stickball players from the Early Classic murals of Tepantitla, Teotihuacan (Fig. 5b). In contrast to the more widely known hipball game, forms of stickball could be played on much larger courts, easily of the dimensions defined by La Venta Mounds A-4 and A-5.

The central and flanking figures on La Venta Stela 2 wear headdresses with prominent chin straps. An incised celt from Río Pesquero portrays a man wearing a bound, helmetlike headdress with a similar chin strap (Fig. 6a). This bound helmet headdress and chin strap are also found on

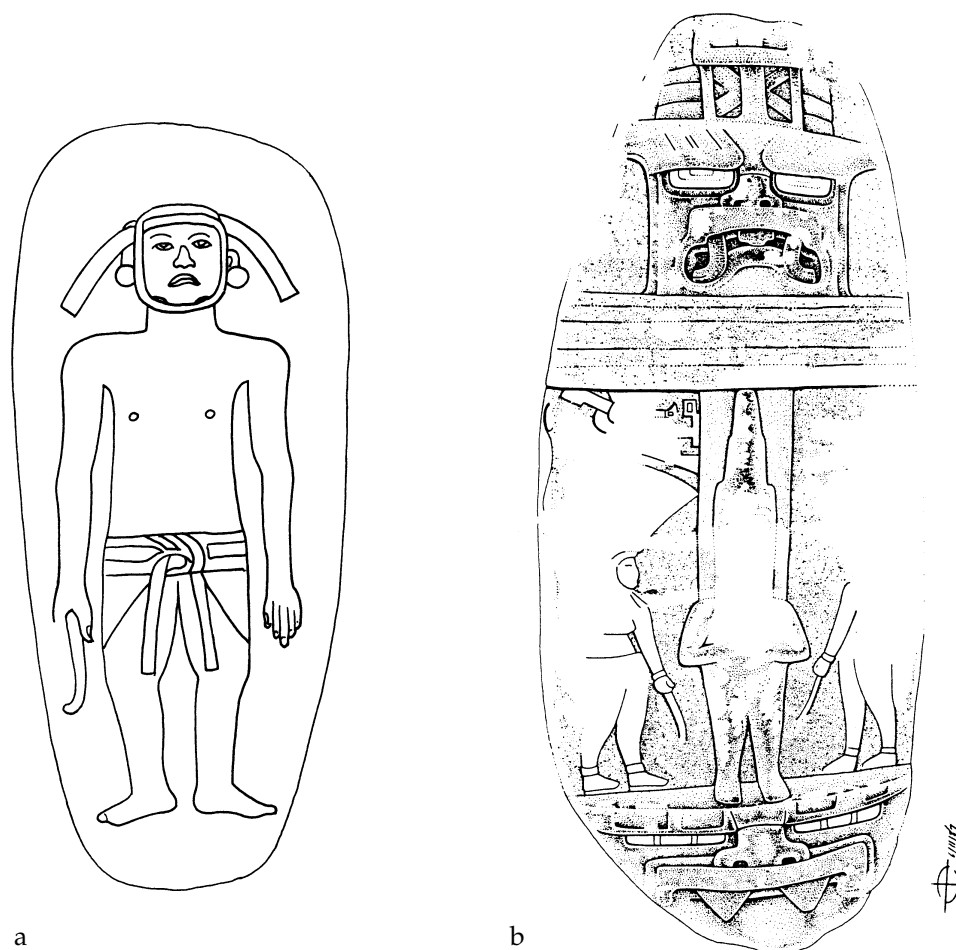


Fig. 6 Probable representations of Middle Formative stickball. (a) Celt with a figure holding a curving stick. Note the headgear, belt, and hipcloth. Attributed to Río Pesquero (after Medellín Zenil 1971: pl. 58); (b) Central figure with a tall headdress flanked by individuals holding curving sticks. Tres Zapotes Stela A. Drawing courtesy of James Porter.

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Olmec colossal heads, including San Lorenzo Monuments 4 and 17, La Venta Monument 3, and Tres Zapotes Monuments A and Q. Piña Chan and Covarrubias (1964) suggest that the colossal heads may be portraits of helmeted ballplayers, and it is likely that the Río Pesquero figure is also a ballplayer. Grasping a curving stick, he wears a thick belt similar to the types worn by Mesoamerican ballplayers. The hip cloth worn by this figure resembles the protective hip padding—probably of leather—worn by ballplayers, including Early Formative examples from San Lorenzo, Tlapacoya, and Xochipala (see Coe and Diehl 1980, 1: fig. 329a; Coe 1965a: nos. 152, 157; Gay 1972b). Tres Zapotes Stela A, a late Olmec or epi-Olmec monument, portrays a pair of flanking figures with curving sticks facing a central, frontally facing individual (Fig. 6b). Although this central figure is badly effaced, he appears to be wearing a tall, columnar headdress, recalling the example found on La Venta Stela 2 and Early Formative ballplayer figurines. Like La Venta Stela 2, this monument may also portray a form of the Mesoamerican ball game.

During the Middle Formative period at La Venta, stone stelae appear for the first time in Mesoamerica. Like the later Protoclassic and Classic Maya examples, these stelae are tabular—broad across but shallow in depth. At San Lorenzo, possible Early Formative precursors occur as upright columnar monuments bearing bas-relief carvings of frontally facing figures. Along with San Lorenzo Monuments 41 and 42, a third example was excavated in 1995 by Ann Cyphers (1996b: 64). The frontally facing figure has penile glans at the back of his head and thus appears to be a monumental personified phallus, similar to the giant stone examples known for Terminal Classic Puuc sites of the northern Maya lowlands. A still earlier version of this motif has since been discovered among the offerings at El Manatí. Dating to approximately 1500 B.C., the sandstone statuette portrays a human figure with penile glans at the back of the head (Ortíz n.d.). Much like the European Tree of Jesse, the phallus may have thematically overlapped with the World Tree in Olmec thought. In Olmec iconography, there is considerable iconographic overlap between stelae, celts, and male loincloths as symbols of the *axis mundi* and the World Tree (see pp. 70–72).

James Porter (1996) notes that many of the Middle Formative La Venta stelae are carved in the form of upright celts, a tradition that continued with the later Classic Maya. Four La Venta stelae, Monuments 25/26 (Fig. 54c), 27, 58, and 66, are not only celtiform, but are carved in green schist or gneiss, resembling the well-known greenstone celts of the Middle Formative Olmec. Excavations by Rebecca González Lauck (n.d.) near the La Venta pyramid uncovered other examples of celtiform stelae. These are portrayed as celts with the poll planted in the ground and the bit pointed upward into the sky. In support of the close identification of stelae with celts, Porter (1996: 65) cites La Venta Offering 4, a tableaux composed of sixteen statuettes standing before six miniature “stelae” in the form of jadeite celts (see Drucker, Heizer, and Squier 1959: 152–161, pls. 30–32). The vertical planting of celts is a fairly common trait among the Middle Formative Olmec. Running across the centerline of Complex A, La Venta Offering 8 was composed of three groupings of celts planted with their polls downward into the earth (ibid.: 174–176, pl. 41). A great cache of 213 serpentine celts also along the centerline of Complex A appears to have been vertically planted, again with their bits oriented upward (Drucker 1952: 75–76, pl. 15c). This dense clustering of celts resembles the recently discovered site of La Merced, located close to the spring of El Manatí (Rodríguez nd; Rodríguez and Ortíz 2000). At La Merced, hundreds of serpentine celts of varying size were planted vertically, bits upward, around Monument 1, a larger celtiform image of the Olmec Maize God. Some 72 cm in total height, La Merced Monument 1 is of transitional size between a massive celt and a small stela. A Middle Formative center line cache from Mound 20, San Isidro, Chiapas, contained a series of celts placed according to the four cardinal points around a central bowl; on the eastern and western ends, two celts were placed bit upward (Lowe 1981: 243–245, figs. 6, 12, 13).

Ground-stone celts clearly played a major role in Olmec ideology (see Pls. 21–23). Although

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celt symbolism became especially developed during the Middle Formative apogee of La Venta, carefully oriented offerings of jadeite celts are known for Early Formative El Manatí (Ortíz and Rodríguez 1994: figs. 5.11, 5.12; 1999). Unhafted celts also appear on Monuments 8 and 18 from Early Formative San Lorenzo (Coe and Diehl 1980, 1: figs. 431, 446–447). The broken upper surface of Monument 18 portrays the outlines of six celts, all with their bits oriented in the same direction.

The development of celt symbolism among the Olmec probably relates to the appearance of farming and food production in the Formative period, as ground-stone axe blades were surely important tools for the clearing of forest brush. In comparison to celts with only knapped edges, those with ground-stone bits are better suited for cutting tough wood, since the ground edge helps prevent further stone loss from chipping (Phillip Wilke, personal communication, 1995). In Neolithic Europe, ground-stone celts also appeared with the development of agriculture: “Flint and stone axes were used above all to cut down trees to make clearings and houses for sedentary mixed farmers” (Whittle 1995: 248–249). Moreover, these celts had a major symbolic role, and commonly appear in Neolithic rock art (see Fig. 61; Twohig 1981: figs. 77, 100, 113, 116, 118, 120, 128, 181, 188, 201). In addition, it has been suggested that some megalithic menhir monuments are imitations of upright celts, much like celtiform stelae of the Middle Formative Olmec (Whittle 1995: 252–253).

For the Olmec, stone celts appear to have a number of overlapping, complementary meanings. Middle Formative caches from La Venta, San Isidro, Seibal, and other Olmec-related sites contain celts oriented to the four directions, indicating their close identification with these cardinal points (Drucker 1952: fig. 10, pl. 8; Drucker, Heizer, and Squier 1959: fig. 51, pl. 47; Lowe 1981: figs. 6, 13; Smith 1982: fig. 189). In Olmec art, however, celts tend to be placed in cross fashion not to the cardinal directions but to the four intercardinal points, thereby defining the corners of directional sides or world quarters (Fig. 4c–e). Nonetheless, whether at the world directions or intercardinal corners, the four celts frame and thereby delineate the World Center.

At La Venta, celt caches are strongly oriented toward the centerline of Complex A. During excavations in 1943, celts were discovered in the centrally oriented Tombs A and E, and in two caches located on the centerline (Drucker 1952: 39, 75, figs. 9, 22). Offerings 1, 2, 10, and probably 13 of the 1955 excavations are all centerline celt caches (Drucker, Heizer, and Squier 1959: 133–137, 185, 187). In addition, whereas the aforementioned Offering 8 has three closely placed celt groups ranging across the centerline, Offerings 9 and 11 are a pair of caches with celts and mirrors flanking either side of the central axis (*ibid.*: 174–179). Gareth Lowe (1981: 243) notes that a series of Middle Formative celt caches also occurs on the centerline of Mound 20 of San Isidro, Chiapas.

The Olmec identified celts not only with the directions or intercardinal corners but also the pivotal *axis mundi*. A number of Olmec jadeite celts portray incised scenes of the four corner celts flanking a central figure (Fig. 4c–e). Reilly (*n.d.*: 227–228) notes that these scenes are elaborated versions of the bar-and-four-dots motif (Fig. 4b). However, with the four corner celts and central axis, these celts themselves also symbolize the world axis, with the bit edge pointing vertically into the sky. The previously described greenstone stelae from La Venta Complex C are essentially monumental forms of jadeite celts, as both these monuments and the smaller celts bear representations of the Olmec Maize God (Taube 1996). Greenstone celts symbolized ears of corn among the Middle Formative Olmec. For both the Olmec and Classic Maya, maize constituted a form of the central World Tree (Reilly *n.d.*: 181–182; Freidel, Schele, and Parker 1993: 73–74). In addition, both the Olmec and Classic Maya identified the centrally placed loincloth apron with vertical celts and the World Tree (see Pl. 8). The symbolic role of the celt as the *axis mundi* is well documented for the contact-period Mixtec. In one mythical account of the creator couple at Apoala, a copper axe head is placed bit upward to support the heavens (León-Portilla 1984: 91).

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Maize, Precious Materials, and the Middle Formative Olmec Economy

The highly developed symbolic complex surrounding maize, celts, directions, and the world center appears to have been first elaborated by the Middle Formative Olmec. Although much of this symbolism may well have developed during the Early Formative period, it is most fully articulated during the Middle Formative period of La Venta, when maize became the dominant staple of the Olmec. Rust and Leyden (1994: 192, 194) note that the widespread appearance of maize corresponds to the climax of La Venta: "The maximum density of recovered maize is thus coincident, in the La Venta period, with the greatest spread of La Venta-related settlement and ceremonial activities, including use of fine-paste ceramics, figurines, and polished greenstone items" (ibid.: 193).

The widespread occurrence of green serpentine and jadeite objects at La Venta appears to be a consequence of the heightened role of corn in the Middle Formative Olmec economy. It has been recently noted that, for the Olmec, greenstone and quetzal plumes symbolized concentrated embodiments of verdant maize (Taube 1996). The growing religious and economic importance of these precious items represents the development of a wealth finance economy from one based primarily on staples. In their discussion of staple and wealth economies among the Inka, Terence D'Altroy and Timothy Earle (1985) note the advantage of wealth items, which, in contrast to agricultural surplus, can be more readily transported, stored, and converted. Unlike massive earthworks or monumental basalt sculpture, celts and other greenstone carvings could be easily exchanged or reworked into statuettes, jewelry, and other precious items. Charlotte Thomson (n.d.) notes that among the Olmec, celts served as the blanks from which statuettes and other greenstone objects were carved: "the polished jadeite celt was the basic unit of Olmec jade exchange" (ibid.: 98). A number of jade and serpentine statuettes in the Dumbarton Oaks collection were probably carved from such celts (Pls. 8, 10, 11, 12, 14). It is likely also that Olmec duck-head pendants were fashioned from celts, with the thin, broad bill corresponding to the curving bit of the blade (see Pl. 36). In addition, Olmec jade "clam shell" pendants closely resemble the outlines of celts. Another Olmec jade pendant form, the "spoon" is probably derived from celts cut along the center of the long axis, such as the halved celts discovered in Offering 4 at La Venta (see Drucker, Heizer, and Squier 1959: pl. 32).

Wealth items analogous to forms of primitive money may have been already present among the Early Formative Olmec of San Lorenzo. Recent excavations by Ann Cyphers (1994: 61) unearthed more than eight tons of perforated iron ore cubes. Obtained from sources in Oaxaca and Chiapas, these exotic cubes may have served not only as beads, but as units of wealth, much like the *kula* ornaments and other forms of Melanesian shell valuables. Although the Middle Formative Olmec continued to carve mirrors and other precious objects from dark iron ore, green became the color of wealth, a tradition that continued until the Spanish conquest (Berdan 1992). According to Peter David Joralemon (1988: 38), greenstone celts were symbolic ears of corn, and served as a form of "currency" among the Olmec (see Pl. 21). Rather than primitive money, however, the greenstone celts should best be considered as primitive valuables, like the shell and stone wealth items exchanged in traditional Melanesia. George Dalton (1977) notes that unlike primitive money, such valuables lacked standardized values and were not used in marketplace transactions for daily goods but, rather, in contexts of ceremonial exchange.

With their broad range of size and quality, Olmec jade and serpentine celts clearly lacked standardized values. In addition, the great symbolic significance of these items—as reflected in art and their careful placement in caches—suggests that celts were not articles of daily currency. Nonetheless, greenstone celts could also have had a powerful economic role in the context of ceremonial exchange. In a discussion of Formative Oaxaca, Kent Flannery and James Schoenwetter (1970: 144) note that the storage of wealth in the form of primitive valuables could have served both to mitigate the risk of crop failure and to establish reciprocal links of exchange and alliance. Although it

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is unlikely that famine was a common concern of the Gulf Coast Olmec, primitive valuables could be exchanged for reasons other than crop failure. Referring to this economic process as emergency conversion, Paul Bohannon and George Dalton (1962) note that it can arise for various reasons: "The emergency may be war, drought, epidemic, or epizootic. In order to survive, additional food must be obtained, and so highly ranked items must be sold off" (ibid.: 6). Whatever the crises, a system of readily stored and convertible wealth would be of great adaptive use to the Formative Olmec.

The great celt caches at La Venta, La Merced, and other Middle Formative sites strongly suggest hoards of stored wealth. Even more impressive are the Massive Offerings of La Venta Complex A, which contain hundreds of tons of raw serpentine. These huge deposits are capped by mosaic pavements of cut serpentine blocks, quite probably blanks from which celts could be carved (see Fig. 34b). In other words, these mosaics are essentially more elaborate forms of celt caches. Although the mosaic motif has been frequently identified as a mask, it probably represents a cleft celt marked with the bar-and-four-dots sign for the World Center. The four dots are marked with the "double-merlon," the Olmec sign for the color green (Taube 1995: 91). Thus the mosaic pavements seem to refer to "the green place." According to Elizabeth Benson (1971), the mosaic motif represents the World Center and quite possibly the site of La Venta: "It is a central motif, the center on the map, and may perhaps stand for La Venta itself, the long plaza of the site itself centered between the four corners of the world" (ibid.: 29).

Given the strong Olmec identification of greenstone and quetzal plumes with the *axis mundi*, the later Maya use of green to represent the World Center in color-directional symbolism probably originated in Formative Olmec ideology. The relationship of items of green wealth with the center surely relates to the cosmological concept of the verdant World Tree. According to Paul Wheatley (1971) capitals symbolize the pivotal world axis, a channel of supernatural power: "The capital, the *axis mundi*, was also the point of ontological transition at which divine power entered the world and diffused outwards through the kingdom" (ibid.: 434). However, aside from their cosmological meaning, major Olmec communities were also surely centers in terms of the process of economic redistribution as described by Karl Polanyi, "collecting into, and distributing from, a center" (1968: 153). Such major sites as La Venta were indeed "centers" for the encircling hinterland populations, where the most esteemed items—green maize, quetzal plumes, and jade—were collected, stored, and exchanged. In terms of both the cosmos and community, green was the color for the central place, the source of abundance and wealth.

Jadeite, Serpentine, and Lapidary Art of the Middle Formative Olmec

Among the more striking traits of the Middle Formative Olmec is the widespread appearance of finely carved objects of jade and serpentine. Although a widely used term, "jade" actually embodies two very distinct types of stone. One of these, nephrite, is a rock amphibole formed of closely interwoven, fiberlike crystals of the minerals tremolite and actinolite (Harlow 1993: 10). Because of this felted, fibrous structure, nephrite frequently has a woodlike grain or "flow" and is somewhat soft to carve although extremely tough, that is, resistant to breakage. The second type of jade is a pyroxene mineral, jadeite, a sodium aluminum silicate of magnesium (ibid.). Jadeite is a very dense and hard stone that often displays a grainy, crystalline texture similar to that of quartzite. However, although harder than nephrite, jadeite is less tough, and lacks the flowing, woodlike grain often found in nephritic jade. Whereas the principal coloring agents of nephrite and jadeite are iron, jadeite tends to have more varied and brilliant hues. In rare instances, when chromium substitutes for aluminum in jadeite, a brilliant emerald green jade is produced (ibid.: 9). Whereas nephrite was the traditional jade of ancient China, this stone does not occur in Mesoamerica. In-

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stead, jadeite is the only form of jade known for this region (Foshag 1955: 1064). Strictly speaking, most if not all of the Olmec jade objects described in this catalogue are jadeitite, that is, jadeite rock containing more than ninety percent jadeite along with other minerals (see Harlow 1993: 13). However, rather than adopting this more accurate but rather cumbersome term, I will refer to jadeitite by the more widely used terms of jade and jadeite.

Whereas both nephrite and jadeite are hard stones that cannot be cut by steel, serpentine is comparatively soft and can be readily scratched with an iron point or blade. Serpentine, or more accurately serpentinite, is a metamorphic rock rich in iron and magnesium (Harlow 1996: 124). Serpentine varies considerably in color, texture, translucency, and hardness. Many serpentines are light green, other examples can be very dark to black (see Pls. 6, 7, 14). Although far less rare than jadeite, serpentine was an esteemed material among the Olmec and overlapped with jade in both symbolic meaning and function. As I have mentioned, both jadeite and serpentine were considered wealth items related to the symbolism of maize and agricultural abundance. Moreover, like jadeite, serpentine was frequently carved into celts and other objects, including statuettes and jewelry; the artistic attention and skill frequently lavished on these objects indicate the esteem in which this material was held.

In terms of geological context, jadeite and serpentine are closely related stones. In fact, one of the preconditions of jadeite is the occurrence of serpentinite, or serpentine rock, in areas of major faulting (Harlow 1993: 9). As George Harlow notes, these geologic conditions have important bearing on the sources of Olmec jade. In comparison to nephrite, jadeite is a far rarer stone, and is found in only some eight to ten regions of the world (Lange 1993: 1). According to Harlow (1993), the Motagua Valley of eastern Guatemala is the only region in Mesoamerica possessing the proper mineralogical and fault conditions for jadeite. At present, it is the only documented source of jadeite in Mesoamerica (Foshag and Leslie 1955). It is noteworthy, however, that jade currently mined from this region is neither the translucent blue jade of the Olmec nor the bright apple-green jade favored by the Classic Maya. Neutron activation studies suggest that there are at least two distinct Mesoamerican sources of jadeite (Bishop, Sayre, and Van Zelst 1985; Bishop and Lange 1993). Harlow (1993), however, argues that due to the metamorphic processes in creating jadeite, its chemical composition can vary considerably in a single region: "most jadeites show the effects of shearing and deformation caused by the adjacent and genetically important fault(s), which can and did mechanically mix adjacent rocks. Thus, one must study jadeitites and artifacts as the somewhat nasty rocks they are" (ibid.: 17). Although it is conceivable that another jadeite source may eventually be discovered in Mesoamerica, the central Motagua Valley remains the most probable source of Olmec jade.

It is quite likely that the first jade obtained from the Motagua consisted of stream-tumbled cobbles and boulders rather than material mined from quarries. Although the preference for loose riverine material partly derives from the relative ease of extraction, there is another important reason for its desirability: such river boulders and cobbles tend to be the hardest and purest jade, the "heart of the stone," with much of the softer, impure, and less consolidated material removed from the constant tumbling in stream beds. Thus, in traditional China, the riverine nephrite boulders of Khotan were favored over quarried material, which often was marred by fractures. It was not until the late sixteenth century that the Chinese began the systematic quarrying of nephrite (Wyatt 1980: 27).

One of the interesting traits of water-tumbled tough stones is a tendency toward celtiform shapes. That is, the natural forms of many jade cobbles virtually invite the carving of stone celts or axes (Fig. 7). As previously noted, Thomson (1975: 94) suggests that celts were the primary form by which Olmec jade was exchanged and subsequently carved into statuettes and other precious ob-



Fig. 7 Jade cobbles in natural celtiform shapes. The larger cobble is chromelanite jadeite from the Motagua Valley. The smaller example is nephrite from Willow Creek, California.

jects. Peter David Joralemon (personal communication, 1982) has noted that polished celts are well-suited for evaluating stone quality. Not only does the polished surface elucidate the color, texture, and hardness of the jade, but the thin, ground-stone edge also reveals its degree of translucency. Many jade celts, including examples in the Dumbarton Oaks collection, still display remnant marks of steps in the manufacturing process, including bifacial percussion and the subsequent stage of pecking and shaping the rounded form (Pls. 21–23).

The initial percussion flaking of a jadeite celt is by no means an easy task, as this material is far tougher and more resilient than flint or basalt. When skillfully performed, however, knapping saves a great deal of time and effort in the manufacturing process, as grinding is a far more laborious and time-consuming task. Matthew Stirling (1961) suggests that many Olmec jades were initially shaped by deft blows: “Percussion was used in some of the preliminary stages, such as breaking off projections and unwanted pieces, or in separating sections blocked out by sawing” (ibid.: 56). One of the finest Olmec jades in the Dumbarton Oaks collection, a fragmentary figure (Pl. 16), displays the precision and sureness with which Pre-Columbian artisans could break jadeite.

Although widely used, the English term *carving* is somewhat misleading for the working of jadeite and other hard stones. Rather than being cut or gouged in the manner of far softer wood, jade is essentially fashioned with abrasives. Thus the Chinese phrase for jade work is *cho mo*, meaning “grinding and polishing” (d’Argencé 1977: 10). Because both nephrite and jadeite are harder than steel, metal tools are of comparatively little use. Of far greater importance is the quality of abrasive and the speed with which it can be applied to the stone to be worked. Excavations at the highland Maya site of Kaminaljuyu uncovered a possible Early Classic jade worker’s burial, complete with unfinished jades and abrasives in the form of coarse quartz sand and pulverized jade (Kidder et al. 1946: 84–85, 120). Readily available quartz and crushed jade probably also were used as grinding agents by Olmec lapidaries. Although not documented for the Olmec, another relatively common grit material possibly included was garnet. Harder than jadeite or quartz, pulverized garnet is a particularly efficient grinding agent. Mixed with water into a slurry, such abrasives as quartz sand, crushed jade, or garnet could be used to drill, saw, grind, and polish jade objects.

Olmec lapidary tools were probably relatively simple, including “saws” of stone, wood and



Fig. 8 Jade mask with remnants of guiding drill holes at the edges of the eye orbits (after *The Olmec World* 1995: 266, no. 182).

flexible string, and various forms of drills. Although the Olmec surely used grit with string to cut certain objects (e.g., the Dumbarton Oaks porphyry masquette, Pl. 38), the angular cuts of many carvings indicate that they favored using abrasives with a bladelike solid instrument of wood or other material. Philip Drucker (1952: 146) interprets a number of gritty sandstone objects at La Venta as stone saws. In these cases, the quartz grains of the sandstone rock served as a natural cutting agent.

Whereas Olmec sawing was done with back and forth movements, drilling employed a rotary motion that could be performed with considerable speed. The drilled pits and depressions found in many Olmec jade and serpentine carvings reveal that a wide variety of bits were used, from extremely fine and narrow tips to broad and wide forms. At times, hollow core drills were also employed. Along with creating a fairly large and even bore, hollow core drills allowed the middle section of stone, or plug, to be removed without grinding, saving both time and material. In contrast to later Mesoamericans, however, there is little evidence that the Olmec commonly used hollow core drilling to remove large portions of stone. Nonetheless, solid bit drills were often employed in the manufacturing process. Miguel Covarrubias (1957: 55) suggests that carefully placed drill holes often served as guides for the sculpture, not only for determining the outlines of such features as the eyes and mouth, but also to determine the depth of carving. Many of these holes were retained in finished Olmec carvings for aesthetic effect, particularly in the corners of the mouth and eyes; in some cases, even the holes used for marking depth are apparent. An impressive brown jade mask displays the remains of a series of such drill holes in its sunken eye orbit regions (Fig. 8).

Along with being used to define features and depth during the manufacturing process, drilling was also performed near the final stages of manufacture, commonly to perforate the earlobes and nasal septum. Typically biconical, these drill holes are at times astonishingly small and must

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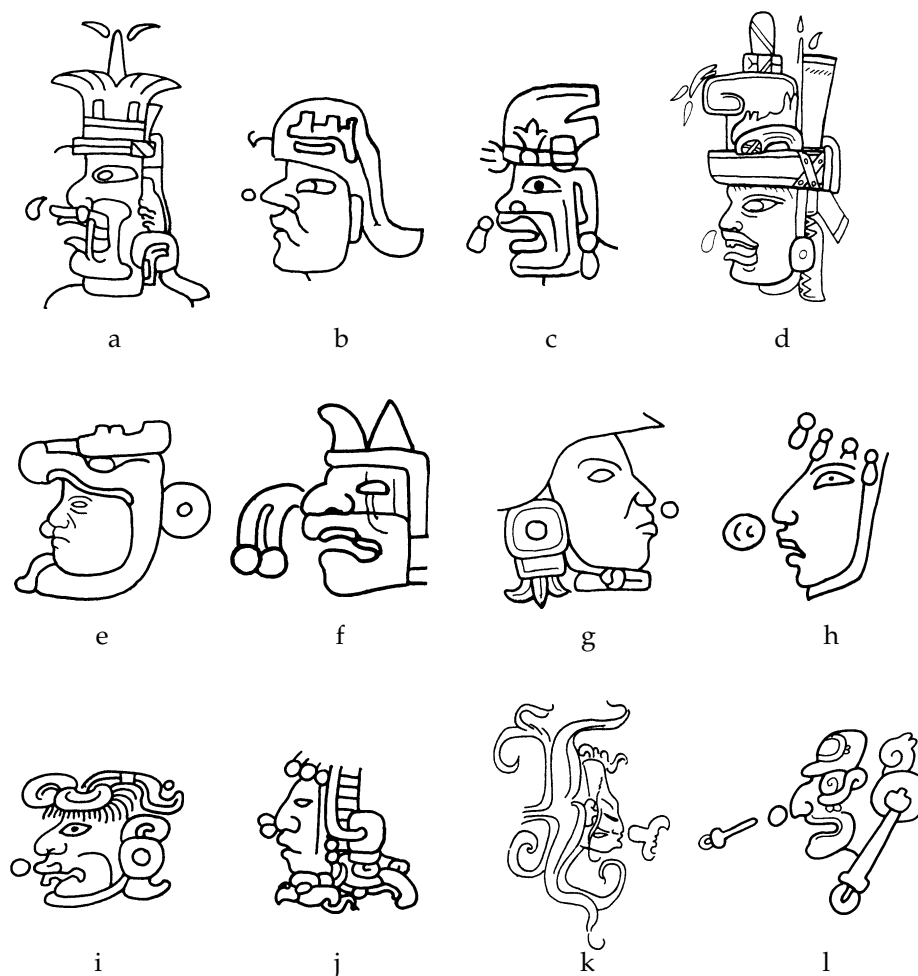


Fig. 9 Breath elements in ancient Mesoamerican art. (a) Olmec Maize God with a tearlike breath device (after Medellín Zenil 1971: no. 67); (b) Olmec flying figure with a circular breath element (after Harmer Rooke Galleries 1984: no. 9); (c) Olmec flying figure with a beadlike breath element (after Benson and de la Fuente 1996: no. 98); (d) Olmec figure with a tearlike breath form (after Benson and de la Fuente 1996: no. 115); (e) Olmec figure with a nose bead. La Venta Monument 19 (after Benson and de la Fuente 1996: no. 17); (f) Head of the Olmec Maize God with pendant breath elements. Shook Panel (after Miller and Taube 1993: 39); (g) Isthmian figure with a circular breath device. La Mojarra Stela 1 (after Winfield Capitaine 1988: fig. 7); (h) Protoclassic Maya Figure with a breath element (see p. 180); (i) Protoclassic Maya Maize God with a circular breath form. Pomona Flare (from Taube 1992b: fig. 20d); (j) An Early Classic Maya ruler with a pair of nose beads. Leiden Plaque (after Schele and Miller 1986: pl. 33b); (k) Late Classic Maya Maize God with a floral-shaped breath element (from Taube 1985: fig. 4a); (l) Postclassic Itzamna with a beaded breath element. Codex Dresden, page 9b.

have been created with very fine bits. It is curious that although a great deal of effort was exerted in piercing the septum of jade and serpentine statuettes, this is not a common feature of ceramic Olmec figures, despite the fact that it could be easily performed in moist clay. The meaning of the drilled septum remains obscure. As in the case of pierced earlobes, a perforated septum may allude to the wearing of jewelry, in this case suspended from the nose. It is also conceivable that the drilling of the septum may have constituted a ritual bestowal of breath or life to the carving. Along with later Maya art, Olmec figures are often represented with beadlike elements in front of their noses (Fig. 9). For both the Olmec and Maya, these nasal elements can appear either as real ornaments or as more ethereal items floating in front of the face. Although it is quite possible that

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jewelry often was worn through the septum, such beads alluded to precious breath. For the Olmec and later Maya, the floating nasal elements denoted breath and life force.¹¹

Jade was not only related to life-sustaining maize, but also the life spirit itself. Classic Maya beads, pectorals, earspools, and other jades are commonly portrayed with signs denoting breath or wind (see Proskouriakoff 1974: pls. 50a, 65b, 66). Fray Bartolomé de las Casas recorded the following ritual performed at the death of a Pokom Maya king: “When it appears then that some lord is dying, they had ready a precious stone which they placed at his mouth when he appeared to expire, in which they believe took the spirit, and on expiring, they very lightly rubbed his face with it. It takes the breath, soul, or spirit” (Miles 1957: 749).

Michael Coe (1988: 225) notes that this rite probably relates to the common Pre-Hispanic custom of placing a jade bead in the mouth of the deceased. Excavations in highland Oaxaca have documented this practice during the Early Formative period, roughly contemporaneous with the Olmec San Lorenzo phase (Marcus 1999: figs. 4, 5). Links to the Gulf Coast lowlands are suggested by a flexed male burial from Tomaltepec, Oaxaca. Along with the bead placed in the mouth, this burial contained a greenstone celt as well as a ceramic vessel resembling the Calzadas Carved Ware of San Lorenzo (*ibid.*: fig. 4).

Following an initial schematic cutting of a jade object, there are the lengthy stages of grinding and polishing. Drucker (1952: 146, pl. 44b) interprets one sandstone artifact at La Venta as a possible grinding stone, and it is quite likely that this material was commonly used for grinding jade. Thomson (*n.d.*: 101) notes that the juxtaposition of the initial angular cutting and the gently rounded contours of the grinding process provides much of the aesthetic appeal and power of Olmec statuettes and other jades: “On the fronts of the figures, every attempt is made to obliterate the hard, straight cuts which determine the essential form of the piece. They are softened and obscured by abrading and polishing. In this fact lies the peculiar dialectic of Olmec jade-working form: the tension between the geometric cuts which determine form, and the aesthetic that demanded form be softened, smoothed and rounded” (*ibid.*: 101).

After the initial grinding, the surfaces of Olmec jades were further finished by sanding and polishing, with the finest abrasive being used for the final, mirror-like polish. Although the materials used for the final polish remain unknown, Thomson (*ibid.*: 107) notes that hematite is currently used as polishing rouge. According to Thomson (*ibid.*), some of the red hematite staining found on Olmec jades may derive from the polishing process.

A great many Olmec jade and serpentine carvings are marked with light incisions. On close inspection, it is evident that these lines were made by repeated scratching with a sharp point, such as the tip of a quartz crystal. In contrast to the highly polished surface of the stone, the incised lines have a dull, mattelike finish. From replicative experimentation with quartz crystals and Motagua jade, I have found that it is easier to incise jade before the final mirror polish, as a slightly rougher surface allows a better purchase for the quartz tip. Although in many cases the designs incised on Olmec jades are quite intricate, the incision is often surprisingly crude and sketchy (Fig. 10). At times, even the overall incised design is rather poorly conceived (see the Hummingbird Bloodletter, Pl. 20). According to Thomson (*n.d.*: 106a), such incision often may have been performed well after the original manufacture of an object. In contrast to the initial carving, the rather light and scratchy incisions could be made with relative ease. Instead of being performed only by specialists, the incisions on many jades may have been made subsequently by their owners.

Among the more striking objects carved by the Olmec were jade and serpentine statuettes,

¹¹ For Maya and Aztec discussions of breath and life, see Thompson (1960: 73), López Austin (1988: 232–236) and Houston and Taube (2000: 265–273).



Fig. 10 Detail of the Dumbarton Oaks Río Pesquero statuette (Pl. 18) showing the sketchlike quality of its fine incision (after Benson 1971: fig. 11)

that recall the standing greenstone figures of later Classic Teotihuacan (see Berrin and Pasztory 1993: nos. 13–21, 183, 187). The meaning and function of such sculptures remain poorly understood for both cultures, however. Peter Furst (1995: 79–80) suggests that the Olmec statuettes of were-jaguars and figures engaged in shamanic transformation may represent shamanic spirit helpers, as they are currently used among the Quiché Maya, as well as the Cuna of Panama and the Chocó of coastal Colombia. Among these contemporary peoples, sculpted images serve as the embodiments of spirits conjured in rites of divination and curing (ibid.). Although many Olmec stone statuettes may have represented particular spirits, including honored ancestors, other greenstone Olmec figures could have served as more generalized conduits for supernatural power. Given the close identification of jade and serpentine with the world axis in Olmec and later Mesoamerican thought, greenstone statues may have embodied the concept of the *axis mundi*, a means of summoning divine power and abundance. For example, among the contemporary Hopi, there are the maize ear fetishes, or *tiponi*, which represent the World Center in kiva ritual. Through the *tiponi*, the Katsina rain spirits are brought into the kiva (Geertz 1987: 17–18). Although the various uses of the Olmec greenstone statuettes await further documentation and study, they likely were not simply static portrayals, but also served as dynamic components of Olmec ritual.

The fine Olmec jade and serpentine carvings in the Dumbarton Oaks collection can be admired as great art; in antiquity these objects were also items of wealth. In part, the value placed on these pieces derived from the extraordinary time and effort required for the cutting, drilling, grinding, and polishing of hard stone. These precious greenstone objects, however, are also in their very essence evocations of maize and agricultural abundance. For this reason, maize symbolism will be one of the more important themes discussed in closer examination of these objects.

Olmec Maize Imagery and Symbolism

Olmec depictions of maize are numerous during the Middle Formative period of La Venta. Joralemon (1971: 32–33) describes three important motifs representing ears of corn—banded maize,

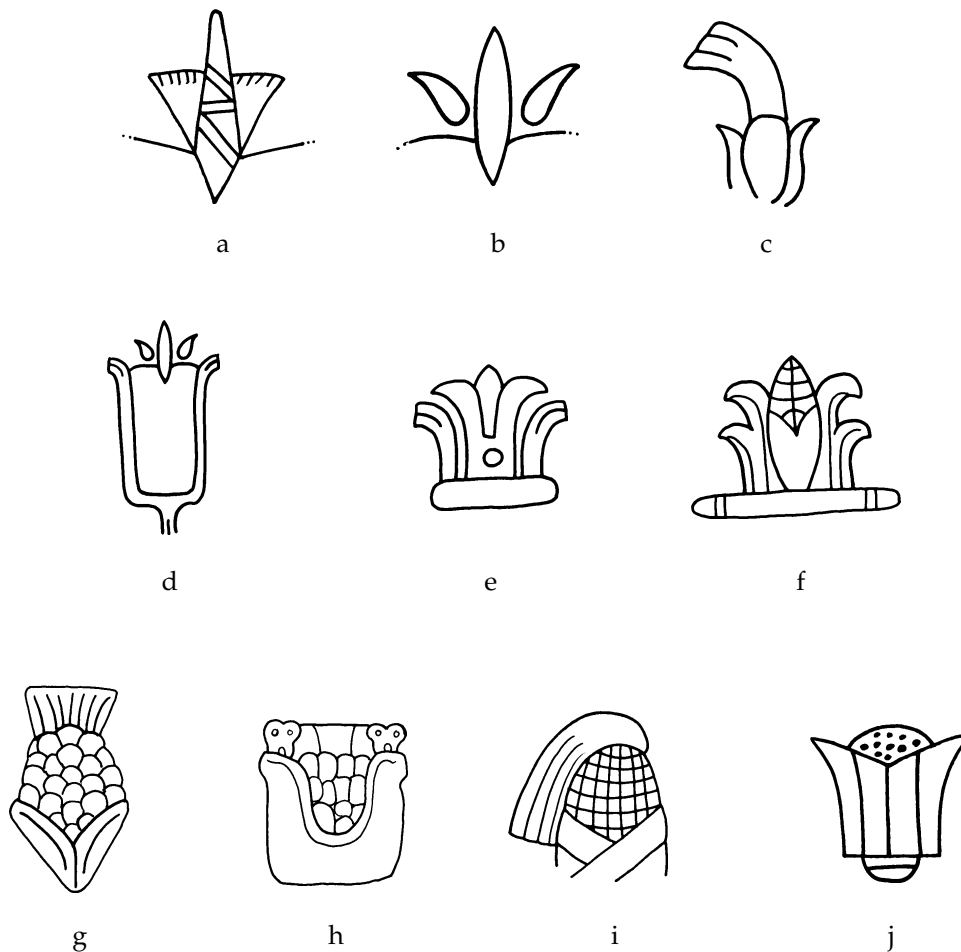


Fig. 11 Olmec and other Pre-Columbian representations of maize ears. (a) Banded maize. Detail of a Río Pesquero incised celt (see Fig. 4d); (b) Tripartite maize sign. Detail of a La Venta incised celt (see Fig. 12a); (c) Maize with flowing silk (after Joralemon 1971: fig. 80); (d) Maize ear flanked by cleft foliation. Detail of a La Venta celt (see Fig. 12a); (e) Maize ear flanked by cleft foliation. Detail of a Middle Formative Olmec carved celt (after Fields 1991: fig. 3a); (f) Maize ear flanked by maize leaves. El Sitio, Guatemala (after Fields 1991: fig. 2); (g) Maize ear with cleft bracts. Early Classic Teotihuacan (after Berrin and Pasztory 1993: no. 76); (h) Maize ear in U-shaped bracts. Late Classic Copán (after Fash 1988: fig. 4); (i) Maize ear in V-shaped bracts. Late Postclassic Aztec (after Nicholson and Keber 1983: no. 53); (j) Maize ear in V-shaped bracts. Nasca, south coastal Peru (after Selser 1902–1923, 4: 328).

tripartite maize, and maize with flowing silk (Fig. 11a–c). Quite frequently, the ear projects out of a V-shaped cleft. Although this cleft has been interpreted as the earth (e.g., Furst 1981: 150; Marcus 1989: 172), it actually represents the maize husk, or bracts, surrounding the projecting central ear.¹² One celt excavated in a centerline cache at La Venta Complex A portrays the ear and central cob flanked by an outcurving U-shaped element (Fig. 11d). A slightly later Olmec carving depicts the central ear surrounded by an outwardly flaring V-shaped husk (Fig. 11e). In this case, the outer U-shaped device is two separate elements, although still with cleft ends. A probable epi-Olmec celt from El Sitio, Guatemala, reveals the meaning of these two forms (Fig. 11f). In this case, the side elements are clearly long maize leaves, quite like the corn stalk carried by one of the figures from Chalcatzingo Monument 2 (see Gay 1972a: fig. 17). Moreover, the El Sitio celt explicitly portrays

¹² According to Furst (*ibid.*) the V-shaped cleft refers both to the earth and the vulva (as the female creative principle). It is quite possible that in their representations of maize ears, the Olmec intentionally combined both the male and female principles as a sign of fertility and creation, with the cylindrical cob enveloped by the folds of the husk. In Mesoamerica and the American Southwest, maize is often dually sexed, with both female and male attributes.

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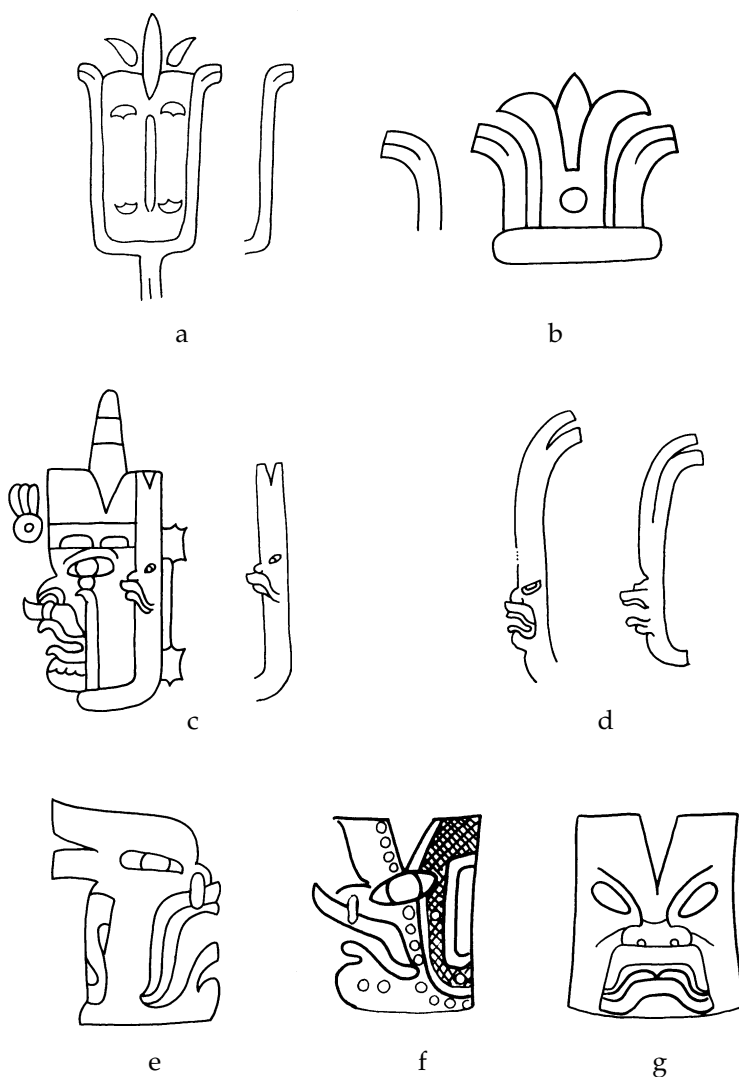


Fig. 12 The cleft foliation motif in Middle Formative Olmec iconography. (a) Maize ear surrounded by a pair of cleft leaves. Incised jadeite celt from La Venta (after Diehl 1990: no. 11); (b) Maize ear flanked by long cleft leaves (after Fields 1991: fig. 3a); (c) Olmec Maize God with a personified cleft leaf flanking its cheek. Incised celt from La Venta (after Joralemon 1971: fig. 175); (d) Examples of personified cleft foliage (see Fig. 45b, d); (e) A foliated aspect of the Olmec Maize God (after Joralemon 1971: fig. 43); (f) A foliated Maize God (after Feuchtwanger 1989: fig. 155); (g) A frontally facing foliated Maize God (after Berjonneau, Deletaille, and Sonnery 1985: pl. 30).

the central ear of corn as a seeded cob emerging from the cleft husk. In later Mesoamerican traditions, including that of Teotihuacan, the Classic Maya, and Postclassic Aztec, maize ears frequently appear with the cob surrounded by V-shaped or U-shaped bracts (Fig. 11g–i). In an independently developed convention, maize ears also appear with V-shaped bracts in Nasca art of south coastal Peru (Fig. 11j).

The V-shaped cleft motif, one of the more striking conventions of Olmec art, primarily refers to vegetation and growth, especially maize. The aforementioned long leaves flanking the central maize ear constitute another form of the vegetal cleft (Fig. 12a–b). Joralemon (1971: 13) first identifies these long cleft elements as vegetation and notes their frequent occurrence as the bifurcated “fangs” of God II, the Olmec Maize God. The cleft ends probably represent the tender opening buds or shoots of growing plants. Although the cleft can be rendered as a single line, it also ap-

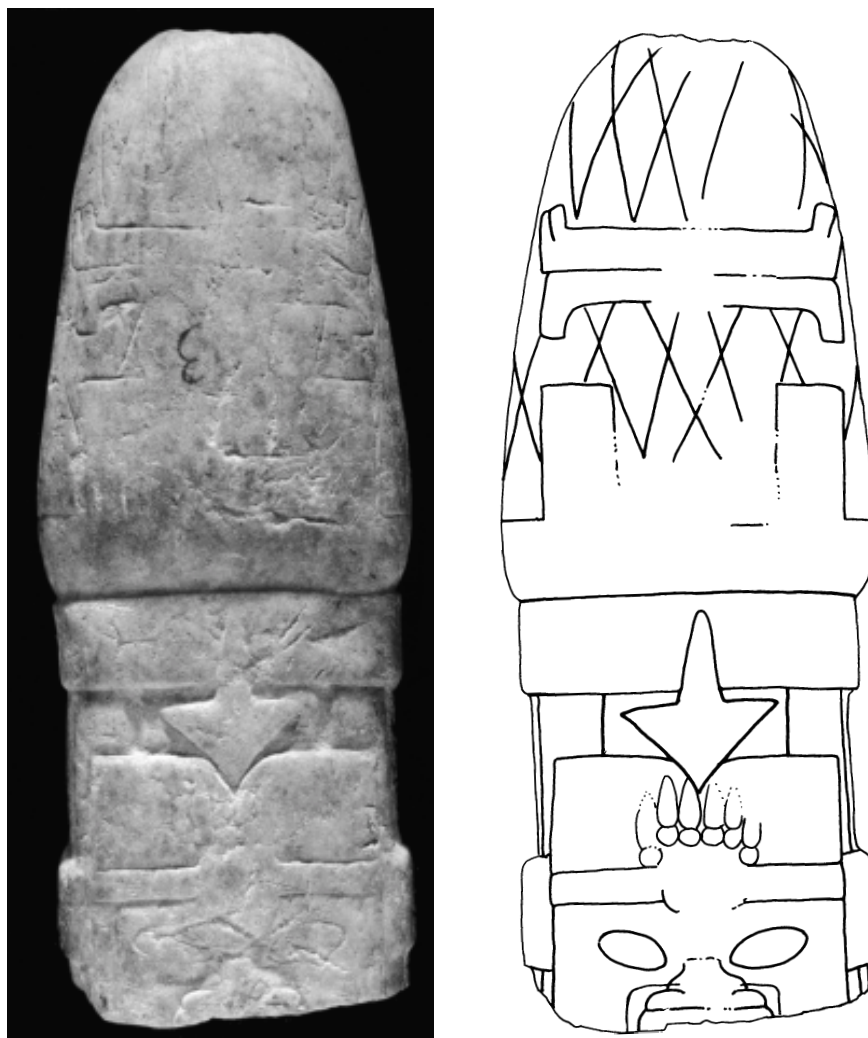


Fig. 13 A fragmentary jadeite maize ear fetish. Note the partial head of the Olmec Maize God at the bottom. Photograph by Hillel Burger; reproduced courtesy of the Peabody Museum, Harvard University.

pears with the same broad V-shaped cleft surrounding maize cobs. Another incised jadeite celt from the centerline of La Venta Complex A portrays the head of the Olmec Maize God in profile (Fig. 12c). The entire head appears as a corn ear surrounded by split foliation, essentially a profile depiction of the cleft U-shaped growth surrounding the La Venta celt of Figures 11d and 12a. In this case, however, the upper end is straight, with a more open, V-shaped cleft, and most notably, the growth is personified with a profile face. In Olmec sculpture, such personified foliation often occurs as a pair of curving vertical arcs on the sides of faces, as if by bracketing the central region, the face becomes an ear of maize (Figs. 12d, 42, 44).

Along with appearing as secondary incisions on sculpture, the personified foliation occurs as a specific god marked by a prominent cleft in the head, which often curves sharply backward (Figs. 43a–d, f, 44 b–c, 46). Termed under the rubrics of Gods VI and X in the Joralemon (1971) classificatory system, the foliated entity probably embodies the tender growing aspect of the Olmec Maize God (see e.g., Pl. 15). For this reason, the head often appears to be backturning and flexible, and typically lacks the mature cranial cob emerging from God II, the Olmec Maize God as the personification of fully grown maize.

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More than a highly valued item of tribute and wealth, maize was a central component of Middle Formative Olmec religion. One of the more common articles wielded in Olmec ritual, the so-called torch, is a maize fetish surrounded by precious feathers, quite probably of the green quetzal (Taube 1996, 2000). In form and concept, these items are notably similar to the aforementioned Hopi *tiponi* and related feathered maize ear fetishes of Puebloan ritual, which are frequently decorated with feathers of the Mesoamerican macaw (see pp. 25, 80). The seated figure of San Lorenzo Monument 26 holds a probable Early Formative example of the maize fetish (Coe and Diehl 1980, 1: fig. 459). These fetishes are far more common in Middle Formative sites of the Olmec heartland and other regions of Mesoamerica, however. Although no archaeological examples of such maize ear fetishes have been documented for Formative Mesoamerica, Carlos Navarrete (1974: figs. 15–17) describes one intact and three fragmentary copies carved in jadeite or serpentine. In the case of the two sculptures with intact upper ends, the object is topped with the head of the Olmec Maize God (see Fig. 35h).

While visiting the Peabody Museum of Harvard University, I encountered another example of an Olmec stone maize ear fetish (Fig. 13). Collected by H. Fremont in Campeche during 1880, the item has been part of the museum's collection since 1910.¹³ The massive jadeite object is presently some 29.5 centimeters in height. It has suffered substantial loss to its lower end and a portion of the top as well; the original sculpture may have approached almost 40 centimeters in total length. As in the case of many of the maize fetishes, bound sticklike elements compose the lower portion, here marked on the front with the head of the Olmec Maize God sprouting maize out of his cleft brow. Above the head, the upper portion displays the double-merlon sign and a stylized, frontally facing bird (see Fig. 53 h–k). The cross-hatching on all sides of this bulging upper portion probably denotes encircling feathers, and appears on other examples of maize fetishes (see Benson and de la Fuente 1996: no. 49). A pointed element representing the central cob may have originally been at the broken, top portion of the jade fetish, which was lost when it was damaged.

Olmec Religion

Along with a complex iconography concerning the cosmos and agricultural fertility, the Olmec also had a rich array of distinct supernatural beings. The pioneering research by Peter David Joralemon (1971, 1976) remains the most ambitious attempt at classifying the many deities appearing in Olmec art. In his first major study, Joralemon (1971) isolates and describes some ten distinct beings, which he labels using Roman numerals. Although these generally appear to be viable and distinct categories, the specific identity and meaning of many of the gods remain poorly known. This is partly because most of these beings have not been traced to better-known deities of Classic and Postclassic Mesoamerica. Until recently, there has been a virtual "Olmec barrier" between well-known Classic Mesoamerican gods and the Formative Olmec. In this catalogue, I will note the presence of two Classic period supernaturals, the Old Fire God and the Fat God, in Middle Formative Olmec ideology (see Pls. 17, 33). However, given the importance of agricultural fertility in Olmec religion, it is not surprising that the most pervasive and profound continuity involves the Olmec gods of rain and maize.

In a now famous diagram, Covarrubias (1946a: fig. 4; 1957: fig. 22) traced the various rain and lightning gods of Classic and Postclassic Mesoamerica to an Olmec prototype. Recently, I have provided further support for the Covarrubias diagram (Taube 1995), and note that the Maya Chaak, the Zapotec Cocijo, and the Central Mexican Tlaloc can indeed be traced to an Olmec deity, essen-

¹³ I am indebted to William and Barbara Fash for providing access to the Peabody Museum collection and to Ian Graham and Gloria Greis for their assistance with information regarding the provenience and accession of the Fremont object (Peabody Museum Accession no. 10-4-20/C-5248).

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tially the snarling figure at the base of the Covarrubias diagram (Fig. 14). The identification of the Olmec Rain God was first presented by C. W. Weiant (1943: 97) during his discussion of a ceramic figurine fragment from Tres Zapotes: "This figurine bears unmistakable resemblance to the Zapotecan Rain God Cocijo as we find him on the earliest of the funerary urns." Much like the argument subsequently posited by Covarrubias, Weiant (*ibid.*) compared this Olmec "rain deity" figurine (Fig. 15a) to images of Tlaloc as well as Cocijo. Like many examples of the Olmec Rain God, the Tres Zapotes figurine displays long and curving canines, a heavily furrowed brow, and eyes that turn sharply downward at the outer corners (Fig. 15a–f). This powerful face clearly derives from the jaguar—a creature closely identified with the Tlaloc, Cocijo, and Chaak rain gods of later Mesoamerica (Taube 1995). The supporting throne figure of La Venta Monument 59 has the face of the Olmec Rain God, along with the ears and body of the jaguar. In many cases, Olmec jaguars are represented with a deeply furrowed central brow and eyes that turn down at the outer corners (Fig. 15g–h). In addition, the Olmec Rain God's maw frequently has the central pointed tooth also found with Olmec jaguars as well as the Zapotec Cocijo (Figs. 3c, 15b, c, f, g, i, j). The face of the illustrated Protoclassic Cocijo from San José Mogote is virtually identical to that appearing on an Early Formative ballplayer figurine attributed to Tlatilco (Fig. 15b, j).

Another major supernatural Olmec being that can be traced to later Mesoamerican deities is the Olmec Maize God (Fig. 16). First identified by Michael Coe (1962b; 1968: 111) and Peter David Joralemon (1971: 59–66), this deity typically has an ear of corn emerging from the center of his cleft cranium. The head is essentially a personification of the previously described maize ear motif, with a central cob emerging from the split husk (Fig. 11; Taube 1996). The Olmec Maize God commonly appears on greenstone celts as well as celtiform stelae from La Venta. In addition, he is frequently surrounded by directional celts, and appears to be a personified form of the World Tree as growing maize (Fig. 4c–e; Reilly n.d.; Taube 1996). Like the Olmec Rain God, the corn deity also has distinctive facial features, with almond-shaped eyes that usually slant upward at the outer corners and a prominent pair of upper incisors. These same facial traits are also found among the Classic corn deities of the Maya, the Zapotec, and peoples of the Gulf Coast (Fig. 16).

It appears that distinct aspects of the Olmec Maize God personified particular stages in the growth cycle of corn (Taube 1996). Whereas the entity referred to as God II in the Joralemon system of deity classification represents the fully matured ear of maize, two other aspects portray the seed and growth of corn. Thus the infant God IV, the entity previously identified as the Rain God by Joralemon (1971), is probably the seed phase of the corn god (see pp. 91–92). Yet another aspect of the Olmec Maize God, designated as God VI by Joralemon (1971), embodies green and tender growing corn and appears as the personified form of vegetal growth (Fig. 11c–g). Unlike the mature corn deity, the growing aspect of the Olmec Maize God tends to have a cranial cleft without the central ear of corn. Nonetheless, there is considerable overlap between these three aspects of the Olmec Maize God. Thus, for example, the four aforementioned maize deity sculptures from Teopantecuanitlán contain attributes of all three beings (see Fig. 46a).

Both the Olmec rain and corn deities bear the typical pulled-back upper lip, or snarl, that serves as a virtual hallmark of the Olmec art style: "a large trapezoidal mouth, known among archaeologists as the 'Olmec' or 'jaguar' mouth, with the corners drawn downward and a thick, flaring upper lip that gives them [Olmec figures] a despondent, fierce expression like that of a snarling jaguar" (Covarrubias 1957: 56). The jaguar identification appears to be correct, as Olmec jaguars are typically portrayed with similar snarls (Fig. 15h–i). However, the meaning of this striking convention remains to be established. Covarrubias (*ibid.*: 58) suggests that the jaguar mouth may allude to a totemic ancestor or to the importance of rain and earth symbolism in Olmec thought. Ignacio Bernal (1969b: 98–99) states that the combination of human and jaguar traits may allude to



Fig. 14 The evolution of Mesoamerican rain gods: (left) the Zapotec and Mixtec deities; (center) the Central Mexican Tlaloc; (right) the Maya Chaak (adapted from Covarrubias 1957: fig. 22)

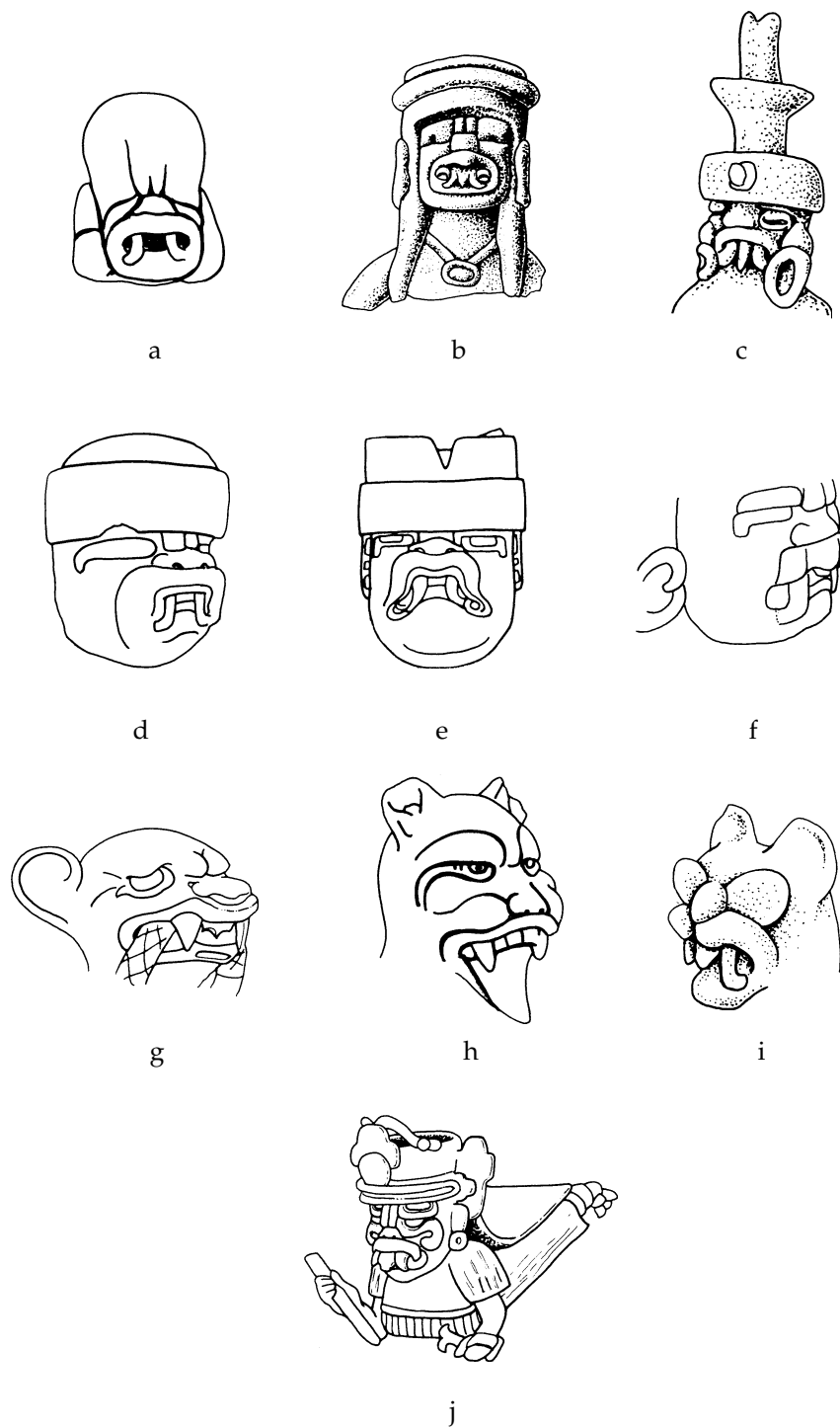


Fig. 15 Examples of the Olmec Rain God, jaguars, and the Zapotec Cocijo. (a) Figurine head of the Olmec Rain God. Tres Zapotes (after Weiant 1943: pl. 29, no. 4); (b) Figurine fragment of the Olmec Rain God. Tlatilco (from Taube 1996: fig. 20a); (c) Fragmentary figurine of the Olmec Rain God (after Niederberger 1987: fig. 282a); (d) Olmec Rain God. Estero Rabón Monument 5 (after Medellín Zenil 1960: pl. 1); (e) Olmec Rain God. San Lorenzo Monument 10 (after Coe and Diehl 1980, 1: fig. 434); (f) Jaguar throne with facial features of the Olmec Rain God. La Venta Monument 59 (after Reilly 1994: 238); (g) Jaguar with a serpent in its mouth. Las Bocas (from Taube 1996: fig. 20c); (h) Anthropomorphized jaguar head. Las Bocas (after *The Olmec World* 1995: no. 51). (i) Early Formative jaguar. San Lorenzo (see Fig. 3b); (j) Ceramic sculpture of Zapotec Cocijo. Monte Albán II, San José Mogote (after Marcus 1992: fig 9.9).

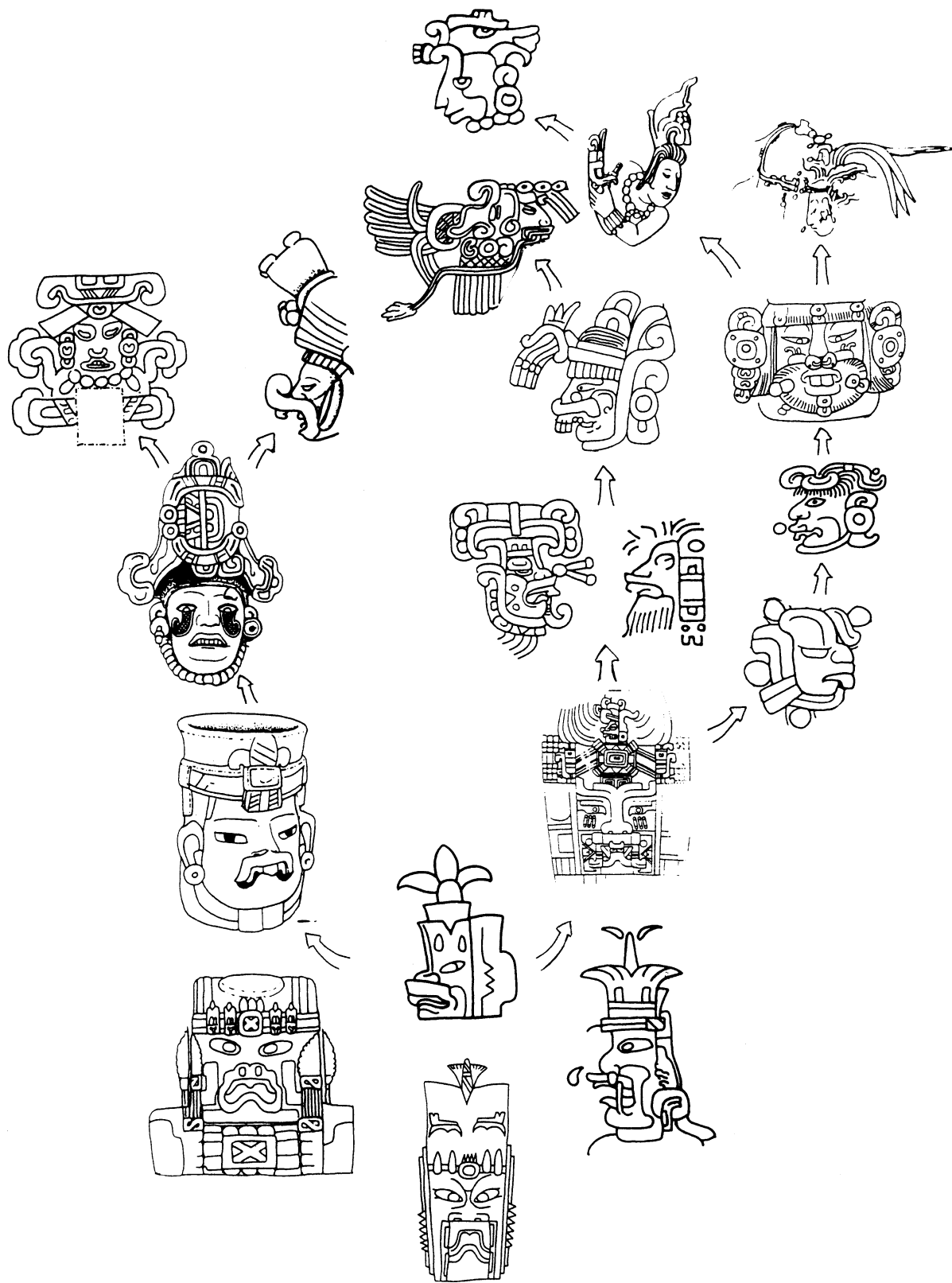


Fig. 16 The evolution of eastern Mesoamerican maize gods: (left) Zapotec; (center) Gulf Coast; (right) Maya

both the totemic ancestor of the rulers and their *nahual*, or supernatural co-essence. Coe (1965b: 751–752) suggests that the jaguar features derive from the mythical union of a jaguar and a woman, leading to the Olmec as a race of jaguar people. This theory was based primarily on Matthew Stirling's (1955: 19–20) interpretation of two San Lorenzo sculptures, Potrero Nuevo Monument 3 and Tenochtitlán Monument 1, although it is unlikely that either monument portrays copulation (Davis 1978). Whereas Potrero Nuevo Monument 3 evidently portrays a jaguar attacking a hapless human, Tenochtitlán Monument 1 is the previously discussed scene of a human ballplayer atop a bound victim (p. 11).

Rather than alluding to an ancestral union of human and jaguar, the jaguar maw probably marks potent supernatural beings. Along with designating such individuals as wholly otherworldly, the snarling mouth also links supernaturals to the most significant power animal in Mesoamerica. In ancient Mesopotamia, the most important power animal was the bull and, for this reason, deities are designated by a headdress of stacked bull horns (Black and Green 1992: 102–103). It is not necessary, however, to look to the Old World for similar conventions. In the Chavín and later Moche iconography of Peru, deities are readily identifiable by their fanged jaguar mouths (Benson 1972: 28).¹⁴

Perhaps the most striking Olmec merging of human and jaguar physiognomy occurs in a particular sculptural motif commonly referred to as the Transformation Figure (see Pls. 5, 6, 7). According to Furst (1968, 1995), these figures represent the transformation, by ecstatic trance, of the shaman into the jaguar. Recent epigraphic research has revealed a similar concept among the Classic Maya (Houston and Stuart 1989; Grube and Nahm 1994). One Classic Maya hieroglyphic sign serves as a logograph for *way*, a Mayan term signifying a supernatural companion, or “co-essence.” Like the Olmec Transformation Figures, the *way* sign embodies both human and jaguar attributes, being composed of a stylized human face half-covered by a jaguar pelt. Although the Classic Maya texts have not been linked directly to shamanic practices, the term *way* can denote shamanic transformation among the colonial and contemporary Maya (Houston and Stuart 1989: 5–6). Furst (1968, 1995) makes a compelling case that the concept of shamanic transformation was present among the Formative Olmec. It is noteworthy that along with the Olmec portrayal of powerful deities, jaguar attributes mark the shaman in supernatural trance, the otherworldly or sacred aspect of the shaman.

Principles of Olmec iconography

Although at first sight Olmec iconography might appear complicated and strange, if not wholly weird, much of it is based on organizational principles that are almost crystalline in their order and elegance. For one thing, Olmec scenes are commonly framed in terms of the cosmos. Although earth symbolism has been strongly emphasized in past research, sky imagery was also extremely important (Taube 1995). Aside from crossed bands, another motif, resembling a series of inverted “U”s, also served as an Olmec sky sign, and for this reason commonly appears at the top of Olmec scenes (ibid.: fig. 11). Such regions as mountains or caves that penetrate the realms of sky, earth, and underworld also fascinated the Olmec (see Grove 1970b; Schele 1995). The *axis mundi* in the middle of the four directions was the most important conduit for communicating between the three levels of the cosmos (Reilly 1994). For the Olmec, mountains were surely one form of the world axis, offering access to the lofty heavens and the cavernous depths of the underworld (see Schele 1995). However, the Olmec world axis also could be represented as a vertical celt or in the

¹⁴ This convention continued in Peru with Middle Horizon Wari iconography. In contrast to Tiwanaku deity images, Wari gods are commonly portrayed with large canines.

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form of growing maize as the World Tree, here personified as the Olmec Maize God. Celts or maize ears also represent the four world directions or the intercardinal corners (Fig. 4c–e). The use of celts and corn to allude to the WorldCenter and intercardinal points suggests that the later Maya model of the world as a four-sided maize field may have originated in Olmec thought (see Tedlock 1996: 220).

Among the Olmec, the form of the human body expressed the cosmos. As has been previously mentioned, the bar-and-four-dots motif probably alludes not only to the world axis and four intercardinal points, but also to the trunk and limbs of a human body. As the highest point on the body, the head refers to the celestial realm. In many cases, the Olmec Maize God wears a complex headband usually composed of a central disk flanked by two pairs of vertical celts or maize ears (Fig. 4c–d). Reilly (n.d.: 179) notes that by donning the headband, one becomes the central world axis surrounded by the four directions. This headband probably alludes to raising the four directions to support the sky, an important episode in Mesoamerican creation mythology. One apparently simplified version of the Olmec Maize God headband displays inverted U signs, marking it as a celestial headband (Fig. 12c). Among the Protoclassic and Classic Maya, the triple Jester God headband has a similar meaning, although in this case it alludes to the raising of the three central hearthstones into the sky (Taube 1998). Along with being worn on the head, celts can also appear on the limbs, quite probably alluding to the four directional elements of the bar-and-four-dots motif (Figs. 34e–f, 48a–b, 51c).¹⁵ An especially large and prominent celt, oriented bit upward, can also substitute for the male loincloth (see Pl. 8). Located on the central axis of the body, the placement of this celt replicates the abundant offerings of celts along the center line of La Venta Complex A and Mound 20 at San Isidro.

Despite the highly developed and codified nature of Olmec iconography, the Olmec were essentially a nonliterate society. The lack of Olmec texts and the extreme antiquity of this culture make the interpretation of Olmec iconography a challenging prospect. Moreover, Olmec imagery is rarely the same, and usually appears in a variety of subtly changing combinations: “There is an interchangeability about Olmec motifs . . . and in fact, the Olmec rarely use the same complex of motifs twice” (Benson 1971: 35). Rather than detracting from the underlying meanings, however, these variations are a crucial means of discerning the underlying significance of particular forms and motifs. One of the most important conventions is that of *substitution*, in which otherwise distinct objects can substitute for one another, thereby implying a close relationship or equivalence between forms. Such substitutional patterns are particularly successful in well-known iconographic contexts, such as the five-piece headband commonly worn by the Olmec Maize God. Thus, although the central disc is usually topped by a vertical cob as the *axis mundi*, in one instance a celt substitutes for the ear of corn, thereby denoting the close relationship between celts and maize ears (Fig. 17a–b). Still another example is the above-mentioned substitution of the celt for the male loincloth as a reference to the central axis of the body (see Pl. 8).

Another related Olmec convention is that of *affixation*, in which two or more otherwise independent forms are placed against each other to make another symbolic reference. For example, the front of La Venta Altar 4 contains four forms composed of a U-shaped bracket, a banded celt, and a pair of undulating feathers, probably the emerald tail feathers of the quetzal (Fig. 17c). With this sign, the celts and precious plumage combine to represent silk-tasseled corn, a closely related and valued commodity (Fig. 17c–d). Another Middle Formative sign is composed of a bar-and-four-

¹⁵ Among the Aborigine of western Arnhem Land, Australia, there is Namarrgon, the Lightning Man, “who produces lightning by smashing stone axes attached to his limbs” (Taçon 1991: 195). Stela 1 from Protoclassic Izapa portrays the Maya lightning god Chaak wearing stone celts on his legs (Taube 1996).

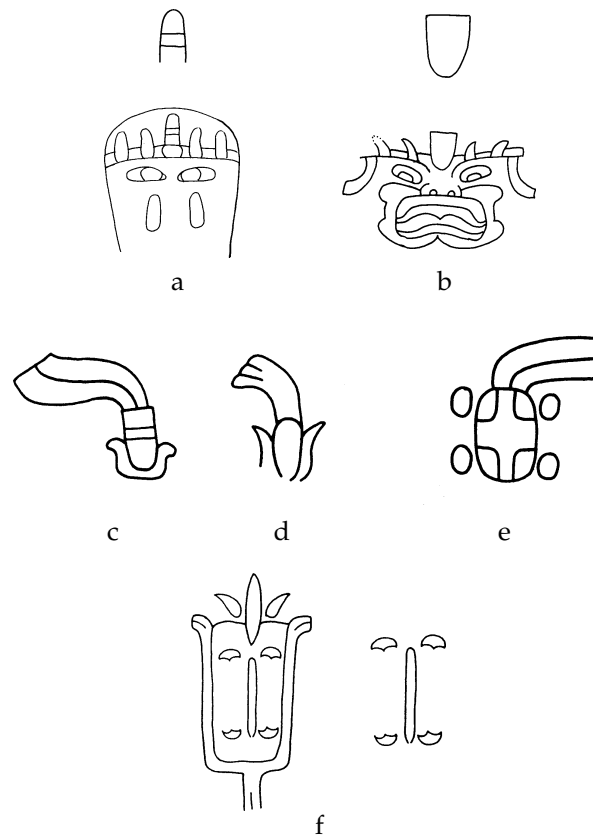


Fig. 17 Examples of substitution, affixation, and infixation in Olmec iconography. (a) A maize cob as the central element of the five-piece headband of the Olmec Maize God (after Joralemon 1971: fig. 174); (b) A vertical celt as the central element of the Olmec Maize God's headband (after Berjonneau, Deletaille, and Sonnery 1985: pl. 25); (c) Maize with a flowing silk sign composed of quetzal plumes affixed to a celt in a U-shaped bracket. La Venta Altar 4 (after Piña Chan 1989: fig. 68); (d) Maize with flowing silk (after Joralemon 1971: fig. 80); (e) A cross sign affixed by four dots and plumes, creating a maize ear as axis mundi (after Joralemon 1971: fig. 34); (f) Bar-and-four-dots infixed in a maize ear (after Diehl 1990: no. 11).

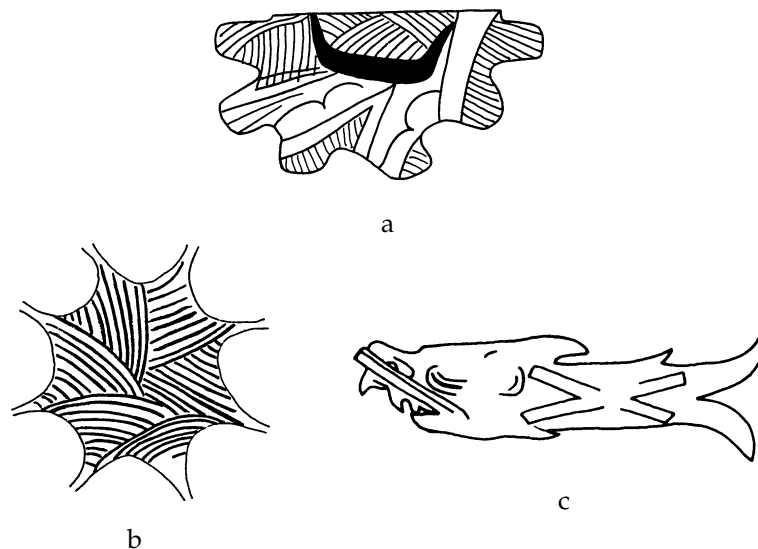


Fig. 18 Infixation in Olmec iconography, illustrated by the combination of shark and shell. (a) Shark eye infixed on a shell sign. Excised design on an Early Formative vessel from Las Bocas (after Coe 1965a: no. 23); (b) Bivalve shell. Interior of a bowl from Tlapacoya (after Niederberger 1987: fig. 493.2); (c) Shark with lunate eye. San Lorenzo (after Joralemon 1976: fig. 5d).

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dots motif conflated with a cross cartouche; the affixation of a pair of curving feathers qualifies the bar-and-four-dots cross sign as a silk-tasseled ear of corn, that is, corn as the central axis (Fig. 17e).

The basic meaning of the tasseled bar-and-four-dots sign can also be understood through another Olmec iconographic process, that of *infixation*. For the aforementioned incised La Venta celt (p. 26), the bar-and-four-dots motif is infixed into the ear of corn (Fig. 17f). Both the tasseled cross with bar and four dots (Fig. 17e) and this La Venta example portray the ear of corn as the *axis mundi*. For the process of infixation, the *pars pro toto* convention is frequently employed. For example, one Early Formative Las Bocas sign is composed of a bivalve shell containing an infixed crescent (Fig. 18a; see also p. 51). In Formative and later Mesoamerican iconography, bivalve shells are frequently portrayed as circular, spoked items (Figs. 18b, 26, 82b). This particular crescent serves as a shark eye in Olmec iconography and is a diagnostic marker of Olmec sharks (Fig. 18c). The infixation of this device into the bivalve reinforces the marine reference.

Another Olmec iconographic convention is *conflation*, in which two or more distinct forms are organically merged into one. For the Olmec, this commonly occurs with supernatural beings, which are often biologically impossible blendings of distinct species. At times, such mergings can represent the combination of distinct realms, such as sky and earth, or allude to and reinforce the symbolism of a particular region, such as the sea. Among the more common species combinations is the Avian Serpent, a symbol of the sky and probable prototype of Quetzalcoatl, the quetzal-feathered serpent (Taube 1995). Aside from animals, objects also are commonly conflated in Olmec iconography. Thus celts are frequently conflated with ears of corn, and often appear with a centrally cleft bit containing an emerging cob (Fig. 19a). The Middle Formative Olmec also conflated the celt and feathered corn fetish into a single item. In one version of the five-part headband, four vertical celts are topped by the upper portion of a feathered cob fetish, complete with a feathery tuft marked by the double merlon and an emerging maize ear (Fig. 19c). The green celtiform stelae from La Venta contain even more elaborate references to the maize ear fetish. The upper head of the frontally facing corn god is topped by the double-merlon and feather tuft and, in the case of La Venta Monument 25/26, an emerging maize cob at the tip (Fig. 19d). The horizontal banding at the base of the La Venta stelae could well allude to the horizontal lashing found on Olmec maize ear fetishes (Fig. 19b, e).

Still another common Olmec convention is that of *personification*, in which inanimate items, such as plants or manufactured objects, are presented as living zoomorphic or anthropomorphized beings. For example, the head of the Avian Serpent can serve as an Olmec sky sign (Taube 1995). As another example, leafy foliation can be personified as the green, growing aspect of the Olmec Maize God (Fig. 12c–d). In fact, the anthropomorphic Olmec Maize God is a clear example of personification. Celts and celtiform stelae that bear representations of the Olmec Maize God are not just static depictions of the being, but portray this deity as the personified embodiment of the particular object (Figs. 4c–e, 19d). The same can be said for Olmec portrayals of maize ear fetishes. At times, the head of the Olmec Maize God can replace the feathered tuft of the fetish (Fig. 19e). A celt from Río Pesquero portrays a still more anthropomorphized form of the maize ear fetish (Fig. 19f). In this case, the serpent head forming the bottom end of the example in Figure 19e has become the legs of the figure, while the brow retains the cob projecting out of a feather tuft marked with the double merlon.

Many of the conventions found in Olmec iconography—such as substitution, affixation, infixation, conflation, and personification—are well represented in the later script of the Classic Maya. But unlike the complex La Mojarra and Maya scripts present by the Protoclassic period, Olmec iconography does not operate as a linear text. Moreover, there is little indication of calendrics or even numerals in either Olmec portable sculpture or monuments. Nonetheless, there are some

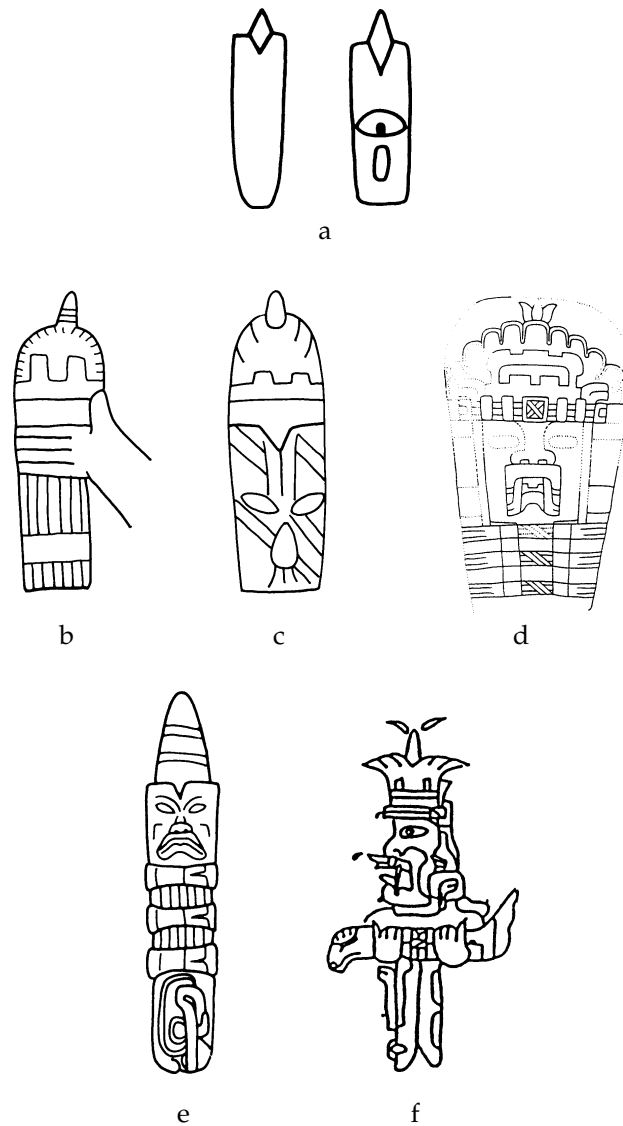


Fig. 19 Examples of conflation and personification in Olmec iconography. (a) Celts conflated with maize ear (see Fig. 4d–e); (b) Maize ear fetish (see Pl. 12); (c) Maize ear fetish conflated with personified celt (see Fig. 48a); (d) Olmec Maize God as personified celt and maize ear fetish. La Venta Monument 25/26. Drawing courtesy of James Porter; (e) Maize ear fetish with head of the Olmec Maize God and serpent foot (from Taube 1995: fig. 10a); (f) Maize ear fetish personified as the Olmec Maize God on an incised celt. Note the serpent legs. Detail of an incised celt from Río Pesquero. Drawing courtesy of Linda Schele.

indications of the development of writing among the Olmec in the form of personal names or titles and as toponymic signs. La Venta Monument 19 portrays a great feather-crested Avian Serpent supporting a figure wearing a headdress of the same serpent being (Fig. 20a). In the upper center of the scene, a pair of long-tailed quetzals flank a sky sign, quite possibly an epigraphic reference to the Avian Serpent or title of the figure seated below (Taube 1995: 87). A related scene appears on a Middle Formative monument from San Miguel Amuco, Guerrero (Fig. 20b). Wearing the headdress of the Avian Serpent, the striding figure holds a probable form of the feathered maize fetish. Above the head of the figure, there is a single sign, apparently an epigraphic reference to either the figure, the burden he carries, or both.

Near the base of the San Miguel Amuco stela there is an eroded motif. Terming it the “in-turning ground line,” Reilly (n.d.: 127, 234–235, 269) considers this an Olmec earth sign, and notes its presence on the Humboldt Celt, Chalcatzingo Monument 21, Los Mangos Monument 1, the Chalcatzingo Vase, and an incised jadeite plaque in the Dallas Museum of Art (Fig. 21).¹⁶ Although

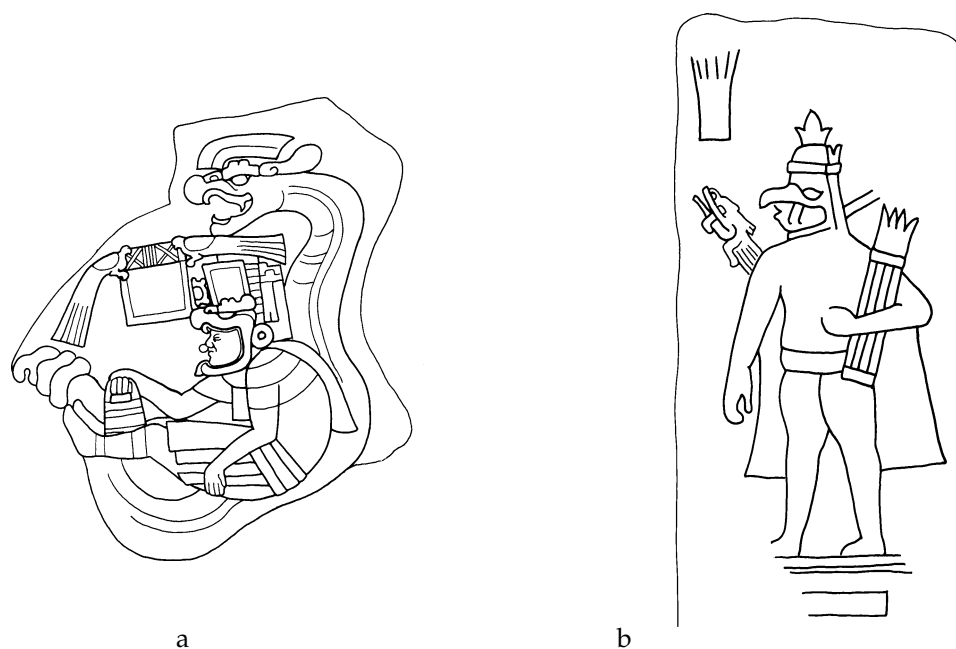


Fig. 20 Possible examples of Middle Formative Olmec writing. (a) Olmec ruler seated on an Avian Serpent with a quetzal and sky sign above, possibly referring to the serpent or ruler. La Venta Monument 19 (from Taube 1995: fig. 6a); (b) An Olmec figure with an Avian Serpent headdress holding a possible form of the feathered maize fetish. Note the probable sign for the same item at the upper left. San Miguel Amuco Stela (from Taube 1995: fig. 7a).

Reilly considers this device as the gums of the Olmec Dragon, it probably derives from an entire frontally facing mouth, and thus should perhaps be termed the “earth maw.” In fact, this same form appears as the mouth of a frontally facing jaguar head in the Dumbarton Oaks collection (Pl. 38). The Humbolt Celt contains four earth maw elements marked with specific signs around a central crossed disk (Fig. 21a). It is quite likely that the in-turning ground line serves as a toponymic marker, much like the hill signs appearing in Zapotec, Mixtec, and Aztec writing (Fig. 22d–e). As is typical of toponymic signs, the Olmec earth maw is frequently qualified by a specific element to refer to a particular place. The Chalcatzingo Monument 21 maw example (Fig. 21c) is marked by diagonal oval elements and lines that also appear in the scene above the maw. David Grove (1987a: 429–430, fig. 27.6) notes that the same motif also appears on Monument 27 and on at least one side of the altar throne at Chalcatzingo. Grove (*ibid.*) suggests it may represent “some aspect of the earth,” and this rare motif may serve to qualify a particular place at Chalcatzingo.

The well-known Chalcatzingo Vase seems to portray a specific toponymic sign (Fig. 21d). Containing a probable pair of teeth, the earth maw supports a leg with an elaborate anklet marked by a cross-band and spangles. Above the anklet, there is a head displaying aspects of the maize deity and the Olmec shark. The maize imagery is further reinforced by the four dots flanking the central

¹⁶ Although Reilly (n.d.: 269) also identifies the motif below the Olmec striding figure of Chalchuapa Monument 12 as the same earth sign (see Anderson 1978: fig. 8), the Chalchuapa example is a series of simple inverted “U”s with no inturning ends. The Chalchuapa motif is the same element that I identify as an Olmec sky sign (Taube 1995). It will be noted that the Chalchuapa figure above this sky element wears a winged cape and the maize ear fetish, both elements associated with celestial flight in Olmec iconography (see Fig. 50). Rather than standing on the earth, the Chalchuapa individual is in the sky.

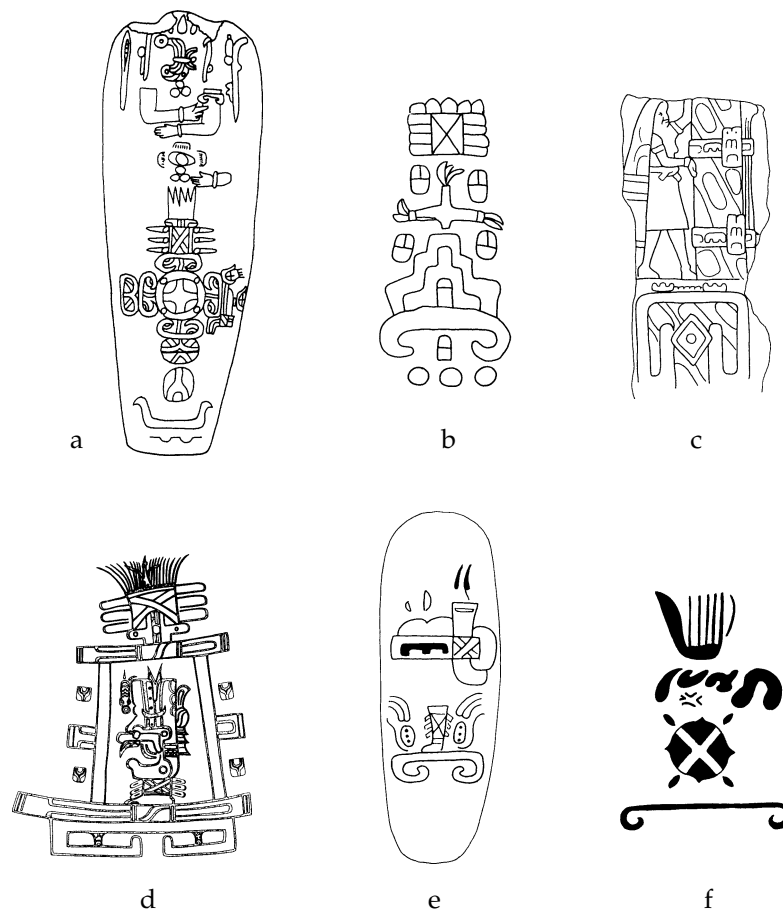


Fig. 21 The Olmec earth maw sign in toponymic expressions. (a) Earth maw signs serving as bases of probable directional signs. Humbolt Celt (from Joralemon 1971: no. 32); (b) Mountain and World Tree atop an earth maw sign. Detail of incised jade plaque in the Dallas Museum of Art (after *The Olmec World* 1995: no. 131); (c) Woman and monument atop an earth maw sign, Chalcatzingo Monument 21 (after Angulo V. 1987: fig. 10.21); (d) A form of the Olmec Maize God atop a crossed band anklet and earth maw sign. Chalcatzingo Vase (from Gay 1972a: 43); (e) A headdress above a compound formed of a leg with a crossed band anklet flanked by probable maize ears, both atop an earth maw. Incised celt (after *The Olmec World* 1995: no. 127); (f) An earth maw supporting a series of Olmec signs. Oxtotitlán Cave (from Grove 1970a: fig. 20).

image and the maize fetish bound with the same spangled anklet device at the top of the scene. An unprovenienced jadeite celt displays a notably similar sign, with the earth maw topped with a leg having the same cross-banded and spangled anklet, in this case flanked by silk-tasseled maize cobs (Fig. 21e). The headdress at the top of this celt probably refers to a particular title, perhaps one of rulership over the place depicted below. With its probable toponymic reference and title, this incised celt approaches the epigraphic complexity of the Late Formative Zapotec. Grove (1970a: fig. 20) records an even more complex grouping in Painting A-1 from the Oxtotitlán Cave in Guerrero.¹⁷ In this case, the earth maw is topped by three distinct signs, once again probably referring to a specific place (Fig. 21f).

The earth maw sign continued to be used as a basal element in later Mesoamerican toponymic signs, where it usually appears with a prominent pair of teeth, clearly identifying it as a mouth (Fig. 22a–b). The jadeite plaque in the Dallas Museum of Art (Figs. 21b, 22c) portrays an Olmec

¹⁷ In another illustration of the somewhat effaced Oxtotitlán painting, Grove (1970b: fig. 25) depicts a pair of curling volutes rather than the earth maw. However, given the common placement of this motif at the base of other Olmec signs, the first mentioned drawing is probably the more accurate.

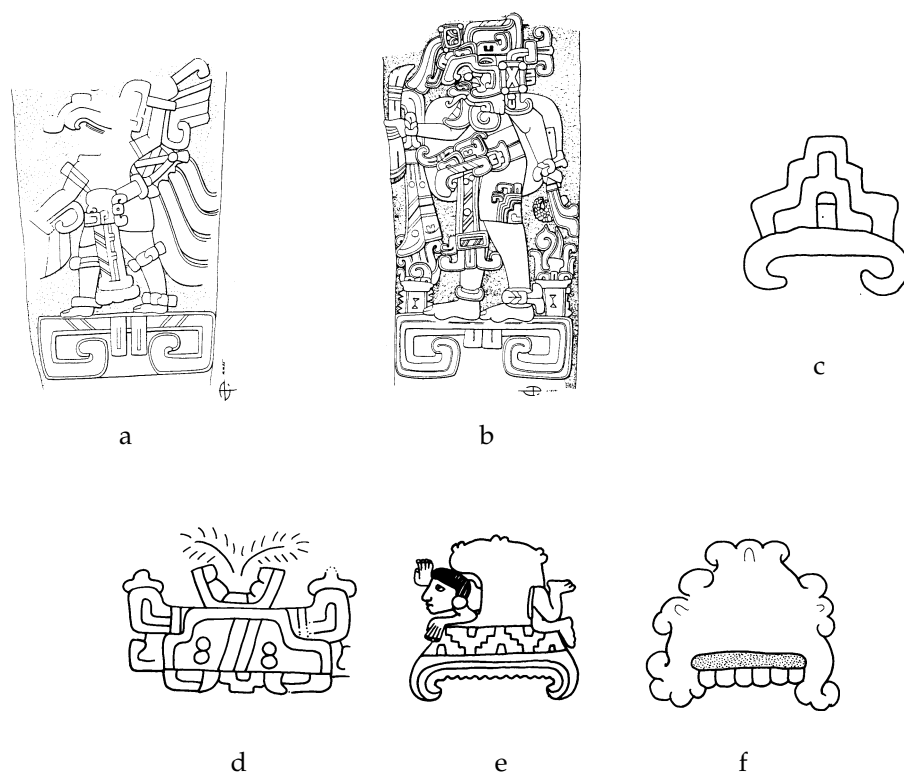


Fig. 22 Examples of the earth maw in Mesoamerican writing and art. (a) A winged figure atop an earth maw. Izapa Stela 4. Detail of drawing courtesy of James Porter; (b) A striding ruler atop an earth maw with smoking censers. Kaminaljuyu Stela 11. Detail of drawing courtesy of James Porter; (c) Mountain and earth maw. Detail of incised Olmec plaque in the Dallas Museum of Art (see Fig. 21b); (d) Protoclassic Zapotec place name with an earth maw below a mountain sign. Note the teeth in the maw. Monte Albán Building J (after Marcus 1992: fig. 6.13); (e) Late Postclassic mountain place name from the Codex Nuttall, page 61; (f) Aztec mountain sign from the *Primeros Memoriales*, folio 252r.

cosmogram, with the sky, World Tree, and four directional signs placed above a stepped mountain with the earth maw at its base. The combination of earth maw and mountain is notably similar to later toponyms of highland Mexico. One early Zapotec toponym from Building J at Monte Albán also portrays a step mountain above an earth maw, here containing the dentition typically found on Cocijo (Fig. 22d; cf. Fig. 15j). For Postclassic Mixtec and Aztec toponyms, the earth maw becomes fused with the mountain (Fig. 22e–f). Nonetheless, in the case of Aztec examples, the earth maw dentition is clearly retained. As a toponymic sign, forms of the Olmec earth maw motif continued in later Mesoamerican writing systems.

The Olmec Legacy

Thanks to the pioneering work of Stirling, Caso, Covarrubias, and others, it is now readily apparent that Olmec is a very early and precocious Mesoamerican culture. Nonetheless, the role of the Olmec in the development of Mesoamerican civilization continues to be a source of considerable debate. Although Caso (1942a: 46) argued that Olmec constitutes the *cultura madre* of Mesoamerica, others have more recently countered that it is simply one of a series of roughly equivalent *culturas hermanas* (e.g. Hammond 1988; Grove 1989b; Flannery and Marcus 1994; Niederberger 1996). According to this latter view, the Olmec were neither earlier nor more advanced than many other societies of Formative Mesoamerica. Although Flannery and Marcus (2000)

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assert that the concept of an Olmec Mother Culture is now entirely outdated and discredited, not everyone agrees with this position (e.g., Clark 1997; Clark and Pye 2000; Cyphers 1996a: 61; Diehl and Coe 1995; Diehl 1996, 2000: 25; Taube 1995, 1996, 2000). Clearly, the importance and extent of Olmec influence in Formative Mesoamerica remains a source of vigorous debate.

Whereas those who question the importance and extent of Olmec influence tend to work in areas outside the Olmec heartland, such as Central Mexico, Oaxaca, and the Maya region, researchers who specialize in the Olmec area prefer to see the Olmec as the first great civilization of Mesoamerica (e.g., Coe 1968; Cyphers 1996a; Diehl and Coe 1995; Diehl 1996). This debate is not simply provincial chauvinism involving who has the earliest and most important site or culture. Instead, these perspectives have colored our understanding of the interactions and developments of Formative Mesoamerica. Thus, *a priori* assumptions regarding the relative importance of the Olmec often have led to simplistic scenarios concerning Olmec “empires” and the unilinear development of Mesoamerican civilizations. Grove (1989b: 10) rightly notes that by stressing the primacy of the Olmec, more complex and subtle relationships between Formative cultures frequently can be obscured. For example, Flannery and Marcus (1994: 388) posit that, at San José Mogote, the most direct foreign contact was with the Valley of Mexico, not the Olmec heartland. Moreover, it is clear that the Zapotec, Maya, and other Formative peoples outside the Olmec heartland were not simply diluted Olmec, but people who possessed their own distinct cultural patterns and trajectory.

Much of the more recent data from other regions of Mesoamerica pertain to Early Formative developments, material that was poorly understood at the time of the 1942 Tuxtla Gutiérrez conference. According to Robert Sharer (1989: 6), many of these newer Early Formative finds outside the Olmec heartland raise serious doubts regarding the supposed primacy of the Olmec and their role in the development of Mesoamerican religion, economics, and society. A great deal of the debate concerning the early development of the Olmec and other Mesoamerican societies revolves around the site of San Lorenzo, the largest and best known of the Early Formative Olmec sites. Flannery and Marcus (1994: 388) argue that the Oaxacan site of San José Mogote is entirely comparable in scale and complexity to San Lorenzo during the Early Formative period. According to these authors, the efforts devoted to manufacturing the San Lorenzo stone monuments readily can be equated to the masonry architecture at San José Mogote. Other researchers consider San Lorenzo to be greater and more complex than San José Mogote and contemporaneous sites outside of the Olmec heartland. Ann Cyphers (1996a: 70), the current director of excavations at San Lorenzo, states that in terms of size and complexity San Lorenzo was the preeminent site of Early Formative Mesoamerica. In addition, both Cyphers (*ibid.*) and John Clark (*n.d.*) note that the work force and effort required for the transport and carving of the more than eighty known monuments at San Lorenzo is unparalleled in Early Formative Mesoamerica. According to Clark and Pye (2000: 245–246), “the early Olmecs ‘had no peers, only contemporaries.’”

During the Early Formative period, Olmec influence outside the heartland is best reflected in ceramics and other portable objects, not monumental carvings. At many Early Formative sites, including Tlatilco, Tlapacoya, Las Bocas, and San José Mogote, Olmec-style motifs commonly appear on pottery vessels. Grove (1989a) questions the Olmec origins of these Early Formative motifs, however, and prefers the less committed designation of “X Complex.” According to Grove (*ibid.*), these motifs reflect an ideological system shared by many Early Formative peoples. In a similar vein, Flannery and Marcus (1994: 387) argue that the supposed Early Formative Olmec motifs appeared simultaneously in many regions of Mesoamerica.

In Formative Mesoamerica, there surely was a shared substratum of religious concepts among many distinct peoples. However, the motifs and style of the X Complex appear to be too specific and arbitrary to be simultaneously derived from different sources. For example, Paul Healy (1974)

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describes an Early Formative, Olmec-style vessel from a cave near Trujillo, in northeastern Honduras. The motif incised on the cylindrical black vase is the head of a supernatural centipede, a being that commonly appears on Early Formative ceramic vessels attributed to Las Bocas, Puebla (Taube n.d.; for e.g., see Feuchtwanger 1989: fig. 1; *The Olmec World* 1995: no. 107). The distance between Las Bocas and the Honduran occurrence of this highly specific motif is some 1400 kilometers, with the Olmec heartland squarely between the two areas. Barbara Stark (2000: 42) also considers these X-Complex motifs to derive from a single, specific area: "A series of independent societies sporadically interacting over great distances is unlikely to devise and adopt a consistent abstract symbolic system without a reference site or region." According to Stark (*ibid.*) the widespread distribution of these motifs reflects a conscious emulation of San Lorenzo and the early Gulf Coast Olmec. Similarly, Clark and Pye (2000: 241) consider the Olmec to be the ultimate source for many of the incised motifs appearing on Early Formative ceramic vessels from Central Mexico and Oaxaca. The majority of the Early Formative X-Complex motifs are best regarded as deriving from the Olmec heartland rather than being an unintentional and coincidental development shared by many "sister" communities of Early Formative Mesoamerica. The only places where such motifs are celebrated on monumental stone sculpture are at San Lorenzo and other Early Formative sites of the Olmec heartland. Although it is another matter to argue that this demonstrates that the motifs originated in the Olmec area, no other Early Formative culture celebrated this iconography on such a scale.

Both Grove (1989b, 1996) and Flannery and Marcus (1994) stress that the reputed Olmec motifs do not derive from an Olmec template, but function in very different contexts among Early Formative societies. As an example, they cite the work by Nanette Pyne (1976) at San José Mogote. According to Pyne, the spatial distribution of two Early Formative ceramic motifs suggests that they corresponded to local lineages at San José Mogote. Although this innovative study has enjoyed considerable recognition, Clark (n.d.) questions both the statistical significance of the distributional pattern and the iconographic identification of particular motifs used in the study. Along with arguing for a special regional use of certain Early Formative motifs at San José Mogote, Grove (1989b: 13) and Flannery and Marcus (1994: 387) note that when X-Complex motifs appear on ceramics outside the Olmec heartland, they do so on local vessel forms. Nevertheless, although these vessels clearly are not slavish imitations of Olmec pottery, it is another matter to establish that they have no relation to Olmec ideology. For example, it is readily apparent that the Early Classic Maya of Tikal created Teotihuacan-inspired vessel forms and iconography in local clays (e.g., Culbert 1993: figs. 19, 30). Although these vessels must be understood in the local context of Tikal, it is also clear that they are conscious and deliberate evocations of distant Teotihuacan. As Stark (2000: 41–42) notes, it is quite possible that similar emulation occurred in Early Formative Mesoamerica. As the "mother" of the known then-contemporaneous Mesoamerican sites, San Lorenzo may well have been the revered source and inspiration of many of the X-Complex motifs found over much of Early Formative Mesoamerica.

Although it has currently received little interest, a close attention to the faunal identities of many X-Complex motifs may provide clues to the place or places from which these signs derive (see p. 49). Thus the frequent portrayal of coastal sharks and shells in Early Formative vessels from highland Mexico points to lowland origins (see Figs. 25a, 26d). Still another example is Early Formative saurian imagery, that is, the Olmec Dragon discussed by Joralemon (1971, 1976). Although I have argued that much of this imagery is based on the horned viper (*Bothriechis schlegelii*) rather than crocodylians, this serpent is also a lowland tropical creature (Taube 1996).

Whereas much of the perceived Olmec influence in Early Formative Mesoamerica appears on locally made pottery and small portable goods, Olmec influence is much more formalized during the Middle Formative apogee of La Venta. During the Middle Formative period, monumental sculp-

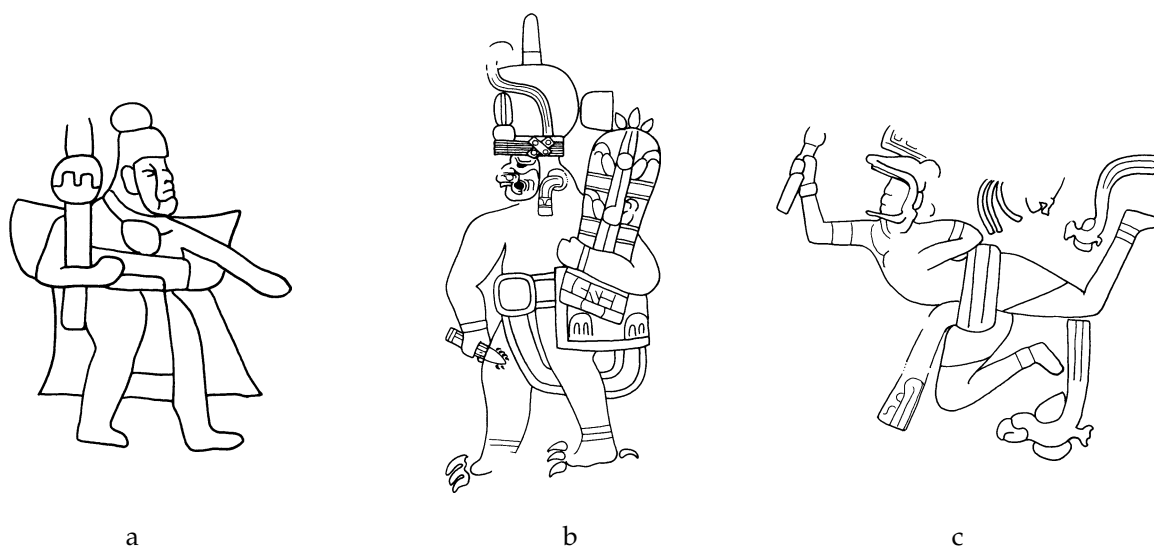


Fig. 23 Olmec maize iconography in Middle Formative Mesoamerica. (a) Striding figure with “torch” maize fetish. Chalchuapa Monument 12, Figure B (after Anderson 1978: fig. 8); (b) Striding figure holding maize ear fetish and probable stela marked with maize plant. Xoc relief (after Ekholm-Miller 1973: figs. 9, 14); (c) Flying figure, “El Volador,” holding maize ear fetish. Chalcatzingo Monument 12 (after Angulo V. 1987: fig. 10.19).

ture in pure Olmec-style appears over much of Mesoamerica, including the Mexican states of Guerrero, Morelos, and Chiapas, as well as Guatemala and El Salvador. It is noteworthy that many of these monumental sculptures are not simply provincial emulations of foreign Olmec influence, but rather, seem to be carved by sculptors trained in Olmec artistic canons and technique. According to Grove (2000: 277) many Middle Formative monuments outside of the Gulf Coast region display direct Olmec inspiration and influence: “Because there are no known antecedents to monumental art in Mesoamerica other than those of the Gulf Coast, the carvings created at the Pacific Coast and Central Mexican sites were most probably produced using a technology ultimately derived from Olmec roots. . . . The additional fact that the non-Gulf Coast monuments adhere to many of the basic stylistic canons of Olmec monumental art reinforces that observation.” I (Taube 1995, 1996, 2000a) have noted that much of the imagery appearing on these Middle Formative monuments concerns agricultural fertility, maize, and exotic articles of wealth, including jade and quetzal plumes. The intentional distribution of Middle Formative Olmec art and iconography out of the Olmec heartland probably was related to the acquisition of exotic goods. Kenneth Hirth (1978: 12) suggests that both Chalcatzingo and sites in the Maya area exhibiting Olmec sculpture were gateway communities for securing valuables from hinterland areas.

According to Grove (1989a: 146), Olmec exchange networks became increasingly formalized during the Middle Formative period to acquire rare stones and other precious elite commodities. One important means by which the Middle Formative Olmec secured distant exchange contacts was through their complex ideology and ceremonialism involving maize and related wealth items (Taube 1996). The majority of the well-known Olmec sculptures found outside the Olmec heartland concern this religious agricultural complex. For example, maize ear torch fetishes can be found at such distant sites as Chalchuapa, El Salvador, and Teopantecuanitlan, Guerrero (see Figs. 23a, 46a). The highland Chiapas site of Xoc portrays a supernatural figure holding the maize ear fetish with one hand and a large tabular device in the other (Fig. 23b). Marked with a growing maize plant and horizontal lashing, this tabular form probably represents an Olmec stela. The green celtiform stelae from La Venta constitute personified versions of the Xoc stela, with images of the

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Olmec Maize God marked with cross-lashing below the face (see Fig. 19d). It is likely that a sculpture from Ojo de Agua, Chiapas, also carries a monument. The standing figure displays the sharply backturned and bifurcated cranium found on the green, foliated form of the Olmec Maize God (see Navarrete 1974: figs. 19–22). The site of Chalcatzingo, Morelos, contains many Middle Formative rock carvings in pure Olmec-style involving maize and agricultural fertility. Monument 1 portrays a woman seated in a cave with cloud scrolls amid a background of falling rain and growing maize. The woman wears two quetzals in her headdress, precious birds decidedly foreign to highland Morelos (see Fig. 38f). Two more probable quetzals appear in the Monument 12 relief at Chalcatzingo, here with a flying macaw and a human figure holding the torch maize fetish (Fig. 23c).

The sunken courtyard at Teopantecuanitlán, Guerrero, contains perhaps the most elaborate portrayal of Olmec maize iconography outside the Olmec heartland. Four images of the Olmec Maize God wielding maize fetishes project above the walls flanking the central effigy ball court, effectively creating the bar-and-four-dots motif, with the alley serving as the central vertical bar of the world axis (Martínez Donjuán 1994: fig. 9.10). The double-merlon motif appears not only on the faces of the four maize gods, but is replicated on a larger scale on the eastern and western sides of the court, in silhouette by the four projecting Olmec Maize Gods (Reilly 1994: 254). With its double-merlon signs, corn god images, and aqueduct system, the Teopantecuanitlán court is truly the “green place.” The sunken court at Teopantecuanitlán could have served as a demonstration center for celebrating the ritual agricultural abilities of the Middle Formative Olmec. Rather than conquest and military power, the primary message of Olmec rulership is abundance and wealth. It is the elaborate symbolism of agricultural fertility and wealth that constitutes the most profound contribution of the Olmec to later cultures of Mesoamerica (Taube 1995, 1996).

During the fifth century B.C., La Venta experienced a major decline in construction activity. Although this marks the end of Olmec culture, it was by no means an abrupt disappearance of a now-lost race. Whereas many of the criteria distinguishing the Olmec—such as the striking art style, highly developed carving and use of fine jade, and particular ceramic types—were no longer present, the people surely were. It has been argued that the Olmec spoke Mixe-Zoquean, a language family still spoken in the Olmec heartland (Campbell and Kaufman 1976). A number of Olmec sites show continued occupation and monumental construction after the Middle Formative period. Some monuments at La Venta, such as Altar 6 and Monument 13, the so-called Ambassador Stone, are probably Late Formative sculptures (de la Fuente 1977a: nos. 64, 67). An especially notable site is Tres Zapotes, where the major occupation and most monuments are post-Olmec, including its famed Stela C (Pool 2000). Two other sculptures from the former Olmec heartland, the Alvarado and El Mesón stelae are also probably Late Formative carvings. Along with Tres Zapotes’s Stela C, these monuments also display Olmec-derived traits (Covarrubias 1957: figs. 29, 68). The Alvarado Stela is also noteworthy for its hieroglyphic text (Fig. 75), which is the same script as on La Mojarra Stela 1 and the Tuxtla Statuette (Fig. 81c; see Winfield Capitaine 1988). However, the Long Count dates found on these two examples place them in the mid-second century A.D., probably well after the carving of the Alvarado Stela. Although the Tuxtla Statuette and La Mojarra Stela 1 are clearly not Maya, they only display few overt Olmec traits. The same can be said for the highly developed writing system which is both distinct from early Maya writing, and has no known Olmec precursor. It appears that both the La Mojarra script and the Long Count system were post-Olmec developments in the former Olmec heartland.

Although one can readily relate Late Formative monuments from the Isthmian area to earlier Olmec sculpture, Olmec influence can be detected in many subsequent Mesoamerican cultures. As noted by Covarrubias (1942), Caso (1942a), and others, it is possible to relate certain aspects of Zapotec, Teotihuacan, and Maya art to more ancient Olmec conventions. In comparison to

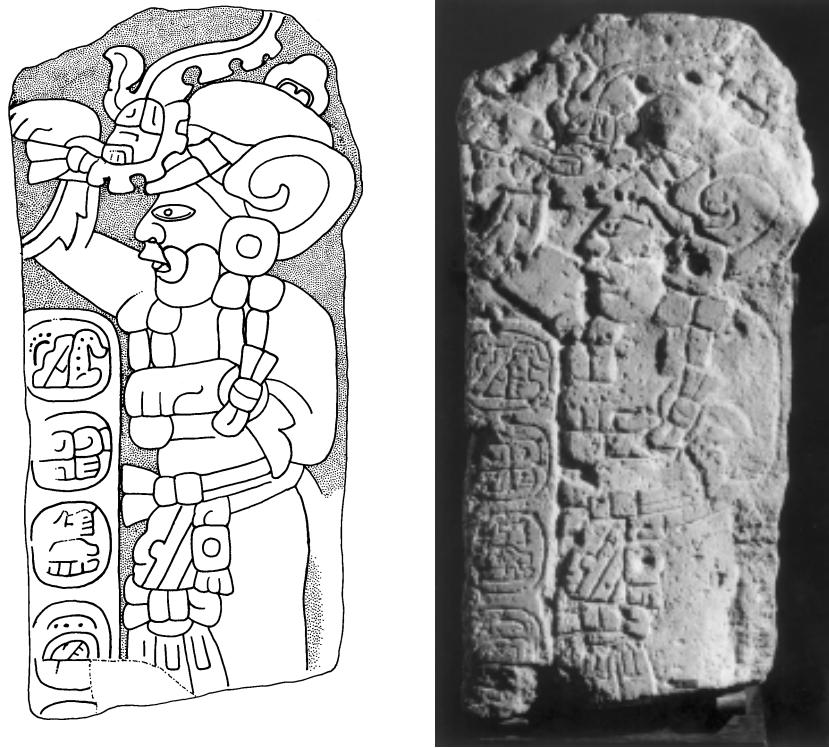


Fig. 24 Late Formative or Protoclassic stela of a Maya ruler with Olmec-style features. Photograph courtesy of the Etnografisch Museum, Antwerp.

Teotihuacan and the Zapotec, early Maya art is perhaps most similar to that of the ancient Olmec. One Maya monument in the Etnografisch Museum in Antwerp portrays a standing ruler with strong Olmec features, including an extended upper lip (Fig. 24). Although this stela was previously identified as Early Classic Zapotec (Etnografisch Museum 1967: no. 106), the style and hieroglyphic text identify it as Maya (Boot 1999). The flexed, pawlike hands are notably like the feet on Kaminaljuyu Stelae 4 and 19, which Lee Allen Parsons (1986: 30, 121) regards as Late Formative “Olmecoid” monuments. The flap partly covering the left forearm also occurs on Silhouetted Relief 4 from Kaminaljuyu (see *ibid.*: no. 154). Although Boot (*ibid.*: 113) suggests that the monument derives from the Maya highlands or southern Pacific coast and piedmont area, its limestone composition suggests the Maya lowlands. Moreover, the back and sides of the stela have patches of stucco formed of marine shell. The use of shell-derived stucco suggests a lowland coastal region with relatively little limestone, such as the Classic period site of Comalcalco, Tabasco, which has monumental buildings of fired brick and shell stucco. It is quite possible that the Antwerp monument dates to as early as the second century B.C., making it among the earliest Maya monuments with a hieroglyphic inscription.

It is far beyond the scope and focus of this volume to delineate the many traits shared between the Olmec and the later Protoclassic and Classic Maya, but among the more striking are the use of stela, stone thrones, particular body poses, portraiture, bloodletting, and the cult of rulership, including the identification of the ruler with the pivotal world axis. In addition, two of the most valued materials of the Middle Formative Olmec—jade and quetzal plumes—continued to be the preeminent precious materials among the ancient Maya and other peoples of Mesoamerica. In fact, in the art of Classic Mesoamerica, including Teotihuacan, Xochicalco, and the Maya region, beads and other items of jade at times are depicted with Olmec-style facial features (Umberger 1987: 64; Reents-Budet 1988: fig. 1c).

Although the occurrence of Olmec features on Classic jade objects might be partly explained

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through the documented presence of Olmec heirlooms among subsequent Mesoamerican societies, it may be an intentional allusion to earlier honored traditions. Researchers generally have viewed the continuity of Olmec traits in later Mesoamerica as the result of historical happenstance, that is, subsequent societies were the passive inheritors of earlier traditions. However, it is now increasingly apparent that Pre-Columbian Mesoamerican societies intentionally evoked earlier hallowed cultures and traditions. Thus, in the art and architecture of the Late Postclassic Aztec, there are clear archaistic allusions to such renowned earlier centers as Teotihuacan, Xochicalco, and Tula (Umberger 1987; López Luján 1989, Matos Moctezuma and López Luján 1993). In a similar manner, Late Formative, Protoclassic, and Classic Mesoamerican societies may have emulated the earlier art and traditions of the Olmec, who may have been regarded as the canonical origin of many aspects of Mesoamerican ideology and statecraft.

Since the first publication of an Olmec object by José María Melgar y Serrano (1869), much has been learned of the Olmec and their role in the development of ancient Mesoamerican civilization. Rather than detracting from the air of mystery surrounding the Olmec, this heightened understanding calls attention to a major paradox. In terms of stylistic development, technical mastery, and sheer aesthetics, Olmec art is among the most compelling of ancient Mesoamerica. No less impressive is the expenditure of effort required for the movement and carving of Olmec monumental sculpture, which continues to proclaim the great power and wealth accrued by Olmec centers and their rulers. Moreover, Olmec influence extended over much of Formative Mesoamerica, with Olmec-style monuments ranging from western El Salvador to western Guerrero, Mexico, an aerial distance of some 1200 kilometers. But although these achievements are on a par with what is known of later Classic and Postclassic Mesoamerica, the Olmec are exceptionally old and are one of the earliest complex societies of ancient Mesoamerica. This precocious quality constitutes one of the most striking and intriguing aspects of Olmec archaeology.

Although in many respects the Olmec stand out as special and unique in Formative Mesoamerica, they should by no means be considered strange or otherworldly. In many ways, our perception of the Olmec continues to suffer from the same notion of strangeness that so heavily influenced Classic Maya research during much of the past century. Until the epigraphic breakthroughs of Heinrich Berlin (1958), Tatiana Proskouriakoff (1960), and others, the Classic Maya were generally thought to be an unusually peaceful people run by a rather detached priestly elite far more concerned with astronomy and astrology than with such historical events as war, marriage, and political alliance. Whereas the Classic Maya now can be seen in the sharper light of historical reality, the Olmec remain an elusive and mysterious people. Along with their powerful but alien art style, the Olmec seem concerned with monumental carving and ritual offerings to the point of obsession. Our conceptions of the Olmec are gradually changing, however. Some of the more important gods and even some of the basic Olmec conceptions of the universe can now be traced to later Mesoamerican traditions. Along with an increased understanding of Olmec art and religion, we are gaining insights into Olmec ecology and economics, and it is clear that much of Olmec religion is based on such here and now concerns as agricultural abundance and material wealth. The many achievements observed for the Olmec should not be seen as symptoms of profligate inefficiency, but as a reflection of a robust economy based on a profound understanding of regional ecological processes and the sophisticated manipulation of social surplus and wealth. The Olmec elite were clearly able to manipulate and exchange vast amounts of surplus and material riches. The burial of jade celts, raw serpentine, and other rare goods at La Venta and other centers probably reflects hoarding and storage as much as permanent offerings to the earth. As powerful role models of agricultural success and wealth, the Olmec were responsible for the dissemination of elaborate farming ritual and symbolism over much of Formative Mesoamerica.



Plate 1

FISH EFFIGY BOTTLE

Plate 1
Early Formative
Ceramic. H. 17.5 cm
B-583

History: Formerly in the collection of Harold Kaye; purchased by Dumbarton Oaks from Alfonse Jax, 1970

Exhibition: Dumbarton Oaks, 1970–

Bibliography: Coe 1965a: fig. 60; Niederberger 1987: fig. 98

This fish bottle conveys a highly animated and almost playful quality. Staring with round, bulging eyes, the fish appears to spout water from its upturned mouth. A modeled gout of water serves as the vessel spout so that liquid poured from the bottle mimics water ejected from the mouth of the fish. The spout and belly of the fish are delineated with rough, carved zones that contrast with adjacent, smoothly burnished black surfaces. The rough areas probably

allude to water, as if the spouting fish lies only half submerged. The coarse regions seem to have been intentionally prepared to receive red hematite staining that still adheres to much of these surfaces.¹⁸ The patterns of abstract, broad, line carving in the belly

¹⁸ The chemical identification of the hematite was performed by Paul Jett.

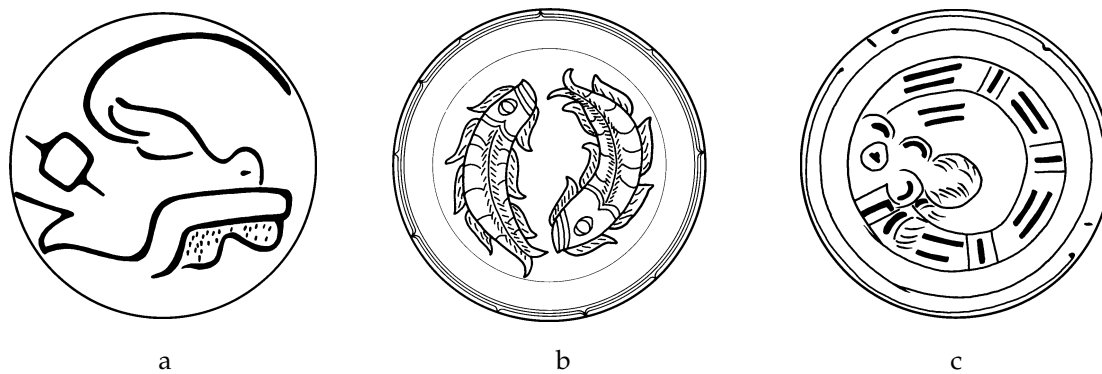


Fig. 25 Formative representations of fish within ceramic bowls. Drawings by Elizabeth Wahle. (a) Shark figure. Early Formative Tlatilco (after Niederberger 1987: fig. 383); (b) Pair of fish. Early Middle Formative Tlapacoya (after Niederberger 1987: fig. 497); (c) Stylized fish. Middle Formative Chalcatzingo (after Grove 1984: fig. 6).

region are similar on both sides of the fish, suggesting an intentional albeit highly abstract design. While some Early Formative ceramics (Joralemon 1988: 32) and Xochipala-style stone vessels (Gay 1972b: fig. 35) have abstract halved images that become whole figures when placed against their mirrorlike opposing counterpart, such is not the case with this object.

With its pleasing, rounded form and contrasting surfaces, this vessel is an excellent example of the Las Bocas ceramic tradition. The site of Las Bocas, in western Puebla, has yielded many such fine ceramic vessels in Olmec style. Unfortunately, because these materials have been obtained through looting, little can be said of the nature of this important site. Many of the vessels and their attendant iconography can be compared to gray and black Calzadas carved ware of Early Formative San Lorenzo, dating approximately from 1150 to 900 B.C. (Coe 1965a: figs. 23–27, 29–31, 33; Coe and Diehl 1980, 1: 162–170). Similar ceramic forms and designs appear in the Early Formative, San José phase at San José Mogote, Oaxaca (Flannery and Marcus 1994: 168–186), and at Tlatilco, in the valley of Mexico, where elaborate effigy bottles are also known (Porter 1953: pls. 6–7; Coe 1965a: figs. 32, 39). In the Soconusco region of Chiapas, still earlier animal effigy bottles are documented for the Locona phase (1400–1250 B.C.) at Paso de la Amada (Lesure 2000).

Although ceramic effigy vessels, such as this fish, may have been manufactured in Puebla or other highland Mexican centers, many of the animals are native to the tropical lowlands of the Olmec heartland, including monkeys, jaguars, toucans, and prob-

ably a number of the fish (Feuchtwanger 1989: illus. 83, 92, 94). Whether these creatures were appealing because of their nonlocal nature or whether they were viewed as bearers of sacred power is not known. Similarly, knowledge is lacking concerning the representation of exotic species found in the Chavín art of Early Horizon Peru (ca. 900–200 B.C.); Burger 1992: 153–156). Also, some New Mexican Mimbres (ca. A.D. 900–1100) ceramics depict distant saltwater fish, rather than local freshwater species (Jeff and Boyle 1986).

The spouting fish is a fairly common motif of Las Bocas-style effigy vessels (Feuchtwanger 1989: illus. 89–91). Similar to the treatment of the spouting fish, Early Formative duck effigy vessels have beaks as spouts, either for liquid or, in the case of one censer, for cloudlike coils of smoke (*ibid.*: illus. 82, 87). Smoke offerings commonly imitate or are to conjure rain clouds in contemporary Mesoamerican ritual, as they did in ancient times. As water creatures, fishes and ducks may have symbolically served as magical water bringers (see Pl. 36).

Aside from a sharklike entity with a crescent eye and toothed maw (Figs. 18c, 25a), fish are relatively rare in the iconography of the Olmec heartland. Early and Middle Formative bowls from Tlatilco, Tlapacoya, Chalcatzingo, and other highland sites, however, frequently contain incised representations of fish in various degrees of stylization (Fig. 25). Although the fish may indicate what was eaten from these bowls, they could also be cosmographic allusions. Just as the double-line break on the rims of Middle Formative bowls refer to the sky (Taube 1995: 92), the fish may allude to the dark, aquatic interior

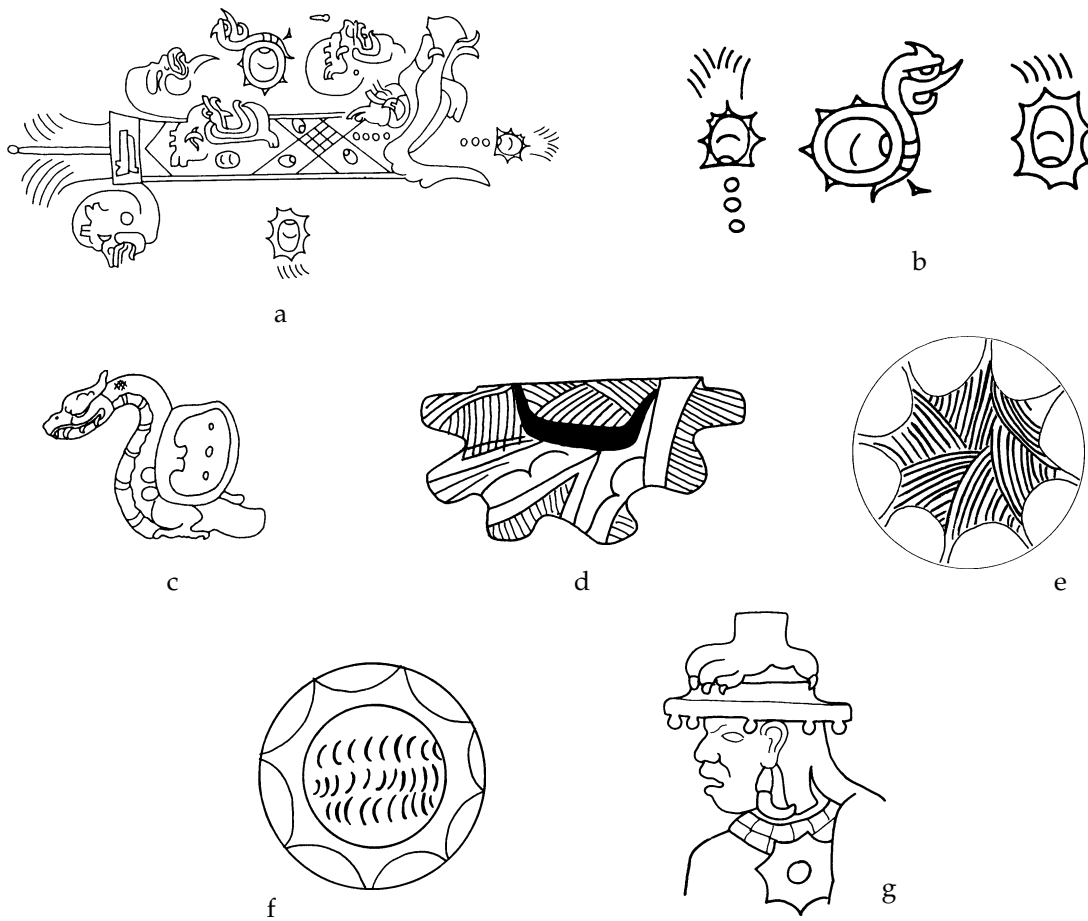


Fig. 26 Representations of bivalve shells in Formative Mesoamerica. (a) Supernatural fish surrounded by probable spondylus shells. Late Middle Formative detail of the Young Lord statuette (from *The Olmec World* 1995: 280); (b) Detail of probable spondylus shells. Note the Formative Oyster Shell Wing Dragon in the center (from *The Olmec World* 1995: 280); (c) Classic Maya Oyster Shell Wing Dragon. Palenque Tablet of the Slaves. Drawing courtesy of Linda Schele; (d) Conflation of a shark eye with a shell motif. Early Formative incised vessel from Las Bocas (after Coe 1965a: no. 24); (e) Interior of an Early Formative bowl from Tlapacoya (after Niederberger 1987: fig. 489.2); (f) Interior of an Early Formative bowl from Tlapacoya (after Niederberger 1987: fig. 493.2); (g) Early Formative Olmec figure wearing shell pectoral. San Lorenzo Monument 14 (after Coe and Diehl 1980, 1: fig. 438).

of earth. A late Olmec serpentine statuette known as Slim or the Young Lord bears an incised fish flanked by shells on his right leg (Fig. 26a). One of the shells appears to be a prototype of the Classic Maya Oyster Shell Wing Dragon (Fig. 26b–c). An Early Formative vessel, attributed to Las Bocas, features a fusion of fish and shell, with the crescent eye of the shark creature placed on a shell (Fig. 26d). The shells appearing on the Young Lord statuette and the Las Bocas vessels are similar to a weblike form commonly

incised on the bottom interior of Early and Middle Formative highland Mexican bowls, suggesting that it too represents a bivalve (Fig. 26e). Moreover, an Early Formative figure carved on San Lorenzo Monument 14 wears a shell pendant of essentially identical form (Fig. 26g). Shell pendants of similar shape are also known in Classic Maya art (Fig. 82b). Both the incised fish and shell motifs appearing in the basal interior of Formative bowls may allude to the lower cosmic realm of earth or, more probably, the underworld.



Plate 2

STONE YUGUITO

Plate 2
Early Formative
Basalt. H. 10.2 cm
B-2

History: Reportedly found at Tlatilco in 1953; purchased by Dumbarton Oaks from John Stokes, 1960

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1960–62; Dumbarton Oaks, 1963–65; Museum of Primitive Art, New York, 1965; Dumbarton Oaks, 1965–

Bibliography: Peterson and Horcasitas 1957; Benson and Coe 1963: no. 14; Coe 1965a: 21; fig. 15; Willey 1966: fig. 3.28b; Bernal 1969b: pl. 58; Niederberger 1987: fig. 95a; González Calderón 1991: pl. 197

Yuguitos appear to derive largely from the Mexican highlands rather than the Olmec heartland, despite the fact that many examples bear designs of strong Olmec style, as also appears to be true for Las Bocas effigy vessels (see Fig. 86). The *yuguito* form generally resembles a turtle carapace, although a *yuguito* underside has a broad and deep groove running to both its ends. The term *yuguito*, or “little yoke,” derives from its vague resemblance to the padded belts used in the Mesoamerican ball game. Although *yuguitos* are not miniature ball game belts, they do appear to have been an important component of the Early Formative ball game.

Fashioned of dense basalt, the Dumbarton Oaks *yuguito* was reportedly discovered at Tlatilco with another plain example (Peterson and Horcasitas 1957). Both appear to have been ritually broken, or “killed,” as offerings for a burial (ibid.). This *yuguito* is composed of five re-joined pieces, with missing portions on the convex upper portion and back of the sculpture. The piece was partly carved by pecking, with some of the pecked surface still visible on the convex upper surface and especially in the broad groove running along the underside. The *yuguito* portrays an anthropomorphic head with a deeply furrowed brow and snarling mouth, facial elements found also on the Olmec Rain God (see Fig. 15; Taube 1995). Remains of red hematite pigment appear in incised portions of the piece.¹⁹ Whereas portions of white paint adhere to the mouth, the eyes contain a black, tarlike substance, probably serving as glue for now lost inlays. The tablike trapezoidal element projecting below the lip may be a beard, with broad crosshatching denoting hair. This same crosshatching encircles the otherwise plain and smooth cranium, as if the figure had a bald pate surrounded by a narrow strip of hair. The figure could well represent the shamanic entity appearing as the Olmec Transformation Figure, who also commonly displays a beard and similar tonsure coiffure as well as a furrowed brow and snarling mouth (see Pl. 5).

In addition to containing some of the earliest known ballplayer figurines of ancient Mesoamerica, the Early Formative shaft tombs at El Opeño, Michoacán, yielded a simple basalt *yuguito* (Flores

Villatoro 1992: 108–109). The abundant evidence of ball game imagery at this site suggests that *yuguitos* were used in the game. The small scale and generally consistent size of *yuguitos* indicate that they could have been worn by ballplayers. Moreover, the rims around the concave ends tend to be slightly outflaring, as if to create surfaces suitable for binding (Coe 1965a: nos. 13–16). Julie Jones (cited in ibid.: 21) has suggested that *yuguitos* were stone copies of items of leather or wood bound against the back of the hand, thereby creating a mitlike handpiece for striking the ball. In support, Coe (ibid.: 21) cites an Early Formative Tlatilco figurine representing a belted ballplayer supplied with a knee pad and a thickly bound item covering the right hand (also see Porter 1953: pl. 4d). A Middle Formative Olmec serpentine statuette portrays a belted ball player with his right arm bound by protective wrapping, with cross-lashing over the hand (*The Olmec World* 1995: no. 134). A Late Formative stela from Teotihuacan, Veracruz, portrays another belted player wearing a knee pad and a virtually identical bound right arm and hand (see Covarrubias 1957: pl. xvii). On the ballplayer stelae from Terminal Classic Bilbao, the players are portrayed with carved objects bound to their padded left hands (see Parsons 1969: pls. 32–33). In a contemporary version of the native ball game, the Mixtec of Oaxaca strike the ball with a thick mit held in the right hand (Castro-Leal et al. 1986: 98–99; Cortés Ruiz 1992).

Although the *yuguito* may have served as a handpiece, this is not the only possibility. Many researchers have suggested that they constituted elbow or knee protectors (e.g. Peterson and Horcasitas 1957: 365; Borhegyi 1980: 2; Miller 1989: 26). In addition, the *yuguito* could have also been worn on a belt, with its long groove fitting snugly against the protective padding. One Olmec statuette features an aged ballplayer with a possible *yuguito* protruding out of the left side of his thick woven belt (see *The Olmec World* 1995: no. 134). If this is the case, the *yuguito* could constitute an ancestral form of the *hacha* and *palma* belt-pieces of Classic Veracruz and related areas.

¹⁹ The chemical identification of the hematite was performed by Paul Jett.



Plate 3

PORTRAIT HEAD

Plate 3
Middle Formative
Serpentine. H. 9.6 cm
B-6

History: Purchased by Dumbarton Oaks from John Stokes, 1965

Exhibition: Dumbarton Oaks, 1963– ; *The Ancient Americas: Art from Sacred Landscapes*, Art Institute of Chicago, 1992–93; Museum of Fine Arts, Houston, 1993; Los Angeles County Museum of Art, 1993

Bibliography: Benson and Coe 1963: no. 17; González Calderón 1991: pl. 335b; Townsend 1992: no. 208

Although this sensitively carved head previously was identified as talc, it is actually fashioned from a soft, grainy serpentine stained brown from long burial. Attributed to highland Puebla, the piece appears to have been broken off of a relatively large statuette. The concern with the subtle form and dimensions of the face suggests that this is a portrait of an actual individual. Nonetheless, a number of Olmec conventions were still applied; among the most noteworthy is the carving of the mouth. The perimeter of the mouth is delineated by an incised line, thereby accentuating the full and rounded lips. Although by no means as subtle, similar treatment of a mouth can be seen on the talc dwarf statuette in the Dumbarton Oaks collection (Pl. 4). In addition, the corners of the mouth are marked by drilling. As noted in the introductory essay, drill holes were frequently employed for orientation and sighting by the artist, serving as guides for proportion and depth of carving. Although used in the manufacturing process, such holes at the corners of the mouth were

surely retained for their aesthetic value as well. The nostrils of the portrait head here are also marked by drilling and the earlobes are entirely pierced by the same technique. The eye orbits are deeply carved and rough in the interior; they probably once contained an inlay of shell or some other material. The eyebrows are unusually sharp and pronounced, particularly in the area above the nose.

As in the case of many Middle Formative Olmec sculptures, this head exhibits considerable cranial modification, with the elongated cranium appearing narrower than the lower face. Two locks of hair hang in front of the ears, and at the back of the head the coiffure extends to the nape of the neck. Although much of the carved detail of the hair is effaced by erosion, the remains of a central part can be detected at the top of the head, with other incised lines in the area above the ears. With long back hair, central part, and locks in front of the ears, this coiffure is quite similar to the hairstyle found on the Las Limas Figure (see de la Fuente 1994: fig. 13d).



Plate 4

DWARF STATUETTE

Plate 4
Middle Formative
Talc. H. 9.3 cm
B-11

History: Purchased by Dumbarton Oaks from John Stokes, 1960

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1960–62; Dumbarton Oaks, 1963– ; *Olmec Art of Ancient Mexico*, National Gallery of Art, 1996

Bibliography: Benson and Coe 1963: no. 22; González Calderón 1991: pl. 419; Benson and de la Fuente 1996: no. 63b

Although carved of soft talc, this statuette has a rich brown patina, presenting an appearance of carved wood. The sculpture portrays a chinless dwarf in a crouching position. Because the legs have strongly

planar angles, they are somewhat difficult to interpret at first glance. The lower legs are encircled by a pair of large, segmented anklets, resembling those on a sculpture of an Olmec-style jaguar in a similar



4a, side view

crouching stance from Tuxtla Chico, Chiapas (see Easby and Scott 1970: no. 25). With the exception of the elaborate anklets, the talc figure is nude and appears to be male. Drilled perforations through the earlobes and septum, however, indicate that the figure originally may have been supplied with jewelry. In spite of his corpulent abdomen, the figure has withered limbs and clearly delineated shoulder blades. This combination of a swollen belly with wasted physiognomy often occurs in Olmec representations of old women (see Joralemon 1981: figs. 12–16). Although not female, this statuette probably portrays an aged dwarf.

The crouching chinless dwarf is a well-known motif in Middle Formative Olmec art, and usually is found in the form of small, portable sculptures (Drucker 1952: pl. 51; Delgado 1965: figs. 2, 3, 10, 11, 13; Easby and Scott 1970: no. 36; Joralemon 1971: fig. 19; 1976: fig. 20f; Larralde de Sáenz 1986: plate 49; Roemer und Pelizaeus-Museum 1986: no. 11; Goldstein 1988: 48; Díaz Oyarzábal 1990: 38; González Calderón 1991: pls. 207–210, 212–219, 224A; *The Olmec World* 1995: nos. 112–118). The squatting stance and frequently upturned head suggest a

posture of attendant supplication, a seemingly appropriate position for dwarfs in royal courtly life. The dwarfs rarely carry objects in their arms, which are often crossed over their chests or raised with the hands near the side of the head. This latter position is similar to that adopted by individuals carrying a tumpline, with their hands supporting the heavy carrying strap. In a number of instances, the squatting dwarf clearly carries such a tumpline (Fig. 27; see also Kubler 1986: pl. 5). The squatting position, hunched-over back, and upturned head of the Dumbarton Oaks sculpture and many other examples of Olmec dwarf figures strongly suggest the physical act of raising or lowering the burden of a heavy tumpline. In two instances, the burden appears to be the dwarf's overgrown head (*The Olmec World* 1995: nos. 112–113). It is quite possible that many of the crouching dwarf sculptures held miniature burdens slung by tumpline across the brow of the figure.

According to Peter David Joralemon (1976: 52) the Olmec chinless dwarf is identified with maize. In support, Joralemon (*ibid.*: 52, fig. 20f) notes the sculpture that portrays a squatting dwarf carrying a

maize-filled sack by tumpline (Fig. 27), whereas in another example, the dwarf has ears of corn on his cranium (Joralemon 1971: fig. 19). For the latter dwarf, the central ear is in the form of the bundled maize ear fetish (see, e.g., Pl. 12). This same object is carried by yet another dwarf, whose head represents the upper portion of the maize fetish, which commonly is supplied with feathers and a projecting central ear of corn (Fig. 28). The Dumbarton Oaks dwarf may have been considered a symbolic “maize bringer.” In this regard, it should be noted that one aspect of the Classic Maya Maize God, the Holmul Dancer, commonly appears with a dwarf assistant (Reents-Budet 1991). In addition, Classic Maya dwarfs commonly appear with herons and other waterbirds and hold aspergillums, further suggesting an identification with water and fertility (see Miller 1985: figs. 22, 24, 25).

According to Carolyn Tate (1995: 60–62), the Olmec considered dwarfs and hunchbacks to have special divine powers, and they served as intermediaries or “messengers” between the world of mortals and the supernatural realm. In both ancient and contemporary Mesoamerica, physical ailments and

deformities are frequently believed to be caused by lightning and, as such, serve as markers of shamanic and rainmaking ability: “The fascination with disease and physical deformities may be partly because these are commonly considered to be sent by the gods of rain and lightning; people exhibiting these afflictions are, in a sense, children of the lightning” (Taube 1988a: 59).

Among the contemporary Quiché, there is the C’oxol dwarf who summons shamanic powers through his lightning axe (Tedlock 1982: 147–150). In his discussion of Olmec dwarfs, Miguel Covarrubias (1957: 57) mentions the contemporary *chaneque* dwarfs of the Gulf Coast and Guerrero, who are related to the more widespread southern Mexican belief in old dwarfs with infant faces who “hide treasures in caves, where they keep the best corn, and in their hands they carry bolts of lightning in the form of serpents.” Much as Covarrubias suggests, Olmec dwarfs were probably identified with rain, lightning, and maize. Rather than simply being droll entertainers of the Olmec court, dwarfs were probably considered chosen beings having a special link to powers of rain and fertility.



Fig. 27 An Olmec dwarf carrying a maize-filled sack with tumpline (after *The Olmec World* 1995: no. 118)

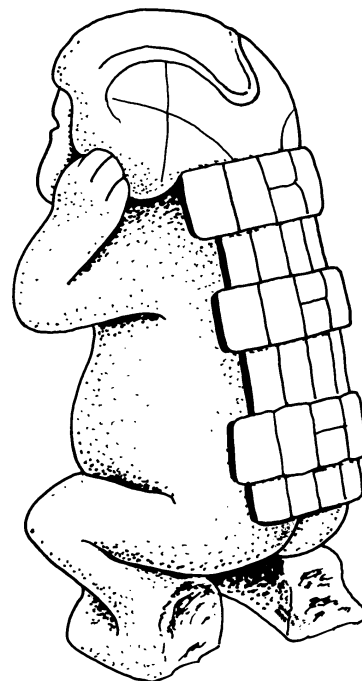


Fig. 28 An Olmec dwarf carrying a maize ear fetish. Middle Formative period. For a frontal view, see Benson and de la Fuente 1996: no. 64.



Plate 5

KNEELING TRANSFORMATION FIGURE

Plate 5
Middle Formative
Stone. H. 19 cm
B-603

History: Formerly in the collection of Ferdinand Ries, who reportedly obtained it from Petlalcingo, Puebla, 1928; in the collection of John Hauberg; acquired by Dumbarton Oaks from Hauberg, 1977

Exhibition: *Before Cortés: Sculpture of Middle America*, Metropolitan Museum of Art, 1970–71; Dumbarton Oaks, 1977– ; *Olmec Art of Ancient Mexico*, National Gallery of Art, 1996

Bibliography: Easby and Scott 1970: no. 43; Benson 1981: 105–108; Goodman 1988: 21; Reilly 1989: 11–13; González Calderón 1991: pl. 227; Furst 1995: fig. 8; Benson and de la Fuente 1996: no. 68

This object is among the most remarkable Olmec sculptures, portraying a marvelously strange blend of human and jaguar physiognomy. Although possessing human ears, a pair of jaguar ears also sprout

from the head. Moreover, just below the human nose, there is the snarling, toothy maw of the jaguar, open as if emitting a powerful roar. Although slightly more subtle, the muscular, compact body reveals the same

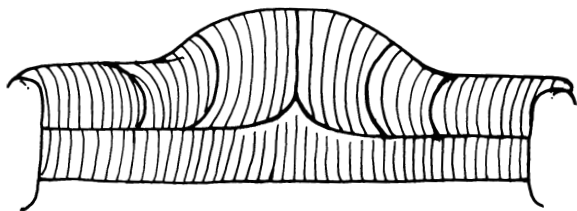


Fig. 29 Detail of the coiffure of the Dumbarton Oaks Transformation Figure

merging of man and feline. While primarily human, the forearms adopt the rearing stance often found among Olmec jaguars (e.g. de la Fuente 1973: nos. 118, 163). In addition, the hands are tightly curled into fists, as if becoming feline paws. Both Elizabeth Benson (1981: 106) and Frank Kent Reilly (1989: 12) suggest that the angular, sunken region in the area of the shoulder and clavicle represents the tearing open of the enclosing human skin, releasing the jaguar hidden inside.

In his analysis of the Olmec were-jaguar motif, Peter Furst (1968) notes that the widespread merging of human and jaguar traits in Olmec art frequently concerns the shamanic concept of transformation, that is, the metamorphosis of the shaman into his or her supernatural counterpart. In a detailed discussion of Olmec Transformation Figures, Reilly (1989) suggests that these sculptures represent shamans engaged in visionary trances, perhaps induced by powerful hallucinogens derived from the parotoid glands of the *Bufo marinus* toad. However, Wade Davis and Andrew Weil (1992) note that due to the high toxicity of parotoid venom, it is unlikely that the Olmec used *Bufo marinus* as a hallucinogenic source. Although it is quite possible that Olmec shamans did indeed use hallucinogens, there is at present no specific evidence for particular hallucinogenic drug use among the Formative Olmec.

According to a former owner of this Transformation Figure, Ferdinand Ries, it was acquired in 1928 in Petlalcingo, Puebla, along with two other stone objects in Olmec style—a standing figure and a head broken from a statuette (Benson 1981: 105). Fashioned of hard and opaque green stone, the sculpture is relatively well preserved, with only minor damage to the head. In addition to a slightly chipped

right ear, the upper canines also appear to be broken. Aside from the region of the loins, the surface is well polished, with the entire piece subsequently painted with a red cinnabar pigment. On the body, the primary emphasis lies in the subtle portrayal of musculature, with fine line incision being reserved only for the nails of the thumb and large toe. In contrast, a great deal of incision is used on the head, to delineate facial features as well as hair. The nostrils were created by drilling, with a pair of joined holes piercing the septum; as with other Olmec Transformation Figures, the earlobes are unperforated. The eye orbits were also fashioned by drilling, although in this case large, hollow-core drills appear to have been employed. Although now missing, the eyes were probably of inlay; like the two other Dumbarton Oaks Transformation Figures (Pls. 6, 7) examples, this material could well have been a polished iron ore.

Although strongly feline, the head of the kneeling figure retains the goatee and distinctive tonsure commonly found with anthropomorphic forms of Olmec Transformation Figures. While the significance of this hairstyle remains unknown, it seems to define a shamanic office. The rufflike band of hair appearing behind the ears of the Dumbarton Oaks figure is composed of two horizontal zones, with the upper portion further divided into six sections. Within these divisions, there are finer incised lines delineating hair (Fig. 29).

In the first publication of this kneeling sculpture, Elizabeth Easby and John Scott (1970: no. 43) note its close resemblance to examples published and described by Furst (1968), who did not discuss this figure but referred to similar pieces, including the other two examples in the Dumbarton Oaks collections. Elizabeth Benson (1981: 107) notes that the Dumbarton Oaks statuette here is strikingly similar to a kneeling Transformation Figure in the Art Museum of Princeton University. According to Benson, these sculptures may have been carved by the same artist. In contrast to the Dumbarton Oaks example, however, the Princeton figure is wholly human, with no overt indication of feline attributes. Nonetheless, in terms of both the positioning and treatment of the body, the sculptures are markedly similar, including the stylistic treatment of the band of hair behind the ears (see Reilly 1989: fig. 6).



Fig. 30 Fragmentary Transformation Figure at the Cleveland Museum of Art. Photograph courtesy of the museum.

Although fragmentary and of somewhat larger scale, a third similar Olmec figure is housed in the collection of the Cleveland Museum of Art (Fig. 30). While initially published as an example of Totonac sculpture (Milliken 1946: 27), it now is readily apparent that this sculpture is quite like the Dumbarton Oaks and Princeton statuettes (*The Olmec World* 1995: no. 14). Missing the head, left shoulder, arm, and much of the left leg, the kneeling figure is nonetheless portrayed in very similar pose, with the right hand atop the knee. As in the case of the other two examples, the toes curve slightly upward to fit smoothly against the buttocks. Also, similar to the Princeton and the three Dumbarton Oaks examples, the musculature of the Cleveland torso is carefully delineated, with the muscles of the shoulders and arms subtly appearing on the smoothly finished stone surface. In contrast, the three figures bear little or no indication of genitalia, despite the fact that all are nude. Benson (1981: 107) notes that although the Princeton figure is covered in cinnabar, there is no staining in the hip region, indicating that it was covered by a loincloth or kilt. It is quite likely that all three figures were at least partly dressed in some form of perishable material.

Perhaps the most striking trait shared by the three figures is the detailed, almost surgical understanding of body musculature. Although the fragmentary Cleveland sculpture lacks the neck region, the other examples display a V-like muscle at the nape of the neck, which constitutes a rudimentary form of the powerful neck muscles found on great cats (see Pl. 6). The Princeton figure appears to be of slightly more advanced years, with a softer appearing chest and a deeply lined face. In comparison, the musculature of the Dumbarton Oaks figure is more defined, including even slight indentations to represent the muscles atop the shoulder blades. The so-called Wrestler from Santa Maria Uzpanapa, Veracruz, is one of the few Olmec sculptures exhibiting a similar concern with musculature (see Bernal 1969a: no. 59). In one study, Roy Craven (1995) reasonably argues that this sculpture actually represents a shaman in a contorted posture. In this regard, it should also be noted that the “Wrestler” is not only bald and bearded, but also displays a face of mature years, quite like the Princeton shaman. For the Olmec, the supernatural power of shamans was portrayed by the physical strength of both jaguars and men.



Plate 6

TRANSFORMATION FIGURE IN COMBAT STANCE

Plate 6
Middle Formative
Serpentine. H. 18.8 cm
B-8

History: Reportedly found in Tabasco with another Transformation Figure (B-9.OS, Pl. 7); purchased by Robert Bliss from Earl Stendahl, 1954

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1956–62; Dumbarton Oaks, 1963– ; *Olmec Art of Ancient Mexico*, National Gallery of Art, 1996

Bibliography: Bliss 1957: no. 10, pl. 4; Kubler 1962: 70, pl. 35; Benson and Coe 1963: no. 19; Furst 1968: fig. 1; Soustelle 1984: 129; Reilly 1989: 14, fig. 16b; Saunders 1989: 71–73; González Calderón 1991: pl. 228; Furst 1995: 69–70; Benson and de la Fuente 1996: no. 70

This statuette, despite its relatively small size, conveys an extraordinary amount of tension and power. In part, this is achieved by the flexed and contorted position of the figure, whose tightly clenched hands evoke the powerful paws of the jaguar. In addition, the statuette exhibits a dense, compact body braced with thick and powerful musculature, with flamelike ropes of veins emanating from the forearms and lower



6a, detail

abdomen. With his bared mouth partly open, the figure leans aggressively forward on his left leg. His right arm and shoulder are coiled in preparation to strike. In view of its pugilistic pose, George Kubler (1962: 70) considers the figure a “middle-aged gladiator.” Frank Kent Reilly (1989: 14) also comments on the boxing stance of the statuette. In fact, forms of boxing with conch shells, carved stones, and other objects is of considerable antiquity in Mesoamerica (see Pl. 12). In addition, Heather Orr (1997) notes that in both ancient and contemporary forms of native Mesoamerican boxing, the jaguar frequently has a prominent symbolic role. A neatly drilled vertical hole passes through the right fist, indicating the figure may once have wielded a weapon. This position of facing left while brandishing a weapon recalls a similar posture discussed by Peter Furst (1965: 43–46) regarding the ceramic tomb art of Protoclassic West Mexico. According to Furst, left-facing, West Mexican warrior figures depict shamans engaged in supernatural battle. In view of its obvious transformational theme, this Dumbarton Oaks sculpture probably represents an entranced shaman combating supernatural forces.

The dynamic pose of this standing Transformation Figure is in strong contrast to the kneeling Transformation Figure in the collection (Pl. 5). Whereas the relatively static kneeling figure may represent the shaman in a posture preparatory to trance, this standing sculpture seems to depict a fully entranced individual engaged in shamanic battle. The physical form of the standing figure also suggests a more

advanced, altered state. Although the character still has human ears, cranium, and the tonsured coiffure typical of Transformation Figures, the smoothly projecting face is almost wholly jaguar, with a deeply furrowed brow, feline muzzle, and sharp canines. Moreover, the massive musculature behind the neck is typical of great cats, which use these muscles to tear or carry their bitten prey. The narrow, steeply sloping shoulders and thick barrel chest also evoke the jaguar, as does the somewhat protruding belly and awkward, knock-kneed stance. All of these traits can also be observed on the even more feline Transformation Figure in combat stance (Pl. 7).

Carved of dark green, almost black serpentine, the statuette gleams with a highly polished, mirror-like surface. Along with vestiges of root markings, particularly on the right brow, the sculpture has traces of cinnabar on the face, hands and feet. The major region lacking high polish is the coiffure passing behind the ears, which was scraped horizontally with a coarse material to create a striated surface, thereby evoking filaments of hair. In addition to the right hand, the eye orbits were also drilled, in this case to receive circular inlays of polished pyrite; only the proper left inlay remains. Smaller drills were employed to create shallow holes for the nostrils and spaces between the toes. The nails of the human hands and feet are delineated by fine line incision, as are the knuckles of the right hand. Designed to allow the sculpture to stand freely, the large and broad human feet are also carefully rendered to show ankle bones and high arches.

According to Samuel Lothrop (in Bliss 1957: 234), both this statuette and the other Transformation Figure in combat stance (Pl. 7) were found together in Tabasco. Both were stained with cinnabar, possibly at the time of burial.²⁰ In view of their many shared stylistic similarities, Furst (1968) suggests, "There seems little doubt that the two Bliss pieces came from the same master's hand" (ibid.: 150). He also notes that another highly polished Transformation Figure, now in the collection of the Los Angeles County Museum of Art, is fashioned from a similar blackish green serpentine with pyrite inlaid

eyes, although in this case the original pyrite inlays are only indicated by yellow staining (*The Olmec World* 1995: no. 46). In addition, Furst (1968: 150, fig. 2) calls attention to a similarly carved serpentine head from Huimanguillo, Tabasco. The brow on this example is marked by a pair of undulating bifurcated veins, virtually identical to the belly veins appearing on the Dumbarton Oaks sculpture here. The facial features of the Huimanguillo head are markedly similar to the head of another Transformation Figure evidently broken from a serpentine statuette (*The Olmec World* 1995: no. 47). Still another Olmec serpentine Transformation Figure was reportedly acquired by Teobert Maler at Dzibalchén, Campeche. The sculpture portrays a supine figure with a jaguar body and upwardly gazing human head (see Metcalf and Flannery 1967). Although of varying form, it is quite possible that these serpentine figures were manufactured at a single workshop in the Tabasco area.

The transformation from human to jaguar constitutes an important theme of portable greenstone sculpture among the Middle Formative Olmec. Although these figures tend to appear with different poses and in various degrees of transformation, they frequently are carved from similar stone, such as dark green serpentine. Along with the use of related stone, these figures often display shared stylistic conventions, suggesting that they may have derived from a single locality within a relatively short period of time. The function of these figures remains largely unknown. The frequent use of green serpentine suggests that they may relate to rituals concerning rain and agricultural fertility. I have suggested that Olmec Transformation Figures frequently concern shamanic rainmaking rituals (Taube 1995: 100). In this regard, it is noteworthy that these sculptures frequently display the deeply furrowed brow and L-shaped eyes commonly characteristic of the Olmec Rain God, a being closely related to the jaguar. The portable transformation sculptures may have been the personal property of specific shamans of the elite, perhaps carefully stored in sacred bundles when not in use.



Plate 7

a



b



c

TRANSFORMATION FIGURE IN COMBAT STANCE

Plate 7
Middle Formative
Serpentine. H. 8 cm
B-9

History: Reportedly found in Tabasco with another Transformation Figure (B-8.OS, Pl. 6); purchased by Robert Bliss from Earl Stendahl, 1954

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1956–62; *Dumbarton Oaks*, 1963– ; *Olmec Art of Ancient Mexico*, National Gallery of Art, 1996

Bibliography: Bliss 1957: no. 11, pl. 5; Kubler 1962: 70; Benson and Coe 1963: pl. 20; Soustelle 1967b: 49, illus. 35; Furst 1968: no. 20; Alcina Franch 1983: fig. 224; Soustelle 1984: 127; Reilly 1989: 14, fig. 16c; Saunders 1989: 71–72; González Calderón 1991: pl. 233; Benson and de la Fuente 1996: no. 71

Although smaller than the Transformation Figure with which it reportedly was found (B-8. OS, Pl. 6), this sculpture is similar in many ways. The figure is in a virtually identical combat stance, facing to the left with the left leg forward and the right arm pulled

back in a striking position. However, in this case both hands are drilled, indicating that a weapon or other object was held in the left hand as well as the right. In comparison to the larger Transformation Figure, this one is decidedly more catlike, with an entirely

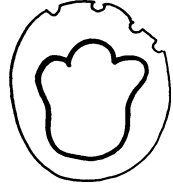


Fig. 31 Detail of the right foot of the Dumbarton Oaks Transformation Figure

feline head and a long, curling tail. Nonetheless, it still is in an essentially human, bipedal stance, and displays pawlike hands clenched in human fashion; like the other shaman-feline, it has thumbs that slightly cover the ends of the second digits.

Along with the similar pose, the material and workmanship of this statuette also recall the previous sculpture, B-8. OS. The figure is rendered in the same highly polished and virtually black serpentine, although in this case much more of the surface has been whitened by the gradual oxidation of the stone. So, too, a considerable amount of cinnabar staining still adheres to the surface, particularly in the more recessed areas, such as the mouth, ears, inner arms, and groin. Along with drilled holes to indicate the nostrils, small and carefully drilled pits mark the spaces between the fingers and toes, an unusual trait seen also on the feet of B-8. OS. A series of curving incised lines delineate the fingers from the backs of the hands. An Early Formative jaguar effigy bottle attributed to Las Bocas indicates that this convention serves to convert the fingers into long curving claws (see Feuchtwanger 1989: 156–157). Thus, rather than simply being human hands, the figure's fists double as feline paws with long, protruding claws. Although B-8. OS has essentially human arched feet, the rear paws of this figure are marked with a trefoil-like device denoting the pads of feline paws (Fig. 31). As in other Olmec examples of serpentine Transformation Figures, minute disks of polished iron pyrite serve as the eyes of the jaguar face. Nicholas Saunders (1988) notes that the use of the mirrorlike reflective pyrite may allude to a striking natural condition of feline eyes. At the rear of their eyes there is a light-enhancing device known as the *tapetum lucidum*. At night, this reflecting element causes the feline eye to shine brightly, creating a startling and impressive effect, particularly when one

realizes that the source derives from a great carnivorous cat.

Although a powerful entity engaged in a combat stance, this figure nevertheless seems to emit a quality of playful cuteness. In part, this is suggested by its infantlike stance and protruding belly. Other sculptures suggest that at times the Olmec elite regarded the great cat with a familiarity approaching affection. One recently published Olmec sculpture portrays a pot-bellied jaguar standing on its rear legs with its hollowed forepaws before the mouth, much as if to blow a trumpet or other instrument (*The Olmec World* 1995: no. 50). With its bent arms and partly crouching stance, the anthropomorphic jaguar from Tuxtla Chico, Chiapas, also possesses a playful, animated quality (Easby and Scott 1970: no. 35; Benson and de la Fuente 1996: no. 4). The stance of this figure also recalls a Late Preclassic jaguar sculpture from El Baul, Guatemala. Elizabeth Easby and John Scott (1970) note the strange combination of terrible beast and attentive pet present in this Maya piece: "In spite of its huge size, bared fangs, and exposed claws this feline sits up and begs like a tame dog. The presence of the double-tiered collar reinforces the impression of a domesticated animal" (ibid.: no. 55).

The Classic Maya also frequently portrayed jaguars with a certain degree of humor; although many such examples exist on Late Classic Maya polychrome ceramic vessels, perhaps the most striking occur on the Jaguar Stairway in the East Court at Copán. J. Eric S. Thompson (1954: 204) had this to say regarding these rotund creatures: "At Copán a giant jaguar guards each flank of a flight of stairs. The jaguar has always had a largely undeserved reputation for fierceness, with many apocryphal stories of attacks on lonely travelers. The artist must have decided to debunk the dread creature. He carved each with one paw on hip, the other pointing to the steps. . . . 'Who's afraid of the big bad wolf?' is clearly the theme" (ibid.: 204). A Late Classic cache adjacent to Copán Altar Q contained the remains of fifteen jaguars, indicating that live jaguars may have been kept at the site. Much like leopards within the traditional royal court of Benin, Nigeria, live jaguars may well have served as virtual "pets" among the Olmec and Classic Maya elite. Along with the use of

jaguar thrones, the presence of these powerful animals in the royal court would proclaim the greatness and power of the ruler. A high degree of royal familiarity with jaguars reinforced the power of the elite, who could have fearsome jaguars rather than mundane dogs as their pets. A number of Late Classic Maya vessels portray live jaguars standing next

to royal thrones (see Kerr 1989: 69; 1994: 563; 1997: 744). The apparently playful quality of the serpentine Transformation Figure here may indicate a special relationship of this precious object to its owner; this figure may represent a beloved companion as well as a supernatural guardian of a particularly powerful individual.

STANDING MALE STATUETTE

Plate 8

Middle Formative

Diopside jadeite. H. 23.9 cm

B-14

History: Purchased by Robert Bliss from Joseph Brummer, Paris, 1914

Exhibition: *An Exhibition of Pre-Columbian Art*, Fogg Art Museum, 1940; *Twenty Centuries of Mexican Art*, Museum of Modern Art, 1940; *Ancient American Art*, Santa Barbara Museum of Art, 1942, M. H. de Young Memorial Museum, 1942, Portland Museum of Art, 1942; *Ancient American Gold and Jade*, Taft Museum, Cincinnati, 1950; *Art méxicain du précolombien à nos jours*, Musée national d'art moderne, 1952; *Mexikansk Konst fran Forntid till Nutid*, Liljevalchs Konsthall, Stockholm, 1952; *Indigenous Art of the Americas*, National Gallery of Art, 1947-52, 1954-62; *Dumbarton Oaks*, 1963- ; *Olmec Art of Ancient Mexico*, National Gallery of Art, 1996

Bibliography: Pleasants 1940: 89; Kelemen 1943: 305-306, pl. 252c-d; Covarrubias 1946b: pl. 12; Bliss 1947: no. 129; Christensen 1955: 186, 194, pl. 16; Linné 1956: 194; Bliss 1957: no. 8, pl. 2; Stirling 1961: fig. 7; Gump 1962: 196; Benson and Coe 1963: no. 25; Coe 1965b: fig. 6; Willey 1966: fig. 3.28c; de la Fuente 1977b: 7, fig. 6; Benson 1981: 95-98, figs. 1-2; Alcina Franch 1983: pl. 30, fig. 222; González Calderón 1991: pls. 383, 422; Benson and de la Fuente 1996: no. 44; Taube 1996: fig. 14d

The first Pre-Columbian object acquired by Robert Woods Bliss, this beautiful statuette was initially designated as Aztec (Benson 1981: 95; 1993: 18), but it is unquestionably a Middle Formative Olmec carving. Moreover, certain stylistic conventions of this piece can be readily compared to jadeite and serpentine statuettes excavated at La Venta. The sinuous profiles created by the outcurving thighs, incurving shins, and outwardly flaring sides of the feet also occur in jadeite Figurine 2 from Mound A-2 as well as stone figures within La Venta Offering 4 (see

Drucker 1952: pls. 47-48; Drucker, Heizer, and Squier 1959: pls. 33-36). In addition, the markedly back-curving, upper portion of the cranium recalls other examples excavated at La Venta (Drucker 1952: Plate 46, Drucker et al. 1959: *ibid.*). It should also be noted that at least one of the statuettes from Offering 4 has a rear cranium similarly divided into four sections (see Drucker et al. 1959: Plate 33, figurine 9). In view of the many stylistic similarities shared between Dumbarton Oaks statuette and similar carvings at La Venta, it is likely that this object was fashioned in



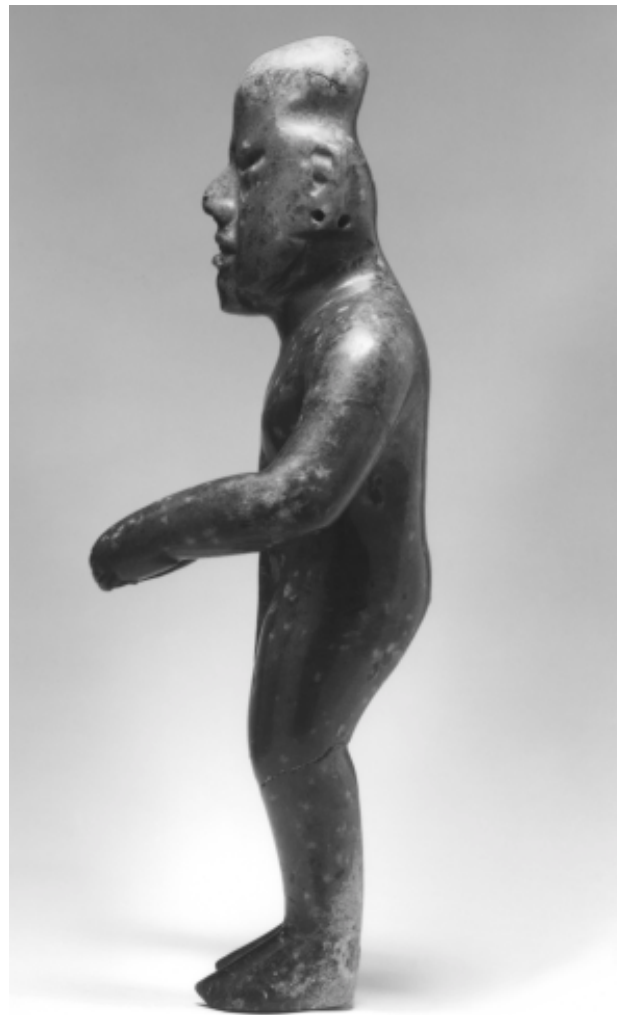
Plate 8



8a, detail, back of head

a region near La Venta, if not at the site itself.

Although the Dumbarton Oaks figure exhibits many of the traits found among serpentine and jadeite figures excavated at La Venta, it is also different in a number of significant ways. For one, it derives from a particularly massive and fine piece of jade and is far larger than the documented examples from La Venta. Moreover, the excavated La Venta statuettes tend to be relatively slablike, with the arms against the side, clearly to conserve both the precious stone and the time required for carving. In contrast, the bent arms of the Dumbarton Oaks figure project both laterally and frontally, a pose that greatly magnifies the amount of necessary stone and carving. Along with its projecting arms, the figure is far more volumetric than the standing statuettes known to be from La Venta. Whereas these examples tend to be thin and wraithlike, the Dumbarton Oaks figure is thick and massive, with well-defined and powerful musculature.



8b, side view

A *tour de force* of lapidary art, the flawless nature of this carving belies the effort and expertise that went into fashioning the extremely hard stone. The fleshy folds at the inner knees and the gently rounded physiognomy suggest a sculpture rendered in soft, buttery clay rather than intractable jadeite. Nonetheless, the arms of the statuette are not simply raised as a sign of artistic virtuosity or aesthetic effect. Instead, the hands are drilled to hold one or a pair of objects. Since the items are now missing, it is difficult to determine what the figure originally held in his partly outstretched arms. Rather than straight, the wrists are bent slightly downward, a condition accentuated by the lower portion of the hands, which project down below the wrists. Because of the downward slant of the hands, a baton or other cylindrical object would not be held vertically but would lean slightly outward.

The bent elbow and extended forearm position are found among other Olmec statuettes in the

Dumbarton Oaks collection (see Pls. 10, 11, 15), and it is also a characteristic of the Middle Formative jaguar sculpture from Tuxtla Chico, Chiapas (see Benson and de la Fuente 1996: no. 4; Clark and Pye 2000: fig. 9). According to Clark and Pye (*ibid.*), the anthropomorphic jaguar is dancing, an interpretation that is further supported by its crouching stance and anklets in the form of rattles or shell tinklers. Coe (1965: 26) notes that Early Formative female figurines from Tlatilco can appear with rattles on their legs, identifying them as dancers. The example illustrated by Coe (*ibid.*: no. 106) has its arms in a bent position virtually identical to the Dumbarton Oaks jade statuette. A similar arm position appears with the dancing Tlaloc impersonators appearing in Codex Borbonicus illustrations of the Aztec first harvest rites of Ochpaniztli. The ears of corn and celts held by these directional beings are notably similar to the maize symbolism of the Formative Olmec (Taube 2000: 318–319). In the contemporary American Southwest, the masked Katsina rain spirits of the Hopi and Zuni commonly dance with bent elbows, the forearms held out horizontally before the body. The traditional wooden kachina images, or “dolls,” ceremonially presented to Hopi girls frequently display the same arm position. In addition, the fists of these wooden images are frequently pierced to accommodate effigy rattles and other dance accoutrements, and it is possible that the Olmec jade statuette was also supplied with rattles or other items pertaining to a dance performance.

The ears and nostrils of the figure are pierced by biconical drilling. Drills were also used to carve the eyes, the ear openings, and even the central bulge of the lower lip. The rough, unpolished nature of the eye orbits suggests that they originally held some form of inlay, now missing. The partly opened mouth reveals an upper set of teeth, with a vertical line separating the longer, downwardly projecting incisors. A rectangular tablike projection below the chin surely indicates a goatee, although there is no fine incision to indicate hair. Indeed, aside from the teeth, fingers, and toes, incision is generally lacking. There are two parallel grooves in the region of the neck. Although the higher groove may indicate the edge of a mask worn against the face, it is more likely that the grooves simply represent creased skin.

The highly polished statuette is composed of diopside jadeite of relatively dark green color with coarser crystalline inclusions, some of which may be seen on the right chest and central abdomen. The top of the head is an opaque, light yellowish green with areas of brown and probably corresponds to the weathered outer “rind” of the original stone. In contrast, most of the jade is of a fine, translucent quality, with light, snowflakelike inclusions. There is a considerable whitened discoloration on the lower heels and calves; the minute crackling in this region suggests that the area may have been affected by fire. Although cinnabar staining is generally absent from the statuette, a small amount still adheres to the left ear.²¹ Both arms, feet, and the right leg once were broken, but there has been no appreciable loss of material, and the limbs have been reattached.

The standing figure is essentially devoid of clothing or ornament save for a prominent vertical element in the region of the groin and lower abdomen. Elizabeth Benson (1981: 95; Benson and de la Fuente 1996: no. 44) interprets this device as a penis covering, but there are no other examples of penis coverings or sheaths among the Olmec, nor are they well-documented for other ancient peoples of Mesoamerica. Rather, this device represents a loincloth in the form of a vertical celt. In form and position, the V-shaped vertical element is essentially identical to the central frontal portions of loincloths appearing on jadeite and serpentine figurines from La Venta (Drucker, Heizer, and Squier 1959: pls. 34–36; Diehl 1990: pl. 6). However, unlike these La Venta sculptures, the Dumbarton Oaks statuette lacks the beltlike horizontal portion of the loincloth. In addition, it projects out from the groin and abdomen as a relatively thick and solid mass. With its narrow rounded lower end, slightly concave sides, and outwardly flaring upper portion, this element is very much like Olmec representations of celts, including examples appearing on the back of a seated statuette from Río Pesquero (Fig. 48c).

An Olmec jadeite figurine attributed to Guatemala displays a loincloth apron in the form of a projecting vertical celt, although in this case the element

²¹ Chemical identification of the cinnabar was performed by Paul Jett.

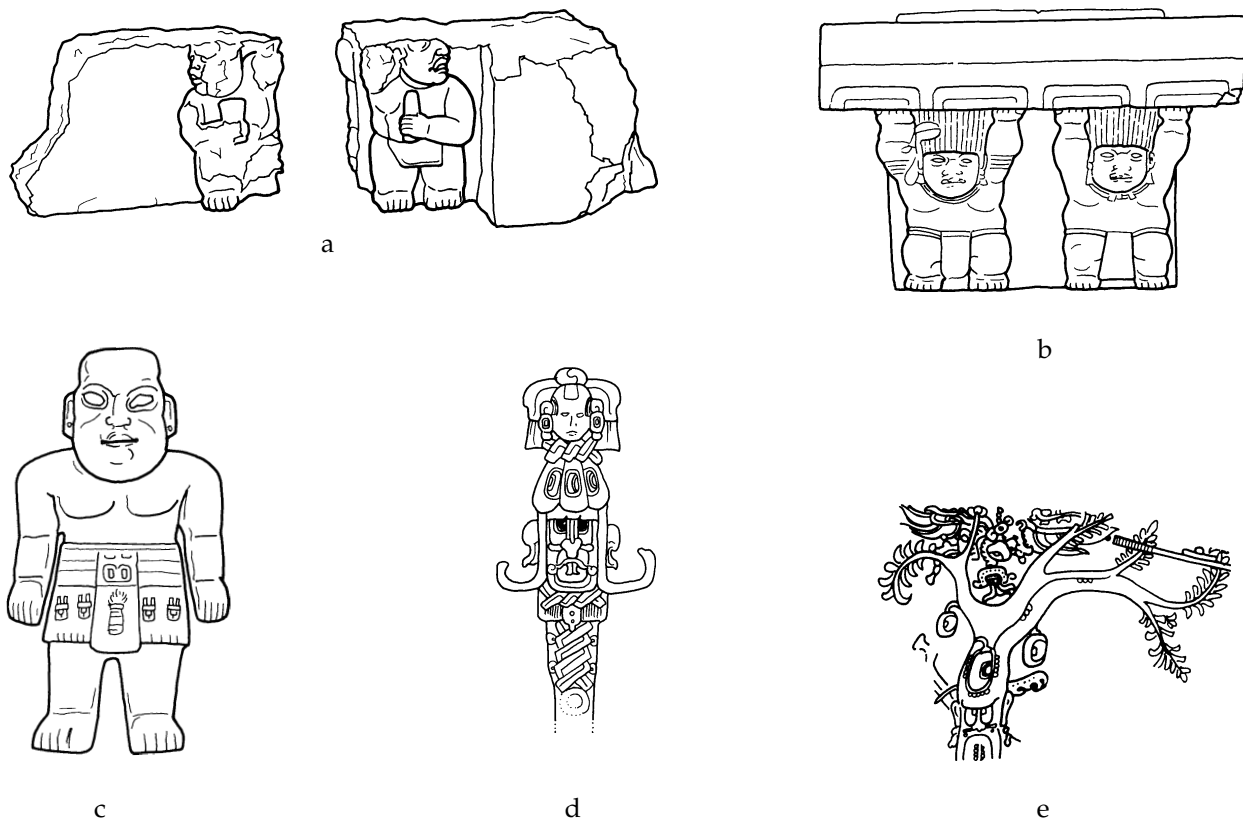


Fig. 32 Celt and loincloth iconography in Olmec and Maya art. (a) Two views of an Early Formative throne with dwarves holding celts. San Lorenzo Monument 18 (drawing by Elizabeth Wahle after Coe and Diehl 1980, 1: fig. 446); (b) Early Formative throne with dwarf skybearers. Potrero Nuevo Monument 2 (drawing by Elizabeth Wahle after Coe and Diehl 1980, 1: fig. 496); (c) Jade statuette with maize fetish on loincloth (drawing by Elizabeth Wahle after Piña Chan 1989: fig. 56); (d) Detail of loincloth from Copán Stela N. Late Classic Maya (after Fash 1991: fig. 94); (e) World Tree with loincloth apron face and celts as fruit in branches. Detail of a Late Classic Maya codex-style vessel (after Robicsek and Hales 1981a: vessel 109).

is also accompanied by the encircling belt portion of the loincloth (Clark and Pérez Suárez 1994: fig. 16.7). There are, however, other examples of Olmec jade statuettes displaying celtiform loincloths without the horizontal belt elements (von Winning 1968: pl. 44; *The Olmec World* 1995: nos. 18, 26). As with the Dumbarton Oaks statuette, these loincloth celts are oriented with the bit edge upward and are rendered not as thin sheets of cloth, but as solid masses projecting out from the loins. The substitution of celts for the male loincloth may partly derive from the widespread identification of axes with heavy male labor, such as the cutting of wood and the clearance of forest bush. For example, among the Yir Yont of north Queensland, Australia, the stone axe served as “a symbol of masculinity” (Taçon 1991: 194). For the Olmec, celts may have also served as symbols of male power.

There is a subtle interplay between celts, loincloths, and the central *axis mundi* in both Olmec and

later Classic Maya iconography (Taube 1996). Two similar throne monuments from the vicinity of San Lorenzo suggest that the relation of celts and loincloths to centrality and the world axis was already present among the Early Formative Olmec. These two thrones—San Lorenzo Monument 18 and Potrero Nuevo Monument 2—both portray Atlantean dwarfs apparently supporting the sky. The San Lorenzo Monument 18 dwarfs both hold vertical celts against the central axis of their bodies (Fig. 32a). Whereas one holds the widening bit upward, the other dwarf grasps the celt in the reverse position, with the blade pointed downward. This same curious contrast is also found on Potrero Nuevo Monument 2, although here it occurs not with celts but with the central hanging loincloth aprons, with one flaring up and the other down (Fig. 32b). Although subtle, such differentiation was surely intentional; the carved loincloths constitute many hours



Fig. 33 Stone *palma* as a figure with a probable celt projecting above its loincloth. Late Classic Veracruz (from Wilkerson 1990: no. 76).

of pecking and finishing of the dense basalt, much unlike a casual mistroke of a painter.

As noted previously, the naked vertical celt served as an Olmec *axis mundi*. Like celts, the central, hanging loincloth apron was also identified with the world axis in Olmec thought. One massive Olmec jadeite sculpture (now in the Museo del Estado de Puebla) portrays a figure with a five-part motif on his loincloth apron and skirt (Fig. 32c). This five-part assemblage commonly occurs on Olmec headbands, such as on the Río Pesquero seated figure in the Dumbarton Oaks collection (Pl. 18). As Frank Reilly (n.d.: chap. 4) notes, this five-part motif constitutes a horizontal representation of the four quarters and center, with the middle element designating the *axis mundi*. In the case of the large jadeite figure in the Puebla museum, the Middle Place is rendered as a feathered maize ear fetish positioned squarely atop the loincloth apron (see pp. 81–82). Reilly (1994: 254) identifies this central device as a form of the pivotal World Tree. In Classic Maya monumental art, the loincloth apron is often represented as the World

Tree, the arboreal form of the *axis mundi* (Schele and Miller 1986: 72). In addition, three celts commonly hang on top of the apron (Fig. 32d). A Late Classic representation of the World Tree has three shining celts hanging from the trunk and branches, indicating that the belt celts are an integral part of the Maya loincloth assemblage (Fig. 32e). In terms of the Dumbarton Oaks statuette, the element placed in the loins and abdomen represents a vertical celt as the loincloth, an allusion to the Olmec *axis mundi*.

The placement of vertical celts in the belt region seems to have also continued in Classic Veracruz. One Late Classic *palma* portrays a caped figure with an apparent celt projecting, bit upward, out of his belt (Fig. 33). It is noteworthy that this celt occurs in the same region where the ball game *palmas* and related *hachas* typically appear. Of course, the Spanish term *hacha* signifies axe and, with its typically flaring and edged upper end, the *palma* also resembles a stone celt oriented bit upward (e.g., Fig. 33). It is possible that both of these Classic Veracruz forms may ultimately derive from Formative celt symbolism.

Among the Olmec, celts, jade, and the Middle Place were all closely identified with maize (Taube 1996). The Dumbarton Oaks statuette also displays certain physical traits of the Olmec Maize God. The pair of projecting upper incisors is a common feature of the god, albeit typically in more exaggerated form. The cranial modification of the Dumbarton Oaks figure is especially complex. Not only is the backwardly curving head slightly bifurcated, but two other cranial protuberances bulge from behind the ears. Although these lower bulges may appear to be some bizarre form of cranial deformation, the mastoid processes close to the nape of the neck produce two bumps near the base of the skull. With the upper bifurcation and the two lower emanations, the rear cranium of the statuette is divided into four protruding sections in an exaggerated version of natural contours. The four-lobed effect at the back of the cranium occurs when the Olmec Maize God represents young, growing corn (see Pls. 15, 18). Upon examining three jadeite carvings in the Dumbarton Oaks collections, one can see the gradual evolution of the four-lobed skull into a growing floral form. Thus, whereas the quadripartite division is relatively subtle on the statuette being discussed here, another

statuette (Pl. 15) presents a more developed form, with more protruding lower emanations and a sharply backturning and deeply cleft upper cranium. Finally, the seated Río Pesquero statuette (Pl. 18) displays a backward sweeping cranium sharply divided into four equal quadrants. Reilly (n.d.: 186–187) notes that this four-part, crossed cleft motif denotes foliation in Olmec iconography and, as such, appears at the growing end of the World Tree. But although the cranium of the Dumbarton Oaks Río Pesquero statuette and fragmentary piece are physically impossible

with living humans, the head of the statuette under discussion could well represent an exaggerated form of intentional cranial modification, an evocation of tender, growing foliage. Thus although the lower rear region of the skull could represent the natural mastoid processes, the backturned and slightly cleft upper cranium could have been achieved through binding or other cranial modification at infancy. Rather than depicting the deity, this jadeite statuette may represent a living person or idealized ancestor identified with the Olmec Maize God.



Plate 9

HEAD OF A MAN

Plate 9
Middle Formative
Serpentine. H. 7.8 cm
B-535

History: Purchased by Mildred and Robert Bliss from John Stokes, Jr., 1962; given to Dumbarton Oaks by Mildred Bliss, 1963

Exhibition: Dumbarton Oaks, 1963–

Bibliography: Benson 1969: no. 27; González Calderón 1991: pl. 335

Along with fashioning small statuettes, the Olmec also carved fairly large standing figures of jadeite and serpentine (Pahl 1975; Benson and de la Fuente 1996: nos. 47, 50). This bust seems to have been originally part of such a sculpture. Although bustlike wooden sculptures were discovered at the site of El Manatí (Ortiz and Rodríguez 1994), the shoulder and upper chest area of this figure were cut. Whereas the exterior surface has been whitened by oxidation during its long burial, the interior of the cut area retains the original dark green of serpentine, indicating that the cutting was done after exhumation.

The relatively common occurrence of greenstone busts as opposed to headless bodies, reflects patterns of stone reuse. (For other examples, see Pls. 3, 16; *The Olmec World* 1995; nos. 24, 47, 213, 229; Benson and de la Fuente 1996: nos. 57, 59.) In reworking large jade and serpentine sculptures, nondescript limbs and trunks were probably recarved into smaller objects, while heads may have been frequently preserved for their beauty and quality of carving. In her study of Olmec jade carving, Charlotte Thomson (n.d.) notes the care and attention lavished upon the head: "Most of the detail of the figure was concentrated in the face, the face being much more realized and expressive than the body" (ibid.: 103). Although the Olmec themselves may have saved heads from recarved statuettes, later Mesoamerican peoples also may have considered and revered Olmec-style heads as rare objects of remote antiquity.

This serpentine bust displays many characteris-

tics of Middle Formative Olmec carving, including the widespread use of drills. The earlobes and nasal septum are biconically pierced by drilling. The corners of the downcurving mouth and the eye orbits were also carved by drills. Within the center of the eye orbits, there is a balanced pair of deeper pupil-like pits, indicating that the figure probably never had eye inlays.

The strongly modified cranium of the figure exhibits the same form commonly seen among serpentine and jadeite statuettes at La Venta. As has been previously noted in regard to another example (Pl. 3), the cranium is elongated, tubular, and considerably narrower than the face below, giving the head a pearlike shape. A Formative Period skull exhibiting this modified cranial form was excavated at El Encanto in the Pampa de Pajón, Chiapas (Lowe 1994: fig. 7.4). As in the case of the Classic Maya, such cranial modification may have evoked an ear of maize, perhaps marking the individual as a "person of corn." For the Middle Formative Olmec, this cranial form appears to be largely restricted to males. Female figures, including the skirted individual on La Venta Stela 1, are typically depicted with long hair and lack extensive cranial elongation. Moreover, the La Venta jadeite and serpentine statuettes displaying this form of cranium commonly have loincloths, a clear indicator of male gender. Although the lower body of the serpentine sculpture is now missing, the cranial modification suggests that the figure probably was male.

INCISED STANDING STATUETTE

Plate 10
Middle Formative
Serpentine. H. 8.1 cm
B-546

History: Purchased by Dumbarton Oaks from Everett Rassiga, 1965

Exhibition: Dumbarton Oaks, 1965

Bibliography: Coe 1967; Benson 1969: no. 428; Niederberger 1987: fig. 91b; González Calderón 1991: pl. 423; Taube 1996: fig. 9b



Plate 10

Like many Olmec greenstone statuettes, this compact figure was probably carved from a stone celt, with the thick poll corresponding to the region of the head. The position of the arms is quite like the standing jadeite figure in the Dumbarton Oaks collection (Pl. 8), which probably also derived from a celt. Like the larger jadeite sculpture, the hands and forearms of this statuette project outward, possibly to indicate dance. However, due to the shortness of the limbs, the hands extend to little more than the tip of the nose, and in this regard the figure corresponds more closely to the original proportions of the celt.

As in the case of the serpentine head in the collection (Pl. 9), this statuette was manufactured from serpentine with black, metallic inclusions. This sculpture is also considerably oxidized from burial,

and now has a soft, whitish-green patination. The oxidized patination continues under the base of the broken legs, indicating that the figure was probably damaged in antiquity. Red coloration adhering in the facial region has been determined by Paul Jett to be ferruginous red earth. The earlobes and septum were pierced by drills that were also used to fashion the corners of the mouth. Fine line incision was employed to carve the four cleft motifs on the upper arms and thighs, as well as the hair on the right side of the head. Many of these lines were created by a single cut, indicating a very sharp tool of crystal, obsidian, or some other hard stone. When viewed from the right side, it can be seen that the shock of hair has a part that curves from the top of the head down to near the top of the right ear. The partly shaved head displays the typical cylindrical cranial modifi-

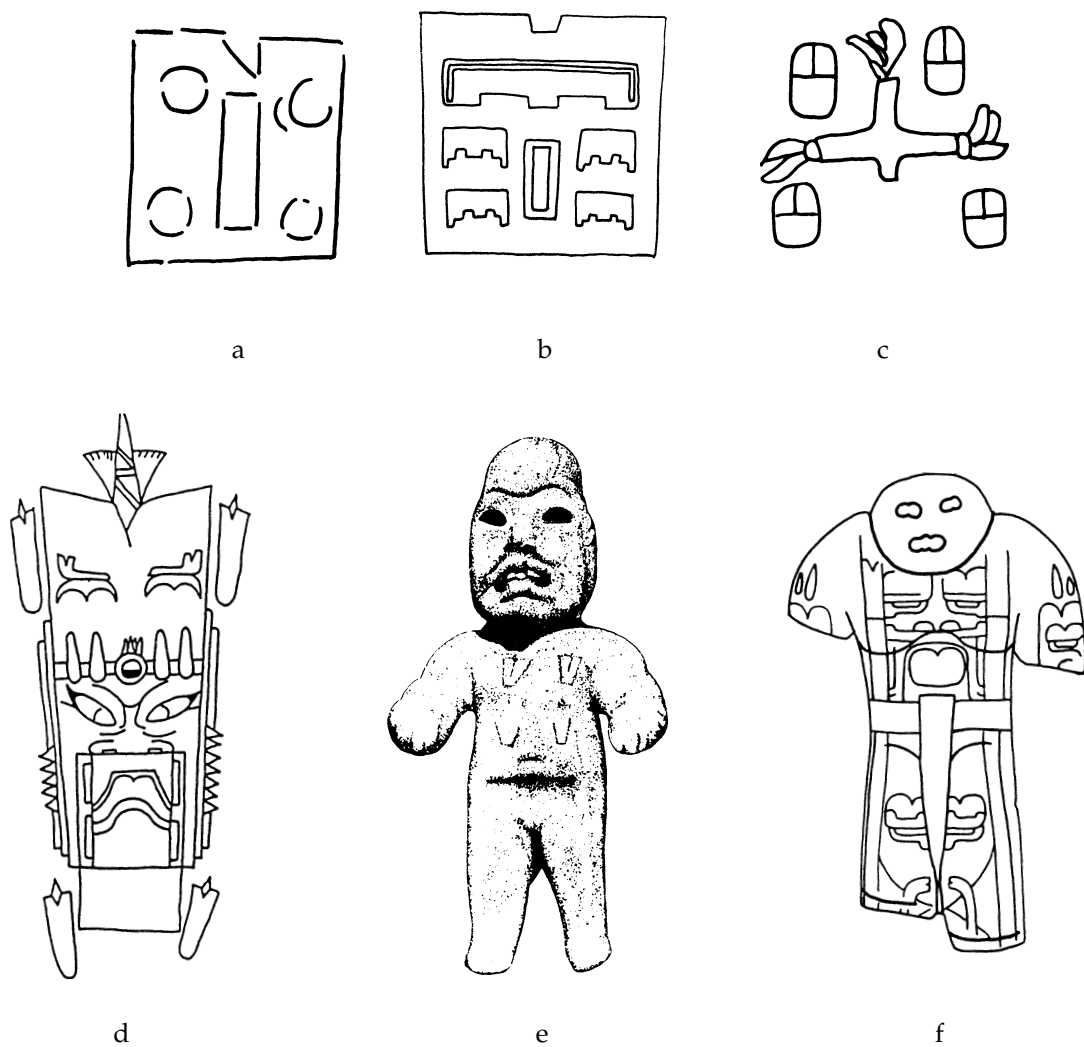


Fig. 34 The bar-and-four-dots motif and centrality in Middle Formative Olmec iconography. (a) Detail of the incised design on the right arm of the Dumbarton Oaks statuette; (b) Bar-and-four-dots motif on the serpentine pavement of La Venta Massive Offering no. 1 (after Drucker, Heizer, and Squier 1955: fig. 29); (c) World Tree flanked by celtiform objects. Detail of a jadeite plaque (after *The Olmec World* 1995: no. 131); (d) Olmec Maize God flanked by celtiform maize ears. Drawing courtesy of Linda Schele; (e) Serpentine statuette with four cleft celts on the torso. La Venta figurine 8 (from Drucker, Heizer, and Squier 1955: fig. 64); (f) Fragmentary jade figure with cleft celt markings on its arms (after *The Olmec World* 1995: no. 23).

cation commonly found among Middle Formative La Venta jade and serpentine statuettes. The figure is somewhat rotund, as can be seen by his slightly swelling belly and the pair of fleshy creases on each forearm.

According to information supplied at the time of its acquisition by Dumbarton Oaks, the figure was discovered at La Venta (Coe 1967: 111). In support of this attribution, Michael Coe (*ibid.*: 112) notes that this statuette is similar to two serpentine carvings, Figurines 8 and 9 of the 1943 season at La Venta (Drucker 1952: 157–158, pl. 50). Coe also calls attention to the four cleft motifs incised on the body of

the Dumbarton Oaks example (Fig. 34a) that are very similar to the cut serpentine mosaic pavements excavated at La Venta (Fig. 34b). Both are composed of a cleft sign containing the Olmec bar-and-four-dots motif, a sign that many researchers interpret as representing the center and four corners of the world (Benson 1971: 28; Marcus 1989: 172; Reilly n.d.: 227–228). In form and concept, the Olmec motif is similar to the Mesoamerican quincunx sign, save that for the Olmec the central vertical axis is laid flat, thereby making a bilateral rather than quadrilateral statement of centrality.

Frank Kent Reilly (n.d.: 179, 227–228) notes that

this same format also appears among Olmec representations of the World Tree, which, either as a crosslike plant or the Olmec Maize God, is commonly surrounded by four vertical elements (Fig. 34c–d). As for the incised serpentine figure under discussion, the bar-and-four-dots motifs are within four cleft designs placed on the arms and legs, thereby once again creating the quadripartite division, with the body forming the central axis. A similar set of four cleft devices appears on the feet and hands of the Río Pesquero statuette (Pl. 18), and it is likely that the four cleft heads on the shoulders and knees of the Las Limas Figure are personified versions of these elements (Taube 1996). On one fragmentary jadeite statuette, a similar pair of cleft shoulder elements sprouts

maize signs (Fig. 34f). Both these body markings and the four cleft devices flanking the Olmec Maize God and the World Tree often represent celts as foliated ears of maize (Fig. 34d). In the case of the aforementioned Figurine 8 from the 1943 season at La Venta, four cleft celts appear on its torso (Fig. 34e).

Apart from cleft celt markings, which appear much like body paint or tattooing, Olmec humans and gods can appear with celts bound to their limbs (see Figs. 50c–d, 51c), a convention also found in subsequent Protoclassic art of Izapa and Kaminaljuyu (Taube 1996). For the Olmec serpentine statuette, the body incisions are overlapping statements of centrality, with the four markings containing still smaller versions of four elements surrounding a vertical bar.



Plate 11



11a, side view

STANDING FIGURE

Plate 11
Middle Formative
Jadeite. H. 8.5 cm
B-17

History: Purchased by Dumbarton Oaks from Earl Stendahl, 1962

Exhibition: Dumbarton Oaks, 1963–

Bibliography: Benson and Coe 1963: no. 28; Niederberger 1987: fig. 608.2; González Calderón 1991: pl. 424

As in the case of the incised serpentine standing statuette in the Dumbarton Oaks collection (Pl. 10), this figure probably derives from a celt. This carving, however, is of a rich, green jadeite rather than serpentine. Nonetheless, in terms of dimensions, pose, and general appearance, it is notably similar to the Plate 10 example as well as Figurines 8 and 9 from the 1943 La Venta season (Drucker 1952: 157–158, pl. 50). It is also quite possible that like the Plate 10 statuette, this figure derives from La Venta. Similar to the large diopside jadeite statuette in the collection (Pl. 8), the cranium of this figure is not simply tubular, but arches slightly backwards, a trait also

known for La Venta statuettes (Diehl 1990: no. 5). Both the nasal septum and earlobes are pierced by biconical drilling, and it is possible that this figure, as well as the one in Plate 10, could have been suspended through the ears as a form of pendant. The corners of the mouth also were carved by drilling, a common trait of Olmec lapidary. Broad line incision was employed to delineate the belly, loins, and back, which has a Y-shaped groove running from the buttocks to the nape of the neck, where it forks to delineate the shoulders from the neck. Whereas all of the fingers are carved by incision, only the large toes are carved on the feet.



Plate 12

STANDING FIGURE

Plate 12
Middle Formative
Serpentine. H. 11 cm
B-16

History: Reportedly from San Pedro Tepatlaxco, Puebla; acquired by Dumbarton Oaks, 1963

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1948–49, 1952–62; Dumbarton Oaks, 1963–

Bibliography: Bliss 1957: no. 5, pl. 1; Benson and Coe 1963: no. 27; Coe 1965b: fig. 8; Cervantes 1969: fig. 4; Benson 1971: 19–20; fig. 26; Joralemon 1971: fig. 20; Niederberger 1987: figs. 101, 613.1; González Calderón 1991: pl. 425; Joyce et al. 1991: fig. 7; Angulo V. 1994: fig. 14.4; Schele 1995: fig. 6b

Fashioned from a dark, almost black serpentine, this statuette is pierced through the ears and the crooks of both arms, with the lower and larger holes providing a ready means of suspension. The broad line cuts delineating the bent arms, eyes, and other portions of the sculpture create a rather hard and angular quality, despite the fact that it is carved from a relatively soft material. Whereas the deep diagonal lines marking the front of the arms appear to have been carved by a back and forth sawlike motion, the backs of the arms were hollowed by solid core drills, with the remains of drill pits obvious in the interior crooks of both arms. Fine line incision delineates the fingers, toes, and details of the two held objects. Remains of red hematite staining adhere to areas of the face and arms, as well as in regions of broad and fineline incision.²²

The two objects carried by the figure constitute a well-known pairing in Olmec iconography. Whereas the vertical cylindrical element tends to be referred to as a torch, the curving device covering the back of the hand is commonly called a “knuckle-duster,” a term first coined by Phillip Drucker (1952: 166). Although common in Middle Formative art, the pairing of these objects occurs also at Early Formative San Lorenzo. Michael Coe and Richard Diehl (1980, 1: 336–337) note the occurrence of these same elements on Monument 26, in which a squatting figure holds the pair in his hands. While well-documented for Middle Formative portable objects, the pairing of these motifs is relatively rare on contemporaneous monumental carving. Among the few examples that can be cited are Chalcatzingo Monument 20, and a small circular altar in the Museo Municipal of Santiago Tuxtla, Veracruz (see Fig. 58a; Angulo V. 1987: 149; Cervantes 1969: 38–39).

In her detailed examination of the knuckle-duster and torch motifs, María Antonieta Cervantes (1969: figs. 7, 9–11) illustrates two examples of horizontally oriented figures grasping such objects in their hands. Jorge Angulo V. (1987: 148–149) compares these representations to Chalcatzingo Monument 12, or *El Volador*, a similarly positioned figure

holding the torch motif while surrounded by flying birds (Fig. 23c). Frank Reilly (n.d.: 136) interprets these figures as individuals in shamanic flight. Although the precise meaning of this position remains to be determined, the flying birds in the Chalcatzingo relief do suggest a celestial realm, as if these objects are being transported through the heavens or, perhaps more accurately, the “torch” serves as a symbolic means of flight, that is, a form of access to the sky.

Forms of the so-called torch motif have been variously interpreted as a burning torch (Coe 1965b: 762; Cervantes 1969; Benson 1971: 20; Joralemon 1971: 16; Stross 1992: 87), a sceptre or club (Anderson 1978: 158), and as a bloodletter (Grove 1987d; Joyce et al. 1991; Reilly 1991). In describing this motif at the site of Teopantecuanitlán, Guerrero, Guadalupe Martínez Donjuán (1994: 159) suggests that it may represent a maize ear, a torch, or clouds and rain. Her first identification is indeed correct; the device represents a feathered maize ear fetish (Taube 1996).

The lower portion of the vertically oriented element is usually a cylinder, with the basal section of that composed of either bound sticks or reeds or by horizontal wrapping, perhaps cotton cloth strips or thread (Fig. 35). Above this bound portion, there is typically a broader tuftlike element containing the double-merlon motif. Because of its expanding and frequently serrated form, the upper element often has been interpreted as flames. However, Elizabeth Benson (1971: 20) notes that this device also resembles feathers. I recently have argued that the torch motif is actually a wrapped feather bundle, an important item of commerce and tribute from the Formative period to the sixteenth century (Taube 1995: 89). In ancient Mesoamerica, precious feathers were frequently handled in bundles with bound cloth, paper, or basketry enclosing the lower portion of the plumes (ibid.: fig. 8). Such wrapping not only held the feathers together, but also served as a means by which to handle the delicate and easily soiled plumes.

The double-merlon sign commonly appearing on the feather portion of the Olmec torch device probably also denotes precious plumage. I interpret the double-merlon as the Olmec sign for green (Taube 1995: 89–91). It commonly appears on green

²² The chemical identification of the hematite staining was performed by Paul Jett.

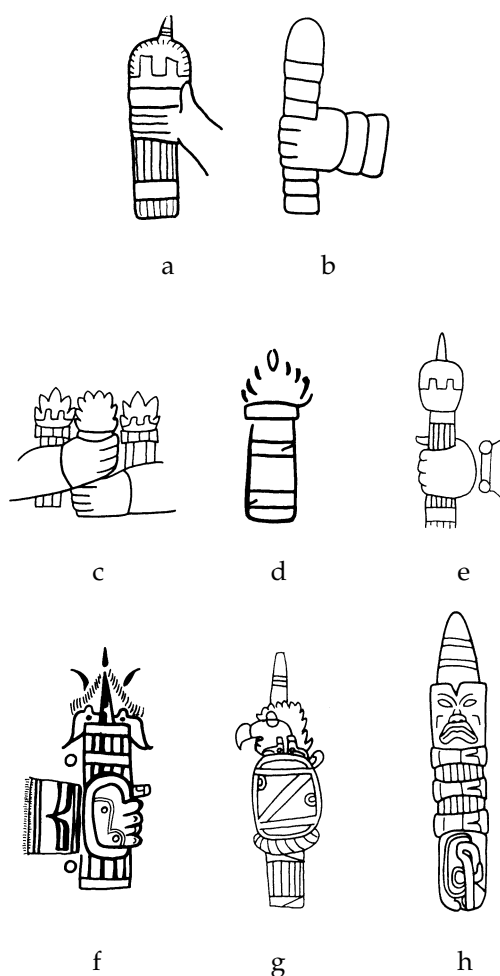


Fig. 35 The feathered maize ear fetish in Middle Formative Olmec iconography. (a) Maize ear fetish held by the Dumbarton Oaks serpentine statuette (see Pl. 12); (b) Maize fetish with wrapped handle (see Fig. 58); (c) Three maize fetishes held by a single figure (after Gay 1972a: pl. 24); (d) Fetish on the loincloth of a jade statuette. For entire figure, see Fig. 32c (after Benson and de la Fuente 1996: no. 47); (e) Fetish with projecting maize ear. Detail of a fragmentary jadeite “clamshell” pendant. Salitrón Viejo, Honduras (after Hirth and Hirth 1993: fig. 13.13c); (f) Maize fetish with a trefoil maize sign. Detail of the Chalcatzingo Vase (after Gay 1972a: fig. 43); (g) Maize fetish with a quetzal head substituting for a feather tuft (after *The Olmec World* 1995: no. 125); (h) Stone effigy of a maize fetish with the head of the Olmec Maize God (from Taube 1995: fig. 10a).

objects, including the well-known serpentine pavements at La Venta as well as the La Venta greenstone stelae, including Monuments 25/26 and 27. Moreover, Oxtotitlán Mural 1—containing the one painted color depiction of this sign—portrays three double merlons in two shades of green (see Grove 1970b: frontispiece). Although green is hardly what one would expect for a fire sign, it is the color of the most esteemed Mesoamerican feather, that of the quetzal. One fascinating version of the torch motif has a quetzal bird head in place of the conventional feather tuft (Fig. 35g). In this case, the bird crest clearly constitutes the serrated fan of “flames” commonly seen on the torch motif. The quetzal head also is supplied with a dotted double-merlon, quite similar to an ex-

ample appearing on the Chalcatzingo Vase (Fig. 35f).

Rather than designating a flaming torch, the Olmec motif represents a feathered object. This device is not simply a precious feather package, however. The quetzal bird example is topped by a pointed device with horizontal bands, a form often seen on other examples of the bound bundle, including this Dumbarton Oaks statuette (Fig. 35a, g, h). This pointed element is the banded maize motif first identified by Peter David Joralemon (1971: 13). At times, the upper portion of the bundle is simply the head of the Olmec Maize God sprouting a banded cob (Fig. 35h). On the Chalcatzingo Vase, the trefoil maize sign—another maize motif described by Joralemon (*ibid.*)—projects out of the feather tuft.

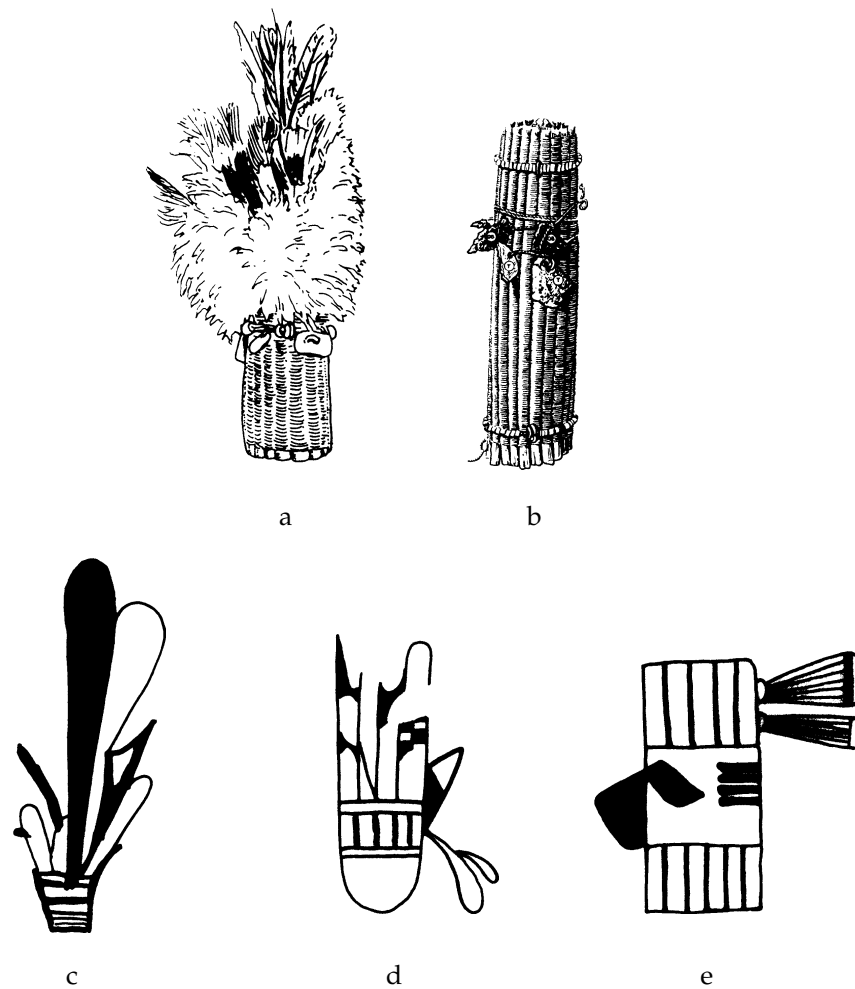


Fig. 36 Feathered maize ear fetishes of the American Southwest. (a) Sia maize ear fetish (after Stevenson 1894: pl. 9); (b) Sia fetish without feathers (from White 1962: fig. 47); (c) Representation of the feathered maize fetish. Detail of a Pueblo IV mural, Pottery Mound (after Hibben 1975: fig. 5); (d) Depiction of a maize fetish. Detail of a Pueblo IV mural, Awatovi (after Smith 1952: fig. 14d); (e) Portrayal of the maize fetish with stick wrapping and clasping hand. Detail of a Pueblo IV mural, Awatovi (after Smith 1952: 14g).

With its feathers, central cob, and lower wrapping, the Olmec form is strikingly similar to maize fetishes still used among Puebloan peoples of the American Southwest (Fig. 36). These feathered maize fetishes are among the most sacred and precious objects of Puebloan ceremonialism (Parsons 1939: 321–323; Smith 1952: 198–200). Whereas the central ear is typically covered with the feathers of the Mesoamerican macaw and other birds, the lower portion is commonly wrapped in cotton thread binding, basketry, or in the case of Keresan examples, long wooden splints bound with cotton (Fig. 36a–b). These ritual items are clearly of considerable antiquity in the American Southwest, and have been identified in the ancient Pueblo IV murals of Pottery Mound and Awatovi (Fig. 36c–e). In addition, archaeological specimens of plumed corn ear fetishes

are known for late Pueblo III, that is, the mid-thirteenth century A.D. (Hall and Dennis 1986: 125, fig. 47). As in the Puebloan examples, the Olmec form is probably a feathered maize ear fetish identified with life-giving powers of agricultural fertility.

As in the case of the maize fetish, the knuckle-duster also has been interpreted in a number of ways: as a weapon, ball game equipment, and bloodletter (Coe 1965b: 764–765; Cervantes 1969: 49; Benson 1971: 22–23; Borhegyi 1980: 2; Grove 1987d; Joyce et al. 1991: 148–149). In outline, knuckle-dusters do somewhat resemble Formative stone *yuguitos* (see Pl. 2). However, in many representations the knuckle-duster clearly has a cylindrical handle across the hollow U-shaped interior, an element entirely lacking from *yuguitos*, which appear to have been lashed rather than grasped (Fig. 37c). In addi-

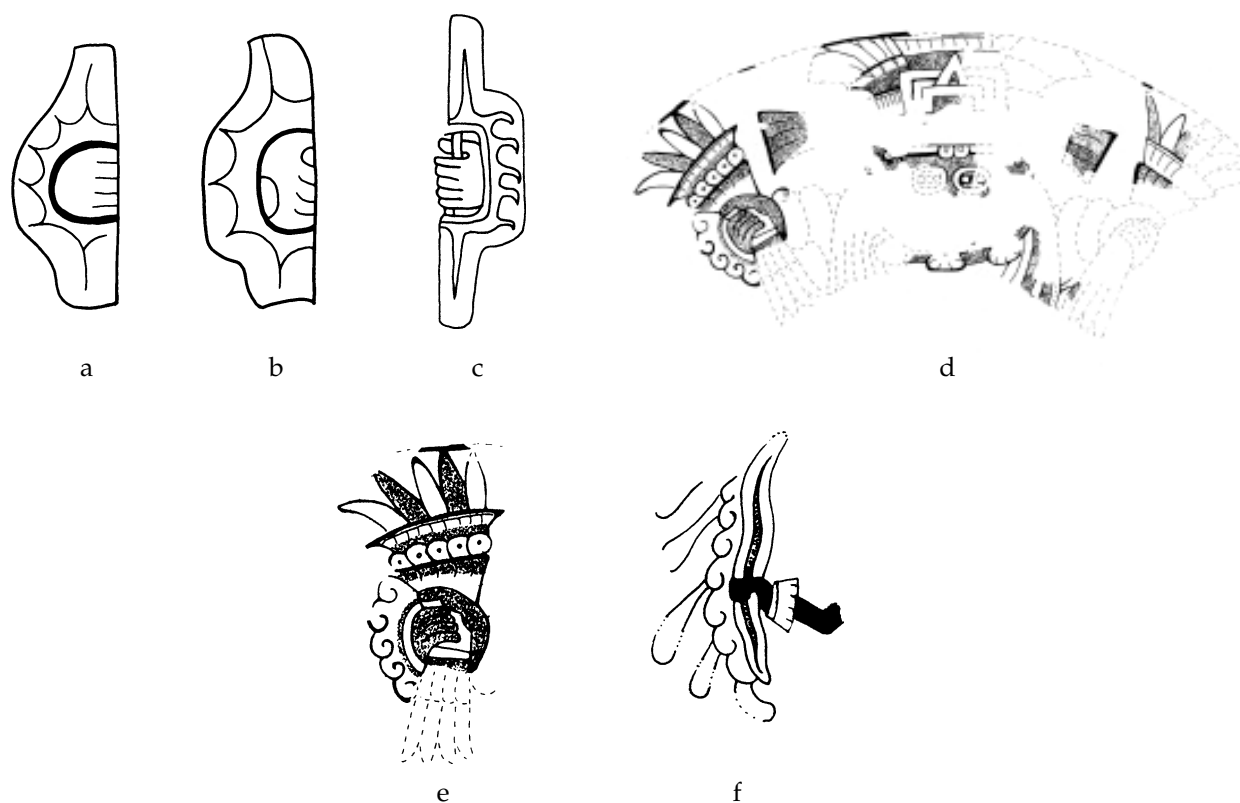


Fig. 37 Comparison of the Olmec knuckle-duster to Teotihuacan cloud signs. (a) Knuckle-duster held by the Dumbarton Oaks statuette of Pl. 12; (b) Knuckle-duster held by the Olmec Maize God (see top of Fig. 48a); (c) Knuckle-duster with volute edging (after *The Olmec World* 1995: no. 125); (d) Teotihuacan-style figure holding a feather bundle and cloud form over knuckles. Detail of an Early Classic vessel, Tikal (from Culbert 1993: fig. 15b); (e) Detail of the feather bundle and cloud sign from the Tikal Early Classic vessel in Figure 37d; (f) Lightning bolt edged with raining cloud volutes. Detail of a Teotihuacan vessel (after Stuart 1995: 25).

tion, the knuckle-duster is typically marked with a serrated wavelike device that David Grove (1987d: 63) identifies as a shell motif (Fig. 37a–c). Wyllys Andrews (n.d.) suggests that the knuckle-duster is formed from a large conch shell, quite probably the milk conch, or *Strombus costatus*. In this case, the rod-like handle derives from the central spire of the shell. The scalloped lines frequently appearing on knuckle-dusters also occur on Early and Middle Formative representations of shells (Fig. 26).

Although the knuckle-duster is virtually unknown outside of Formative Olmec iconography, an Early Classic Teotihuacan-style vessel from Tikal may provide a clue as to its symbolic meaning (Fig. 37d–e). The scene portrays a probable Tlaloc figure grasping a long feather bundle—possibly a maize ear fetish—and a white object lined with curling volutes. In form and placement, the latter item is very much like the Olmec knuckle-duster, which can also have volutelike scalloping near the edge (Fig. 37c). At Teotihuacan, such volutes represent clouds or

mist, and can appear with rain and lightning signs (Fig. 37f). Fashioned from white marine shell, the Olmec knuckle-duster may be an emblem of clouds and water, an appropriate companion to the feathered maize ear fetish. With its rounded sides and outcurving ends, the knuckle-duster outline does resemble Olmec depictions of clouds, including examples from Chalcatzingo and the related petroglyphs of Tecaltzingo, Puebla (Fig. 38). In outline, the pair of raining clouds appearing on the skirt of Chalcatzingo Monument 1 are virtually identical to knuckle-dusters (Fig. 38f–g). It is also noteworthy that both the Olmec Rain God and the Olmec Maize God sometimes appear grasping pairs of knuckle-dusters (see Pl. 18) (Coe and Diehl 1980, 1: 316).

The conch knuckle-duster may have been both a weapon and an emblem of clouds and rain. Michael Coe (1965b: 765) suggests that it was “a fairly effective hand-weapon during close infighting,” and in support notes a stela from Padre Piedra, Chiapas,



Fig. 38 Comparison of the knuckle-duster form to Olmec cloud signs. (a) Knuckle-duster held by the Olmec Maize God (see Fig. 48a); (b) Knuckle-duster held by a schematic Olmec Maize God. La Venta (after Diehl 1990: no. 11); (c) Creature with clouds and rain. Chalcatzingo Monument 4 (after Angulo V. 1987: fig. 10.3); (d) Cloud with upturned ends. Tecaltzingo, Puebla (after Dyckerhoff and Prem 1972: no. 5); (e) Creature with clouds. Tecaltzingo, Puebla (after Dyckerhoff and Prem 1972: no. 1); (f) Seated woman with clouds on her skirt. Chalcatzingo Monument 1. Drawing courtesy of James Porter; (g) Detail of a cloud on the skirt of a woman. Chalcatzingo Monument 1; (h) Ceramic vessel in the form of a cloud (after Gay 1972b: fig. 33).

portraying an Olmec figure apparently menacing a smaller individual with a knuckle-duster (ibid.: fig. 1). Rather than a weapon of war, the knuckle-duster could have been a boxing instrument used in ritual gladiatorial combat. Scenes in Late Classic Maya art portray helmeted figures boxing with conch shells and *manoplas*, carved stone objects with looped handles (see Joyce 1933; Kerr 1989: 13; Robicsek and Hales 1981a: fig. 17a). One conch boxing scene portrays a pair of Chaak impersonators fighting figures wearing helmet masks of the Jaguar God of the Underworld (Robicsek and Hales 1981a: fig. 17a). Heather Orr (n.d.) has recently noted that the bas-

reliefs from the Protoclassic Zapotec site of Dainzú concern such competitive battles, here for the ritual creation of rain. Calling attention to the presence of cloud signs and other rain symbolism on the helmet masks of the Dainzú players, Orr also notes that in contemporary highland Guerrero, such ritualized combat marks the May beginning of the rainy season, with the falling blood symbolizing falling rain. Thus in the community of Zitlala, men wearing thick “tigre” helmet masks strike each other with heavy knotted ropes (ibid.: 154–156).

In Classic Maya portrayals of Chaak, the rain god commonly carries a stone *manopla* as well as his

lightning axe (Robicsek and Hales 1981a: 22–25). However, one Late Classic vessel portrays Chaak wielding not a *manopla*, but the conch weapon found in the aforementioned boxing scene of Chaak and jaguar impersonators (see Kerr 1992: 485). In the Late Postclassic Codex Dresden, Chaak commonly appears with a round, handled object in one hand and an axe in the other, the same pairing found in the Classic portrayals of Chaak (see Codex Dresden, pp. 42a, 61–62, 66b). The curving projections appearing on the round object indicate that it is probably of shell rather than stone. The conch knuckle-duster was probably also a weapon of the Olmec rain god, a means of creating falling rain.

Although not a functional weapon, a ceramic version of the rain-making knuckle-duster also may have continued into Late Postclassic Central Mexico. The region of Tlaxcala and neighboring Puebla have yielded many examples of ceramic objects with a loop-shaped handle at the back (Uruñuela et al. 1997). The front of this curious object frequently portrays the face of the rain god Tlaloc. Of the more

than 110 examples recently excavated from one deposit at Cholula, “Tlaloc is by far the most common representation” (ibid.: 65). The excavators of this deposit note that very similar objects are wielded by Tlaloc on pages 27, 28, and 75 of the Late Postclassic Codex Borgia (ibid.). Along with displaying the Tlaloc face, these examples also shed streams of falling water, as if they were water-filled jars or clouds. In general form, concept, and size, these loop-handled objects resemble the cloud knuckle-duster of the Formative Olmec.

According to Peter David Joralemon knuckle-dusters “are closely linked to maize symbolism” (Benson and de la Fuente 1996: no. 54, legend). Along with the “torch” maize ear fetish, the knuckle-duster was probably also a symbol of agricultural fertility. The pair of objects grasped by Dumbarton Oaks statuette B-16.OJ appear to be ritual items concerning the generation of rain and agricultural abundance and wealth. By wielding these objects, the figure may be portrayed as the controller and provider of rain and agricultural fertility.



Plate 13

FRAGMENTARY FIGURE

Plate 13
Middle Formative
Serpentine. H. 5 cm
B-10

History: Purchased by Robert Bliss from Robert Stolper, 1960

Exhibition: Dumbarton Oaks, 1963–

Bibliography: Benson and Coe 1963: no. 21; González Calderón 1991: pl. 420



Fig. 39 Jade statuette of a seated woman. La Venta Columnar Tomb, Mound A-2 (from Benson and de la Fuente 1996: no. 51).

In both stone and workmanship, this figure is similar to the standing statuette of Plate 12, and is carved in angular fashion from a dark, virtually black serpentine. The hands of this sculpture are highly schematic, paddlelike forms with no delineation of the fingers. In contrast to the abstract treatment of the arms and torso, considerable attention was paid to the carving of the face, which suggests the portrait of a specific individual. The highly expressive face displays slit, virtually shut eyes and a full and relaxed mouth, qualities suggestive of powerful inward reflection, such as from trance or meditation. The long, straight hair was carefully incised down the back of the head to the nape of the neck. A pair of shallow, drilled pits delineate earspools. In contrast to many Olmec stone statuettes, the holes do not penetrate through the earlobes.

The figure is probably from a statuette broken at the waist. A drilled hole within the now smoothly finished base may have secured the bust to a staff or other object. It is also possible that this hole originally held a pin that connected to a similar hole in the now missing lower half of the sculpture; in other words, the two halves of the broken sculpture may have been rejoined with an interior pin. Such a re-

pair appears on an exquisite albeit fragmentary jadeite Olmec figure (*The Olmec World* 1995: no. 23). On that object, the flat and slightly reground surface of its broken left arm contains a drilled hole that surely received a pin for attaching the lower portion of the limb. The use of pins to attach separate pieces of stone is also documented by a serpentine effigy spear-thrower in the Dumbarton Oaks collection (Pl. 26). Although usually it is difficult to establish when recarving occurred, it is likely that the Olmec did refashion broken but still treasured statuettes. One large Middle Formative jade statuette in the Museum für Völkerkunde, Vienna, displays clearly recarved arms (see Benson and de la Fuente 1996: no. 46). Although the arms are sharply truncated just below the shoulders, the Olmec sculptor ingeniously incised clenched hands on the arm stubs, thereby creating the forward arm position commonly found among portable Olmec stone sculptures (e.g., Pls. 8, 10, 11, 15).

Despite the fact that there is no clear delineation of breasts, the coiffure of the Dumbarton Oaks figure suggests that it portrays a female. Although long hair also can be found on Olmec portrayals of men, this particular hairstyle features bangs and hair spreading out from a central point at the top of the head, rather than from a part. A virtually identical coiffure tops the jadeite Figurine 1 from the Columnar Tomb within Mound A-2 at La Venta (Fig. 39). The skirted La Venta statuette also has bangs, thin, longer locks in front of the ears, and still longer, shoulder-length hair at the back of the head. In addition, the unparted hair is rendered as incised lines radiating from the crown. Although supplied with a headband, a skirted woman appearing on La Venta Stela 1 is also portrayed with similar hair (Piña Chan 1989: pl. 30). The same coiffure, complete with the locks in front of the ears, appears on an Olmec fragmentary wooden statuette in the Rautenstrauch-Joest-Museum in Cologne (see Bolz 1975: pls. 23–24). As in the case of the female figure from the Columnar Tomb at La Venta, the lower cheeks of this wooden head are full and rounded, a subtle but quite possibly important means of designating female gender. Although the Dumbarton Oaks sculpture probably portrays a female, it is difficult to determine whether she is an historical individual, an idealized ancestor, or a goddess.



Plate 14

STANDING FIGURE

Plate 14
Middle Formative
Jadeite. H. 8.5 cm
B-15

History: Formerly in the collections of Joseph Brummer and Walter Baker; purchased by Robert Bliss from V. G. Simkhovitch, 1948

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1949–62; Dumbarton Oaks, 1963–; *Die Azteken und ihre Vorläufer: Glanz und Untergang des Alten Mexico*, Roemer- und Pelizaeus Museum, Hildesheim, 1986; Ausstellungsleitung Haus der Kunst, Munich, 1987; Oberösterreichisches Landesmuseum, Linz, 1987; Louisiana Museum of Modern Art, Humlebaek, Denmark, 1987; National Archaeology Museum, Athens, 1988; Société du Palais de la civilisation, Montreal 1988

Bibliography: Kelemen 1943: 298, pl. 243c; Bliss 1957: no. 4, pl. 1; Benson and Coe 1963: no. 26; Coe 1965b: fig. 9; Willey 1966: fig. 3.28d; Joralemon 1971: fig. 218; Benson 1981: 100–101, fig. 5; Roemer- und Pelizaeus Museum 1986: no. 3; Niederberger 1987: fig. 91a; González Calderón 1991: pl. 489



14a, front view



14b, back view

Fashioned from a fine, light blue jadeite, this statuette conveys some of the more noteworthy conventions of Olmec art and lapidary. The narrowed eyes and almost grimacing mouth are well-known traits of the Olmec style, and are especially common with “baby” figures. Among the infantile qualities displayed by this figure are its relatively large head and thick, short limbs and the curving lines at the elbows, wrists, and bridge of the nose, which suggest creases in plump, fleshy skin. In addition, it is noteworthy that this particular being—God IV in the Joralemon (1971: 71–76) classificatory system—is generally portrayed as a baby. Along with infantile qualities, the sculpture resembles a personified celt, another common convention of Middle Formative Olmec art. Similar to the well-known Kunz Axe (Ekholm 1970: 36–37), the head of this figure corresponds to the thick and blunt poll of the celt, with the feet in the area of the bladed edge. This orientation marks a basic division in Olmec carved celts. Whereas in-the-round effigy celts typically have the head at the thick poll, or butt, of the celt, figures on incised celts are usually oriented with head toward the bit edge; in other words, the celt is oriented bit upward (see also Fig.

48b). Although the feet of the Kunz Axe retain the essential blade form, the Dumbarton Oaks example is flattened on the base, allowing the sculpture to stand freely. The dimensions and treatment of the feet, with all ten toes carefully incised, recall an effigy celt attributed to Oaxaca (Coe 1965b: fig. 28).

Like many in-the-round Olmec effigy celts, a broad, deep groove separates the head of the statuette from the body, as if constituting the groove for hafting a stone axe. This horizontal groove continues across the back of the figure, which is also carved with a T-shaped channel of comparable width and depth to delineate the legs and the base of the buttocks. A horizontal series of incised fine lines cross the back to represent the heels, backs of the knees, shoulders, and headband. The lines of the shoulders, knees, and headband continue around to the sides of the figure. The sides of the head also are marked with raised bands segmented by fine line incision, evidently earpieces composed of folded paper strips, a common trait of God IV.

In comparison to the blocky and schematic back and sides, the front of the figure is far more three-dimensional, especially in the carving of the head.

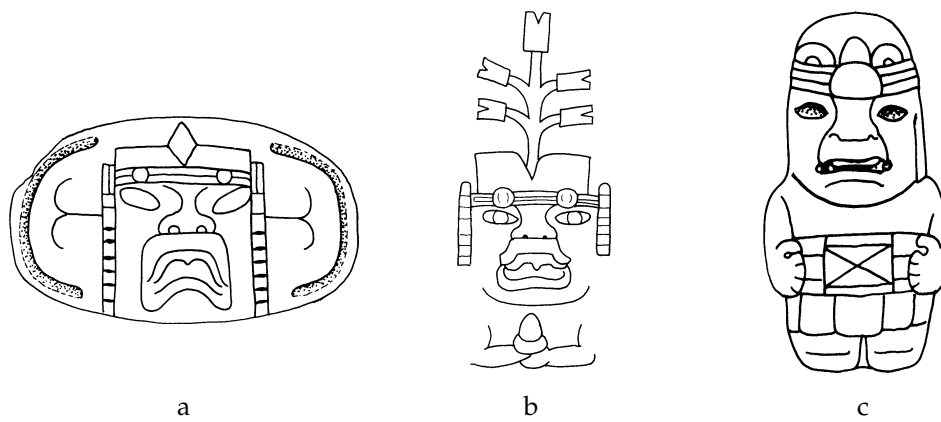


Fig. 40 Middle Formative Olmec portrayals of the infant Maize God. (a) Olmec Maize God atop a turtle carapace. Jade pectoral from La Encrucijada, Tabasco (after Diehl 1990: no. 12); (b) Olmec Maize God with a maize plant emerging from its cleft brow (after Nicholson 1976: fig. 20); (c) Olmec Maize God with a trefoil maize sign on its brow. Jadeite statuette from the vicinity of Peto, Yucatan (after Kidder 1942: fig. 39f).

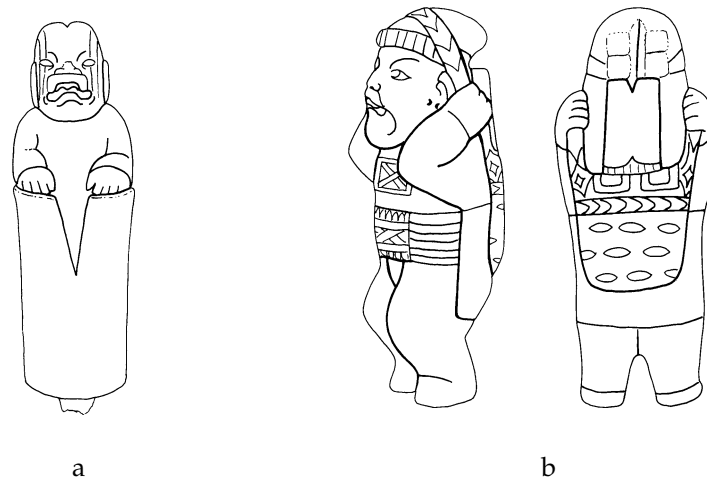


Fig. 41 The infant Olmec Maize God with cleft maize signs. (a) Olmec Maize God as an ear of corn emerging from a cleft husk. Handle of a jade bloodletter (after Berjonneau, Deletaille, and Sonnery 1985: pl. 8); (b) Olmec Maize God carrying corn with tumpline (after Benson and de la Fuente 1996: no. 74).

The section of the headband crossing the brow is a projecting band marked with incision, in contrast to the pair of simple fine lines marking the headband behind the earpieces. Solid core drills carved the nostrils and corners of the mouth, and subtle indentations along the edge of the open mouth suggest that much of this area was hollowed by drilling. Although often erroneously identified as toothless gums, the ridge below the large upper lip denotes the upper teeth, with the central pointed nubbin representing a projecting pair of incisors. The same central point appears on the large jadeite mask of the Olmec Maize God in the Dumbarton Oaks collection (Pl. 30), where the mouth element is divided by a vertical line. Although in more realistic form, the

large standing jadeite statuette in the collection (see Pl. 8) displays similar dentition. In the case of this standing figure, the pair of projecting incisors is also clearly delineated. The eyes of the figure are markedly slanted, with the upper lids leaning considerably downward toward the interior of the face. Rather than being smoothly hollowed out, the eyes are carved by wedge-shaped grooves, suggesting that they were not inlaid. The chest is marked with a rectangular pectoral, another common costume trait of God IV.

In an essay devoted to Olmec ideology, Michael Coe describes God IV as “the best-defined and most ubiquitous of all Olmec supernaturals” (1989b: 75). In the same study, Coe also provides a succinct dis-

cussion of the attributes and occurrence of this being: “God IV is the floppy were-jaguar baby carried in the arms of figures in niches in the front of certain ‘altars’ in heartland sites like San Lorenzo and La Venta, and in the arms of the Las Limas figure. It is characterized by a distinctive headdress with a knobbed frontal band and wave side-ornaments on either side of the head” (ibid.).

Along with the headband and ear ornaments, God IV commonly wears a pectoral and belt marked with diagonal crossed bands (Figs. 40c, 41b). The bird-man figure from Oxtotitlán Cave wears a green crossed-band pectoral, suggesting that this device was fashioned from jade or serpentine (Grove 1970b: frontispiece). Moreover, a fragmentary example of such a green stone pectoral is documented for the Middle Formative Palangana phase of San Lorenzo (Coe and Diehl 1980, 1: fig. 249). Both Coe (1968: 112) and Peter David Joralemon (1971: 90) have identified the infant God IV as the Olmec rain deity. I have argued, however, that the Olmec Rain God is not a baby, but a mature being with long canines and a deeply furrowed brow entirely distinct from God IV (Taube 1996) (see Fig. 15f). This identification of God IV as the Olmec Rain God is based primarily on San Lorenzo Monument 52, which was discovered near the head of a major stone drain system. The back of the figure is hollowed by a deep groove, as if part of the drain (see Coe and Diehl 1980, 1: 361–336). It is unclear, however, as to how such a figure could serve as a drain segment. For one thing, the seated figure would need to be planted face down, for another, the hollowed back is not a simple groove but flares slightly at both ends. Rather than being set face down, the cleft-headed figure may have sat against a vertical cylindrical object, such as a post or symbolic World Tree. In one Olmec representation of God IV, a maize plant—the Olmec form of the World Tree—sprouts from the cleft in the center of the head (see Fig. 40b).

In Olmec iconography, God IV is frequently depicted with cranial maize elements (Fig. 40a–c). Although Mesoamerican rain gods do often appear with maize ears in their headdresses (Nicholson 1976: 165, 168, figs. 21–22), God IV is quite probably an infant aspect of the mature Olmec Maize God (Taube 1996). The frequently cleft cranium, project-

ing incisors, and eyes slanting upward at the outer corners are all physical qualities shared between God IV and the older Olmec Maize God, or God II. In addition, this being can appear rising out of or carrying cleft corn motifs. One sculptured jade portrays a pudgy infant emerging from a cleft device, a scene that Joralemon (1988: 40) interprets as a maize-related infant rising out of the husk of a cleft ear of corn (Fig. 41a). Another jadeite sculpture portrays the infant God IV carrying a cleft maize sign slung by tumpline across his back (Fig. 41b).

A recently discovered jadeite plaque from La Encrucijada, Tabasco, portrays God IV atop the underside of a turtle shell; the two openings and plastron sutures are clearly evident (Fig. 40a). Among the Classic Maya and in the contemporary lore of Veracruz, the god of corn emerges out of a turtle shell (see Taube 1986; Ichon 1973: 74–75). Among the Popolucan—the Mixe-Zoquean group living in the former Olmec heartland of southern Veracruz—the contemporary form of this maize being is known as Homshuk. Along with riding on the back of a turtle, Homshuk engages in a wide range of mythic episodes, many of which recall the Quichean *Popol Vuh* (see Foster 1945: 191–196; Münch 1983: 163–169; López Austin 1994). Although typically portrayed as a rather mischievous young boy, Homshuk represents all phases of maize: “Homshuk is pictured as being three feet tall with hair of corn silk, who passes from childhood through maturity to old age each year during the cycle in which the maize sprouts, grows tall, ripens, and then withers” (Foster 1945: 180). But by the same token, it is his youthful quality that provides his basic identity as the fertile seed. In one episode, when Homshuk descends to the underworld to resurrect his father, he declares, “I am he that germinates, I am the new seeds, I am the rebirth” (Münch 1983: 167). Among Nahuaspeaking people of northern Veracruz, the spirit of maize seed, Chicomecxitl, is also considered an infant with corn silk hair (Sandstrom 1991: 245).

In the Gulf Coast region, the personification of corn as a childlike being is not limited to the Formative Olmec and contemporary ethnography. The Late Postclassic Codex Fejérváry-Mayer—widely believed to derive from the Gulf Coast area—portrays growing maize as a child (Fig. 42a). The por-

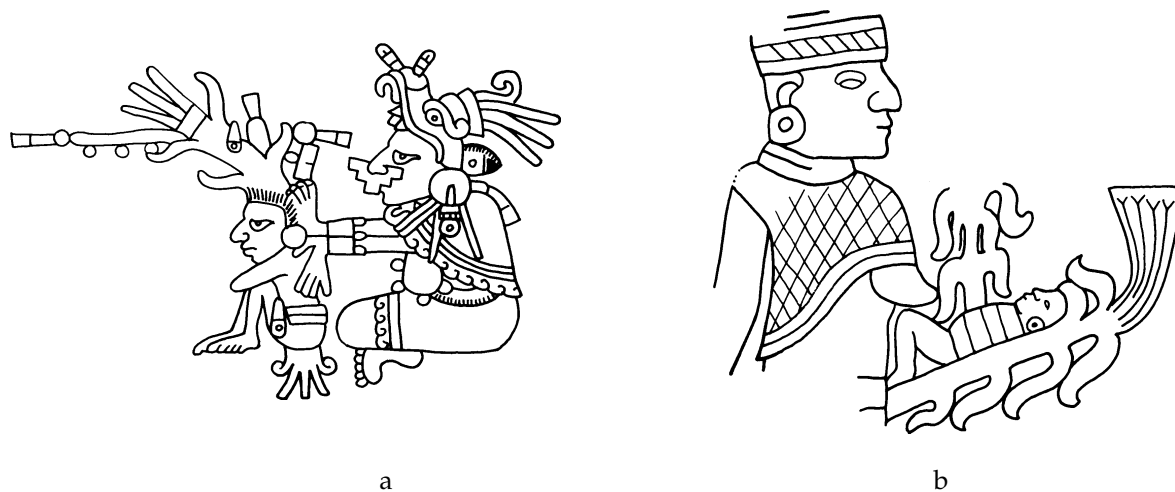


Fig. 42 Pre-Hispanic depictions of infant corn gods from the Gulf Coast region. (a) Infant maize deity cared for by a goddess. Codex Fejérváry-Mayer, p. 33; (b) Infant maize god nursed by a goddess. Detail of a column from El Tajín (after Brueggemann, Ladrón de Guevara, and Sánchez Bonilla 1992: 125).

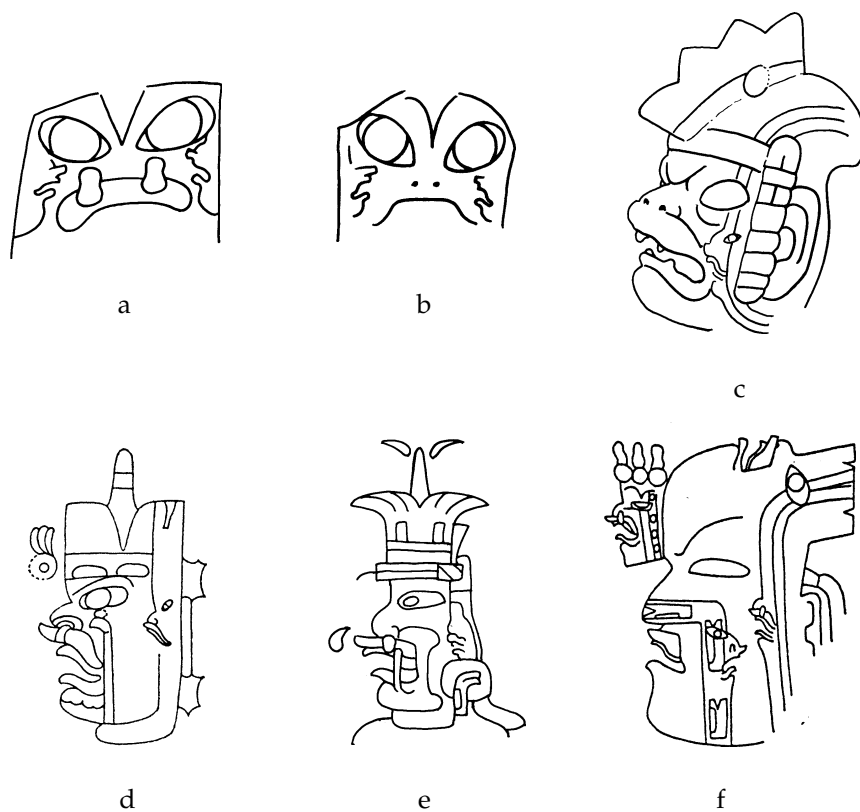


Fig. 43 The Olmec Maize God with smaller faces of the same deity on its cheek. (a–b) Olmec Maize Gods with cleft heads and profile deity faces on their cheeks (after Covarrubias 1957: fig. 35); (c) Figure blending attributes of the infant and foliated aspects of the corn deity. Necaxa Statuette (after Covarrubias 1957: color pl. 2); (d) Olmec Maize God with a foliated aspect of it flanking its cheek. Incised jade celt from La Venta (from Drucker, Heizer, and Squier 1959: fig. 35e); (e) Olmec Maize God with the face of the deity flanking its cheek. Incised jade celt from Río Pesquero (after Medellín Zenil 1971: no. 67); (f) Foliated aspect of the Olmec Maize God with secondary heads of the deity on its brow and cheek (after Covarrubias 1957: fig. 35).

trayal of corn as an infant is also documented for Late Classic Veracruz. One of the carved columns from the Mound of the Building Columns at El Tajin portrays a swaddled baby lying atop a tasseled maize plant with a second corn stalk rising from its belly (Fig. 42b). A goddess with an exposed breast suckles the growing maize and infant corn deity with her milk.

Like Homshuk and similar maize beings of the contemporary and Classic Gulf Coast, the infant Olmec deity designated as God IV probably represents the childlike, seed aspect of the adult Olmec Maize God. In two representations of figures dressed as God IV—Coatzacoalcos Monument 1 and La Venta Monument 77—the figures wear what has been identified by Douglas Bradley and Peter David Joralemon (1993: 19) as a maize kernel sign at the back of the head (Fig. 57d–e). This motif also appears in the same place on the infant Necaxa Statuette, a representation of the infant God IV (see Vaillant 1932: 513).

God IV commonly shares traits not only with the mature Olmec Maize God, or God II, but also God VI, the personification of green, growing maize (see pp. 94–99). The four Olmec Maize Gods from the sunken court at Teopantecuanitlán have the five sectioned headband of God II, the crossed-band pectoral of God IV, and the cleft, backwardly turning head of God VI (Fig. 46a). In many instances, the infant aspect has the same backwardly swept and cleft cranium found with the foliated aspect of the Olmec Maize God, as well as the vertical banding across the eyes (Fig. 44). Nonetheless, God IV still can be readily distinguished by his infancy and particular costume attributes, including the segmented headband, crossed bands, and pleated earpieces. The Necaxa Statuette is an excellent example of the infant God IV displaying attributes of God VI, the foliated aspect of the Olmec Maize God (Fig. 43d). As the fertile germinating seed, the infant God IV thematically overlaps with the personification of green, growing corn.



Plate 15

FRAGMENTARY FIGURE

Plate 15
Middle Formative
Jadeite. H. 7.5 cm
B-585

History: Acquired by Dumbarton Oaks from Edward Merrin, 1970

Exhibition: Dumbarton Oaks, 1970–

Bibliography: Benson 1971: 36–37, figs. 44–46; Niederberger 1987: fig. 92

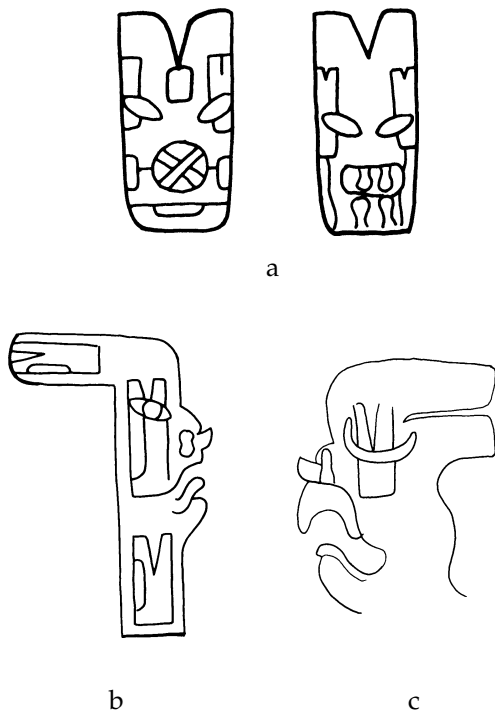


Fig. 44 Examples of the Olmec Maize God with cleft elements through the eyes. (a) Two aspects of the corn deity forming part of a headband (see Pl. 18); (b) Foliated aspect of the maize deity with a cleft celt over its eye (also see Fig. 43f); (c) Foliated aspect of the corn god with a cleft celt over its shut eye (after Gay 1972a: fig. 44a).

Carved from light blue, mottled jadeite, this incised figure was probably broken from a standing statuette. The outstretched position of the lower arms is quite like other Olmec standing figures in the Dumbarton Oaks collections and, as has been noted, may indicate dance (see Pls. 8, 10, 11). On the front of the sculpture, an apparently ancient break follows a horizontal broad line incision that seems to have delineated the belly. On the back side, however, the break is not so uniform and cuts in a diagonal fashion across the upper buttocks. In contrast to other jadeite figures in the Dumbarton Oaks collection, there is relatively little attempt at subtle modeling and finishing. Instead, drill and saw marks are readily visible over much of the piece, endowing the figure with a rough, but also powerful quality. Solid core drills carved hollows in the upper arms, corners of the mouth, and nostrils, as well as the eyes,

both of which were fashioned by three overlapping pits. Whereas the nasal septum is unpierced, both earlobes are biconically drilled.

The fingers and, most notably, the face, are carved with fine line incision that delineates the upper teeth from the lip as well as two pairs of inwardly looking profiles on each side of the face (Fig. 45a). For these outer profile faces, the frontal half of each of the biconically drilled earlobes cleverly serves as eyes (Benson 1971: 36). These rather schematic, outer faces commonly appear on cleft-headed figures, which I regard as forms of the Olmec Maize God (Taube 1996) (Fig. 43a–b). Elizabeth Benson (1971: 37) notes that such profile faces also are found on the jadeite Nexaca Statuette and an incised celt from La Venta (Fig. 43c–d). The La Venta example is an explicit representation of the Olmec Maize God, complete with the banded maize sign growing out of its cleft head (Joralemon 1971: 61). Moreover, with its prominent curling lip and eyes upwardly slanting at the upper corners, the La Venta representation is very similar to the profile faces, as if these also constitute schematic forms of the Olmec Maize God. Another jadeite celt, in this case attributed to Río Pesquero, portrays the Olmec Maize God flanked by a smaller profile face (Fig. 43e). As personified forms of facial banding, these profile heads are also sometimes examples of God VI in the Joralemon (1971: 79–81) system of deity classification (Fig. 43f). Both the Necaxa Statuette and God VI have backwardly sweeping crania, a trait that I compare to young growing corn (Taube 1996). With their frequently cleft and backturning crania, the flanking profile heads probably represent maize foliation, much as if the central face represents the ear of corn (see Fig. 43d). It will be subsequently noted that the Dumbarton Oaks statuette also portrays the personified aspect of green growing corn.

Two other, larger profile faces appear in the region of the nose and eyes of the statuette (Fig. 45a). In fact, as Benson (1971: 36) notes, the statuette's eyes double as the eyes of the profile faces, with their incised snouts lying against the sides of the sculpted nose. Below the snouts, there are pairs of parallel lines, with the outer lines running virtually to the chin of the statuette. Although these may well be the lower parts of the profile faces, they probably

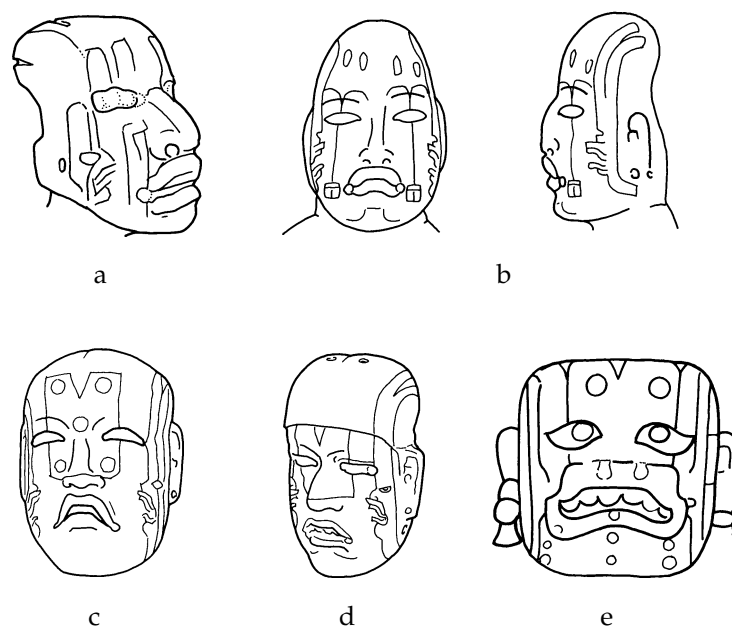


Fig. 45 Olmec figures displaying cleft celts on their brows and the foliated maize deity on their cheeks. (a) Head showing the foliated aspect of the Dumbarton Oaks Olmec Maize God in Pl. 15. Drawing by Elizabeth Wahle; (b) Statuette with cleft elements on its brow and foliated heads of the maize deity on its cheeks. Drawing by Elizabeth Wahle (after Thomson 1975: fig. 108); (c) Serpentine mask with a cleft celt on its brow and foliated heads of the corn deity on its cheeks. Drawing by Elizabeth Wahle (after *The Olmec World* 1995: no. 25); (d) Jade mask with a cleft celt on its brow and foliated heads of the maize god on its cheeks. Drawing by Elizabeth Wahle (after Berjonneau, Deletaille, and Sonnery 1985: pl. 9); (e) Detail of an Olmec-style monument from the vicinity of Tenosique, Chiapas (after García Moll 1979: fig. 3).

constitute mouth brackets for the statuette, a common convention for the Olmec Maize God (see Pl. 18). The snouts of the larger profile faces are beaklike and recall the cleft-headed beaked faces appearing on the shoulders of the Las Limas statuette (see Joralemon 1976: fig. 3b–c). The profile faces on the Dumbarton Oaks sculpture also are prominently cleft, a convention commonly referring to maize, foliation, and, by extension, greenstone celts. In the case of these two examples and the four cleft heads on the limbs of the Las Limas figure, the faces appear to be personifications of the foliated cleft celts found on the limbs and faces of Olmec figures (see Figs. 44a–c, 48a–b; Feuchtwanger 1989: no. 104).

One incised figure displays facial markings quite similar to the Dumbarton Oaks statuette, including the outer, inwardly looking profile faces, and prominent clefts over the eyes (Fig. 45b). In this case, however, the eye clefts do not appear to connect to profile faces or celtiform motifs. In addition, although the cranium is backcurving, it is not nearly as developed as the Dumbarton Oaks example, and in this regard more resembles the cranial modification ex-

hibited by the large standing Dumbarton Oaks jadeite statuette (see Pl. 8), as well as an incised jadeite mask (Fig. 45d). The facial marking on this mask is quite similar to that appearing on an incised serpentine mask now in private hands (Fig. 45c). This serpentine object is known to have been found at San Felipe, Tabasco (Sisson 1970). Still another example of this facial patterning occurs on an Olmec monument in the vicinity of Tenosique, on the lower central Usumacinta (Fig. 45e). Although slightly eroded, the long, inwardly facing profile heads are plainly visible, as is the cleft form in the center of the brow. Although the Dumbarton Oaks and Figure 45b statuettes have two cleft eye elements, the jade and serpentine incised masks and the Tenosique monument have only one central cleft device over the eyes.

The head of the Dumbarton Oaks statuette appears to be a more developed, supernatural form of the slightly backwardly curving cranium of the jade mask (Fig. 45d), the other incised statuette (Fig. 45b), and standing jadeite figure of Plate 8. On the fragmentary figure here, the head curves back at virtu-

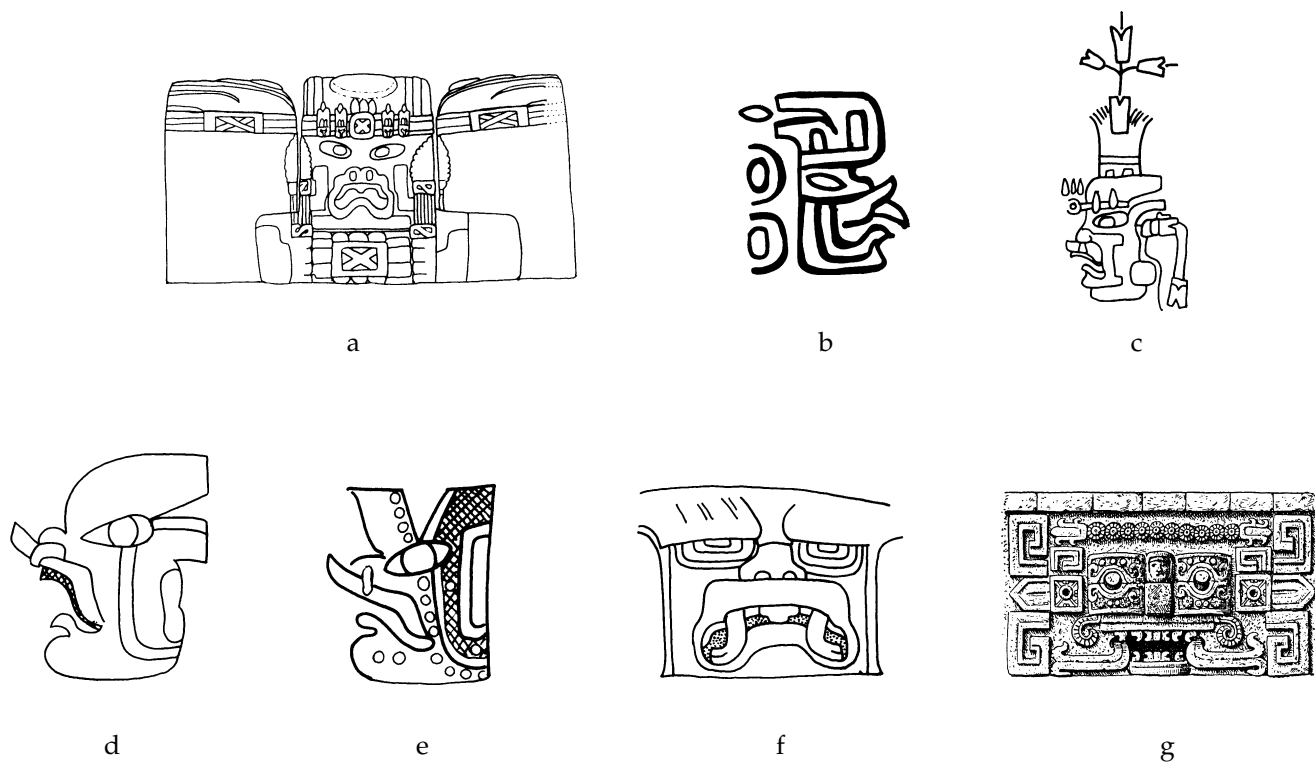


Fig. 46 Examples of the foliated aspect of the Olmec Maize God and Mesoamerican portrayals of breath. (a) Olmec Maize God combining attributes of its infant and foliated forms. Teopantecuanitlán sunken court (after Martínez Donjuán 1985: fig. 10); (b) Foliated Olmec Maize God with a possible maize ear emerging from its cleft head (after Joralemon 1971: fig. 135); (c) Olmec Maize God with backturning cranium. Detail of a jade celt attributed to Río Pesquero (after Benson and de la Fuente 1996: no. 17); (d) Foliated corn god with backturning cranium. Detail of a ceramic vessel from Tlapacoya (after Feuchtwanger 1989: fig. 154); (e) Foliated corn deity. Detail of a ceramic vessel from Tlapacoya (after Feuchtwanger 1989: fig. 155); (f) Olmec deity with cleft breath elements, detail of Stela A, Tres Zapotes (see Fig. 6b); (g) Late Classic Maya portrayal of zoomorphic mountain with breath elements at corners of mouth (from Selser 1902–1923, 5: 226).

ally a right angle to the face and does not terminate in a gently rounded bulge, but rather, with a hard, sharp edge. In addition, the back of the head has a deep cleft, much like a modern hammer claw. Combined with a lower pair of protuberances near the nape of the neck, the cleft cranium creates a four-part effect, as if the back of the head was transected by a cross. With the head in profile, the cleft head also is represented by short horizontal incised lines at the end of the projecting cranium. In fact, a version of this same convention can be seen on the statuette of Figure 45b and the mask in Figure 45d, where the curving, outer profile heads split apart near the back of the cranium. Occurring at the very edge of the face, the outer incised profiles of the Dumbarton Oaks statuette may actually follow up along the side of the head to the backcurving cleft, thereby creat-

ing the same form as seen on the latter two examples (Fig. 45a).

The meaning of the sharply backturning, cleft cranium of the Dumbarton Oaks statuette and other supernaturals requires discussion. The Olmec Maize God—complete with the slanted eyes and five-part headband typical of this being—can appear with this cranial form (Fig. 46a–c). In one instance, the backcurving cleft seems to be supplied with a maize ear (Fig. 46b). It is noteworthy, however, that the backwardly turned cleft usually does not contain maize signs—quite probably because this convention represents the growing, leafy plant rather than the mature ear of corn. The deity designated as God VI by Joralemon probably represents this aspect of green, growing corn (Fig. 46d–e). Because of the vertical line passing through the eye, Coe (1968: 111,

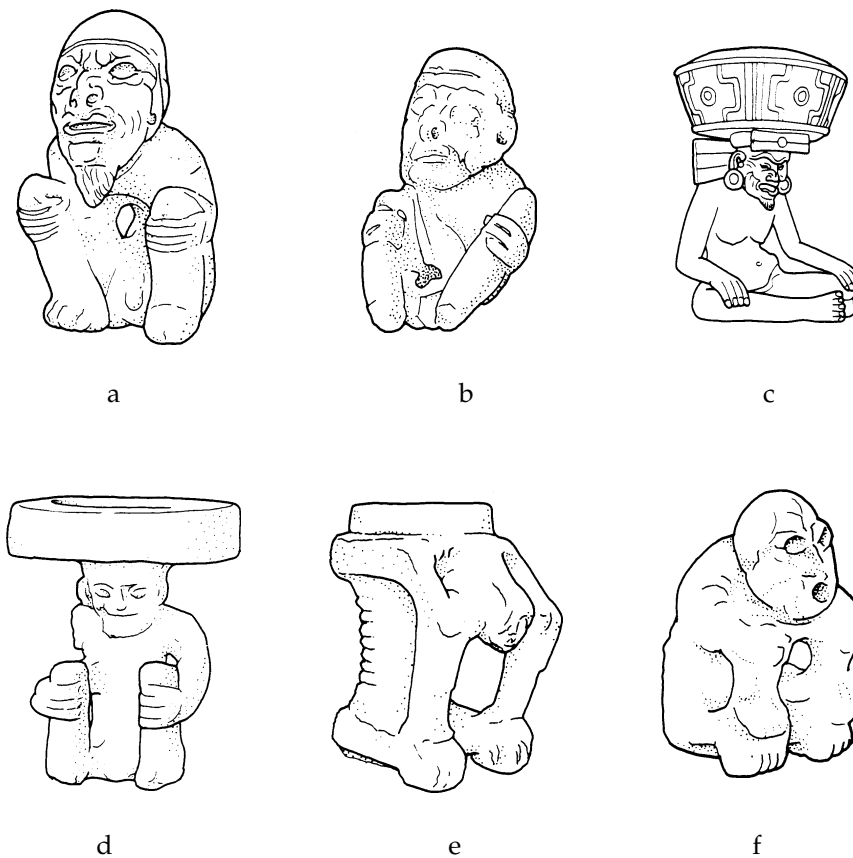


Fig. 47 Representations of the old fire god, Huehueoteotl, in ancient Mesoamerica. (a) Probable Olmec example of the old fire god (after Freidel 1995: fig. 5); (b) Jade statuette of a probable Olmec version of the old fire god (after Musée Rath 1998: no. 235); (c) Ceramic Huehueoteotl censer. Classic period Cerro de las Mesas (from Taube 1992b: fig. 66c); (d) Stone Huehueoteotl censer from the vicinity of Jalapazco, Puebla (from Selser 1902–23, 5: 537); (e) Stone Huehueoteotl censer from Colima (after Williams 1992: fig. 16); (f) Greenstone carving of a probable old fire god. Protoclassic Colima (after Leyenaar, van Bussel, and Weber 1992: no. 142). Drawings a, b, d, e, and f are by Elizabeth Wahle.

114) and Joralemon (1971: 90) have identified the Olmec being as an early form of Xipe Totec, the Mexican flayed god of spring. Nicholson (1976: 165), however, noted that later Mesoamerican gods had similar facial banding, including Cinteotl, the Postclassic Central Mexican god of corn. Although Joralemon (1971: 79) stresses that a line transecting the eye is an essential criterion for God VI, the vast majority of the cited examples derive from Tlapacoya-style vessels. Rather than the eye band, the cleft and usually backwardly curving cranium seems to be a more essential trait of this being, the foliated aspect of the Olmec Maize God.

According to Kent Flannery and Joyce Marcus (2000: 13), the being designated God VI in the Joralemon system of deity classification represents the earth in its “angry” aspect as the earthquake, with the cleft referring to a broken, open fissure. How-

ever, this being is far more celestial than terrestrial in nature. In Olmec iconography, crested birds can appear with the banded facial attributes of God VI (see Taube 2000: fig. 10). In addition, figures with the cleft, backwardly bent cranium are portrayed in supernatural flight holding the feathered maize ear fetish (*ibid.*: fig. 11a–b). In these scenes, the cranium appears as if bent by rushing wind during flight. In Olmec art, a curving cleft element frequently emerges out of the corners of supernatural mouths (fig. 46f). Although it has been noted that this curving cleft element denotes vegetation in Olmec iconography, it could have still another meaning. In Classic Maya art, breath is commonly rendered as bifurcated scrolls emerging from the mouths of zoomorphic mountains and other supernatural beings (fig. 46g). Along with personifying growing corn, the deity with the back-turning cleft cranium may em-

body an aspect of wind, such as the spring and summer breezes that both bend the growing maize and bring rain-laden clouds.

The face of the Olmec Maize God often has elements descending from its nostrils and at times they appear to drip atop the upper lip (Figs. 43a, c, f; 44a–c; 45e; 46a, c–e). This curious feature is especially common on the cleftheaded, foliated aspect of the Olmec Maize God, the embodiment of green, growing corn. Coe describes this nasal motif as “mucous-like,” and this identification may well be correct. Rhonda Taube (personal communication, 1997) notes that in the corn-rich region of De Kalb, Illinois, many individuals suffer extreme allergies when the growing corn pollinates. This period of pollination corresponds well with the foliated aspect of the Olmec Maize God, who is the embodiment of not the mature and fertile cob, but green, growing corn.

The backwardly turning head transected in four parts is found on other examples of Olmec sculpture, including the seated jadeite statuette from Río Pesquero in the Dumbarton Oaks Collection (Pl. 18). As Elizabeth Benson (1971: 17–19) and Frank Reilly (n.d.: 186) both note, a similar head form appears on the sculpture from San Martín Pajapan and La Venta Monument 44 (Fig. 49 a–b). However, in the case of

these two monuments, the backcurving element is not an actual cranium but part of a headdress, composed of long parallel lines identified as feathers by William Clewlow (1968: 40). In view of their flexibility, narrowness, and length, these plumes probably represent the emerald green tail feathers of the male quetzal. In Olmec art, quetzals similarly are depicted with long and sharply curving tail plumes (Figs. 38f and 52c). The front of the San Martín Pajapan headdress displays the face of the Olmec Maize God; a stylized World Tree with a pair of radiating branches sprouts out of the cleft cranium (see Fig. 49a). The ends of these branches display the same four-sectioned form commonly appearing at the end of the backcurving cranium and headdress (Fig. 48c). The San Martín Pajapan figure also holds a bar with the same four-way cleft at one end, and, according to Reilly (n.d.: 187), the monument portrays a ruler raising this bar as the World Tree. Both Reilly (1994a, 1994b) and I have discussed the widespread use of maize as the *axis mundi* in Olmec iconography (see pp. 17, 30, and Taube 1996). It would appear that the fragmentary Dumbarton Oaks statuette and other figures displaying similar head forms represent the Olmec Maize God in the specialized aspect of young growing maize, the Olmec form of the verdant World Tree.



Plate 16

FRAGMENTARY FIGURE

Plate 16
Middle Formative
Jadeite. H. 6.6 cm
B-19

History: Formerly owned by Mrs. Herbert Spinden; purchased by Robert Bliss from V. G. Simkhovitch, 1948

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1949–62; Dumbarton Oaks, 1963– ; *Olmec Art of Ancient Mexico*, National Gallery of Art, 1996

Bibliography: Covarrubias 1944; Covarrubias 1946b: pl. 11; Bliss 1957; Covarrubias 1957: pl. 9; no. 9, pl. 3; Mason 1958; Stirling 1961: figs. 5–6; Gump 1962: 192–193; Kubler 1962: 70, pl. 34b; Benson and Coe 1963: no. 30; Coe 1965b: fig. 15; Burchwood 1971: pl. 3; de la Fuente 1977b; Benson 1981; Alcina Franch 1983: fig. 232; Kubler 1984: 100; González Calderón 1991: pl. 410; Benson and de la Fuente 1996: no. 58

Although it has suffered considerable damage, this jewel of Olmec lapidary art is among the most outstanding examples of portable Olmec sculpture. In fact, the bold percussion that separated the bust from the body lends a striking and dramatic air to the piece. It is noteworthy that the exquisite face received no damage from what appears to have been intentional and controlled mutilation, recalling the massive flake scars seen on San Lorenzo Monument 20 and other major Olmec sculptures (see Coe and Diehl 1980, 1: 330). The curving indentations in the area of both shoulders suggest “bulbs of percussion” from where the bust was

fractured from the body. However, according to lithic experts John Clark and Gene Titmus (personal communication, 1997) these indentations are secondary and occurred after the bust was removed from the body. Clark and Titmus note that the statuette appears to have been first broken across the trunk. From this initial platform, two blows were struck up the body to remove the sides of the torso as well as shoulders and arms. A final, major blow was made again across the torso, thereby creating a relatively flat base for the bust.

The jade is a soft, blue color and highly translucent, with flecks of white inclusions. The surface is



16a–c, additional views a



b



c

crazed with fine fracture lines, possibly from the sharp blows by which the bust was reduced from a statuette. The only clear evidence of drilling appears in the rather large nostrils, which are joined through the septum. The nostrils contain reddish soil that also adheres to the face and to areas of rougher and deeper breakage. The delicately carved face is covered by fine striations executed by a sharp tool, suggesting that it was not simply ground, but carved by the fine point of a quartz crystal or other tool used for hard-stone incision. Considerable care was exerted in the area of the eyes and brow, which is creased by four diagonal lines. As on the figure in Plate 15, the eyes are composed of V-shaped channels, making it unlikely that they once held inlay. The partly opened mouth exposes the upper teeth, with the incisors indicated by fine line incision.

Among the more striking traits of this figure is the mane of shoulder length hair, separated by a deep part running down the center of the head. The filaments of hair are delineated by a controlled series of incised lines. From the same point along the part, pairs of lines run in opposite directions down the sides of the head. These carefully spaced lines continue to the back, but due to the shape of the cranium, some converge as they descend. The coiffure of this figure recalls the long hair found on the seated jadeite woman of Mound A-2 at La Venta (Fig. 39), as well as the fragmentary serpentine statuette in the collection at Dumbarton Oaks as shown in Pl. 13. Elizabeth Benson (1981: 100) notes, however, that the hair of this figure is somewhat different. Rather than radiating out from a point at the crown, the hair spreads from a long part running down the center of the head. Benson (*ibid.*) compares this hairstyle to that worn by the Las Limas Figure. Along with having similarly parted long hair, the Las Limas Fig-

ure wears a loincloth, thereby identifying it as male.

According to Benson (1981), the jadeite bust probably represents a historical personage: "This face is not only biologically possible, but is undoubtedly a portrait" (*ibid.*: 100). As she also mentions, the basic identity of this being has been a source of some debate. George Kubler (1984: 11) notes that the perceived attitude, personality, and even gender of the Dumbarton Oaks jadeite bust can change markedly according to lighting and the angle of perspective. Thus, when viewed from slightly below, the face has a supplicatory, almost tender expression that, according to Kubler (*ibid.*), suggests a singing woman (Pl. 16c). However, seen face on, the figure appears to be male, with an assertive and commanding expression. Although Kubler (*ibid.*) favors the former position and female interpretation, Benson (1981: 99) notes that the angle of the head and forward position of the left shoulder indicate that the figure was probably seated while leaning forward on the left arm. She compares this posture to the Laguna de los Cerros Monument 11. Still another example is the powerful niche figure of La Venta Altar 4, whose forward-leaning upper body is supported by his left arm (Piña Chan 1989: pl. 68). Among the later Classic Maya, the enthroned king on the magnificent Wall Panel 3 at Piedras Negras strikes a similar pose (Sharer 1994: fig. 5.17). Rather than looking upward, the Dumbarton Oaks bust gazes directly ahead, much as if it derived from a forceful, forward-leaning enthroned figure. Although it is entirely possible that, as with the later Maya, high offices were not exclusively reserved for males, both the facial features and hairstyle suggest that the Dumbarton Oaks bust represents a male Olmec ruler.



Plate 17

SEATED OLD MAN

Plate 17
Middle Formative
Jadeite and albite. H. 10 cm
B-18

History: Purchased by Robert Bliss from Hellmut de Terra, 1958

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1958–62; Dumbarton Oaks, 1962–

Bibliography: Benson and Coe 1963: no. 29; Benson 1981: 103–104, fig. 7; González Calderón 1991: pl. 421



17a, back view

Although displaying clear Olmec conventions, this sculpture is unusual both in posture and physiognomy. The figure is hunched over, with his knees pulled up tightly against his shoulders. When viewed from the front, the legs create the impression of two staffs or rounds of wood. In addition to the curious pose, a hollow core drill was used to make a large cavity in the region of the abdomen. Extensive drilling in the areas between the ribs and hips have further hollowed out the sunken belly region. On the back of the figure, these hollowed areas continue around the elbows up to the armpits. Above the sunken abdomen, three pairs of diagonal lines delineate the ribs. On the back of the figure, three pairs of curving diagonal lines represent the shoulders and ribs while, below, a fourth pair of lines curves in an opposite direction to depict the upper portions of the bony hips. Broad line incisions on the base of the sculpture delineate the buttocks and feet.

Along with the bony and wasted body, the face of this bearded figure is drawn, with high cheekbones and sunken cheeks. But although he is of advanced years, there is nothing senile or infirm about his visage, which instead conveys the power and

concentration seen on certain anthropomorphic Olmec Transformation Figures (see Reilly 1989: fig. 1). Small drills carved the corner of the mouth and nostrils, which biconically pierce the septum. The hair of the goatee is marked with fine line incision. The ears are delineated by blocky, rectangular forms, resembling, in this regard, the earpieces found on the God IV infant (Pl. 15). The figure wears a headband marked with the Olmec “flame eyebrows” as well as a central roundel supporting a probable maize cob. At the central crown of the head, there is the well-known trefoil maize sign, which also appears atop the seated Río Pesquero figure in the Dumbarton Oaks collection (Pl. 18).

Although old women are better documented in Olmec art (Joralemon 1981), depictions of aged males also exist (e.g., *The Olmec World* 1995: nos. 28, 30, 134, 214, 215). The massive and headless Misantla Monolith 1 in the Museo Regional de Jalapa also has ribs portrayed on the chest and back; in addition, a line of protruding vertebrae run up the figure’s hunched back (Piña Chan 1989: pl. 54). Although the Misantla figure also grasps his legs, they are positioned tailor-fashion rather than up against the torso. An Olmec steatite figure in the collection of the Dallas Museum of Art portrays an old man in a markedly similar posture to the Dumbarton Oaks sculpture (see Fig. 47a). In this case, the seated figure also pulls his legs up vertically against his bent body. Still another example was recently exhibited at the Musée Rath in Geneva (Fig. 47b). Fashioned in highly polished, emerald green jadeite, this statuette also portrays an old man with his legs pulled up tightly against his body. As in the case of the Dumbarton Oaks statuette, the figure displays a pierced nasal septum. In addition, the lower abdomen is also hollowed out by drilling, giving the figure an emaciated appearance. Although of simpler form than the Dumbarton Oaks example, both the Dallas Museum of Art and Musée Rath exhibition figures also wear headbands.

With their old age, goatees, and hunched appearance, the Dumbarton Oaks, Dallas, and Musée Rath exhibition figures recall the old fire god, Huehuetotl, god of the hearth and the world center, or *axis mundi*. The following sixteenth-century Aztec prayer describes Huehuetotl in the central

earth navel, or *tlalxicco*: “The mother of the gods, the father of the gods, who resideth in the navel of the earth, who is set in the turquoise enclosure, [enclosed] with the waters of the lovely cotinga, enclosed with clouds—Ueuetotl, he of Ayamictlan, Xiuhtecuhtli (Sahagún 1950–82, 6: 88–89).

In facial appearance, the Dumbarton Oaks figure is especially similar to the magnificent Classic period Huehuetotl from Cerro de las Mesas (Fig. 47b). Huehuetotl, whose name in Nahuatl signifies “Old God,” is one of the earliest-known deities of Mesoamerica. Angel García Cook (1981: 250) notes the presence of ceramic Huehuetotl censers in Middle Formative contexts in Tlaxcala. Huehuetotl braziers are also known for Late Formative Ticoman and Cuicuilco, clear precursors to the stone Huehuetotl censers of Classic Teotihuacan (Vaillant 1931: pl. LXXIX; von Winning 1976: 151).

In contrast to the Dumbarton Oaks, Dallas, and Musée Rath Olmec statuettes, the majority of Huehuetotl figures tend to sit cross-legged, not with the knees pulled up against the chest. Nonetheless, Edward Seler (1903–23, 5: 537, pl. LXV, nos. 1, 2) published four explicit Huehuetotl censers in the same squatting position (Fig. 47c). According to Seler (*ibid.*), these stone sculptures derive from the region of Jalapazco, Puebla. Henry Nicholson (1971: 96) suggests a Formative date for the Jalapazco fire god sculptures, that is, as roughly contemporaneous with the nearby Tlaxcalan examples as well as the Dumbarton Oaks and Dallas figures. Another early stone Huehuetotl *incensario* was discovered at Tlalancaleca, Puebla (García Moll 1976). Although this figure is seated cross-legged, it is stylistically similar to the Puebla examples published by Seler. According to Roberto García Moll (*ibid.*), the Tlalancaleca monument dates to approximately 600–100 B.C., that is, the same general period as the other Puebla carvings.

In ancient West Mexico, many stone Huehuetotl braziers have the legs placed vertically against the body rather than seated cross-legged (Williams 1992: figs. 8, 10, 12, 13, 15–17). Although the arms often support the brazier basin atop the back, they can also be placed against the vertical legs, quite like the positions found among Puebla Huehuetotl braziers and the three Olmec stone statuettes (Fig. 47e). For the two Huehuetotl examples published by Eduardo Williams (*ibid.*: figs. 15–16), the trunk of the body is shrunken and emaciated, with protrud-

ing ribs; it will be recalled that the Dumbarton Oaks statuette is also portrayed with prominent ribs. Given the many similarities shared between the Puebla braziers and Olmec statuettes, it is quite possible that the two West Mexican braziers are of considerable antiquity. Williams (*ibid.*: figs. 15, 16) tentatively attributes the two braziers to the state of Colima, a region in which greenstone statuettes are also found dating to the Protoclassic period of the shaft tombs (ca. 100 B.C.–A.D. 300). Typically fashioned of hard greenstone, the statuettes portray seated men touching their vertically placed knees with both hands (see Berjonneau, Deletaille, and Sonnery 1985: pls. 224–226, 231; Leyenaar, van Bussel, and Weber 1992: pl. 142). These figures frequently display signs of old age, including shrunken abdomens, prominent shoulder blades, and protruding brows and chins (Fig. 47f). In other words, they are strikingly like the three Olmec statuettes under discussion as well as the Puebla and Colima Huehuetotl braziers. Quite probably, these Colima greenstone statuettes represent the old fire god.

Small greenstone carvings of Huehuetotl continued to be fashioned in Classic Mesoamerica. One Teotihuacan greenstone statuette, 6.3 centimeters in height, portrays the wizened old fire god leaning over, with his hands placed on his crossed legs (Thomson 1971: no. 77). Formerly owned by Robert Woods Bliss, the object is now part of the collection of the Peabody Museum at Harvard University.

It is likely that the Dallas, Musée Rath, and Dumbarton Oaks figures are early versions of the seated greenstone statuettes of Protoclassic Colima and Classic Teotihuacan and constitute Middle Formative Olmec versions of Huehuetotl. In terms of the Dumbarton Oaks sculpture, it would be tempting to interpret the “flame eyebrows” as a reference to fire. However, as I recently have pointed out, these eyebrows do not refer to fire but to bird plumes, and by extension, the sky (Taube 1995: 86). In addition, rather than referring primarily to the crests of harpy eagles, flame eyebrows probably allude to the green feathered crest of the quetzal (see p. 111). Among the Olmec and later peoples of Mesoamerica, maize, quetzal plumes, and jade are closely identified with the *axis mundi* (see pp. 18–19 and p. 112). It is quite possible that both the central maize on the headdress and the trefoil maize motif capping the head of this jade figure refer to the central world axis, a well-known attribute of Huehuetotl.

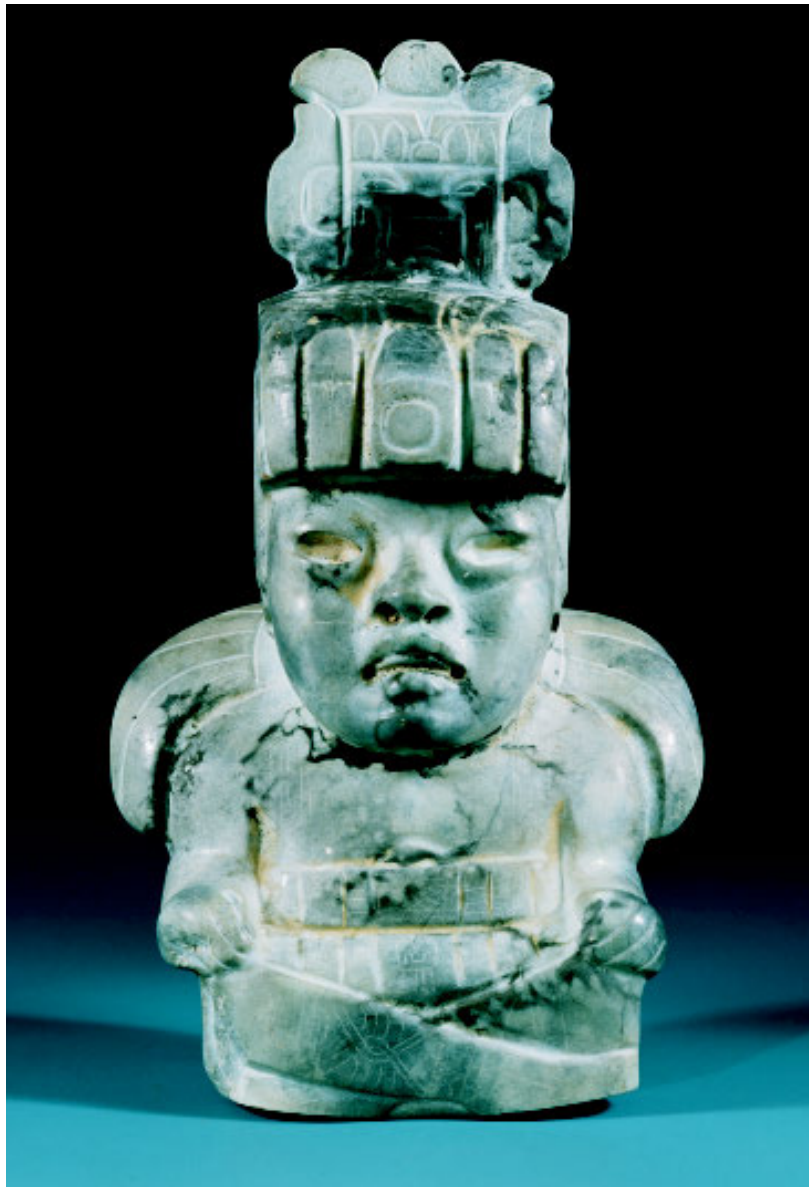


Plate 18

SEATED FIGURE

Plate 18
Middle Formative
Jadeite. H. 16.3 cm
B-592

History: Reportedly from Río Pesquero; purchased by Dumbarton Oaks from Alfonse Jax, 1970

Exhibition: Dumbarton Oaks, 1970–; *Olmec Art of Ancient Mexico*, National Gallery of Art, 1996

Bibliography: Benson 1971; Joralemon 1971: 52, figs. 4c, 19c; Soustelle 1984: 176–177; Niederberger 1987: fig. 93; González Calderón 1991: pl. 418; Joyce et al. 1991: fig. 7a; *The Olmec World* 1995: 281; Schele 1995: figs. 5b, 12a; Benson and de la Fuente 1996: no. 52; Taube 1996: fig. 8a; 2000: fig. 10d, and Tate 1999: fig. 15



18a, side view



18b, back view

Despite its relatively small size, this is one of the most iconographically complex objects known to have been produced by the ancient Olmec. Attributed to Río Pesquero, the figure appears to have been ritually burned in antiquity, a common trait of jades reportedly from this site (Joralemon 1988: 40). Thus, although the original piece was probably a shining, translucent blue-green jade, the present mottled surface ranges from chicken-bone white to grey to areas of dull black. Aside from the fire-altered surface and several fine cracks, the sculpture is in almost perfect condition, with only minor loss by chipping to the right hand.

In the region of the nostrils, mouth, and headdress, there are small stains created by granules of sand. A small quantity of these grains still adheres to the right nostril of the figure. In the future, this sand may prove valuable in allowing for comparisons with other objects attributed to this alluvial site.

In addition to changing the original color of the piece, the burning of the statuette has partly obscured the intricate fine line motifs that, save for the plain base, cover almost the entire sculpture. This

fine incising was probably the last major step in the carving of the object, since even the final stage of polishing would partially remove the extremely shallow incision. As with many Olmec jades, the incised designs were probably enhanced with cinnabar or hematite stain. Aside from the final, rather sketchy fine line incision, the depths and widths of other carved lines vary considerably. Whereas the facial carving of the crowning trefoil element is relatively shallow, the headband of the larger figure below is in much higher relief. The cross transecting the backward-turned headdress is even more deeply and broadly carved. The deep, straight lines of the headband, backcurving head element, and other portions of the statue were not carved by incision, but by sawing. Solid core drills perforated the nostrils and septum of the figure as well as the ears, which are biconically drilled. The corners of both the principal mouth and those of the crowning upper face were also carved by drilling. In addition, drills partially hollowed the areas between the thumbs and palms. Whereas much of the figure is rather blocky and planar, the face is carved entirely in the round,

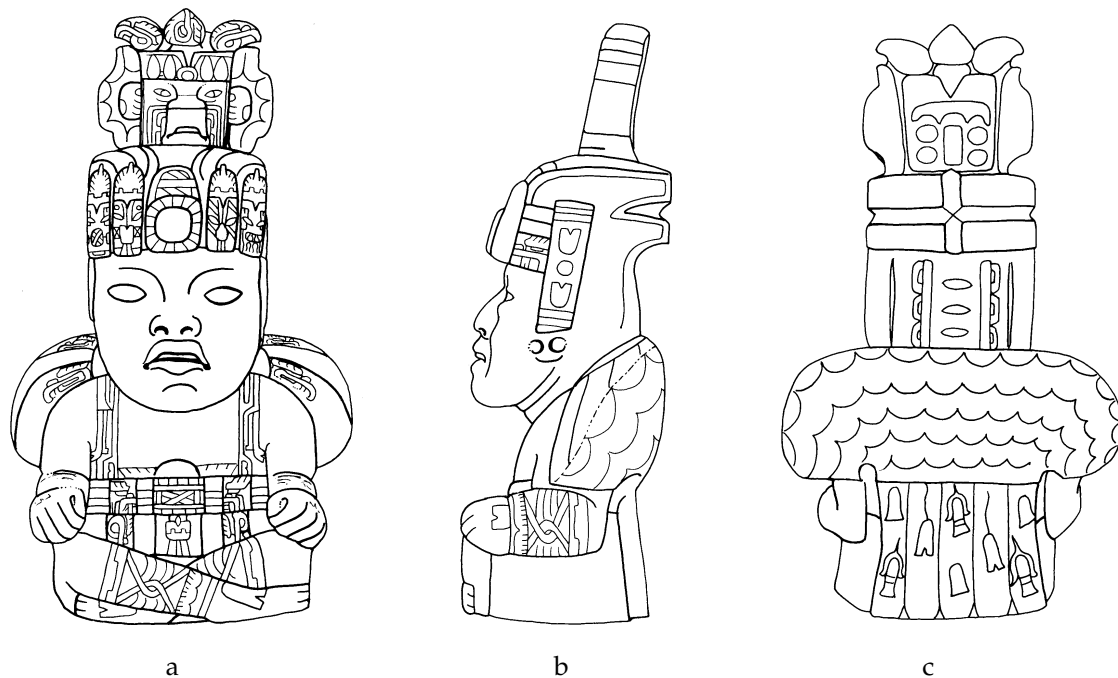


Fig. 48 Line drawings of the front, side, and back of the Río Pesquero statuette (Pl. 18)

in striking contrast to the surmounting, plaquelike head capping the headdress.

An excellent, thorough description and interpretation of the Río Pesquero statuette has been written by Elizabeth Benson (1971), who argues that the sculpture constitutes a portrait of an actual Olmec ruler. In her detailed analysis of the figure's costume attributes and attendant iconography, Benson (*ibid.*) defines a number of important iconographic themes. According to her, the figure is strongly avian (*ibid.*: 31), with a winglike feathered cape, plumed tail, and a series of bird heads incised on portions of the costume. Benson (*ibid.*: 34) also notes that the sculpture displays many quadripartite divisions, possibly references to the world quarters. In this discussion, many of the insights by Benson will receive further support. It will be noted that a great deal of the costume and iconography is devoted to maize, richly expressed by wealth items of precious feathers and jade. In addition, the figure displays costume elements of Gods II, IV, and VI of the Joralemon (1971) system of Olmec deity classification, deities that I consider aspects of the same being, the Olmec Maize God (Taube 1996, 2000) (see pp. 27–28, 30, 88–99).

Benson (1971) describes a number of specific costume traits, including the capping mask, the backturned headdress, five-part headband, skirt, and feathered tail. Along with analyzing these costume elements in detail, she (*ibid.*: 17–19) makes notewor-

thy comparisons to other Middle Formative Olmec figures, including San Martín Pajapan Monument 1 and the closely related but fragmentary La Venta Monument 44. Like the Río Pesquero sculpture, both of these figures have sharply backturned headdresses divided into four sections at the rear (see also Pl. 15). Moreover, the front of both headdresses displays a mask of the Olmec Maize God (Fig. 49). Although the top of La Venta Monument 44 is damaged, the San Martín Pajapan headdress clearly sprouts foliage, quite like the trefoil maize plant that grows out of the top of the capping Río Pesquero mask. In addition, La Venta Monument 77 shares many traits with the jadeite statuette and the other two monuments, including the same backturned headdress sectioned into four parts at the rear (Fig. 49c). Although the front of the Monument 77 headdress has suffered considerable damage, it apparently had a shallow mask plaque, quite like those in the identical position on the San Martín Pajapan and Monument 44 figures and the mask atop the Río Pesquero figure. In addition, the pose of the Monument 77 statuette—including the crossed legs and the loosely fistled hands resting on the knees—is virtually identical to the Dumbarton Oaks jadeite sculpture.

Along with discussing the figure's shared traits with monuments, Benson (1971: 30–31) also notes the similarity of the Río Pesquero statuette to an in-

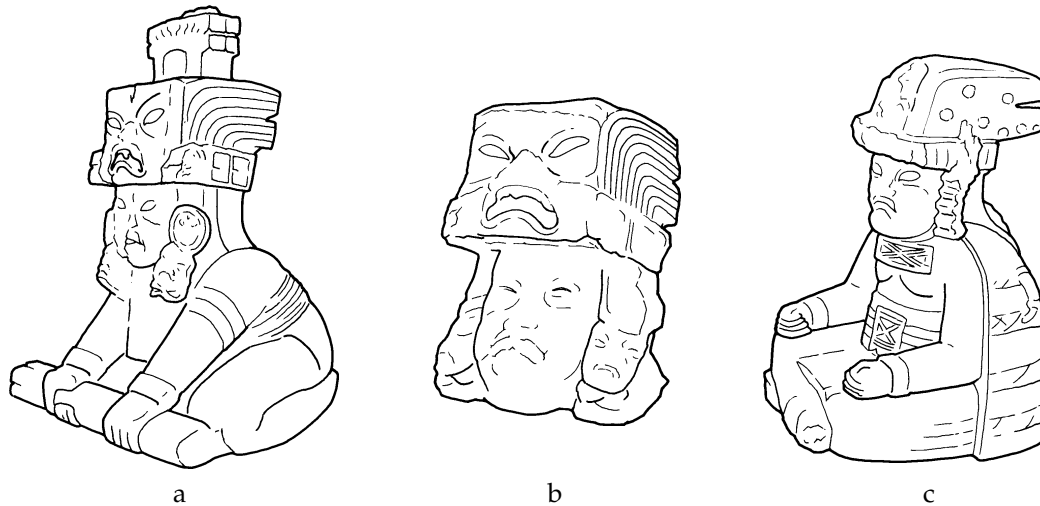


Fig. 49 The bifurcated and sharply backturned headdress in Olmec monumental sculpture. Middle Formative period. Drawings by Elizabeth Wahle. (a) Figure wearing a headdress topped by the World Tree. Note the Olmec Maize God mask immediately below. San Martín Pajapan Monument 1; (b) Fragmentary figure with a backturned headdress and frontal mask of the Olmec Maize God. La Venta Monument 44; (c) Seated figure with a backturned headdress. The damaged area at the front may have originally been the frontal mask of the corn deity. La Venta Monument 77.

cised “flying” figure (ibid.: 17–19, 31). The figure shares the backturned headdress, crossed-band belt, and short skirt or kilt appearing on the Dumbarton Oaks carving (Fig. 50a). Frank Kent Reilly (n.d.: 191) notes that the flying figure appearing on the serpentine sculpture known as Slim, or the Young Lord, also shares a number of costume traits with the Río Pesquero sculpture, including the feathered cape, five-part headband, ear coverings, and short skirt (Fig. 50c). According to Michael Coe (1992: 92), the costume of the Dumbarton Oaks figure is especially similar to that appearing on an Olmec incised belt celt (Fig. 50d). Among the many shared traits, the striding celt figure has the backcurving cleft headdress topped by a sprouting Olmec Maize God flanked by knuckle-dusters, the five-part headband, crossed-band belt piece, a short skirt and “suspenders,” and a feathered cape and hanging tail elements. The feathered cape of the Dumbarton Oaks sculpture closely resembles the cape worn by the flying figure on the incised Young Lord (Fig. 50c), and it is likely that both refer to a pair of outstretched wings.

A diminutive breast appears in profile below the right arm of the incised celt figure, thereby identifying this individual as a woman. Similarly rendered breasts occur with skirted women on Chalcatzingo Monument 21 and Pijijiapan Stone 1 (Fig. 51a–b).

Although now somewhat damaged, it is possible that the headdress worn by the Pijijiapan woman was of the same sharply backturned type on the jadeite statuette and related figures (see Pl. 15). A long lock of hair can be seen falling behind the shoulder of the incised celt figure (Fig. 50d). Although it is unwarranted to identify all skirted Olmec figures as female, the feminine identity of this individual suggests that the short skirt is also worn by women. The skirt worn by the Dumbarton Oaks figure is formed of three pleats; the central pleat is larger than the flanking forms. A similar, three-pleated short skirt is worn by the frontally portrayed woman appearing on La Venta Stela 1 (see Piña Chan 1989: pl. 30). Carmen Cook de Leonard (1959: 339) identifies the broadly hipped and skirted figure facing the bearded individual on La Venta Stela 3 as a woman, and it is likely that the skirted supernatural figure hovering behind her also is female (Fig. 51c). In addition to long hair, cape, skirt, and hanging tail, the striding woman on La Venta Stela 3 also wears the five-part headband with a central medallion, in this case occupied by a mask. Because of the surface loss behind the head, it is impossible to discern whether this individual also wore the sharply backturned headdress.

As on the incised belt celt (Fig. 50d) and the La

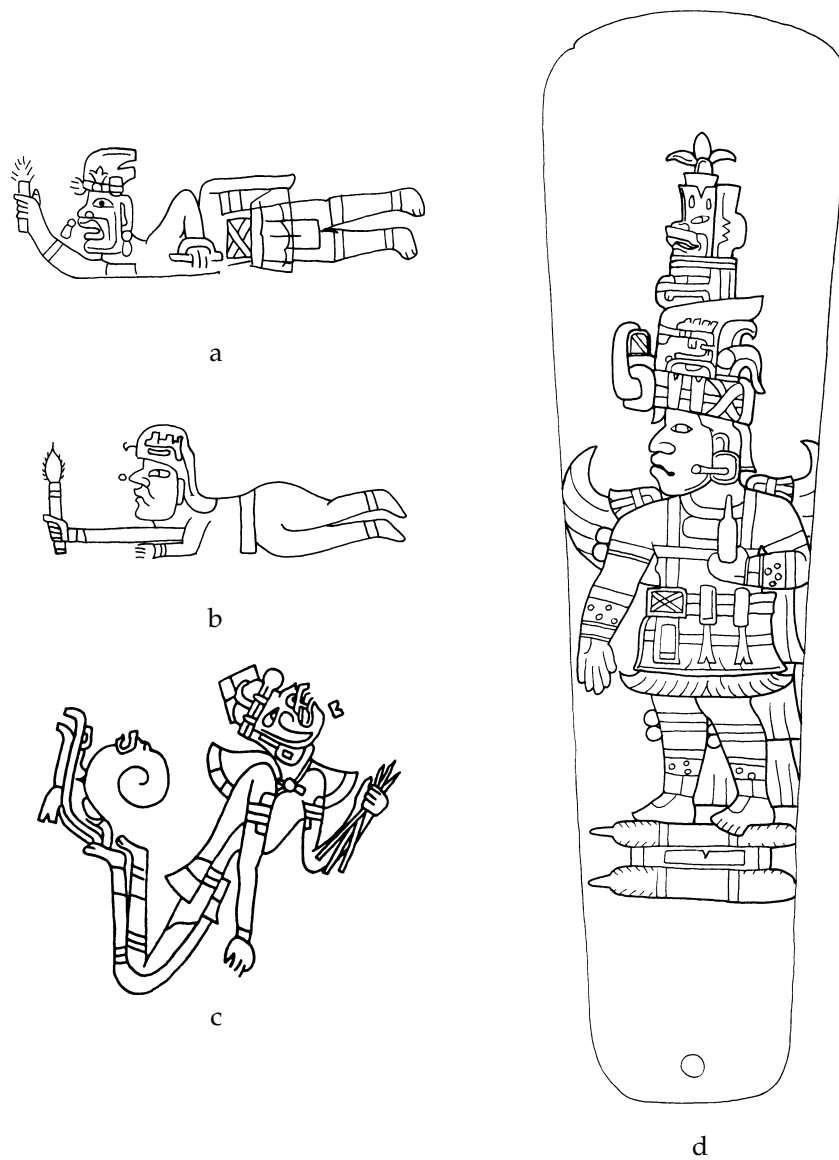


Fig. 50 Figures exhibiting the costume traits and attributes of the Río Pesquero statuette. (a) Flying figure wearing a backturned headdress, crossed-band belt, and skirt. Note the maize fetish and knuckle-duster held in its hands (after Benson and de la Fuente 1996: no. 98); (b) Flying figure with a “torch” maize ear fetish and probable quetzal headdress (after Harmer Rooke Galleries 1984: no. 9); (c) Flying Olmec Maize God with shoulder cape. Detail of the Young Lord statuette (from *The Olmec World* 1995: no. 193, fig. 2); (d) Belt celt displaying a woman with a feathered cape and tail holding a maize ear fetish. Note the pair of maize fetishes at her feet (after Benson and de la Fuente 1996: no. 118).

Venta stela, the Dumbarton Oaks skirted figure probably also represents a woman. Benson (1971: 14) calls attention to a “curious semicircle” immediately above the central belt panel. It is quite likely that this sunken area serves to delineate, albeit subtly, the lower contours of the breasts. The beautifully rendered face of the figure also exhibits feminine qualities, particularly in the rendering of the full and rounded lower portions of the cheeks, which create a crease at the side of the neck. As noted previously,

Olmec women tend to be portrayed with fleshy cheeks (see p. 87). In proportions and expression, a wooden Olmec female head in the Rautenstrauch-Joest-Museum is notably similar to the Río Pesquero statuette (Bolz 1975: pl. 23). The many costume similarities shared among the Río Pesquero statuette, the woman on the incised belt celt, and the La Venta Stela 3 figure suggest the intriguing possibility that they are the same historical individual.

According to Benson (1971), the costume worn

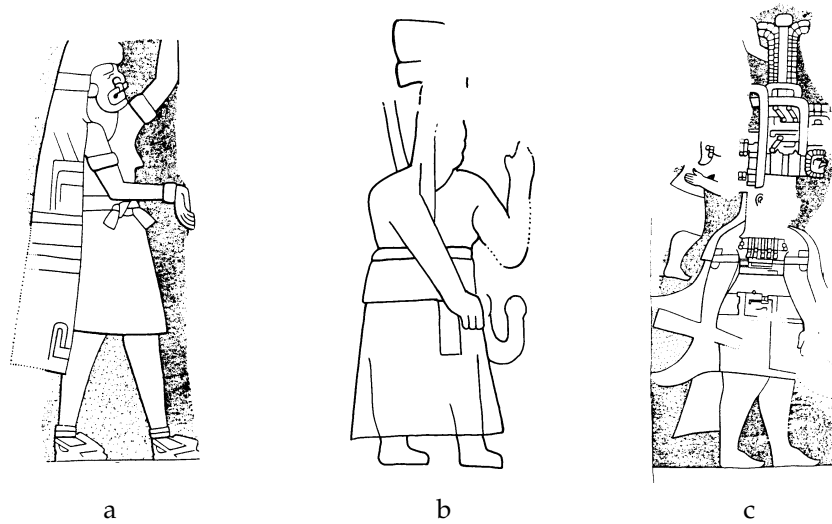


Fig. 51 Representations of women in Olmec-style monumental sculpture. (a) Skirted woman. Chalcatzingo Monument 21. Detail of drawing courtesy of James Porter; (b) Skirted woman with backturned headdress. Pijijiapan Stone 1 (after Navarrete 1974: fig. 2); (c) Skirted woman with a probable feathered cape and tail. Note the celts bound to her arms. La Venta Stela 3. Detail of drawing courtesy of James Porter.

by the Río Pesquero figure alludes to birds and by extension, celestial flight. Along with pointing to the many representations of bird heads on the headdress, cape, and body of the figure, Benson also notes that the plumed cape and tailpiece are quite like the feathered wings and tail of a bird. According to Reilly (n.d.: 192), the costume worn by the Dumbarton Oaks figure combines the themes of shamanic flight and raising the *axis mundi*. In a number of cases, the flying figures grasp the “torch” maize ear fetish (Fig. 50a–b; see also pp. 80–82). In Figure 50a, the incised figure grasps the fetish in his right hand. Chalcatzingo Monument 12, also known as “El Volador,” portrays a flying figure holding the maize fetish in his right hand; a pair of flying quetzals and a macaw reinforce the celestial significance of this scene (Fig. 23c). Figure B of Chalchuapa Monument 12 holds the fetish in his right hand while wearing a winged cape (Fig. 23a). The figure stands on a band of inverted U-signs, indicating he is in the sky (see Anderson 1978: fig. 8). Moreover, in Figure 50d, the winged woman on the incised celt stands upon a pair of maize fetishes and grasps a third in her left hand. Although the significance of the Olmec flying motif remains to be established, in many instances it concerns the carrying of the corn fetish. As a condensed symbol of the *axis mundi*, the maize ear fetish may have provided a ritual means of shamanic flight.²³

A series of nine profile bird heads are incised on the Dumbarton Oaks statuette: three on the capping trefoil device, four on the shoulder cape, and two on the skirt (Fig. 48a). All of these heads have a hooked, downcurving beak and a feathered crest, essentially the same as the so-called flame eyebrows. Similar feather crests are found on the headdress above the five-piece headband, as if they were larger forms of the crests of the profile birds. In essence, the bird costume of the seated figure may well refer to the same crested bird appearing on many parts of the figure’s body.

In Olmec iconographic studies, crested birds are widely interpreted as the harpy eagle (*Harpia harpyja*), an identification first suggested by Philip Drucker (1952: 169, 195). However, harpy eagles are by no means the only crested bird known to the Olmec. Another crested bird, of great economic as well as religious importance, was the emerald quetzal (*Pharomachrus mocinno*). It is likely that many of the long and slender feathers appearing in Olmec costume and iconography represent the plumage of this bird. In addition, explicit, full-figured depictions of quetzals occur on La Venta Monument 19, as well as Monuments 1 and 12 at Chalcatzingo, a site far distant from the native habitat of the quetzal. The better-preserved quetzal of Chalcatzingo Monument 12 seems to display a backward-leaning crest, quite like that of the crested birds on the Dumbarton Oaks

²³ For a similar concept in the Central Andes, see pp. 166–167.

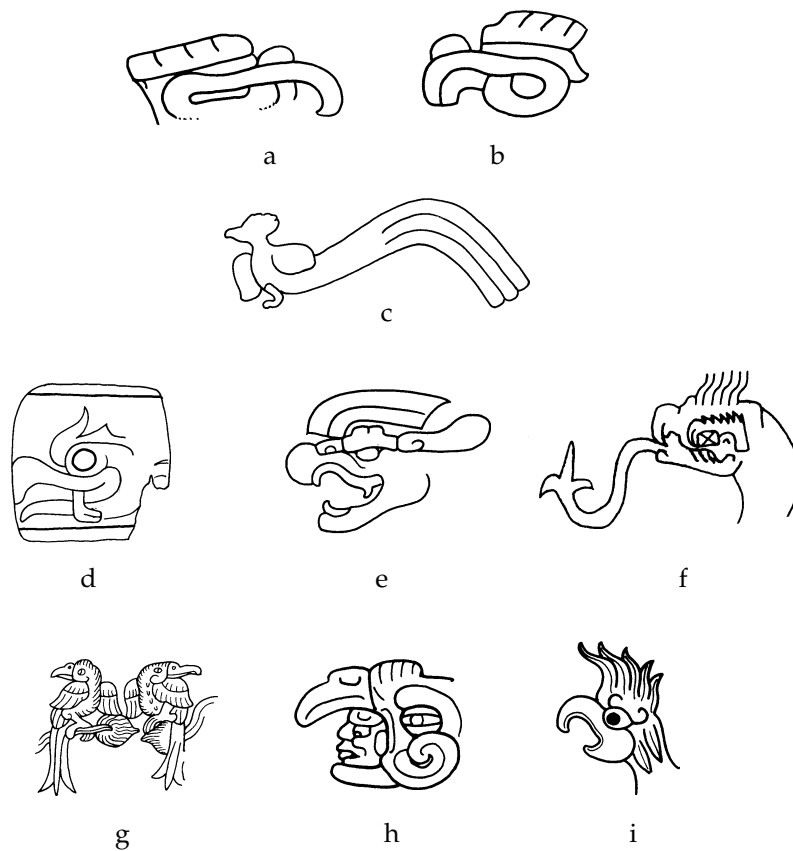


Fig. 52 Representations of quetzals in ancient Mesoamerica. (a–b) Probable quetzal heads incised on the Río Pesquero statuette (see Fig. 48a); (c) Flying quetzal. Detail of Chalcatzingo Monument 12 (after Angulo V. 1987: fig. 10.19); (d) Probable quetzal incised on jade earflares. La Venta Columnar Tomb (after Diehl 1990: no. 8); (e) Serpent with a bird beak and feather crest. La Venta Monument 19 (after Diehl 1990: no. 2); (f) Serpent with a bird beak and feather crest. Juxtlahuaca Cave, Guerrero, Painting 2 (from Joralemon 1971: fig. 248); (g) Pair of quetzals. Detail of an Early Classic Maya vessel (after Berjonneau, Deletaille, and Sonnery 1985: pl. 328); (h) Crested quetzal head forming part of the name K'inich Yax K'uk' Mo. Early Classic Copán, Margarita Structure (after Sharer n.d.); (i) Quetzal with a raptor beak (after Matos Moctezuma 1987: 117).

jadeite statuette (Fig. 52c). The flame eyebrow motif may have alluded primarily to the quetzal. For this reason, flame eyebrows commonly appear on objects of precious green jade and serpentine (e.g., *The Olmec World* 1995: nos. 78, 99, 101, 106, 117, 125, 170, 171, 193–195, 231a). A bird with prominent flame eyebrows appears on jadeite earflares from the Columnar Tomb at La Venta; the rich, emerald green color of these jades is almost identical to that of the quetzal (Fig. 52d).

Although many Olmec crested birds have curving beaks suggestive of raptorial birds, explicit Classic-period quetzals frequently appear with similar long, downcurving beaks (Fig. 52g–i). A clear Early Classic example is the quetzal appearing in the name of K'inich Yax K'uk' Mo from the Margarita Structure at Copán (Fig. 52h). With its long beak, nostril, and brow crest, this quetzal head is notably like the

profile bird heads appearing on the Río Pesquero figure (Fig. 52a–b). In addition, Seler (1902–23, 4: 564–565) notes that in Late Postclassic Central Mexico, the quetzal images tend to display a beak and claws more typical of eagles or other raptors. In short, in both Classic and Postclassic Mesoamerica, quetzals are commonly rendered much as if they were eagles, with long, curving beaks. It is also noteworthy that the quetzal has long and curving claws resembling diminutive talons (see Stuart and Stuart 1993: 201). Explicit Olmec plumed and crested serpents also appear with large, raptorlike beaks (Fig. 52e–f). Although it is conceivable that these constitute harpy eagle serpents, the quetzal is far more widely associated with feathered serpents in Mesoamerican thought. In the case of the plumed serpent on La Venta Monument 19 (Fig. 52e), the creature appears in association with two quetzal birds.

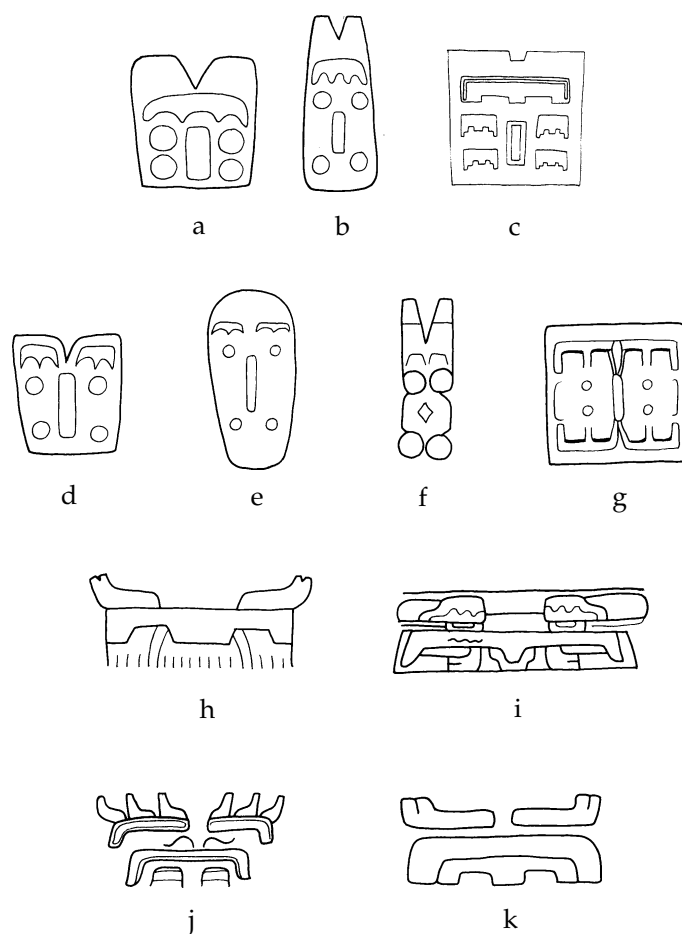


Fig. 53 The bar-and-four-dots motif topped by sky imagery. (a) Back of the Olmec Maize God masquette of the Río Pesquero statuette (see Fig. 48c); (b) Bar-and-four-dots motif topped by a scalloped sky sign (after *The Olmec World* 1995: no. 78); (c) Serpentine pavement inlaid with the bar-and-four-dots motif topped by a sky sign. La Venta (after Drucker, Heizer, and Squier 1959: fig. 29); (d) Bar-and-four-dots motif with two scalloped sky signs (after Joralemon 1976: fig. 19j); (e) Bar-and-four-dots motif with scalloped sky signs from an incised celt. La Venta (after Joralemon 1976: fig. 19m); (f) Bar-and-four-dots motif topped by inverted U-brackets (after Joralemon 1976: fig. 19l); (g) Bar-and-four-dots motif with inverted U-brackets (after Marcus 1989: fig. 8.15); (h) Avian head with a beak forming a sky sign (after Joralemon 1976: fig. 10s); (i) Avian head with a beak forming a sky sign (after Joralemon 1976: fig. 10r); (j) Frontal view of an Avian Serpent with inverted, U-shaped sky brackets in its mouth. Detail of an Early Formative ceramic vessel. Tenenexpan, Veracruz (after *The Olmec World* 1995: no. 104); (k) Avian Serpent with a scalloped sky sign in its mouth (after Navarrete 1974: fig. 22).

In Olmec iconography, the crested bird commonly appears with maize as well as jade, another verdant item of wealth more similar to the precious emerald quetzal than to the harpy eagle. Peter David Joralemon (1976: 52) notes that the Olmec crested bird, which he terms God III, or the Bird-Monster, is closely identified with maize, and is even portrayed with corn sprouting from its head. Although this is not a trait well known among eagles in Mesoamerica, quetzals and their plumage are widely identified with corn and vegetal growth. For example, whereas in Yucatec, *k'uk'* signifies "sprout," *k'uk'um* is the term for quetzal (Barrera Vásquez 1980: 420).

In terms of the Dumbarton Oaks jadeite statuette, three crested bird heads appear on the trefoil maize sprout at the top of the headdress, probably referring to precious green quetzals rather than eagles. The four profile bird heads on the cape are placed on long, curving feathers, more resembling the flexible tail feathers of quetzals than stiff eagle plumes. In the same regard, the long, pliant feathers appearing on the headdresses of the related San Martín Pajapan sculpture and La Venta Monument 44 also probably are tail plumes from the male quetzal (Fig. 49a–b). Although the sides of the Dumbarton Oaks headdress lack long plumage, it

does appear above in the area at the top of the headdress. Similarly, the backcurving headdress on La Venta Monument 77 is topped with long, parallel lines, likely also referring to quetzal plumes. As previously indicated, these sharply backcurving and cleft headdresses allude to verdant, tender growth (see pp. 96–99). Wearing a crested brow, wings, and long feathered tail, the Dumbarton Oaks jadeite figure embodies not the eagle, but the precious quetzal.

The capping headdress element of the statuette above the five-piece headband portrays the Olmec Maize God grasping a pair of shell knuckle-dusters in his hands. (For a discussion of knuckle-dusters, see pp. 80, 82–83.) Although Benson (1971: 23) interprets the face as that of the infant God IV, the sprouting trefoil maize element identifies this figure as the mature Olmec Maize God, or God II (see Joralemon 1971: 59, 62). Virginia Fields (1991) notes that the Olmec trefoil maize device is ancestral to the foliated jade Jester God widely worn by Classic Maya kings as a headband across the brow. Although the Olmec trefoil sign is sometimes used alone to crown heads (see Pl. 17), the example from the Río Pesquero statuette appears to be a more complex and expanded form of headdress, with the head of the Olmec Maize God an integral part of the object. Similarly, some Late Preclassic and Early Classic Maya forms of the foliated Jester God also appear with the face of the Maize God topped with the trefoil element (see Pl. 39; Hellmuth 1987: figs. 80–81).

On the Dumbarton Oaks figure, the face of the crowning Olmec Maize God displays not only the slanted eyes typical of this being, but also mouth brackets, a convention found with other examples of the corn deity (see Joralemon 1971: figs. 172, 183, 184; 1976: fig. 8d). The god wears the same five-part headband as the primary figure below does, save that in this instance, the four flanking vertical elements are not cleft celts, but lanceolate-shaped maize ears. Although rendered in profile, the maize god capping the headdress of the incised belt celt figure (Fig. 50d) also has four lanceolate maize cobs across the brow.

The occurrence of the Olmec Maize God with knuckle-dusters as a capping headdress element is by no means restricted to the Río Pesquero figure,

and is a relatively common device in Olmec costume. An excellent example occurs on an Olmec-style stela from Tiltepec, Chiapas, where the Olmec Maize God again appears with the trefoil maize sign sprouting from his head (see Milbrath 1979: fig. 51). The profile Olmec Maize God atop the female in figure 50d also has both the trefoil cranial element and knuckle-dusters. An Olmec-style bas-relief from Finca La Unión, Chiapas, portrays a figure wearing a sharply backcurving and cleft headdress topped with a trefoil Olmec Maize God in profile; a vertical element behind the deity head probably represents a knuckle-duster (Norman 1976: fig. 6.12; Lowe 1994: fig. 7.1). A fourth probable example occurs on another incised celt, in this case above a version of the five-part headband (see Joralemon 1971: fig. 33).

In basic design, the rear of the crowning headdress element is virtually identical to the front, with the outlines of the central cleft head, trefoil foliation, and knuckle-dusters delineated by incision. However, on this reverse side, only the back of the central cleft form contains additional incision, here marked by a version of the bar-and-four-dots motif (Fig. 53a). According to Benson (1971: 28–29), the four elements flanking the central bar allude to the four world quarters, with the bar referring to the central place. More recently, Joyce Marcus (1989: 172–173) and Frank Kent Reilly (n.d.: 227–228) also have argued that the bar-and-four-dots motif represents the cosmos and the central *axis mundi*.

Directly above the bar-and-four-dots sign, there is a horizontal element with four curving points on its underside (Fig. 53a). Although other four-point examples are known (Fig. 53b), the sign usually appears in a paired three-pronged form, resembling “E”s turned on their sides (Fig. 53c–g). The La Venta mosaic pavements are excellent examples of this motif (Fig. 53c). Save for one instance in which this form appears both above and below the bar-and-four-dots sign (Fig. 53g), it is invariably placed above the world axis motif, as if constituting a sign of the heavens. This interpretation is further corroborated by its frequent occurrence on the upper brow of heads, the corporeal region corresponding to the celestial realm (see Joralemon 1976: figs. 4d, 8b, 8d). In addition, the three-pronged version of this device also appears as the beak and maw of certain fron-

tally portrayed Olmec birds (Fig. 53h–i). In a number of instances, the lower pronged area is actually formed of inverted U-brackets (Fig. 53j–k) that represent an Olmec version of the sky band (Taube 1995). Quite frequently, these elements occur as teeth in the mouth of the Olmec Dragon, or what I have termed the Avian Serpent (*ibid.*), an Olmec personification of the sky (Fig. 53j). When fused as a single dental form, the pair of inverted U-brackets become the three-pronged device (Fig. 53k). In view of its placement above the bar-and-four-dots motif, and its relation to inverted U-brackets, birds, and the Avian Serpent, the four-pronged element is best regarded as a celestial sign supported by the *axis mundi*.

Along with the crowning, trefoil corn deity, the Dumbarton Oaks figure wears an elaborate five-piece headband across his brow (Fig. 48a). Composed of four celtiform shapes surrounding a central circular form, versions of this headband are commonly worn by the Olmec Maize God, including by the capping figure immediately above (see also Figs. 34d, 46a, c, 54c). As suggested by the headband worn by the crowning Olmec Maize God, the four vertical elements symbolize maize ears. In many instances, however, they appear not as lanceolate-shaped cobs, but as cleft celts, at times sprouting a small and pointed central ear of corn (see Fig. 46a). The four headband elements on the jade figure are somewhat unusual, and combine the cleft celt with the maize fetish torch motif. Whereas the lower portion contains the cleft celt form, the upper region is formed by a feathered maize fetish, complete with the double-merlon sign and projecting central ear of corn (Fig. 54a). The female incised on the celt in Figure 50d stands on a pair of these corn fetishes.

As a maize ear projecting out of a precious feather bundle, the corn fetish corresponds closely to the form and meaning of the statuette, which has a foliated Olmec Maize God rising out of a feathered head crest (Fig. 54b). In addition, the lower portions of the four headband elements apparently portray particular aspects and faces of the Olmec Maize God. In other words, like the statuette figure itself, the capping feathers and maize ears serve as the headdresses of the four celt heads (Fig. 54a). The conflation of celt and maize fetish iconography is

also a feature of the green Olmec Maize God stelae from La Venta (Fig. 54c). While James Porter (1996) rightly notes that these monuments are presented as great celts, the upper portions corresponding to the headdress region also contain the feather tuft and double-merlon appearing with torch corn fetishes. In the case of La Venta Monument 25/26, a trefoil maize ear stands atop the feather tuft, recalling the Olmec Maize God capping the Río Pesquero headdress (Fig. 54c).

A petaled medallion topped by a banded maize cob occupies the center of the Río Pesquero headband (Fig. 48a). Reilly (*n.d.*: 189) notes that the central medallion probably represents a mirror, and indeed, the circular petaled form is markedly similar to later mirrors of Classic Teotihuacan (see Taube 1992a). A similar Olmec petaled device encircles the niche on La Venta Altar 4 (Fig. 54d). According to Joralemon (1971: fig. 80), the four devices surrounding this ring are silk-tasseled maize cobs. However, these corn ears appear to be represented as jade and quetzal feathers in the form of celts tipped by long, flowing quetzal plumes. I recently have proposed that this La Venta niche represents the Olmec form of the Heart of Sky concept known from the later Maya (Taube 1995: 94; see Freidel, Schele, and Parker 1993: 59, 99, 103, 105, 425), here enclosing a figure wearing a bird headdress (see de la Fuente 1977a: pl. 46). Ringed with four feathered maize celts, the La Venta motif may well be the symbolic form of the Río Pesquero headband, which contains the central petaled medallion surrounded by the four celtiform and plumed ears. In this regard, it also should be noted that this device is worn on the brow—the uppermost portion of the body—a probable reference to the four quarters and center of the sky. In one profile representation of the Olmec Maize God, the figure wears a headband composed of the central medallion held by an inverted U-bracket skyband (see Fig. 43d). Also rendered in profile, the five-piece headband worn by the female on the incised celt is supplied with crossed bands, a well-known Olmec sky sign (Fig. 50d). The later three-piece Maya version of this headband also had celestial significance (Taube 1998).

Each of the four cleft celts occurring on the Río Pesquero headband is incised with a distinct face

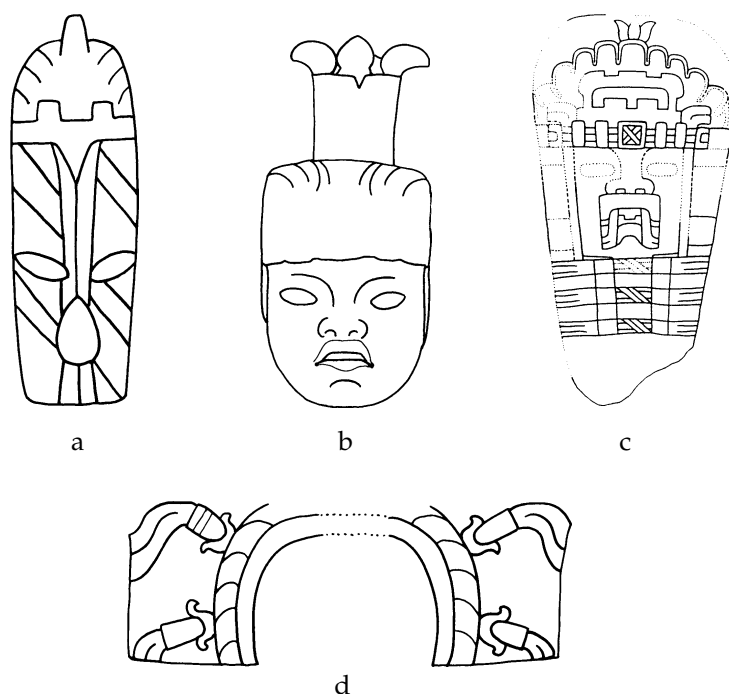


Fig. 54 Middle Formative Olmec maize iconography. (a) Conflation of a cleft celt and feathered maize ear fetish. Detail of the headband from the Río Pesquero statuette (see Fig. 48a); (b) Feather headdress of the Río Pesquero statuette topped by a maize sign (see Fig. 48a); (c) Conflation of a celt and feathered maize ear fetish. La Venta Monument 25/26. Drawing courtesy of James Porter; (d) Celtiform maize ears with corn silk rendered as quetzal plumes. La Venta Altar 4, niche.

(Fig. 55a). Benson (1971: 24) suggests that the four faces represent aspects of the same being. All have eyes slanted upward at the outer corners, an important trait of the Olmec Maize God, as can be seen in the representation of this being in the headdress (Fig. 48a). Debra George (personal communication, 1994) notes that the four faces may represent aspects of the Olmec Maize God as four phases in the growth cycle of corn. According to George, the incised elements in the region of the mouth are references to growth stages. Moving from the viewer's left to right (Fig. 55a) the first lower facial element is a circular crossed band, then a cleft celt, a lanceolate-shaped cob, and finally a curious form suggestive of root-like filaments. These four elements may correspond to the seed, the growing plant, the mature ear, and finally, the harvested and fallow plant.

Although the fourth and final element remains poorly understood, there is considerable support for the first three faces as consecutive phases in the growth and maturation of maize. In Olmec iconography, the crossed band element often appears as the central medallion of the five-piece headband, commonly with maize sprouting out of the device (Fig. 55b–c). Joralemon (1971: figs. 173, 175, 176) has con-

sidered unornamented circles placed in the identical position on the brow as representations of corn seed. The central element on the brow of the first incised face could well also represent a maize grain (Fig. 55a). In addition, the crossed-band cartouche is commonly paired with another containing a single circle or dot, an element that has been interpreted as a maize grain (Fig. 55d) (Joralemon 1971: 13, motifs 82, 91, fig. 78, legend; Bradley and Joralemon 1993: 19). Although the precise meaning of the crossed band and dot remains to be determined, the frequent pairing suggests that both are related to maize seed. Joralemon (1971: fig. 172) cites and illustrates one example in which the crossed-band and dot brow pieces are conflated into a single form.

The cleft celt form of the second face is a well-known convention for plant growth in Olmec iconography (see pp. 25–29.). The lanceolate maize cob in the mouth region of the third face, with its rounded base and pointed top, closely resembles the four-maize-ear headband worn by the crowning Olmec Maize God in the headdress, as well as the cob serving as the central portion of the trefoil maize foliation emerging from his cleft head (see Fig. 48a). The diagonal banding on the third face is commonly

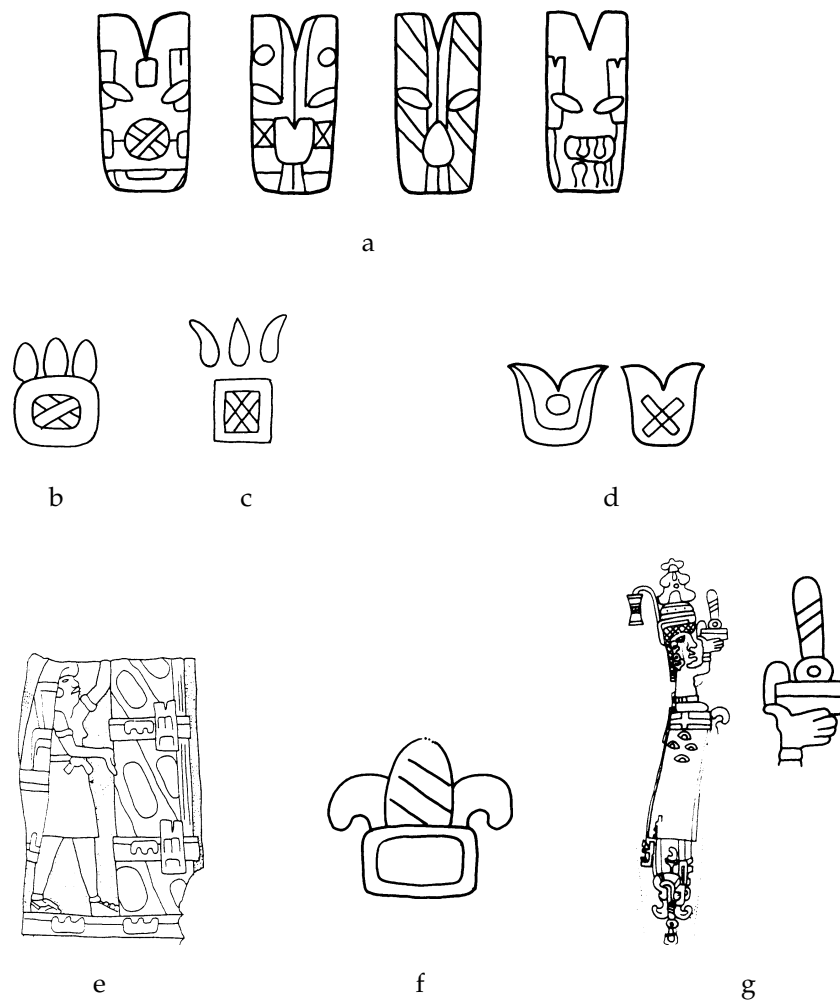


Fig. 55 Headband of the Río Pesquero figure and related maize iconography. (a) The four faces of the Río Pesquero headband (see Figs. 48a, 66c); (b) Crossed bands topped with a trefoil maize motif. Detail of an Olmec Maize God headband from Teopantecuanitlán (after Martínez Donjuán 1985: fig. 10); (c) Crossed bands topped by a trefoil maize motif (after Joralemon 1976: fig. 171); (d) Crossed bands paired with a maize seed sign (after Joralemon 1976: fig. 17c); (e) Woman standing next to a World Tree with a diagonal band motif. Chalcatzingo Monument 14. Detail of drawing courtesy of James Porter; (f) Maize ear marked with diagonal bands. Late Formative Zapotec (after Scott 1978: fig. 8); (g) Late Formative Zapotec figure holding a banded maize ear, with a detail of the maize ear at right (from Pahl 1975: fig. 2).

found among Olmec representations of mature maize ears, including the example rising above the central petaled medallion here. Reilly (n.d.: 189) has compared this diagonal banding to the World Tree on Chalcatzingo Monument 21, a form that I consider to be a giant vertical maize cob, thematically similar to massive portrayals of the Olmec Maize God on La Venta stelae (Taube 1996) (figs. 19d, 21c, 55e). Among the Late Formative Zapotec, maize cobs are also commonly marked with diagonal bands (Figs. 55f–g).

If the first three faces on the Río Pesquero headband represent particular aspects of the Olmec Maize God and the growth cycle of corn, the first face represents God IV in the Joralemon (1971) system of deity classification. This is an infant being

that I regard as the deified aspect of maize seed (see Pl. 14). Among the more striking traits of this deity are crossed bands, which commonly occur on its headband, pectoral, and belt. The second face may well be God VI, which probably represents tender growing corn (see Pl. 15); the dots appearing on the sides of this figure's cranium are frequently found with this being. Clearly the third face, with the infixed cob, refers to mature corn, or God II, who commonly displays an ear of corn projecting from the top of his head. Although the fourth head still cannot be readily compared to a specific Olmec being, the Río Pesquero figure wears costume elements of Gods II, IV, and VI, the five-piece headband being a clear reference to God II.

The sides of the Río Pesquero figure's headband

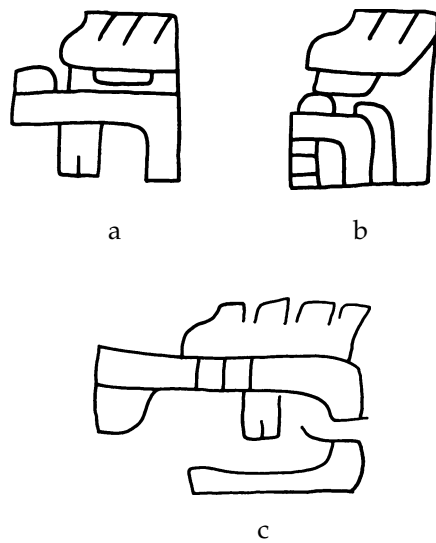


Fig. 56 Comparison of Avian Serpent heads on the Río Pesquero statuette and the celtiform belt pendant. (a) Avian Serpent on the side of the headband of the statuette (see Fig. 48b); (b) Avian Serpent on the belt of the statuette (see Fig. 48a); (c) Avian Serpent on the headdress of the woman on the Río Pesquero statuette in Figure 50d.

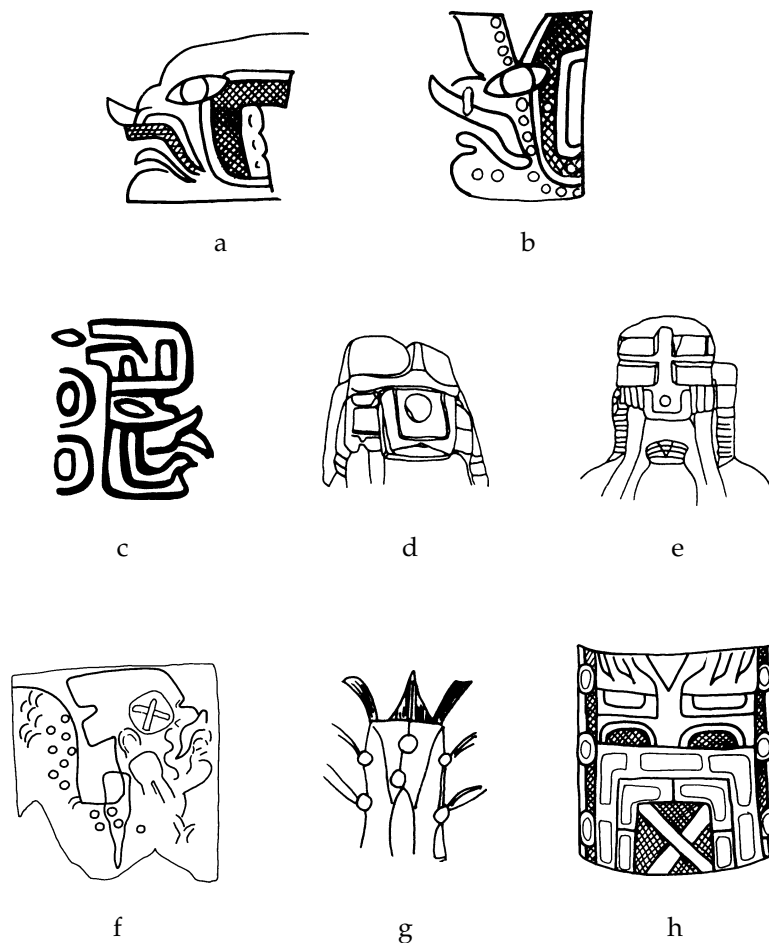


Fig. 57 The foliated aspect of the Olmec Maize God and its dot motif. (a) Head of a foliated corn god with dot elements at the back of its head (after Coe 1965a: no. 21); (b) Foliated corn deity with dots on the side of its face and chin. Detail of a ceramic vessel from Tlapacoya (after Feuchtwanger 1989: fig. 155); (c) Foliated corn deity with dots behind its head (after Joralemon 1971: fig. 135); (d) Bracketed maize corn seed motif on the back of the head of a stone sculpture. Coatzacoalcos Monument 2 (from Bradley and Joralemon 1992: illus. 1a); (e) Bracketed maize motif at the back of a figure wearing a headdress of a foliated corn god. La Venta Monument 77. For a view of the monument, see Figure 49c (from Bradley and Joralemon 1992: illus. 1d); (f) Probable form of the foliated corn god with dots on an undulating body. San Lorenzo Monument 30 (after Coe and Diehl 1980, 1: fig. 461); (g) Early Formative maize ear with probable grains rendered as dots. Detail of a vessel from San José Mogote, Oaxaca (after Flannery and Marcus 1994: fig. 12.39); (h) Cleft-headed figure with dots at the sides of its face. Early Formative vessel from Tlapacoya (after Niederberger 1987: fig. 457).

are marked with two inwardly facing Avian Serpent heads, which also appear on the belt of the figure (Figs. 48b, 56a–b). In contrast to the crested bird heads, the snouts are not hooked and beaklike, but straight, much like a snake maw. This same entity also appears on the headdress of the incised female figure on the celt in Figure 50d (See also Fig. 56c). As a sky-dwelling creature, the Avian Serpent qualifies the celestial significance of the five-piece headband.

A striking trait of the Río Pesquero statuette is the sharply backcurved headdress, a form also shared with the fragmentary jadeite figure in the Dumbarton Oaks collections in (see Pl. 15). For the broken figure, however, the backcurved element is an integral part of the skull rather than a headdress, there is considerable ambiguity in this regard concerning the seated Río Pesquero figure; in contrast to the San Martín Pajapan sculpture and La Venta Monuments 44 and 77, there is no clear indication that this rear, backcurved portion is actually separate from the cranium. Quite probably, this relates to a common ambiguity in ancient Mesoamerican representations of god impersonation. When humans don a deity costume, they ritually become the living embodiment of the supernatural being (Stone 1991). Quite probably, the backcurved, crossed-cleft headdress refers to the second incised face in the five-part headband, the personification of tender, young growing maize designated as God VI in the Joralemon (1971) system. As previously noted, the San Martín Pajapan sculpture, La Venta Monuments, 44 and 77, and the Río Pesquero statuette have long quetzal plumes atop the headdress, quite possibly referring to leaves and the young, green ear of corn. A similarly striated headdress appears in one representation of the Olmec Maize God on a celt (Fig. 43 e), although here a central mature cob holds the headdress erect rather than curving down toward the back. On this celt, the striated and cleft headdress clearly refers to the green maize husk surrounding the ear.

In many representations of the cleft-headed God VI, the deity displays a series of dots on its face or the back of its neck (Fig. 57a–c). A pair of such dots appears on the second incised face of the five-part headband, the probable personification of green, growing corn (Fig. 55a). These dots appear to be

closely related to the backcurved cleft cranium or headdress, and also occur on the serpentine body of a probable Early Formative version of the foliated corn god from San Lorenzo Monument 30 (Fig. 57f). In addition, a similar series of dots are on the side of the La Venta Monument 77 headdress (Fig. 49c). In one profile representation of the Olmec Maize God as young, tender corn, these circular devices are within vertical U-shaped brackets (Fig. 57c). Versions of this same motif also appear in the same position on the neck region of the Río Pesquero figure, here as two rows flanking three lenticular forms (Fig. 48c). Although the precise meaning of these central forms remains unknown, they do resemble certain Olmec maize ears, which when emerging from a V-shaped cleft are frequently lenticular in form. This convention also appears on the central skirt panel of the Río Pesquero figure (Fig. 48a), as well as on some La Venta celts (Drucker 1952: fig. 47b–c). In addition, one serpentine figure has four such elements on the brow, as if constituting schematic forms of the four maize celts appearing in the five-piece headband (Fig. 45b). These devices are also found on the maize basket carried by the infant form of the Olmec Maize God, possibly as symbols of harvested corn (see Fig. 41b).

The dots associated with the backturning cleft cranium and headdress are also of somewhat ambiguous meaning, and could well represent rain, stars, or maize seed. Although this simple device could well have a range of associative meanings, it appears to represent maize grain. Douglas Bradley and Peter David Joralemon (1993: 21) note that both Coatzacoalcos Monument 2 and La Venta Monument 77 display the “Dot in Bracket” sign for maize grain at the back of the head, in the same position as the incision appearing on the neck of the Río Pesquero figure (Figs. 57d–e). Although oriented on their sides, it is likely that the U-brackets and circles on the Río Pesquero sculpture and the profile depiction of the Olmec Maize God are forms of the same sign (Figs. 48c, 57c). A series of dots also appears on a pair of maize ears incised on a bowl from Early Formative San José Mogote, Oaxaca. Along with the capping trefoil maize sign, diagonal banding, and a probable outline of a lanceolate-shaped cob near the base, one of the maize ears also appears to have sprouts emerging from the four seed dots on the sides (Fig. 57g).

An Early Formative vessel from Tlapacoya depicts a cleft-headed figure with dots similarly positioned at the side of the head, quite probably also references to maize seed (Fig. 57h).

Along with the sharply backcurving headdress, the Dumbarton Oaks figure displays other costume traits of the infant God IV. Benson (1971: 32) compares the earpieces and crossed-band belt worn by the Río Pesquero figure to the God IV infant held in the lap of the Las Limas Figure. It is quite likely that the Río Pesquero earpieces are a version of the wavy, folded earpieces commonly found as part of God IV's costumes (e.g., Figs. 40a–b, 49c). However, in this instance, each of the earpieces is marked by a dot flanked by a pair of cleft celts, probably referring to seed and growing maize. The pair of suspenders running down the shoulders to the skirt appear to be marked with profile bird heads facing upward, with the lower beaks oriented toward the central axis of the figure. The crossed-band belt piece is of the conventional type found among infant God IVs and also appears on the incised female of Figure 50d. The crossed-band motif serves as an Olmec sign of the heavens, and as such, commonly appears in the uppermost portion of scenes (Reilly n.d.: 125; Taube 1995: fig. 7b–d). The central belt element is flanked by yet another celestial reference, a pair of profile representations of the Avian Serpent (Fig. 56b). From these two profile faces, two bird heads descend onto the two flanking pleats of the skirt. The broader, central pleat contains the image of a celtiform maize ear marked with the double-merlon sign for green. The pair of bands below this device also appears near the base of the second, and probably third incised face of the four-piece headband (Fig. 55a).

A concentric series of five scalloped lines marks the back of the winglike feathered shoulder cape (Fig. 48c). Benson (1971: 13) notes that this device serves as an Olmec convention for feathers, and is often found on Early Formative bird effigy vessels (e.g., Feuchtwanger 1989: pl. 85). The scalloped-line motif is also found with an Early Formative serpentine Olmec Maize God on San Lorenzo Monument 30, perhaps indicating feathers or scales (Fig. 57f). With the points of the scalloped lines oriented upward, as in the case of the jade figure, the motif can also represent water and waves. Thus, a number of Early

Formative cylinder seals have scalloped waves below sky signs and falling rain (Taube 1995: fig. 5a–c). If the feathered cape does indeed represent verdant quetzal plumes, the scalloped lines could well be an allusion to water as feathers.

A tail element composed of five long feathers hangs below the plumed shoulder cape of the Río Pesquero figure (Fig. 48c). The use of a feathered tail element to refer to birds occurs also in Early Classic Maya iconography, where back mirror and pendant feather assemblages commonly represent bird tails (Hellmuth 1987: figs. 491–497). The eight elements incised on the tail feathers appear to represent the transformation of celts to maize. Thus the tail contains three simple celts, two foliated cleft examples, and finally, three ears of banded maize, quite similar to the four celtiform ears appearing around the petaled niche of La Venta Altar 4 (Fig. 54d). The three simple celts flare slightly outward at their bits, recalling jade celts attributed to El Manatí (González Calderón 1991: 81, pls. 273, 315). The two cleft celts are each supplied with a long undulating line, quite possibly an indication of roots. This rare motif also appears under the eyes of the fourth face in the five-part headband (Fig. 55a). The placement of celt iconography on the rear of the figure recalls later Classic Maya costume, in which jadeite belt celts are commonly suspended from the small of the back (e.g., Tikal Stelae 1, 2, 3, 5, 8).

While visiting the Museo Municipal de Santiago Tuxtla in 1995, Christopher Moser and I noticed a monument displaying a combination of celts and maize like that on the feathered tailpiece of the Río Pesquero figure (Fig. 58a). The stone disk portrays a figure with the mouth of the Olmec Rain God holding the maize fetish and a shell knuckle-duster cloud device in its hands (see pp. 79–85). Two tasseled corn cobs and a celt sit among curving bands above the face. The forms of both the outflaring celt and the maize ears in U-shaped bracts are notably similar to those on the Río Pesquero tailpiece (see Fig. 48c).

The bracelets and anklets worn by the Río Pesquero figure are of almost identical design, each containing a pair of twisted cords flanked by a series of parallel curving lines (Fig. 48a–b). Whereas the upper side is marked with the double-merlon

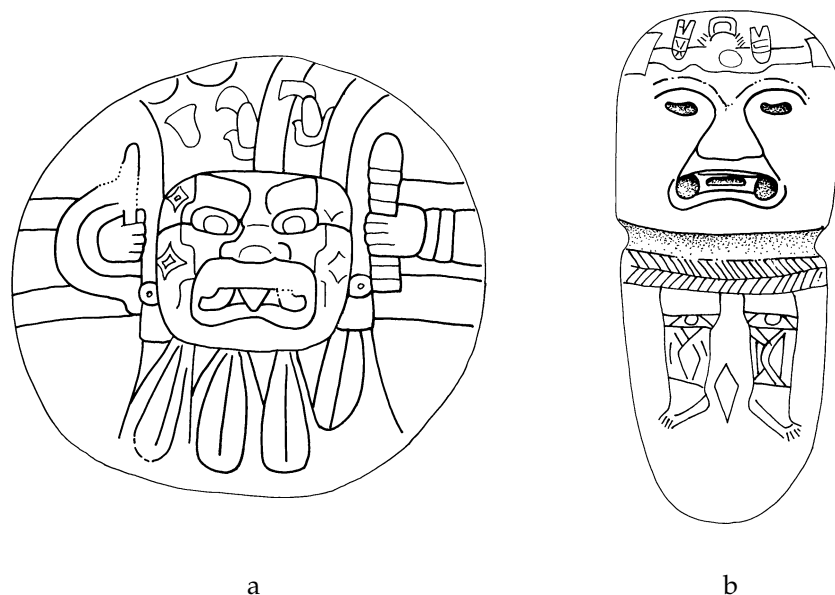


Fig. 58 Stone sculpture displaying iconography pertaining to the Río Pesquero statuette. (a) Disk with celts and maize ears above central face, drawn by author from item on display in the Museo Municipal de Santiago Tuxtla, Veracruz. (b) Olmec-style stone axe attributed to the Etzatlán region of Jalisco (after Ochoa Salas 1976: figs. 1 and 2).

sign for green, the lower portion is edged with short parallel lines suggestive of feathers. Bracelets and anklets with the twisted-chord motif are quite rare in Formative Olmec art. A similar design occurs on a probable arm from the fragmentary monument designated as Chiapa de Corzo Stela 1 (Lee 1969: fig. 59). The same form of anklet appears on a carved and incised Olmec-style axe attributed to the region of Etzatlán, Jalisco, by Lorenzo Ochoa Salas (1976). This axe shares another trait with the Río Pesquero statuette—a simplified form of the four-celt headband (Fig. 58b). Although possessing only two headband celts, both display incised motifs. In addition, a circle surmounted by a probable maize ear occupies the center of the headband.

The bracelets of the Río Pesquero figure partly cover a pair of cleft celts, which also appear on the ankles of the figure (Fig. 48a–b). The female incised on the celt in Figure 50d also has celts protruding from her anklets and possibly wristlets as well. A pair of cleft celts also appears atop the feet of the large serpentine statuette currently designated as the Young Lord (*The Olmec World* 1995: 280). As in the case of similar sets of four celts placed on the body, these elements probably allude to the four world quarters, thereby denoting the body as the pivotal world axis (see Pl. 10). Although the examples from the Río Pesquero figure appear much like body

markings, the Olmec did bind actual celts to their bodies. One example of this is the female figure from La Venta Stela 3, who wears a pair of celts tied to her upper arms (Fig. 51c).

In addition to sharing costume traits with the San Martín Pajapan sculpture and La Venta Monuments 44, 77, and Stela 3, the Río Pesquero statuette is especially similar to the female on the incised celt (Fig. 50d). Both the celt figure and the statuette may well represent the same individual, whether she be a supernatural or, more likely, a historical personage. Rather than displaying the snarling were-jaguar face of the Olmec Maize God, both examples have entirely human features, and it is likely that they are portrayed as living, human personifications of maize. Female gender is by no means inconsistent with Mesoamerican maize symbolism. Among the Classic Maya, the Tonsured Maize God frequently displays female attributes, at times even merging with the female moon goddess (Taube 1985: 178; 1992b: 67–68). However, it is possible that the richly dressed Río Pesquero figure embodies yet another form of wealth and exchange. A number of researchers have suggested that the Olmec exchange of brides may have constituted an important means of securing alliances with distant regions (Flannery 1968: 105–106; Cyphers Guillén 1984; Earle 1990). Following this line of reasoning, women cementing

such alliances could be considered the ultimate source of the precious stones, plumage, and other exotic rare goods derived from distant lands.

Couched in the cosmic terms of the world directions and center, the Río Pesquero statuette is a complex but also very orderly statement pertaining to interrelated forms of verdant wealth — jade, quetzal plumes, and maize. In addition to being carved from a large piece of jadeite, the statuette displays a number of jade costume elements; the capping Olmec Maize God mask, celt backpieces, and four cleft celts on the headdress and limbs. The four-celt headband is also conflated with feathered maize fetishes, which rise much like feathered headdresses above the cleft celts. The backturning cranial element, the winged cape, and the long tail feathers are probably quetzal tail plumes, and it is likely that the profile avian

heads are representations of the same bird. With the brow crests, feathered wings, and long tail feathers, the statuette seems to be dressed as the esteemed quetzal. However, the rich allusions to jade and quetzal plumage serve to reiterate the underlying theme of corn. Thus the four celt and feather images in the headband are actually maize fetishes that above appear as simple maize ears in the corresponding headband of the Olmec Maize God mask. The four different faces on the principal headband allude to particular aspects of the Olmec Maize God. Attributes of three of these beings, Gods II, IV, and IV of the Joralemon (1971) system of deity classification, are represented in the complex costume of the principal figure, a woman embodying Olmec concepts of wealth and agricultural fertility.



Plate 19

HUMMINGBIRD BLOODLETTER

Plate 19
Middle Formative
Jadeite. L. 6.6 cm
B-25

History: Purchased by Robert Bliss from Earl Stendahl, 1954

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1960–62, Dumbarton Oaks, 1963–

Bibliography: Bliss 1957: no. 7; Benson and Coe 1963: no. 35; González Calderón 1991: pl. 466

Fashioned from olive-green jade, this pleasantly stylized hummingbird almost surely served as a bloodletting instrument. Although no explicit representation of penitential bloodletting is known in Olmec art, there is considerable archaeological evidence for bloodletting in Formative Mesoamerica. Among the jadeite bloodletters excavated at La Venta, one is in the form of a stingray spine, the bloodletting instrument *par excellence* in ancient Mesoamerica. Jadeite, obsidian, and actual stingray spine bloodletters are known from the highland site of Chalcatzingo, Morelos (Fash 1987: 86–87; C. Thomson 1987: 302; Grove 1987c: 291). Two of the obsidian bloodletters

were serrated to imitate stingray spines (Grove 1987c: 291). During the Middle Formative period at San José Mogote, Oaxaca, real stingray spines and serrated obsidian imitations were used in bloodletting rites (Marcus and Flannery 1994: 62). Although the jadeite bloodletters, including the present example, tend not to have very sharp points, they may have been used after an initial cut was made from obsidian or another sharp material. It is also conceivable, however, that some jade bloodletters may have been precious but non-functional votive copies of real lancets used in bloodletting.

Hummingbirds are an important Olmec blood-



19a, alternate view

letting motif, with the long beak serving as the piercing instrument. Along with the other hummingbird bloodletter in the Dumbarton Oaks collections (see Pl. 20), additional examples also are known. A virtually identical bloodletter of similar jade, complete with the simple wings and boxlike body, was collected in the sixteenth century, quite probably as an Aztec heirloom (Roemer- und Pelizaeus Museum 1986: pl. 342). Another hummingbird bloodletter was discovered in a cache of Olmec-style jades from Chacsinkin, Yucatan (Andrews 1986: fig. 9b). As in the case of the Dumbarton Oaks example and the Aztec heirloom, the Chacsinkin bloodletter was drilled for suspension. An Olmec hummingbird bloodletter was also found at Edzna, another Classic site of the northern Maya lowlands (see Schmidt, de la Garza, and Nalda 1998: no. 238). For the Dumbarton Oaks hummingbird, the suspension hole doubles as the eyes of the bird. Jadeite perforators may often have been worn by the Olmec elite; Monument 6 of Laguna de los Cerros portrays a figure wearing a pair of perforators as pendants on his chest (de la Fuente 1977a: illus. 76).

The identification of hummingbirds with sacrifice and bloodletting is relatively common in Mesoamerica. Despite their diminutive size, hummingbirds can be fiercely territorial, and they often attack creatures many times their size. Thus it is entirely appropriate that the bellicose patron god of the Aztec was Huitzilopochtli, or “hummingbird on the left.” According to Aztec belief, the souls of slain

warriors would return as hummingbirds and other winged creatures to drink the nectar of flowers (Sahagún 1950–82, 3: 49). Unlike butterflies, however, hummingbirds do not simply sip flowers but also stab them with their long, pointed beaks. In Classic Maya art, the hummingbird generally appears with a flower transfixed through its long beak (Fig. 59a–b). The same convention also may be seen with mosquitos, suggesting that these aggressive, buzzing, and bloodsucking creatures were considered the insect versions of hummingbirds (Fig. 59c). Seler (1902–23, 4: 576) calls attention to the widespread identification of hummingbirds with piercing and blood sacrifice in Mesoamerican thought. In a register from the Lower Temple of the Jaguar at Chichen Itza, hummingbirds pierce the chests of men emerging from flowers, as if the act of gathering nectar was tantamount to heart sacrifice (Fig. 59d). Hummingbirds were also identified with blood and sacrifice in Late Postclassic Central Mexico. In the Codex Borgia, page 44, Quetzalcoatl, in a hummingbird costume, stands below a flowering shower of blood. Directly above, four similarly winged figures attack a bat (Fig. 59e). Three of the four winged creatures have antennae, suggesting that they are mosquitos. In Aztec iconography, hummingbirds frequently sip nectar from flowers blossoming from bone perforators (Fig. 59f). The bone lancet and flower motif denote the blood here as sweet nectar gathered by hummingbirds.

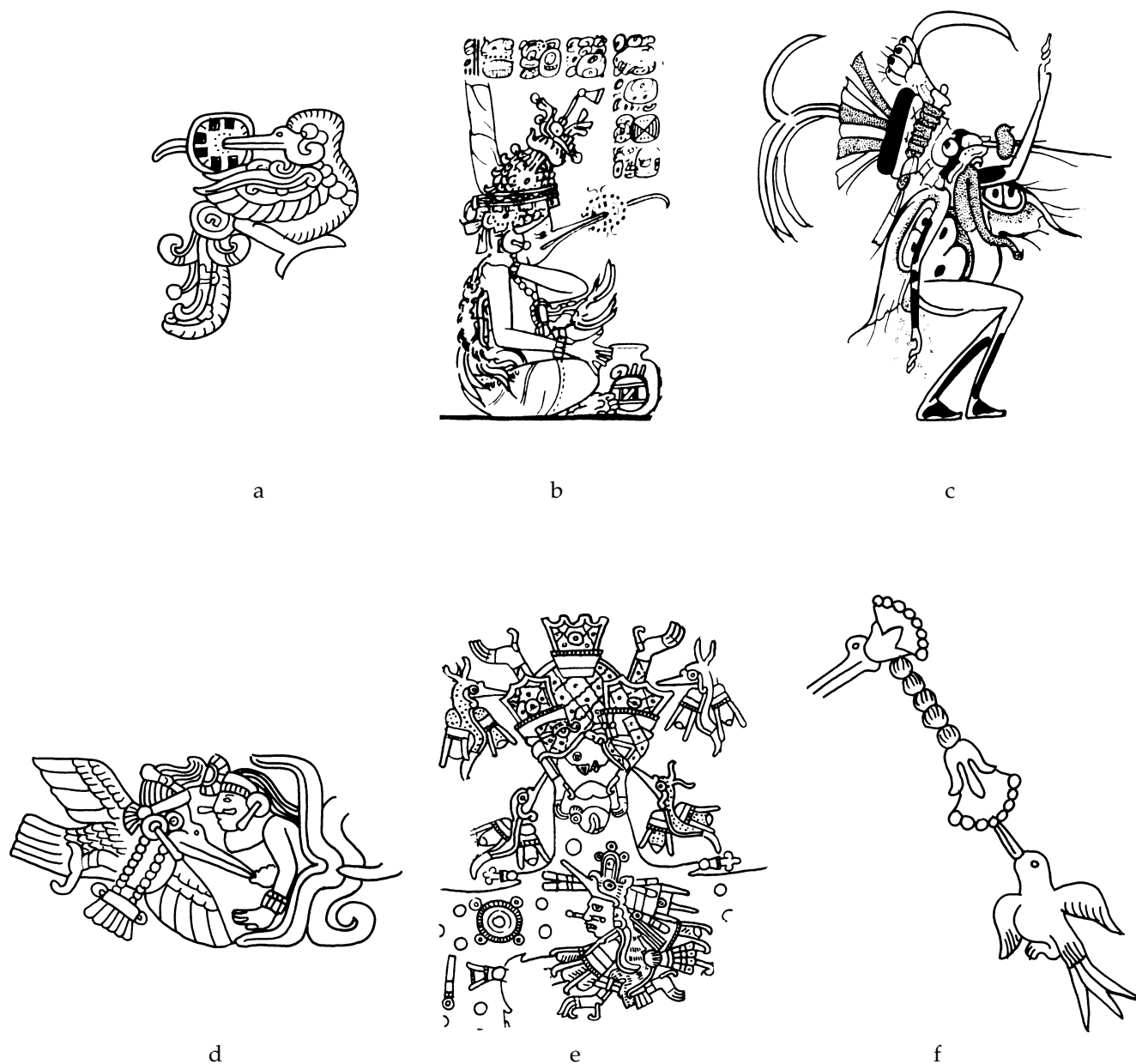


Fig. 59 Representations of hummingbirds and mosquitos in ancient Mesoamerica. (a) Hummingbird piercing a flower. Detail of an Early Classic Maya vase (after Berjonneau, Deletaille, and Sonnery 1985: pl. 329); (b) Hummingbird with a flower pierced by its beak. Detail of a Late Classic Maya vase from Tikal Burial 196 (from Culbert 1993: fig. 84); (c) Mosquito with a flower pierced by its proboscis. Detail of a Late Classic Maya vase (from Taube 1993: 58); (d) Hummingbird piercing the heart of a man emerging from a flower. Chichen Itza Lower Temple of the Jaguar (after Maudslay 1889–1902, 3: pl. 46); (e) Hummingbird in a stream of falling blood with a bat and mosquitos. Codex Borgia, page 44 (from Danzel 1923: pl. 65); (f) Hummingbird sucking a flower hanging from a bone bloodletter. Codex Magliabechiano, page 61.



Plate 20

HUMMINGBIRD BLOODLETTER

Plate 20
Middle Formative
Jadeite. L. 17.3 cm
B-24

History: Reportedly from Guerrero; purchased by Robert Bliss from Earl Stendahl, 1954

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1960–62; Dumbarton Oaks, 1963–; *Olmec Art of Ancient Mexico*, National Gallery of Art, 1996

Bibliography: Bliss 1957: no. 6; Benson and Coe 1963: no. 35; Coe 1965b: fig. 32; González Calderón 1991: pl. 470; Benson and de la Fuente 1996: no. 106

As does the other bloodletter in the Dumbarton Oaks collection (Pl. 19), this example portrays a hummingbird, with the lancet tip denoting the long, sharp beak. Rather than being carved in the round, however, the bird is shallowly incised on the surface, with deep carving reserved for only the eye orbits. Along with the base, the handle region, corresponding to the belly of the bird, is flattened, allowing the bloodletter to be positioned vertically with the point up or horizontally on its side. Despite the fineness of the jade and elegant form of the perforator, the incised design is rather sketchy and crude. Much of the feathering is delineated by short, regularly spaced parallel lines, on the head, back, belly, wing, and tail feathers of the bird. Each of the wings has three feathers, and four appear on the tail. The bird's beak is delineated by a pair of incised lines that extend from near the eye region to the tip of the lancet. Two curved lines near the eyes indicate nostrils.

With its cylindrical handle and central lancet, this perforator is of the Olmec "icepick" type. Examples of icepick perforators have been excavated from Formative contexts at La Venta (Drucker 1952: pl. 53) and Seibal (Willey 1978: 97, figs. 104–105) as well as from the massive Classic jadeite cache from Cerro de las Mesas (Drucker 1955: pl. 50a–b). Along with two Olmec heirloom pieces, the Cerro de las Mesas cache also contained simple cylindrical perforators (Drucker 1955: pls. 49a–c, 50c–d). As in the case of similar jadeite examples known for Chalcatzingo (Thomson 1987: fig. 17.12), these awls were probably often set in cylindrical handles of wood or some other material, thereby making an icepick-form perforator. Moreover, it is likely that the jadeite icepick form, represented by the Dumbarton Oaks example, is simply a copy of the more common, composite tool. At Chalcatzingo, there is a probable handle from such a perforator.

The cylindrical ceramic object has a hole in its tapering end, evidently to receive the stone lancet (Grove 1987c: fig. 16.21d). At La Venta, there is a handle of similar form, in this case fashioned from serpentine (Drucker, Heizer, and Squier 1959: fig. 53e). Along with the central pit on the narrower end, the serpentine handle is also flattened on one side, recalling the Dumbarton Oaks example.

In addition to the actual objects, representations of icepick perforators are relatively common in Olmec iconography. For example, Laguna de los Cerros Monument 6 represents two such perforators worn as pendants (see p. 123). In addition, a downwardly pointed icepick bloodletter is carved atop the foliated Olmec Maize God on San Lorenzo Monument 30 (Fig. 57f). The icepick perforator form closely resembles the Olmec feathered maize ear fetishes, with the point representing the protruding ear of corn. In fact, the maize fetish has been previously identified as a bloodletter (Grove 1987d). In outline, the feathered maize fetishes in figure 50d at the base of the late Olmec scene closely resemble icepick perforators. Although the item held in the hand of the woman has been identified as a perforator (Benson and de la Fuente 1996: 269), it more probably represents a maize fetish. A jadeite sculpture from the vicinity of Ocozocoautla, Chiapas, portrays a figure holding a large maize fe-

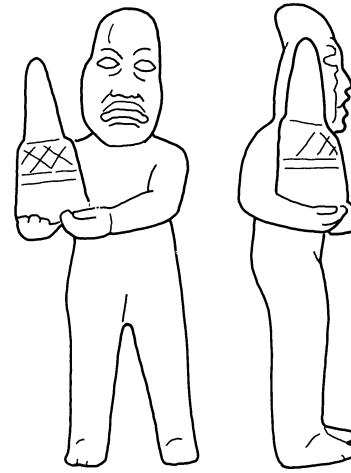


Fig. 60 Figure holding a maize ear fetish resembling an “icepick” form bloodletter. Jade statuette from Ocozocoautla, Chiapas (after Navarrete 1971: pl. 2). Drawing by Elizabeth Wahle.

tish with a central pointed ear of corn projecting out of feathers marked by cross hatching (Fig. 60). The form of this object also is very similar to the icepick perforator. In Mesoamerican thought, blood is widely identified with maize, much as if it constituted the sacrificial sustenance of the gods and ancestors (Taube 1985: 178–180). By their form, Olmec icepick perforators may allude to the symbolism of maize as well as blood.

JADEITE CELT

Plate 21
Middle Formative
Jadeite. L. 22.6 cm
B-30

History: Purchased by Robert Bliss from Earl Stendahl, 1954

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1956–62; Dumbarton Oaks, 1963

Bibliography: Benson and Coe 1963: no. 38

One of the hallmarks of the Middle Formative Olmec are polished, petaloid greenstone celts fashioned of serpentine and jade. This jadeite example is of a particularly massive and impressive size, weighing almost 1.7 kilograms. Except for its especially high polish, this precious celt was made in essentially the

same manner as everyday Olmec celts fashioned from basalt and other stones (e.g., Coe and Diehl 1980, 1: 238–239). The jadeite of this celt was first roughly fashioned by bifacial flaking. Some of the marks from these powerful blows can still be discerned on the rounded edges and bladed bit end.



Plate 21

The stone was then shaped and smoothed by pecking, a considerable amount of which can still be discerned as small surface dings. The final and probably most time-consuming step was the grinding and polishing, which created the smooth and gleaming surface visible to this day.

An important trait of both the Mesoamerican Formative period and the Neolithic equivalent in Europe is the widespread existence of ground stone tools, including celts. As Grahame Clark notes in regard to Europe, “archaeologists have been surely right to see in the polished stone axe or adze blade a

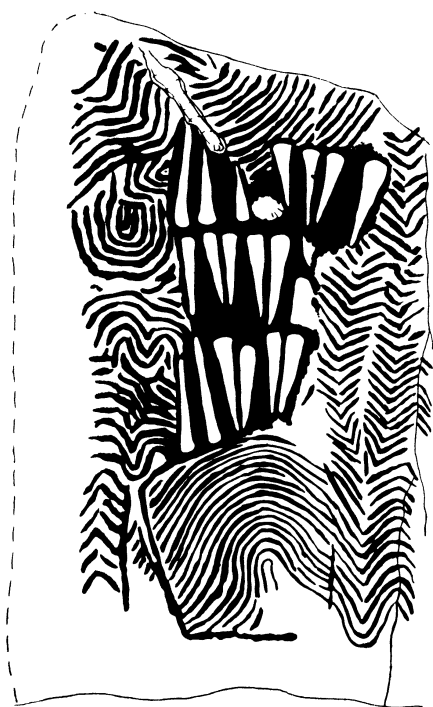


Fig. 61 Outlines of Neolithic celts carved on a megalithic passage grave at Gavrinis, France (from Twohig 1981: fig. 113)

very symbol of neolithic culture” (1965: 1–2). In Neolithic Europe, ground-stone axes were a necessary tool for clearing forest growth, an essential step in the preparation of fields for food production (ibid.: 2). In the tropical lowland jungle of the Olmec, stone axes must also have played such a critical role as well as being condensed symbols of agricultural fertility and farming. In both regions, polished stone axes were clearly more than just efficient tools. Precious jadeite celts are characteristic of Neolithic Europe as well as Formative Mesoamerica (ibid.; Coles 1974). Like the jadeite Olmec examples, European celts are finely fashioned and polished, far more than would be necessary for wood cutting. Moreover, as Clark (1986: 45) notes, polished Neolithic celts were frequently unhafted, as evidenced by their representation in a megalithic passage grave at Gavrinis, France (Fig. 61). Similarly, the Olmec focus was not on the hafted axe, but rather the naked jade celt, which is frequently represented in both portable and monumental art. The closely placed blades in Olmec celt caches indicate that they were deposited without hafted handles. In addition, Olmec jadeite axes

are often elaborately carved and incised—ornamentation that would be covered or obscured by hafting.

In a recent work devoted to the cross-cultural study of heirlooms, Katina Lillios (1998: 237) notes that “the adzes and axes of farming and forest clearance” are common types of heirlooms, ancient objects that tangibly link living owners to their ancestral and mythic past. Among the Hopi and other Puebloan peoples of the American Southwest, the *chamahiya* celts of lightning and maize are revered objects of great antiquity as well as power (Ellis 1967; Taube 2000a: 325–326). The contemporary Quiche Maya of Momostenango keep stone celts and other ancient objects in lineage shrines known as *mebil* (Tedlock 1982: 81). Among the Maori of New Zealand, the kin inherit the nephrite adze blades and other jades of a deceased chief, thereby ensuring the continued prestige of the lineage (ibid.: 250). Similarly in Olmec society, fine jade celts may have been passed down from one generation to the next as increasingly esteemed and powerful symbols of major lineages.

Peter David Joralemon (1988) suggests that Olmec celts served as a form of primitive money: “Celts might have been a kind of currency for the Olmec, a store of wealth that could be easily traded, exchanged, and accumulated” (ibid.: 38). Grahame Clark (1965) makes a similar case for finely polished Neolithic celts, which are frequently found cached or hoarded in groups: “The one certain thing that they [celt groups] remind us of is that such objects represented an important source of wealth: and the natural storage place for wealth, whether dedicated to unseen powers in the form of votive offerings or intended for the use of the owner, would in the prevailing state of society have been the soil” (ibid.: 6).

The well-known Olmec deposits of jadeite and serpentine celts at La Venta and other sites also could be considered in a similar light as hoards or even “banks” of stored wealth. Although the Formative Olmec and Neolithic Europeans belong to the remote prehistoric past, green celts were used as items of wealth by Melanesians well into the twentieth century (Einzig 1966: 79; Quiggin 1970: 178–179; Meyer 1995: 392–408). Among the items exchanged in the famed *kula* ring of the Trobriand Islanders were

thin and finely polished greenstone celts, or *beku*, which served as primitive valuables and in rites of garden magic (Malinowski 1922: 358, 481–482; Shack 1985: 41, 91). Bronislaw Malinowski (1934) describes the role of *beku* greenstone celts in the Trobriands economy: “The production of polished axe blades was in the Central Trobriands the main process by which accumulated food was transformed into an object of condensed wealth and thus made available for purposes for which it would have been useless in the form of perishable goods” (ibid.: 195). This very likely was the role of Olmec jade celts, which appear to have been considered much as precious concentrations of agricultural surplus (Taube 1996, 2000).

As in the case of the Melanesian examples, Olmec greenstone celts probably functioned in the context of ceremonial exchange rather than in everyday market transactions. Rather than having a standardized value, the Olmec celts probably varied widely according to material, size, and prestige. Thus, as in Melanesia, the Olmec greenstone

celt can best be considered a primitive valuable rather than primitive money (see Dalton 1977).

In comparison to what is known of Neolithic Europe and Melanesia, the identification of greenstone celts with agricultural abundance seems to have developed far further among the Formative Olmec. In part, this may derive from the particular agricultural plants involved. Whereas the principal agricultural products of Neolithic Europe were wheat and barley, the major item of Trobriand agricultural wealth is yams. But, for the Middle Formative Olmec, the key plant was maize, the ear of which, in its very form, resembles a greenstone celt. With their broad, curving bits and narrow polls, the outlines of Olmec celts are so similar to Olmec representations of maize that it is frequently difficult to distinguish them. Moreover, much as maize seed is prepared on the stone metate, celts and other jade artifacts were surely ground and polished on flat stone surfaces. Through the process of grinding, both maize food and finished jade are created.



Plate 22

JADEITE CELT

Plate 22
Middle Formative
Jadeite. L. 28.2 cm
B-29

History: Attributed to Rancho Potrerillos, Veracruz; purchased from Earl Stendahl, before 1948

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1948-49; Dumbarton Oaks, 1963-

Bibliography: Bliss 1957: no. 17; Benson and Coe 1963: no. 38



Plate 23

JADEITE CELT

Plate 23
Middle Formative
Jadeite. L. 21.5 cm
B-28

History: Attributed to Rancho Potrerillos, Veracruz; purchased by Robert Bliss from Earl Stendahl

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1948–49; Dumbarton Oaks, 1963–; *Die Azteken und ihre Vorläufer: Glanz und Untergang des Alten Mexico*, Roemer- und Pelizaeus Museum, Hildesheim, 1986; *Ausstellungsleitung Haus der Kunst, Munich*, 1987; *Oberösterreichisches Landesmuseum, Linz*, 1987; Louisiana Museum of Modern Art, Humlebaek, Denmark, 1987; National Archaeology Museum, Athens, 1988; Société du Palais de la civilisation, Montreal, 1988; *Olmec Art of Ancient Mexico*, National Gallery of Art, 1996

Bibliography: Bliss 1957: no. 17; Benson and Coe 1963: no. 38; Roemer- und Pelizaeus Museum 1986: no. 3; Benson and de la Fuente 1996: no. 113

Both these celts are attributed to Rancho Portrerillos, in the vicinity of El Mangal, Veracruz. Such fine jadeite celts must have been items of great wealth in Middle Formative Olmec society. Although of different sizes, the El Mangal celts are similar in workmanship and in the color and quality of the stone, and they may well have derived from the same cache or burial.

Both celts are well fashioned and highly polished, with fine, sharp-edged bits, allowing for the ready appreciation of the color and translucency of the jade. The larger celt (B-28.OJ, Pl. 23) is an especially massive example, with a weight of some 1.8 kilograms. A great deal of effort was clearly spent in the final stages of grinding and polishing, and there are only small portions of bruised stone from pecking. On the smaller piece (B-29.OJ, Pl. 22), a considerable amount of pecking is still visible in the poll area. Another jadeite celt of similar form and qual-

ity displays pecking over much of the surface area (Thomson 1971: no. 4). Since only the bit-edge region of this celt is devoid of pecking, it would appear that the grinding and sharpening of the cutting edge was one of the last stages in the shaping process. The lustrous polish of the two Dumbarton Oaks celts recalls a jadeite celt discovered in a Classic Maya tomb at Pomona, Belize, evidently an Olmec heirloom (see Kidder and Ekholm 1951: fig. 5c,c').

Although celt B-29.OJ (Pl. 22) retains much of the pecking from the manufacturing process, it is very regular in form and, in outline, conforms to Olmec representations of lanceolate maize ears, such as on the five-piece headband worn by the capping maize god of the Río Pesquero statuette in the Dumbarton Oaks collection (Pl. 18; see Figs. 48a, 66a). Although the poll region appears to be of dark and opaque stone, several fractures reveal it to be of translucent blue jadeite.

CELT PENDANT

Plate 24
Middle Formative
Diopside jadeite. L. 16.4 cm
B-23

History: Purchased by Robert Bliss from Joseph Brummer, 1935

Exhibition: *An Exhibition of Pre-Columbian Art*, Fogg Art Museum, 1940; *Ancient American Art*, Santa Barbara Museum of Art, 1942, M. H. De Young Memorial Museum, 1942, Portland Museum of Art, 1942; *Indigenous Art of the Americas*, National Gallery of Art, 1947-49, 1952-62; Dumbarton Oaks, 1963-

Bibliography: Bliss 1947: no. 47; Bliss 1957: no. 20; Coe 1962b: fig. 2b; Benson and Coe 1963: no. 34; Joralemon 1971: figs. 78, 173; Fields 1991: fig. 3d

This jade pectoral expresses the close relationship between greenstone celts and maize in Olmec thought. The object is clearly celtiform, with a slightly narrowing poll and a sharpened bit edge at the opposite end. Nonetheless, because the object is strongly tabular, it is unlikely that it ever served as a true axe head. Two biconically drilled holes pierce

the squared edge on one side of the piece, allowing the object to be worn horizontally as a pectoral. An Olmec design is boldly incised on one side. The motif is oriented toward the long vertical axis, and thus would appear on its side when the object was worn as a pendant. Rather than being lightly scratched on the surface, the decoration seems to have been cut



Plate 24

with a back and forth sawlike motion. Areas of overcutting are readily visible in the lower U-like form of the motif. Similar incision is evident on the reverse side, although in this case the carving seems to have been aborted. In addition, two other cut marks can be seen on the reverse side on the lower edge opposite the two drilled holes. It is probable



24a, back view

that these two cut marks, near the poll and bit ends, are remnants of the preliminary blocking and cutting of the celt pendant.

The diopside jadeite of this celt pendant is similar to another Dumbarton Oaks piece acquired from Joseph Brummer, the large standing jadeite statuette of Plate 8. Both are composed of relatively dark, green

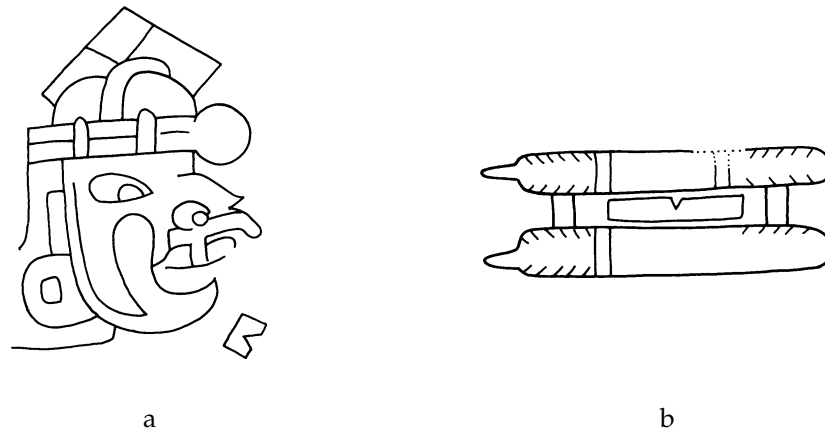


Fig. 62 Olmec cleft celts and the U-shaped device. (a) Olmec Maize God with a cleft element at its chin. Detail of the Young Lord statuette (after *The Olmec World* 1995: 277); (b) A cleft element between maize ear fetishes (see Fig. 50d).

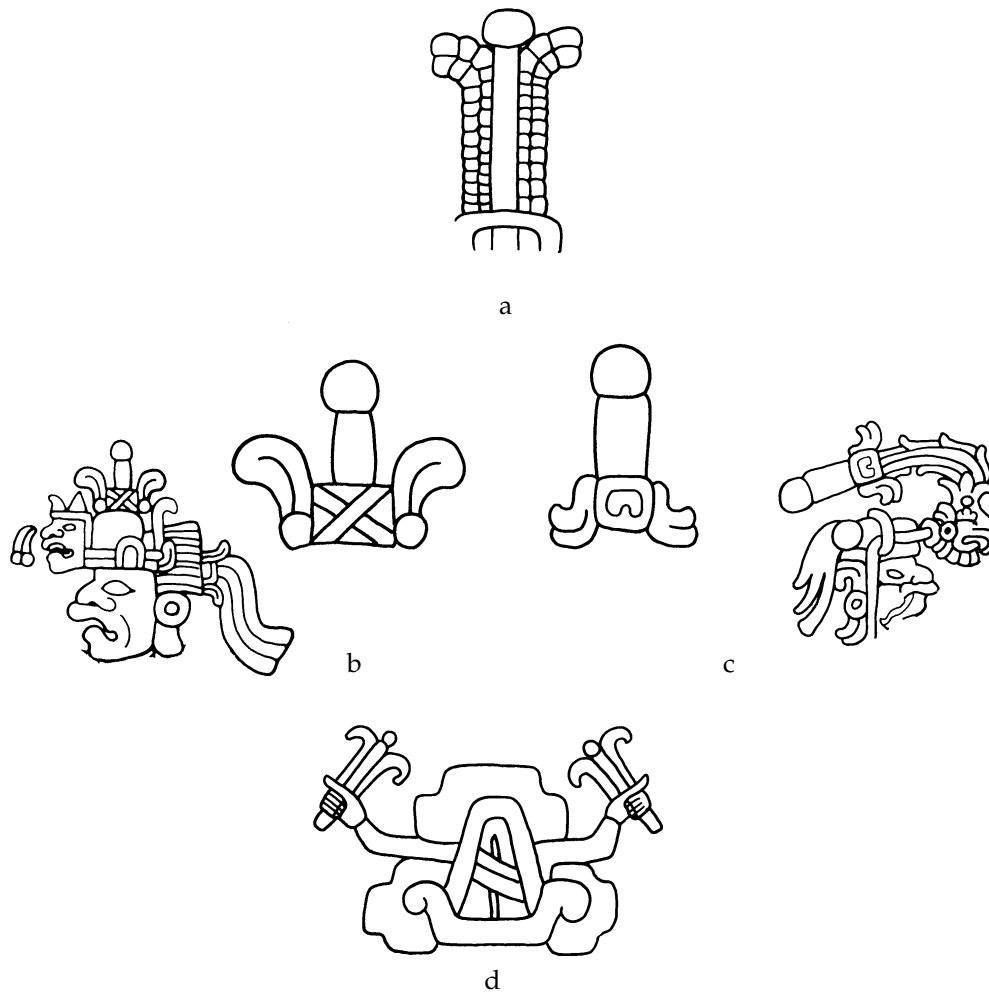


Fig. 63 Mesoamerican maize signs featuring cylinder topped by ball. (a) Rod and ball flanked by probable grains. Detail of a headdress from La Venta Stela 3; (b) Rod and ball topping a headdress of the Olmec Maize God. Detail of the Shook Panel (from Miller and Taube 1993: 39); (c) Rod and ball capping foliation emerging from trefoil Jester God ornament. Kaminaljuyu Stela 20 (after Parsons 1986: fig. 143); (d) Zapotec personified ear of corn holding a pair of rod-and-ball maize signs flanked by foliation (after Caso and Bernal 1952: fig. 94).

stone with areas of less-consolidated, coarse crystals. The back and sides of the pendant retain some red calcite staining, with minute amounts also present in the cut front surface.²⁴ Michael Coe (1962b) was the first to note that the surface design contains a prominent maize sign. According to Coe, the trefoil element near the bit end represents a maize ear partly projecting out of an enclosing husk. Peter David Joralemon (1971: fig. 173), Virginia Fields (1991: 168), Tomás Pérez Suárez (1997), and I (Taube 1996, 2000a) concur with this assessment. According to Fields (*ibid.*) this trefoil motif is ancestral to the foliated Jester God jewel worn by Maya kings. Joralemon (1971: fig. 173) identifies the circular element below the trefoil motif as a “seed-corn” dot. In support, Joralemon (*ibid.*: figs. 170–172, 174) notes other Olmec examples of maize ears above similar seed dots.

The lowest of the three elements comprising the incised celt motif is a U-shaped device in a rectangular cartouche. Although it often occurs in Protoclassic Maya art, the meaning of this simple U-sign is poorly understood (see Parsons 1986: figs. 75, 143, 167, 169, 173, 175). Jeffrey Quilter (personal communication, 1996) suggests that the U-shaped form

may be a variant of the cleft celt motif, and indeed there are late Olmec versions of the U-sign motif that have V-shaped clefts on the celts (Fig. 62). The Protoclassic U-sign may well derive from the Olmec cleft celt motif.

The U-shaped rectangle and the central seed element compose a single form resembling a ball placed atop a column. A similar rod and ball can be found atop the headdress worn by the female figure on La Venta Stela 3 (Figs. 51c and 63a). The beaded elements flanking this central column closely resemble maize grain, and it is quite possible that the device represents an erect ear of corn. Although of simpler form, a quite similar element occurs in identical position atop the central figure of the Shook Panel, an entity that I identify as the Olmec Maize God in the role of an acrobat (Taube 1996) (Fig. 63b). Kaminaljuyu Stela 20 portrays a Protoclassic Maya version of the rod-and-ball motif, in this case sprouting as growth out of a foliated Jester God browpiece (Fig. 63c). A Classic personified form of Glyph J—the Zapotec maize sign—holds a pair of probable maize ears with the same rod-and-ball motif (Fig. 63d).

²⁴ The chemical identification of the calcite was performed by Paul Jett.



Plate 25

EFFIGY SPEAR-THROWER

Plate 25
Middle Formative
Jadeite. L. 33 cm
B-32

History: Reportedly found with another effigy spear-thrower (B-33.OJ, Pl. 26); purchased by Robert Bliss from Earl Stendahl, 1955

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1956–62; Dumbarton Oaks, 1963–

Bibliography: Bliss 1957: no. 17a, pl. 9; Benson and Coe 1963: no. 154

Both this object and B-33.OJ (Pl. 26) are the only known Mesoamerican examples of spear-thrower effigies fashioned from greenstone. In view of the quality of the jade, form, and workmanship, this example is almost surely Olmec. The color of the jade is bluish green, mottled with white flecks, a type relatively common to fine Olmec jades. As is typical of fine Olmec jadework, the carving is also extremely regular, subtle, and controlled. The handle region is only suggested by a pair of indentations cut into the sides near the butt end. It is quite possible that finger loops were originally attached to this portion; an *atl-atl* fragment from Coahuilla has such loops bound to a

similarly indented handle (see Saville 1925: fig. 13). The hooked working end of the *atl-atl* is also slightly indented on both the front and back sides, creating a narrow, necklike feature in profile. A small, biconically drilled hole pierces the sides of the *atl-atl* slightly below the constricted neck region. Rather than being a working element of a spear-thrower, this hole probably served for suspension. Although the entire instrument is finely smoothed, only the tip of the handle exhibits high surface polish.

Given its relatively small size, it is unlikely that the jadeite item was ever used as a spear-thrower. Instead, as in the case of object B-33.OJ (Pl. 26), it

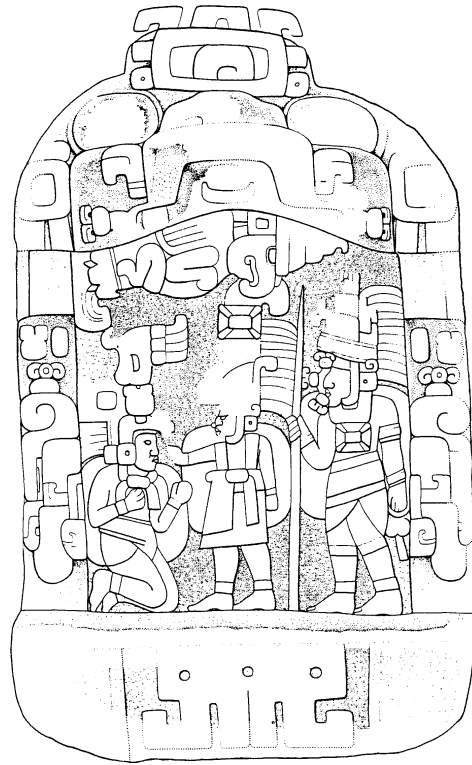


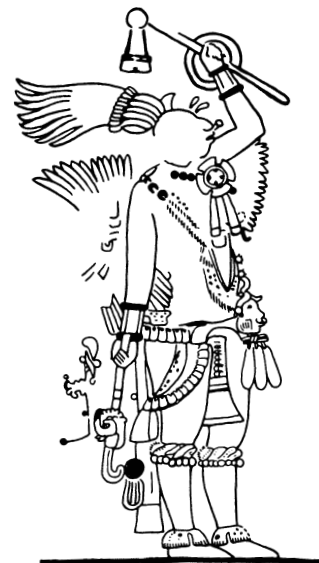
Fig. 64 Tres Zapotes Stela D. Note the flanking figure wielding a spear and *atl-atl*. Drawing courtesy of James Porter.



a



b



c

Fig. 65 Uaxacatun representations of figures with probable spear-throwers. (a-b) Protoclassic stucco figures from Structure H-Sub 10 (from Valdés 1987: figs. 5, 7); (c) Early Classic figure holding *atl-atl*. Detail of a mural from Structure B-VIII (from Sharer 1994: fig. 4.29).

was probably intended as an effigy copy of an *atl-atl*, perhaps as an insignia of rank or as a votive offering. Although effigy copies of spear-throwers are rare in Mesoamerica, miniature examples in bone are known from excavations at the Aztec Templo Mayor (see Castillo Tejero and Solís Olguín 1975: pl. 42).

Aside from this Olmec jade spear-thrower, a jade *atl-atl* grip is also known (Gay 1995: no. 117). Supplied with two finger holes and a central perforation for the *atl-atl* shaft, this object could have been part of a functional spear-thrower. Carlo Gay (*ibid.*) identifies this object as Olmec, and given the dark blue color of the stone and quality of workmanship, this is a likely attribution. It is noteworthy that the Dumbarton Oaks spear-thrower is also of dark blue hue and lacks a finger grip. It is thus conceivable that these two items were originally parts of the same *atl-atl*. However, although this is a possibility, it remains to be seen whether the grip and shaft fit together.

As a representation of an Olmec *atl-atl*, the Dumbarton Oaks jade is one of the few indications that the Formative Olmec used such a weapon. Robert Hall (1997: 114–115) notes a probable Early Formative representation of a spear-thrower on a ceramic seal from Tlatilco. Although the spear-thrower is generally associated with the highland cultures of Classic and Postclassic Mesoamerica, it is also represented in a Late Formative stone sculpture from the Gulf Coast region. Tres Zapotes Stela D portrays

a figure wielding a spear and an explicit *atl-atl* (Fig. 64). It is possible that another, roughly contemporaneous Veracruz sculpture, the Matisse Stela, depicts a man holding a spear-thrower (see Easby and Scott 1970: no. 61).

At the lowland Maya site of Uaxactun, the Protoclassic Structure H-Sub 10 bears stucco representations of figures wielding curving sticklike forms (Fig. 65a–b). Although it is possible that these devices could refer to a Maya form of stickball, they are more likely to be spear-throwers. A later Early Classic mural from Uaxactun Structure B-VIII portrays a figure wielding a similar but more elaborate *atl-atl* with a curving, hooked end (Fig. 65c). Although this individual has been interpreted as a visitor from the Central Mexican site of Teotihuacan (Sharer 1994: 185), he wears Maya costume elements, including a solar *k'in* sign pectoral, and the mask and triple celt belt-piece. Moreover, rather than being rendered in Teotihuacan style, the spear-thrower is ornamented with a long-beaked bird, quite probably the Maya Principal Bird Deity. Although the occurrence of the *atl-atl* as a Classic Maya weapon of war is often equated with Teotihuacan influence (e.g., Schele and Freidel 1990: 152, 450), the stucco reliefs from Uaxactun Structure B-VIII suggest that as early as the Protoclassic period, spear-throwers were also Maya emblems of military and political power.

STONE EFFIGY SPEAR-THROWER

Plate 26
Possibly Middle Formative
Chloromycenite schist. L. 54.7 cm
B-33

History: Reportedly found with effigy spear-thrower B-32.OJ (Pl. 25); purchased by Robert Bliss from Earl Stendahl, 1955

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1956–62; Dumbarton Oaks, 1963–

Bibliography: Bliss 1957: no. 17b, pl. 9; Benson and Coe 1963: no. 36; González Calderón 1991: pl. 471



Plate 26

Unlike jadeite spear-thrower B-32.OJ (Pl. 25), which can be readily compared to known jade worked by the Olmec, this object is carved from a softer and more brittle stone closely resembling serpentine. The complete spear-thrower was fashioned from at least three joined pieces of separately carved stone, of which only the two ends remain. Remnants of red staining—probably cinnabar—occur in the recessed regions of the hook and finger loops. Nonetheless, the distal end of this *atl-atl* effigy is similar to the jadeite example, and has the flattened recessed area below the hooked portion and, in addition, the slightly constricted neck behind the hook. Moreover, whereas the tips of both handles are slightly rounded, the distal hook ends are both flattened. In form, the two Dumbarton Oaks examples are distinct from the many Late Postclassic wooden spear-throwers published by Marshall Saville (1925).

The handle of this *atl-atl* is supplied with the two finger loops commonly found on Classic and

Postclassic spear-throwers. Whereas the finger loops of utilitarian Mesoamerican spear-throwers tend to be of cut shell bound to the shaft, the loops, handle, and lower shaft of this effigy are carved from a single piece of stone. Nonetheless, the edge of the handle and the beginning of the shaft are clearly demarcated by a carved indentation. This may well allude to lashing that would bind the rings and handle of the spear-thrower. The upper portion of the shaft and hooked tip were fashioned from a separate piece of stone. Although the lower end of the upper shaft is somewhat damaged, the joining area of the lower shaft and handle is in good condition. Here, it can be seen that the two portions had carefully cut, overlapping ends originally joined by two pins, a technique more typical of woodworking than stone. Due to its small size and fragility, it is likely that, as in the case of spear-thrower B-32.OJ, this *atl-atl* is an effigy copy rather than a functional weapon.



Plate 27

JADE TUBE

Plate 27
Middle Formative
Jadeite. L. 24.2 cm
B-134

History: Purchased by Robert Bliss from Earl Stendahl, 1954

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1956–60; Dumbarton Oaks, 1963–

Bibliography: Benson and Coe 1963: no. 151

Although this object may appear simply as a particularly large and impressive bead or pendant, it is actually a thinly walled jade tube that required a great many days of painstaking grinding to produce. The straight profile of the central perforation of this object is quite different from the hourglass-shaped holes common to biconically drilled beads. Whereas such beads are simply drilled from both ends, this large piece is carefully reamed to create a remarkably even, thin wall. The thickness of the jade at the opening averages some 2.5 millimeters, thickening slightly in the interior to some 4.5 millimeters. Due to this thinness, the fine, bluish green jadeite is wonderfully translucent. At both ends of one side of the tube, the stone is slightly red and somewhat frac-

tured. This probably constitutes part of the original exterior cortex, or “rind,” of the jadeite boulder, which commonly is discolored by natural exposure. This interpretation is supported by inspection of the opposite side of the tube, which is slightly flattened with a long groove running down the center. The groove and flattened area are probably the remains of the original slab sawing from the mother stone, which clearly corresponds to the interior rather than the exterior rind of the boulder.

The remarkable expenditure of effort required to remove the more distant, interior portion of the tube is entirely unnecessary for the suspension of a simple bead, as the interior would not even be visible. In addition, the thinness of the walls makes it extremely

vulnerable to breakage by chipping or fracturing, a hardly desirable quality for suspended beads. But if this object is no ordinary bead, what was its function? Like the two effigy spear-throwers in the Dumbarton Oaks collection (Pls. 25, 26), this item may be a copy of a weapon, in this case a blowgun. It is perhaps noteworthy that the mottled blue jadeite is very similar to that of the jade spear-thrower of Plate 25, as if they may have constituted part of an assemblage of jadeite weapons. In addition, this jade tube and the two effigy spear-throwers were all acquired from the same source, Earl Stendahl, during 1954 and 1955. According to Stendahl, however, the tube was not found with the spear-throwers in Puebla but, rather, derived from Guerrero.

Aside from this possible Olmec example, elite blowguns fashioned of rare materials are known for the contact period Aztec. The treasure of Moctezuma II contained three blowguns fashioned with pearls, pear shell, feathers, and precious stones (Linné 1948: 111). The blowgun has a widespread distribution in Mesoamerica and is documented among contem-

porary peoples of Oaxaca and the Maya area (Linné 1948). The antiquity and origin of this weapon in Mesoamerica are poorly known, although it does appear in Early Classic Teotihuacan and Maya art (Soustelle 1967a: pl. 39; Coe 1989a: fig. 14). Peter David Joralemon (personal communication, 1994) has called my attention to a probable Early Formative example on a ceramic effigy bottle attributed to Las Bocas. The vessel portrays a monkey holding a long, cylindrical object (Fig. 69a). Although this object has been identified as a staff, Joralemon notes that it is hollow, making it far more likely to be a blowgun. The sixteenth-century Quichean *Popol Vuh* describes the Hero Twins as great blowgunners (Tedlock 1996). Classic Maya art reveals that the preeminent blowgunner was the twin Hunahpu, who is essentially the personification of the day name Ahau, the Maya term for rulership (Coe 1989a). Like the stone effigy spear-throwers in the Dumbarton Oaks collection, this jade tube may be an emblem of elite power, here in the form of a blowgun.

JADE MIRROR

Plate 28
Middle Formative
Jadeite. H. 8 cm; W. 7.5 cm; Max. thickness 1.1 cm
B-529

History: Purchased from Frances Pratt, 1963; given to Dumbarton Oaks by Mildred Bliss

Exhibition: Dumbarton Oaks, 1963–

Bibliography: Benson and Coe 1963: no. 40; González Calderón 1991: pl. 483; Carlson 1993: Fig. 18.1

Fashioned from mottled, light blue-green jade, this plaque is rectangular, with well-rounded corners. A pair of biconically drilled holes pierces the back upper edge of the piece, concealing suspension holes that are not visible from the front. The same technique is evident on the celtiform pendant in Plate 24. The back side of the plaque is slightly convex,

and bears two curving grooves running parallel to one of the vertical sides, probably aborted cuts made during the original blocking out and shaping of the piece. The front side has a gently concave and highly polished surface. In a detailed study of this object, John Carlson (1993) suggests that it represents an effigy copy of an iron ore Olmec mirror. He (*ibid.*:



Plate 28

249) notes that the dimensions of the concave surface are virtually identical to those known for Olmec mirrors. Although Carlson (ibid.: 249) interprets this item as a “non-functional” copy of an iron ore mirror, it is quite possible that, as with the metallic ore examples, this pectoral could have also been used in divinatory scrying. In such divination, the play of light is at least as important as the quality of the reflection.

Although rare, other examples of Olmec jade mirrors do exist. The back of one concave jade mirror attributed to Guerrero bears an incised representation of a frontally facing crested bird, quite possibly an owl or quetzal (*The Olmec World* 1995: no. 170). An incised jadeite disk marked with the image of the Olmec Maize God may also have functioned as a mirror (see Benson and Joralemon 1980: no. 15).

The use of mirrors in divination is widely documented in Mesoamerica, and such mirrors often seem to have served as powerful emblems of high office (Carlson 1981). The ancient Maya deity God D, or Itzamna, an old god of priestly arts, commonly appears with a petaled mirror on his brow (Taube 1992b: 31–34). Along with being a priest, this aged being is commonly enthroned, quite probably as the paramount god of the Maya pantheon (ibid.: 35–36, 146). The early colonial Yucatec Motul Dictionary provides the following entry for *u neen kab* or *u neen*

kah, signifying the mirror of the world or of the community: “el sacerdote, cacique, gobernador de la tierra o pueblo, que es espejo en que todos se miran” (the priest, chief, governor of the land or people, that is the mirror in which all see themselves) (Barrera Vásquez 1980: 565). In this entry, a mirror serves as a metaphor for the priest or ruler that literally and figuratively reflects the community. A number of ethnohistorical accounts describe the use of mirrors by Central Mexican rulers (Ekholm 1973). In Late Postclassic Central Mexico, the preeminent being of sorcery and magic was the omnipotent Tezcatlipoca, whose name means “smoking mirror.” In the early colonial Aztec chants recorded by Ruiz de Alarcón, the earth itself is described as the “mirror which gives off smoke” (Coe and Whittaker 1982: 304, 308, 310).

Just as rulers were commonly represented as embodiments of the pivotal world axis, mirrors were also identified with the World Center in Olmec thought. The four-part motif on the Humboldt Celt has been interpreted as an Olmec representation of the four directions (Miller and Taube 1993: 78; Reilly n.d. : 129). It is quite possible that the circular element in the center of the four directional signs represents a mirror (Fig. 66a). The La Venta cache known as Offering 1943-E contained a magnetite mirror within a cruciform placement of green celts (Fig.

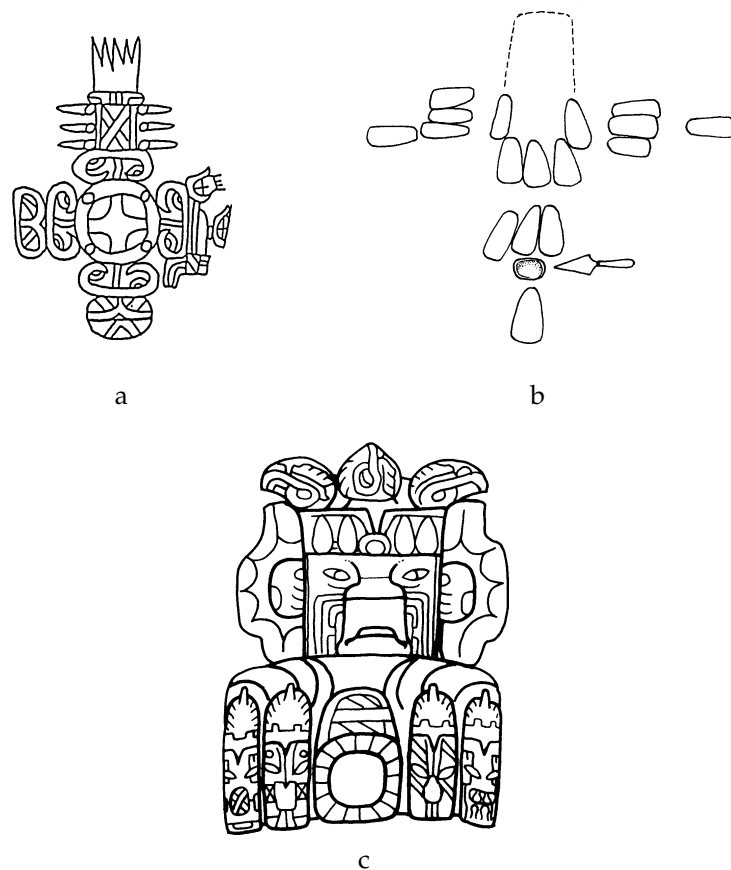


Fig. 66 Mirrors, centrality, and the World Tree among the Olmec. (a) Disk in the center of four probable directional signs. Humboldt Celt (from Joralemon 1971: fig. 32); (b) Mirror in cruciform celt arrangement. La Venta Offering 1943-E (from Coe 1972: fig. 7); (c) Probable mirror in the center of the four-celt headband worn by the Río Pesquero statuette. Note the smaller replication of the mirror and headband on the capping Olmec Maize God mask (see Fig. 48a).

66b). Michael Coe (1972: 9) interprets this arrangement as the World Tree, with the mirror representing the “the quadripartite god who raised the World-Trees,” an early form of the four Tezcatlipocas who raise the heavens in Aztec myth. In this episode’s rendering in *Historia de los Mexicanos por sus pinturas*, Tezcatlipoca transforms into a tree of mirrors (*tezcacuahuitl*), whereas Quetzalcoatl becomes the *quetzallhuexotl* willow (Garibay 1979: 32). The allusion to a quetzal-willow is probably not coincidental. Beginning in the Formative period, the quetzal and other precious green items are identified with the World Center.

The Olmec four-celt headband commonly worn by the Olmec Maize God often has a central circular device topped with maize as the World Tree. The Dumbarton Oaks Río Pesquero statuette (Pl. 18) contains one of the most elaborate representations of this headband. In this case, the central brow object is a petaled mirror topped with a vertical ear of corn (Figs. 48a and 66c). Placed in the center of the four-

celt headdress, the vertical cob signifies the middle place, or *axis mundi*, also replicated by the capping image of the Olmec Maize God as the World Tree. Just as the Maya used the color green, or *yax*, for the middle place, the Olmec used such materials as green corn, jade, and quetzal plumes to depict the *axis mundi*. Thus the Olmec Maize God capping the Río Pesquero statuette is probably a jade mask atop backcurving quetzal feathers, similar to the headdress masks and plumes appearing on the San Martín Pajapan monument and La Venta Monument 44 (Fig. 49a–b). It also has been noted that the maize trefoil sign sprouting from the head of the Olmec Maize God on the Río Pesquero figure is marked with three quetzal heads (Fig. 66c).

The concept of the mirror as the World Center was widespread in ancient Mesoamerica. Along with wearing a mirror in the center of his brow, the Maya Itzamna also represents the World Tree (Taube 1992b: 36, 40). Similar to the earlier Olmec, the Maya also used growing maize as a symbol of the World Tree

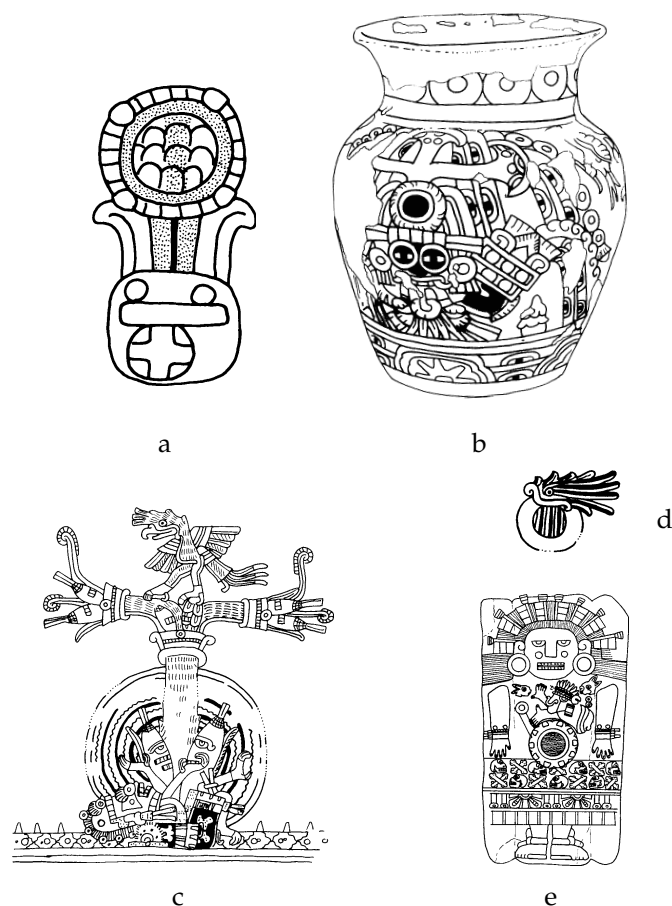


Fig. 67 Mirrors, centrality, and the World Tree in Mesoamerican iconography. (a) Mirror serving as an ear of maize. Detail of an Early Classic Maya censer (after Emmerich 1984: no 45); (b) Teotihuacan Tlaloc with a mirror diadem sprouting a World Tree with falling water, jade, and quetzals (after Fondo Editorial de la Plástica Mexicana 1964: pl. 334); (c) Maize plant with jade signs and quetzal bird rising out of a pool marking the World Center. Codex Borgia, page 53; (d) Mirror of Tezcatlipoca rendered as a pool of water with the day name Atl, or Water. Codex Borgia, page 17; (e) Aztec sculpture of a goddess with a mirror depicted as a pool of water on her abdomen. Templo Mayor (from López Austin 1979: fig. 4).

(Freidel, Schele, and Parker 1993: 53–55). On one Early Classic censer portraying the Tikal king Great Jaguar Paw as the maize god, mirrors are used to represent ears of corn, both on his central headdress and on a plaque held in his right hand (Fig. 67a). It appears that the yellow tesserae of the pyrite mirror are being compared to grains of corn. Among the Teotihuacanos and later peoples of Central Mexico, the middle place, known as *tlalxicco*, or “earth navel,” was frequently represented as a large circular mirror held against the abdomen (Taube 1992a: 81–82) (Fig. 67e). A remarkable Early Classic vessel from Teotihuacan portrays Tlaloc wearing a petaled mirror on his forehead (Fig. 67b). As in the case of the Río Pesquero statuette, a World Tree rises above the central brow mirror. Along with spouting streams of water, this marvelous tree bears strings of green

jade beads. A long-tailed quetzal, rendered in green and red, is to be seen above the hanging jade. A very similar theme involving the central World Tree appears on page 53 of the Late Postclassic Codex Borgia, which Eduard Seler (1963, atlas: 53) identifies as the *tlalxicco* (Fig. 67c). The *axis mundi* is portrayed as a maize plant marked with jade signs rising out of a circular pool of water. A quetzal perches in the branches of this precious tree of abundance. The circular pool is surrounded by a yellow rim, and it is likely that it alludes to a mirror. In Mesoamerican thought, mirrors are frequently compared to shining pools of water and, in fact, divinatory scrying was often performed with vessels of water (Taube 1992a: 186, 189). On page 17 of the same manuscript, the diagnostic cranial mirror of Tezcatlipoca appears as a circular pool of blue water marked with the day

name Atl, or Water (Fig. 67d). Moreover, a greenstone sculpture excavated at the Aztec Templo Mayor portrays the central *tlalxicco* mirror as a pool of water (Fig. 67e).

To the Olmec, mirrors fashioned of blue-green jade probably served as condensed symbols for the world axis. However, rather than referring simply to centrality, such mirrors also alluded to the overlapping themes of water, maize, and wealth. In contrast to Olmec hematite, ilmenite, and magnetite mirrors, which evoke the importance of these ores

as precious materials among the Early Formative Olmec, jade mirrors embody the Middle Formative concern with corn and related verdant items of wealth, these being jade and quetzal plumes. The relation of this complex of precious green items to mirrors and centrality did not end with the Olmec, but continued in later traditions of ancient Mesoamerica. This jadeite mirror is a direct reflection of the Olmec symbolism of jade which, like mirrors, is frequently related to the World Center in Olmec thought.

JADE MASK

Plate 29
Middle Formative
Jadeite. H. 13 cm
B-127

History: Purchased by Robert Bliss from Earl Stendahl, 1941

Exhibition: *An Exhibition of Pre-Columbian Art*, Fogg Art Museum, 1940; *Ancient American Art*, Santa Barbara Museum of Art, 1942, M. H. De Young Memorial Museum, 1942, Portland Museum of Art, 1942; *Indigenous Art of the Americas*, National Gallery of Art, 1947–62; Dumbarton Oaks, 1963–

Bibliography: Bliss 1947: no. 92; Bliss 1957, no. 87; Benson and Coe 1963: no. 32; Coe 1965b: fig. 24; González Calderón 1991: pl. 375

Masks fashioned from single pieces of precious jade are among the most striking sculptural genres of Olmec art. The jade of this particular example is opaque and lightly colored, with red surface staining on the right side of the face. The opaque and light color is probably patination from long burial. Although some Olmec jade masks may have been worn (see, e.g., Pl. 30), many lack eye perforations or are of insufficient size to cover a face. In this example, both of these traits hold true. Nonetheless, it is carved much like an actual mask, with the back deeply hollowed out. The principal means of suspension was provided by a central, biconically drilled hole that penetrates the flat, upper rim of the

mask. Two more biconally drilled holes pass laterally from below the ears into the interior sides of the mask.

The serene face of this mask is beautifully carved, with subtle, well-rounded dimensions. When viewed face on, it is evident that the lower cheeks are slightly broader than the cranium. In addition, the lower portion of the object includes a small portion of the upper neck, a trait rarely found in Olmec masks. The full and strongly defined eyelids are further accentuated by the deep carving in the eye socket region above the nose. The eyes are almost sinuous in outline, with a downward slant in the interior and a corresponding upward slant on



Plate 29

the outer edges. Solid-core drilling in the inner corners of the eyes, the nostrils, the middle of the upper lip, and the corners of the mouth lends a crisp quality to the carving, as does the fine line incision around the edges of the upper eyelids, lower lip, and ears. The use of hollow-core drills to delineate the pupils is highly unusual in Olmec lapidary art, and may be a subsequent “improvement” by later peoples. The later Maya commonly recarved Olmec heirloom objects (see Pl. 39). Although this additional carving is usually limited to inscriptions, Peter David Joralemon (personal communication, 1987) has pointed out a British Museum example in which the Maya recarved the eyes of an Olmec pectoral. In this case, the pupils were carved into the heavy lower lids below the original slitted eyes, thereby creating a face more consistent with Maya canons of beauty (see Schele and Miller 1986: pl. 31).

Although not an actual mask, the function of this piece and similar small Olmec masks remains to be determined. It is quite possible that such pieces were costume ornaments, such as pectorals or belt pieces.

However, it is also conceivable that they served as masks for personified sacred bundles, such as would contain the remains of honored ancestors or images of gods and other esteemed objects. The well-known later stone masks of Classic Teotihuacan—which also lack pierced eyes—have been similarly considered as masks for funerary bundles (Easby and Scott 1970: 148). A ceramic sculpture from Teotihuacan portrays such a bundle with a detachable mask (Berrin and Pasztory 1993: no. 60). The Teotihuacan masks are frequently supplied with drilled holes on the sides and occasionally at the top (*ibid.*). Along with the Olmec example, this probably served to bind the mask to an inert object, such as a wooden armature or bundle. Moreover, like the Olmec mask, Teotihuacan stone masks tend to be squared off at the top, possibly to accommodate a capping head-dress (Easby and Scott 1970: 148). Although masked bundles remain undocumented for the Olmec, the limbless wooden sculptures from El Manatí, Veracruz, closely resemble bundled figures supplied with masks (see Ortíz and Rodríguez 1994).

JADE MASK

Plate 30
Middle Formative
Jadeite. H. 20.8 cm
B-20

History: Purchased by Robert Bliss from Robert Stolper, 1960

Exhibition: Dumbarton Oaks, 1960–; *Olmec Art of Ancient Mexico*, National Gallery of Art, 1996

Bibliography: Benson and Coe 1963: no. 31; Lothrop 1963: 93; Palmer 1967: pl. 49; Joralemon 1971: fig. 24; Joralemon 1976: figs. 2c, 5a; Benson 1981: 102–103, fig. 6; N. Davies 1983: fig. 1; Niederberger 1987: fig. 88; González Calderón 1991: pl. 344; Stuart 1993: 115; Benson and de la Fuente 1996: no. 82; Pasztory 2000: fig. 6

According to Samuel Lothrop (1963: 93), this magnificent jade mask was taken to Italy in the 1530s, making it one of the first Olmec objects collected by Europeans (see also p. 123). Elizabeth Benson (1981) cites a letter from the art dealer Robert Stolper to Robert Bliss: “There is some evidence that it had been there since the 16th century. It was published some time ago by a Hungarian professor as a ‘Tang’ mask; was sold by one collector to another as a Chinese piece and later returned because it was American and not Chinese” (ibid.: 102).

Although neither Benson (ibid.) nor I have been able to document the sixteenth-century provenience or the purported publication, this object clearly was obtained before the discovery of similar masks from Río Pesquero in the late 1960s (Medellín Zenil 1971: 18–19, pls. 59–65, 68–69; Joralemon 1988: 40).

Benson (1981: 102–103, fig. 6) provides a detailed description of the overall appearance and condition of the piece, and notes that the proper left brow region is restored.²⁵ According to Stolper, the missing piece may have been lost relatively recently, quite possibly in the 1930s. Moreover, the upper right quarter of the mask was broken off and reattached, with some stone loss to the cheek region (ibid.). There is also a crack extending from the right cheek across the lip to the right tooth. The right ear has suffered some loss, evidently by a blow from the front.

²⁵ In the description of the mask, the accompanying photograph was reversed (Benson 1981: fig. 6.).

Although some of the damage may have occurred in recent times, portions of the mask were intentionally removed in antiquity. Most of the back, encircling edge of the mask was detached by sawing and breakage. The only portion of the original edge that remains is in the areas of the right and left temples and the chin. The scar of a particularly long saw cut—virtually the whole length of the mask—can be seen behind the right ear. Rather than constituting a finished recarving of the piece, this cutting seems to have been primarily designed for obtaining portions of the precious, translucent jade. With this removal, there is no evidence of subsequent grinding or polishing, and the cutting and breakage scars are clearly evident. Nonetheless, it is noteworthy that none of this substantial removal is visible from the front, and therefore in no way detracts from the appearance of the face. A similar treatment of jade sculpture can be observed in the massive Kunz Axe in the American Museum of Natural History in New York. In this case, a large portion of jade has been removed from the rear cranial region of the anthropomorphic axe (Saville 1929: fig. 99). However, as in the case of the Dumbarton Oaks mask, none of this removal can be detected from the front. According to Charlotte Thomson (n.d.: 93), the back of the Kunz Axe was cut in antiquity to remove a vein of emerald green jade.

In contrast to the jade mask of Plate 29 in the Dumbarton Oaks collection, this large mask was carved to be worn (Benson 1981: 102; see Stuart 1993: 115). Holes cut through the partly hollowed eyes al-



Plate 30



30a, three-quarter view

low sight through the pupils, a convention also found among stone masks attributed to Río Pesquero (see Medellín Zenil 1971: nos. 59, 60, 68; Berjonneau, Deletaille, and Sonnery 1985: pl. 1). The nostrils also pierce the mask, allowing for easy breathing. In addition, the interior nasal area is carefully hollowed out to accommodate the nose of the wearer. Although interior nasal depressions also occur in masks attributed to Río Pesquero (Medellín Zenil 1971: nos. 65, 69; *The Olmec World* 1995: no. 192), it is especially developed in the Dumbarton Oaks example, and penetrates well into what appears as the bulbous nasal area on the front of the mask. Suspension was provided through two pairs of lateral holes just above and below the ears. As with many Olmec stone masks (e.g., Pls. 29, 31), an additional central hole may have vertically penetrated through the top of the mask. However, due to the removal of much of the backing, it is impossible to determine whether a hole was originally present. With a cord suspended from the upper crown of the head, such a hole would have provided a great deal of support for this weighty stone object.

Although the perforated pupils, nostrils, hollowed nose, and suspension holes all suggest that this is a functional mask, as a large, solid piece of jade this is by no means an item that could be worn for long periods of time or in performances requiring a great deal of movement. It may have functioned in rites involving deity impersonation, but considerable rustlike staining around the eyes suggests that it may have had another function. Present in the eye region on both the interior and exterior of the mask, this discoloration strongly suggests the staining that occurs from the oxidation of iron pyrite or other iron ores. As with the serpentine Transformation Figures in Plates 6 and 7, the pupils may have been inlaid with iron pyrite that would have blocked any vision through the mask. For an inlay, however, it would not be necessary to entirely pierce the pupils. Instead, pyrite disks simply could have been placed atop a jade surface rather than being inserted as plugs into the pupil holes. It is impossible to determine, moreover, whether a pyrite inlay would have been an original part of the mask, or subsequently added at the time of burial.

The face is exceptionally well carved, and portrays a supernatural being with eyes slanted upward at the outer corners and a sharp, outwardly projecting upper lip. The Olmec used such snarling mouths



30b, side view



30c, back view

to designate divine beings (see pp. 30–34). The interior of the mouth contains a prominent pair of upper incisors. Although the general form of these two curving teeth closely resembles the so-called gum lines of Olmec divinities, the central vertical line reveals that they are teeth. Quite probably the gum lines are simply less elaborate unincised forms of similar teeth. The mouth is plainly open, with the tongue visible below the upper incisors. In fact, the contours of the lower lip closely match the bracketlike form of the upper mouth, as if the two are intended to fit snugly together in a closed mouth. Although most of the

facial surface is smoothly polished, both the upper and lower lips and the ears are marked with incision. At the base of the better-preserved right ear, there is a lobe-like form marked with a pair of horizontal incised lines, quite probably an ear pendant. As on the jade mask of Plate 29, only the inner portion of the upper eyelids is delineated by incision.

The expression of this face varies considerably according to the angle of perspective, a common trait

of Olmec objects. When viewed frontally from slightly below, the face has an extremely tense and fierce appearance. However, when seen straight on, the face is far more serene. In view of the slanted eyes, curving upper lip, and prominent pair of incisors, this face may well represent the Olmec Maize God or God II in the Joralemon (1971) system of deity classification. To the Olmec, this mask may have been a vivid portrayal of the living face of corn.



Plate 31

STONE MASK

Plate 31
Middle Formative
Serpentine. H. 8.4 cm
B-151

History: Previously in the collection of Eva Hannstein; acquired by Dumbarton Oaks through Samuel K. Lothrop, 1960

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1960–62

Formerly in the private collection of Eva Hannstein in Panajachel, this small mask was reportedly found in the region of Nebaj, Guatemala. It is of dark green serpentine containing red flecks, probably caused by the oxidation of flawed areas. Remains of red pigment adhere in the drill holes, as well as in areas of the mouth and the upper portion of the hollowed back. This pigment is also present in the nicks on the back left side of the mask, revealing that this damage occurred before the object was stained. For suspension, the mask contains three biconically

drilled holes, one at the top of the head and two through the back rim in the region of the ears. Drills also delineated the nostrils and the corners of the mouth. Although the drill holes at the mouth corners correspond to Olmec carving techniques and conventions, the eyes are not typical of Olmec stone carving. As in the case of the mouth, drill holes usually mark the corners of the eyes. Although the remains of drill holes can be discerned within the eye orbits, they are in the interior, not at the corners. Following the initial drilling, the eyes were carved be-



Fig. 68 Comparison of an Olmec serpentine mask to a Late Formative Fat God sculpture from Kaminaljuyu. (a) An Olmec-style serpentine mask attributed to Guatemala. Note the furrowed brow (from McNear 1982: no. 5); (b) A monumental head of the Fat God with a furrowed brow, pursed mouth, and broad cheeks. Kaminaljuyu Monument 38 (from Parsons 1986: fig. 101).

yond the pairs of holes by a back and forth sawing motion. Thus, rather than having naturalistic contours, the eyes are schematic, linear grooves. Although this style of eye is not common to Olmec lapidary carving, it does appear on a fragmentary Olmec-style jade maskette reportedly found in Costa Rica (*The Olmec World* 1995: no. 158).

In addition to the schematic eyes, the incision marking the facial features is also unusual for Olmec fine stone carving. Both the upper lip and the exterior of the nostrils are carved by rather crude and unsteady lines. In the case of the nostrils, the incision reaches almost to the tip of the nose. There is also an incised horizontal line behind the right ear. However, in contrast to the nose and mouth, the fronts of the ears are schematic and tabular, with no marks of drilling or incision.

When viewed face on, the mask is especially wide in the lower cheeks. Whereas the truncated top of the head has a width of some 5 centimeters, the cheeks swell to a width of 6.5 centimeters, giving the face an avocado or pearlike form. Although particularly striking in the case of this mask, Olmec figures frequently have lower cheeks that are broader

than the cranium (*The Olmec World* 1995: nos. 12, 32). In contrast to the frontal view, the mask profile strongly resembles Classic Maya proportions, with a long, curving nose and a soft recessed chin. In this regard, the Guatemalan attribution is noteworthy. The proportions of the mask are very similar to another small, serpentine Olmec-style mask attributed to Guatemala (Fig. 68a). The large cheeks, pursed mouth and puffy eyes of this mask are strikingly similar to the Dumbarton Oaks example. In addition, this second mask also displays features of the Late Formative Fat God “potbelly” sculptures of the Guatemalan highlands and piedmont.²⁶ The brow is heavy and furrowed, a common trait of Fat God monumental sculptures (Figs. 68b, 72). In fact, the facial proportions and physiognomy of both masks recall the monumental Fat God sculptures of Late Formative Guatemala. Although possessing strong Olmec traits, it is quite likely that these small masks were carved in Guatemala, quite probably at the end of the Middle Formative or beginning of the Late Formative periods.

²⁶ For a discussion of the Fat God, see pp. 156–161.



Plate 32

MONKEY MASQUETTE

Plate 32
Middle Formative
Jadeite. H. 2.9 cm
B-166

History: Purchased by Robert Bliss from William Spratling, 1938

Exhibition: *An Exhibition of Pre-Columbian Art*, Fogg Art Museum, 1940; *Ancient American Art*, Santa Barbara Museum of Art, 1942, M. H. De Young Memorial Museum, 1942, Portland Museum of Art, 1942; *Indigenous Art of the Americas*, National Gallery of Art, 1960–62; Dumbarton Oaks, 1963–

Bibliography: Bliss 1957: no. 111; Benson and Coe 1963: no. 63

Along with carving life-size jade masks, the Olmec also fashioned miniature masks worn as items of jewelry. Although this item previously was identified as Maya (Bliss 1957: no. 111; Benson and Coe 1963: no. 63), both the stone and carving technique suggest an Olmec attribution. Rather than the bright apple-green color common to Classic Maya jades, this masquette is of translucent olive-green jadeite. It closely resembles a miniature mask complete with

eye orbits and a hollowed back. The pair of perforations near the upper portion of the head corresponds to the mask's suspension holes. Rather than serving as a mask for a statuette, however, this object probably was a pendant. As in the case of the Dumbarton Oaks Fat God masquette (Pl. 32), the hollowed back both alludes to a miniature mask and improves the translucency of the stone. The lower right ear of the masquette has suffered some dam-



32a, front view



32b, back view

age, resulting in much of the earlobe being destroyed.

Along with the form and quality of the jade being characteristic of the Olmec, the pendant exhibits the widespread use of carving with solid-core drills, another common trait of Olmec jade working. The sunken eye orbits, nostrils, cheeks, and the hollowed back all were carved by drilling. In addition, the nostril holes biconically pierce the nasal septum, a common trait of Olmec carvings in precious stone. Pairs of holes also pierce the earlobes and the top of the mask. In these two cases, however, the drilling was primarily from the back of the mask, with only minute holes visible on the front.

Similar jadeite masquettes were discovered in Offerings 5, 6, and 7 during 1955 excavations at La Venta (Drucker, Heizer, and Squier 1959: fig. 43, pls. 37–40). As in this case of the monkey-head pendant, three of the four La Venta masks have deeply hollowed backs that Philip Drucker, Robert Heizer, and Robert Squier interpret as means by which to enhance the translucency of the carvings (*ibid.*: 164, 169, 172). Moreover, much of the drilling used to perforate the masquettes was done from the back, with relatively small holes in the front (*ibid.*: 163, 172). The back of the largest of these masquettes, from Offering 7, seems to have been hollowed by a massive solid core drill (*ibid.*), recalling the regular and smoothly hollowed back of the monkey head pendant.

The distinctive, central brow crest marks this

pendant as the head of a spider monkey as commonly depicted in Olmec art (see Fig. 69a; Easby and Scott 1970: no. 47; de la Fuente 1977a: illus. 39, 40). A full-figure Olmec monkey pendant rendered in blue-green jade also is known (Easby and Scott 1970: no. 47). Aside from this example, there is a seated monkey pendant of celadon green jade (Gay 1995: no. 109). Although not of typical Olmec jade, the workmanship and style of the celadon piece suggest that it is Olmec. A similar, albeit more schematic greenstone full-figure monkey pendant was excavated at Chalcatzingo (Thomson 1987: fig. 176). Similarly seated monkey pendants also have been found at earlier Ocos phase Mokaya sites (1250–1100 B.C.), which are among the earliest-known ancient Mesoamerican effigy pendants (Clark 1991: fig. 7).

The widely open eyes and sunken cheeks of the monkey masquette pendant convey a highly animated and almost mischievous quality, which seems to be further conveyed by the curiously asymmetric nostrils. In view of their spirited antics, it is hardly surprising that monkeys were widely regarded as amusing and mischievous beings in ancient Mesoamerica. In both ancient and contemporary Mesoamerica, the spider monkey is identified with music, dance, clowning, and sexuality (Seler 1902–23, 4: 456–459; Bricker 1973: 93–96, 175–176; Taube 1989). Elizabeth Easby and John Scott (1970: no. 47) note two instances in which spider monkeys appear to be depicted with a certain degree of humor in Formative period art. The Olmec full-figure blue-green



Fig. 69 Formative figures with circular head ornaments. (a) Monkey holding probable blowgun. Early Formative effigy bottle from Las Bocas (from Easby and Scott 1970: no. 21); (b) A coatimundi eating squash. Early Formative effigy bottle from Las Bocas (after *The Olmec World* 1995: no. 62); (c) An acrobat with a pair of circular ornaments. Middle Formative soapstone statuette (after *The Olmec World* 1995: no. 40).

jadeite pendant depicts a potbellied monkey in a hanging position, with its forearms stretched far above its head (*ibid.*). An Early Formative Las Bocas effigy bottle of a partly crouching monkey with a puckish face and possibly holding a blowgun constitutes the second example (Fig. 69a).

The Las Bocas monkey displays roughened circular areas on the sides of the head (Fig. 69a). Rather than being natural features of monkeys, these head elements appear to depict bird down and also appear on Early Formative avian representations (*The Olmec World* 1995: nos. 57, 58). It is possible that these devices may refer to social roles corresponding to performance and entertainment (see also Figs. 69c, 71a)

The same head elements occur on an Early Formative effigy bottle illustrating a coatimundi chewing a gourd in great earnest (Fig. 69b). Along with the spider monkey, the curious and playful coatimundi is identified with clowning and performance in Mesoamerica, and in Yucatec Mayan, the term for this creature, *chi'ik*, is essentially synonymous with clown or buffoon (Bricker 1973: 181–183). In Early and Middle Formative Olmec art, the downy circular head elements are also found among acrobats, contortionists, and dwarfs (Feuchtwanger 1989: no. 103; *The Olmec World* 1995: nos. 40, 184). It would appear that like later Mesoamerican peoples, the Olmec identified monkeys with humor and ritual clowning.



Plate 33

FAT GOD MASQUETTE

Plate 33
Middle Formative
Jadeite. H. 5.4 cm
B-551

History: Acquired by Dumbarton Oaks from Everett Rassiga, 1966

Exhibition: Dumbarton Oaks, 1966–

Bibliography: Benson 1969: no. 429; Benson 1981: 104–105, figs. 8–9

This pendant is a miniature mask of the Fat God, a poorly understood being found among the Maya and other early cultures of Mesoamerica (Beyer 1930). Composed of a highly translucent, rich blue-green jadeite, this masquette is masterfully carved and polished to mirrorlike perfection. When viewed in profile, the face appears unusually deep for the dimensions of an Olmec mask. Due to the extensively hollowed out back, however, the piece is wonderfully translucent, especially in the area of the left cheek.

Although the eye orbits do not pierce the masquette, a large hole passes through the open mouth. In addition, a pair of biconically drilled holes at the crown of the head provide suspension for the pendant. Although the masquette has drilled nostrils,

they are relatively shallow and widely spaced, and no attempt was made at piercing the septum. Despite its highly finished nature, the face retains the remains of drill pits created during carving, including shallow pits flanking the upper bridge of the nose, the left side of the nose, the middle of the upper lip, the juncture of the upper lip and nose, and the corners of the mouth. But rather than suggesting an unfinished quality, these indentations provide a certain sharpness and clarity. Moreover, many of the pits are highly polished, thereby being facetlike sources of shining light. The masquette bears traces of red cinnabar staining in some unpolished or more deeply carved regions.²⁷

²⁷ The chemical identification of the cinnabar was provided by Paul Jett.



33a, side view, showing translucency

Although a finely carved piece, this masquette by no means corresponds to typical canons of Olmec beauty. The face is bulbous and fleshy, with a bald, thickly furrowed brow, massive eyebrows and heavy, sagging cheeks. Moreover, the strangely bulging lips pout almost as if to whistle. On close inspection, it can be seen that the grotesque features protrude slightly above the rear portion of the masquette, as if these constitute a mask worn by an actual person. Thus the unusual depth of the object may be because the wearer is incorporated into the piece—i.e., the ears and part of the face. A small jadeite pendant of unknown date from the Cenote of Sacrifice at Chichen Itza portrays a similar entity with heavy

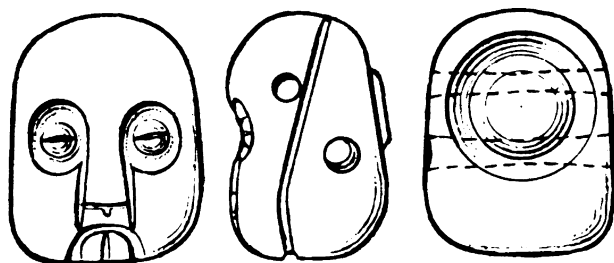


Fig. 70 Pendant of a head wearing the mask of the Fat God. Chichen Itza, Cenote of Sacrifice (from Proskouriakoff 1974: pl. 50.1b).

cheeks and a puckered mouth (Fig. 70). Although Tatiana Proskouriakoff (1974: 92) identifies the pendant as a rabbit head, both this face and the Dumbarton Oaks example represent the Fat God, a major anthropomorphic character of great antiquity in Mesoamerica. In addition to a hollowed back, the cenote pendant also is encircled with a line, again as if portraying an individual wearing a mask.

Perhaps the earliest example of this rotund being appears on an Early Formative effigy *tecomate* attributed to Tlatilco (Fig. 71a). Although the upper mouth is somewhat damaged, the bald, furrowed forehead and pendulous cheeks are plainly evident. In contrast to the Dumbarton Oaks jadeite example, it appears that the eyes are shut. A recently excavated ceramic vessel from Chilpancingo, Guerrero, portrays a Middle Formative example of the same being (Fig. 71b). Along with the bald pate and heavy cheeks, the face also has a pursed mouth, with the tongue protruding atop the sagging lower lip. A Middle Formative greenstone pendant seems to represent the same bald entity, which appears with shut eyes and heavy, sagging cheeks (Fig. 71c). Although lacking the lower jaw, this example portrays a pointed upper lip quite like that on the Chilpancingo example (Fig. 71b).

The cited Early and Middle Formative examples of the heavy-cheeked figure are clearly related to

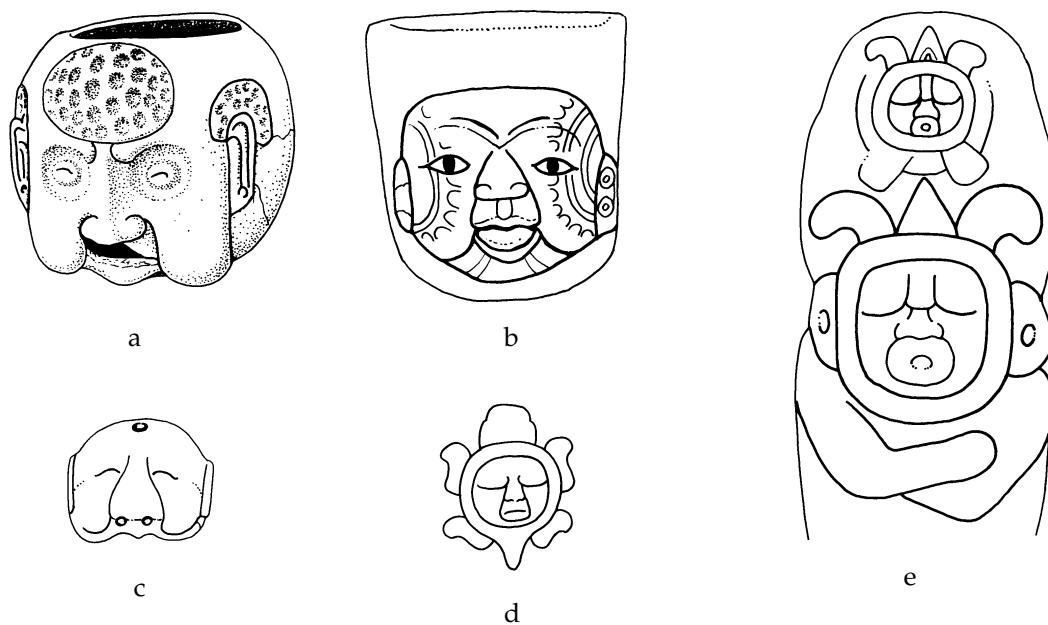


Fig. 71 Representations of the Fat God in Formative art. (a) Vessel representing the head of the Fat God. Early Formative Tlatilco (after Feuchtwanger 1989: illus. 105). (b) Face of the Fat God on Middle Formative vessel. Chilpancingo (after Martínez Donjuán 1994: fig. 9.5); (c) Middle Formative miniature mask pendant of the Fat God (after *The Olmec World* 1995: no. 185); (d) A Fat God face atop a schematic turtle. San Miguel (after Stirling 1957: pl. 50); (e) Two images of Fat God on a stone monument. Tiltepec (after Milbrath 1979: fig. 51).

faces on several monuments dated by both Susan Milbrath (1979: 38) and Lee Parsons (1986: 18) to the Middle Formative period, that is, roughly contemporaneous with the Dumbarton Oaks pendant. A sculpture from San Miguel, in the vicinity of La Venta, depicts what appear to be nine turtles, each with the face of this image on its carapace (Fig. 71d). All of the puffy faces appear with heavily lidded, shut eyes, recalling the eyes of the Tlatilco vessel and the Middle Formative jawless pendant (Fig. 71c). A monument from Tiltepec, Chiapas, bears two forms of the same entity, the upper occurring in a similar turtlelike cartouche (Fig. 71e). Immediately below, there is a larger example, complete with an upper body. Both display shut, heavily lidded eyes, and pursed circular mouths, recalling the mouths of the Dumbarton Oaks pendant and the Chilpancingo vase (Figs. 71b–c).

The bald, fat-featured visage appearing frequently with shut eyes and pursed circular mouth is by no means limited to the Early and Middle Formative periods of the Olmec. Instead, it also appears among the rotund potbelly sculptures of Monte Alto (Fig. 72a), Santa Leticia, and other sites of piedmont and highland Guatemala and El Salvador. These sculptures are typically bald-headed, with shut, heavily lidded eyes, furrowed brows, pendulous

cheeks, and, at times, circular, pursed mouths (Fig. 72b). Although S. W. Miles (1965) and John Graham (1982, 1989) favor a very early, pre-Olmec dating for these sculptures, many consider them to be Late Formative (Parsons 1986: 39–40; Demarest 1986: 138–139; Miller and Taube 1993: 86; Rodas 1993). In his discussion of Late Formative potbelly sculptures, Parsons (1986: 41) notes the continuity of this theme in Protoclassic Veracruz, as well as in Classic period art of Teotihuacan and the Maya. The Classic examples are frequently labeled the “Fat God,” a term first coined by Hermann Beyer (1930). As with the Formative character, the Classic entity is frequently bald, with a furrowed brow, heavily lidded shut eyes, bulbous lips, and massive, sagging cheeks (Fig. 73). At times, this being also may appear with a pursed mouth and sagging lower lip similar to the Dumbarton Oaks example (see Weiant 1943: pl. 41, no. 5).

In his initial identification of the Fat God, Beyer (1930) cites its presence at Teotihuacan, Veracruz, and the Maya region. But although clearly an important and widespread entity, the Fat God and its symbolic significance remain poorly understood. According to Hasso von Winning (1987, 1: 145), the Classic Fat God figures do not represent a deity, but rather, real rotund people participating in ceremonial offices. In



a



b

Fig. 72 Depictions of the Fat God in Late Formative Maya sculpture. (a) Head of the Fat God. Monte Alto Monument 10 (from Parsons 1986: fig. 123); (b) Fat God potbelly sculpture. Note the pursed mouth. San Juan Sacatepequez (from Parsons 1986: fig. 103).

a number of Classic Maya vessel scenes, however, a probable form of the Fat God appears as a specific *way*, the Mayan term for a supernatural co-essence (Fig. 74). Along with heavy, pendulous cheeks and closed eyes, this figure displays a huge belly and pronounced navel, common traits of the Late Formative potbelly sculptures. In the accompanying texts, the corpulent entity is epigraphically labeled as a *sitz' winik*, or “glutton man,” and in one case, *sitz' kimi*, meaning “glutton death” (Grube 1991: 226; Grube and Nahm 1994: 709–710). In one instance, he wears the woven suit commonly donned by Fat God figures in the northern Maya lowlands (Fig. 74c; see also, Fig. 73c–d). The horizontal marking of this suit in the lower abdomen area reveals that this figure has a swollen belly, in this case resting atop the frontal loincloth apron (Robicsek 1978: pl. 109).

It has been suggested that many of the Classic Fat God figures represent ritual clowns impersonating gluttony, a common target of social commentary in ritual humor of Mesoamerica and the American Southwest (Miller and Taube 1993: 86). In this regard, it is noteworthy that Classic Fat God figures can appear with upraised arms (Fig. 73b), a widespread gesture of dance in ancient Mesoamerica (Taube 1988a: 128, 136, 151; 1989). In addition, Classic Maya examples often grasp fans (Figs. 73c, 74c),

which, like rattles, constitute an important indication of dance and performance in Maya iconography (Taube 1989). One Jaina-style figurine depicts a woman supporting a massive Fat God who fondles her breast with one hand, thereby possibly alluding to not only gluttony but also lust, another common source of social condemnation (Fig. 73d).

Even in its earliest-known appearance (Fig. 71a), the Fat God may have been identified with clowning and performance. The aforementioned Early Formative Tlatilco vessel depicts the Fat God with pocked circular elements in the area of the forehead and ears. It has been noted previously that these cranial decorations are probably downy feathers, and may mark performers and entertainers in Olmec iconography (see Pl. 32). It also will be recalled that the Dumbarton Oaks Olmec jade pendant seems to portray an individual wearing a mask of the Fat God, as if impersonating this grotesque being during a theatrical performance.

Although the Fat God may well represent a sacred clown character of impressive antiquity and longevity, this being appears to be more than a supernatural personification of gluttony. The many Middle and Late Formative monumental stone carvings of the Fat God suggest that it had an important symbolic role in early southeastern Mesoamerica. I

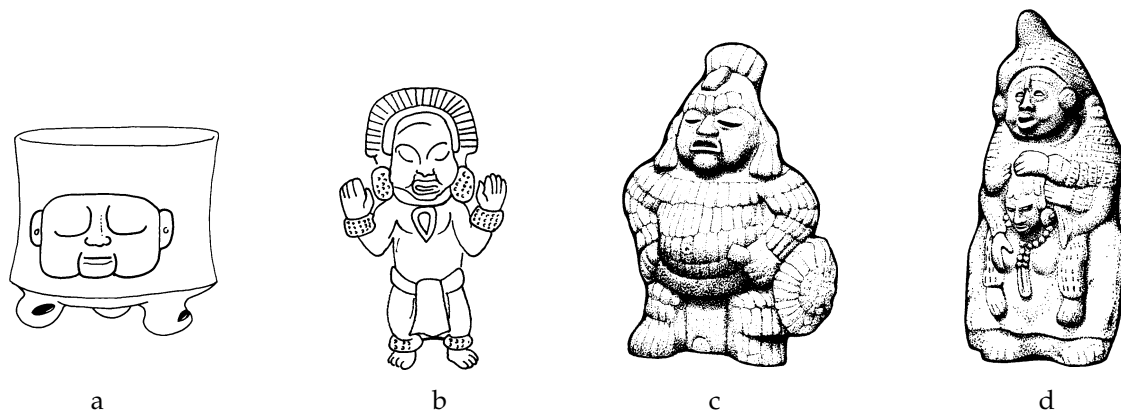


Fig. 73 Images of the Fat God from Classic Mesoamerica. (a) Face of the Fat God on an Early Classic vessel (after Seler 1902–23, 5: 520); (b) Fat God figure in a dance position (from Séjourné 1959: fig. 77); (c) Late Classic Maya Jaina figurine of the Fat God with a dance fan (from Piña Chan 1968: pl. 12); (d) Late Classic Maya Jaina figurine of a woman supporting a Fat God figure (Piña Chan 1968: pl. 13).

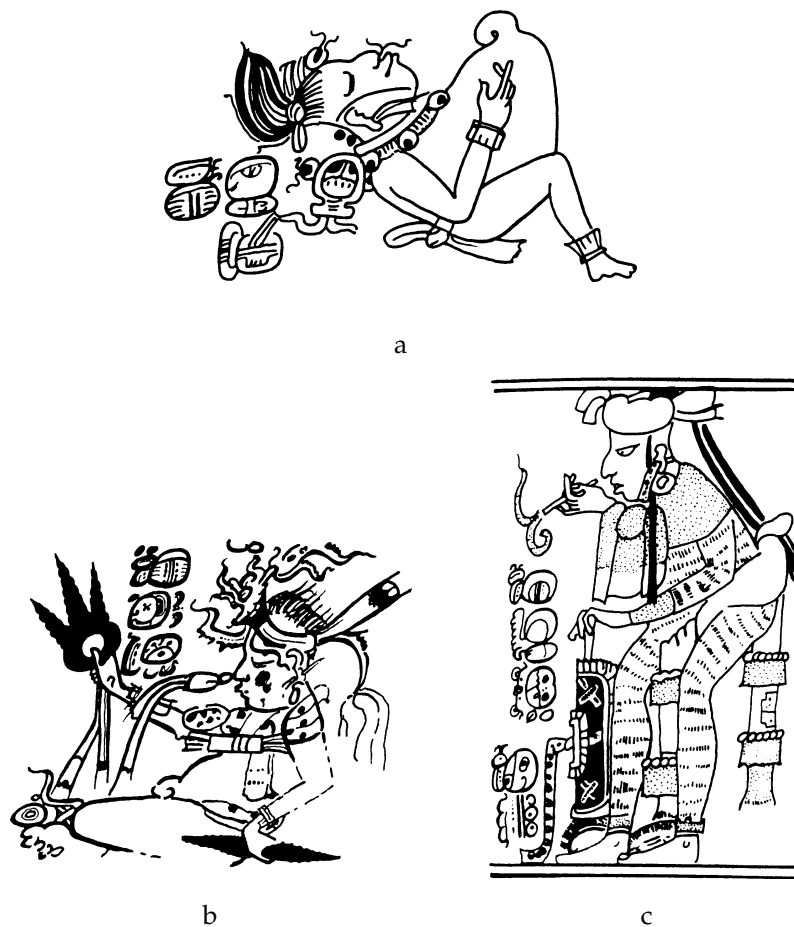


Fig. 74 Representations of the *sitz' winik*, or *glutton way*, from Late Classic Maya vases; (a) *Glutton way* lying on his back. Note the extruded navel (from Miller and Taube 1993: 87); (b) *Glutton way* epigraphically labeled *sitz' kimi* (from Grube and Nahm 1994: fig. 49); (c) Smoking *sitz' winik* wearing a full-body suit commonly found among Late Classic Maya examples of the Fat God. See Fig. 73c–d (from Schele 1985: fig. 3).

suspect that the Fat God may have been a personification of the domestic three-stone kitchen hearth, and was therefore identified with the concepts of territory and centrality as well as gluttony. It recently has become apparent that among the ancient Maya, the three-stone hearth was an extremely important metaphor for the *axis mundi* (Freidel, Schele, and Parker 1993: chap. 2; Taube 1998). Certain Proto-classic Maya stone spheres bear faces of the Fat God, as if personifications of spherical hearthstones (Parsons 1986: fig. 133; Ekholm 1970: 94–95). In addition, triadic groupings of Fat God sculptures are known from Santa Leticia, El Salvador, and Finca Sololá, Guatemala (Demarest 1986; Parsons 1986: figs. 92, 113; Rodas 1993: 6–7). A probable Terminal Classic triadic grouping of Fat God sculptures is also found at Seibal, where three rotund seated figures support a flat jaguar altar, much like a *comal* placed upon the three-stone hearth (see Smith 1982: fig. 140b).

Triadic appearances of the Fat God are not limited to monumental stone sculpture. At Classic

Teotihuacan, three-pronged ceramic kitchen braziers often functioned much like portable versions of a three-stone hearth. Quite frequently, the three prongs are decorated with the Fat God (Linné 1942: fig. 306; Séjourné 1959: fig. 98; Manzanilla, Ortiz Butron, and Angel Jiménez 1993: fig. 139). One Teotihuacan ceramic object portrays three Fat God heads placed equidistantly at the edges of a concave disk (von Winning 1987, 1: chap. 12a; fig. 1o). In the northern Maya lowlands, the Fat God also can appear on the tripod feet of large Late Classic food bowls, or *hawante* (Brainerd 1958: fig. 88). The common appearance of the Fat God in triadic groupings, as well as its frequent resemblance to spherical hearthstones in early Maya piedmont sculpture, suggests that the Fat God embodied the three-stone hearth and its attendant significance as the pivotal *axis mundi*. Thus, along with apparently being a Bacchus-like character of feasting and clowning, the Fat God also may have been an embodiment of the World Center, the source of fertility, prosperity, and wealth.



Plate 34

WINGED PENDANT

Plate 34
Middle Formative
Diopside jadeite. L. 26.8 cm; Thickness 1.2 cm
B-128

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1948–49, 1952–62; Dumbarton Oaks, 1963–

Bibliography: Bliss 1957: no. 81; Benson and Coe 1963: no. 150

This impressive, subtly contoured pendant plaque is fashioned from a large, cut slab of jade. The highly polished stone is dark, opaque green with relatively large crystalline inclusions, quite like the Dumbarton Oaks celtiform pendant bearing an incised maize motif. Four biconically drilled suspension holes occur on the top edge of the plaque, two through the right-angled tips, and two others in the central curved region. Whereas the outer pair of holes passes through the sides and top edge of the slab, the more interior holes were created by drilling through the top edge and back of the piece. Thus, none of the drill holes are readily visible from the front of the pendant. Moreover, although the front has gently beveled edges, the back side of the pendant is flat and slablike.

Although subtle, the contour of the pendant is fairly complex and sinuous. The top edge has three gently curving emanations, creating two shallow

clefts some 6 centimeters from either end. These depressions are centered on two other gently swelling emanations on the opposite lower edge of the piece, with a broad indentation complementing the large central curve of the upper edge.

The pendant has been interpreted as a bat with outstretched wings, although with no indication of a bat head or body (Lothrop et al. 1957: 246). Although two winged batlike pendants are known for the Olmec, they are quite different in form, and represent anthropomorphic figures flanked by upwardly curving wings (see Pohorilenko 1981: figs. 5, 7). In fact, Karl Lorenzen (personal communication, 1996) suggests that these two examples represent butterfly figures rather than bats. Although it is conceivable that this pendant represents a highly stylized bat, its abstract nature mitigates against any firm links to the natural world.

Both the type of stone and workmanship of this pendant are compatible with Olmec jades. The use of "hidden" suspension holes drilled through the top edge and back is commonly found in Olmec pendants (e.g., see Pls. 24, 28, 35). Moreover, the celtiform pendant of Plate 24 shares not only a similar type of jade and the use of hidden suspension holes, but also a slablike form, with little attempt at three-dimensionality or even fully rounded edges. It is quite pos-

sible that both represent relatively late examples of Olmec lapidary work. However, at present, the form of this pendant is unique among the Olmec and cannot readily be compared with other stone pendants or their depictions in Formative or later Mesoamerican art. The principal figure on the Late Formative Alvarado Stela of southern Veracruz wears a large winged pendant of comparable scale but of a different form (Fig. 75).

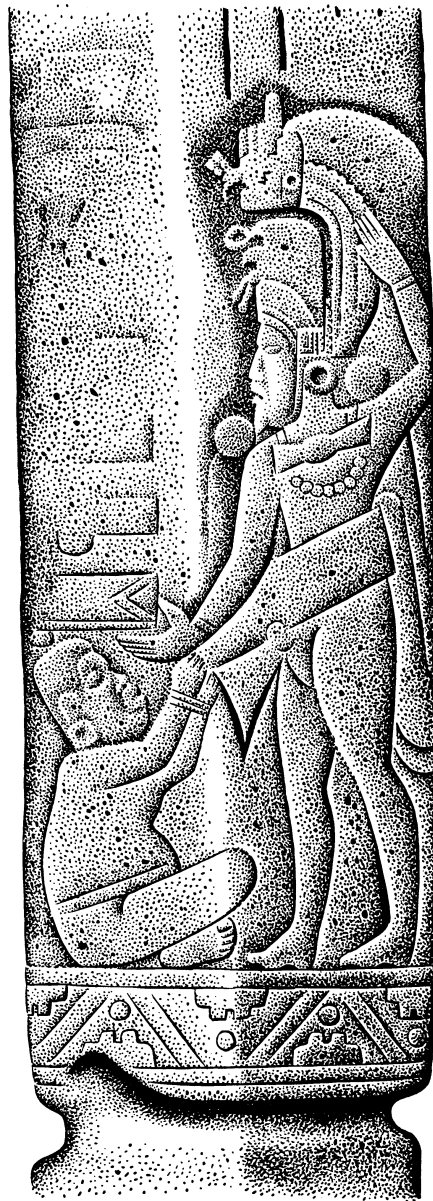


Fig. 75 Figure wearing a large winged pectoral. Alvarado Stela, Veracruz, Late Formative period (from Covarrubias 1957: fig. 29).



Plate 35

RECLINING FIGURE PENDANT

Plate 35
Middle Formative
Serpentine. L. 11.2 cm
B-7

History: Attributed to San Cristobal Tepatlaxco, Puebla; purchased by Robert Bliss from Earl Stendahl, before 1948

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1949–62; *Dumbarton Oaks*, 1963– ; *Olmec Art of Ancient Mexico*, National Gallery of Art, 1996

Bibliography: Christensen 1955: 186, fig. 167; Bliss 1957: no. 12; Disselhoff and Linné 1960: fig. 38; Martí 1961: fig. 77; Stirling 1961: fig. 4; Benson and Coe 1963: no. 18; Benson 1981: 98–99, fig. 3; Coe 1965b: fig. 11; Willey 1966: fig. 3.28a; Glubock 1968: 24; Bernal 1969b: pl. 74c; Davies 1983: fig. 4; Niederberger 1987: fig. 89; González Calderón 1991: pl. 468; Benson and de la Fuente 1996: no. 58

This figure reportedly was discovered in two pieces several years apart. In May 1948, only the head and left arm fragment were exhibited at the National Gallery of Art. The larger fragment, consisting of the right arm, legs, and torso, were joined to the rest of the piece later that same year. The pendant repre-

sents a male reclining on his side, with his left arm placed against his sharply upturned head. A biconically drilled hole behind the right shoulder reveals that the figure was intended to be worn horizontally, with the crook of the right arm or knee offering other possible places for suspension. The pen-



a



b

Fig. 76 Middle Formative examples of reclining figure pendants. (a) Reclining figure attributed to San Gerónimo (from Bernal 1969b: pl. 74b); (b) Reclining figure attributed to Tzintzuntzan (from Bernal 1969b: pl. 74d).

dant is fashioned of serpentine with metallic inclusions, quite like other Olmec objects at Dumbarton Oaks (e.g., Pls. 9, 10). In addition to the hole through the right shoulder, the figure has a perforated nasal septum and pierced earlobes. The hollow areas defined by the arms and legs appear to have been carved by drilling and string sawing, and the remains of a large drill hole can be discerned in the area of the right wrist and arm pit. The toes and fingers as well as a line for the buttocks and small of the back were created by incision. Particularly fine, light incisions delineate the ears and loincloth. A great deal of attention was devoted to carving the face, which is deeply furrowed around the puffy eyes

and grimacing mouth. The tightness and intensity of the face is further augmented by the sharp, almost contorted turning of the head at a right angle from the body. Three triangularly placed drill holes created the interior of the downwardly turning mouth, a convention found among other Middle Formative Olmec sculptures in precious stone (*The Olmec World* 1995: nos. 18, 11, 153).

Along with the Dumbarton Oaks reclining figure pendant, Ignacio Bernal (1969b: 155, pl. 74) describes and illustrates two closely related examples, one attributed to San Gerónimo, Guerrero, and the other, an Olmec heirloom discovered at the late Tarascan capital of Tzintzuntzan, Michoacán (Fig. 76).

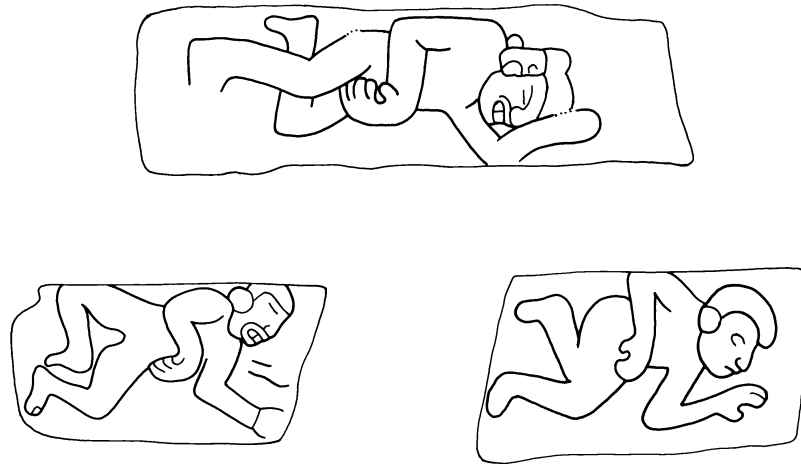


Fig. 77 Examples of Middle Formative Danzantes. Monte Albán (after Scott 1978, 2: D-15, D-65, M-9).

Although Bernal (*ibid.*: pl. 74) interprets the three pendants as “dancing figures,” he illustrates all three as reclining. Elizabeth Easby and John Scott (1970: no. 11) note that the San Gerónimo example is also pierced at the neck and hip for horizontal suspension. The San Gerónimo figure also wears a loincloth, thereby identifying it as male, like the Dumbarton Oaks figure. But although somewhat damaged, the pose of the Tzintzuntzan figure is especially similar to the Dumbarton Oaks piece, and displays a sharply upturned head with one hand placed against the belly. Whereas the Dumbarton Oaks figure lies on his right side, the San Gerónimo and Tzintzuntzan examples are on their left sides.

Despite a number of minor differences, the three pendants are strikingly similar in both form and theme. Although clearly related, the meaning of these figures remains poorly understood. Bernal (1969b: 155) notes their resemblance to certain of the slightly later Danzante sculptures, figures that Michael Coe (1962a: 95–96) interprets as slain enemies of Monte Albán (Fig. 77). However, although the Zapotec Danzantes tend to appear nude with mutilated genitalia, two of the Olmec figures wear loincloths, and there is no indication that they have been humiliated or physically abused.

In comparison with typical Olmec proportions,

the three pendants are strangely attenuated and wraithlike, giving them an otherworldly, supernatural quality. The curious pose of these figures recalls the flying individuals in Peruvian Paracas textiles (Fig. 78a–b), which have been interpreted as shamans engaged in ecstatic flight (Paul and Turpin 1986). Along with the Olmec pendants, these figures also had been previously identified as dancers (*ibid.*: 23). However, a roughly contemporaneous painted Chavín-style textile from nearby Karwa provides considerable support for the shamanic interpretation. In this case, a series of figures holding necklacelike devices flies amid birds in a landscape of flowering cactus and maize (Fig. 78c). A Chavín-style gold plaque depicts a pair of flying avian figures in similar pose with ropelike forms (Fig. 78d). Lucy Salazar-Burger and Richard Burger (1996: 100) compare the rope motifs of Early Horizon Chavín and Cupisnique both to concepts of shamanic transformation and to a creation myth from the Chavín de Huantar region featuring a pair of siblings and a rope as a conduit to the heavens. The authors further note that this myth also concerns the origin of potatoes and the relative productivity of certain land. The Tello Obelisk, an Early Horizon Chavín de Huantar monument filled with depictions of cultigens, features a pair of individuals in the flying

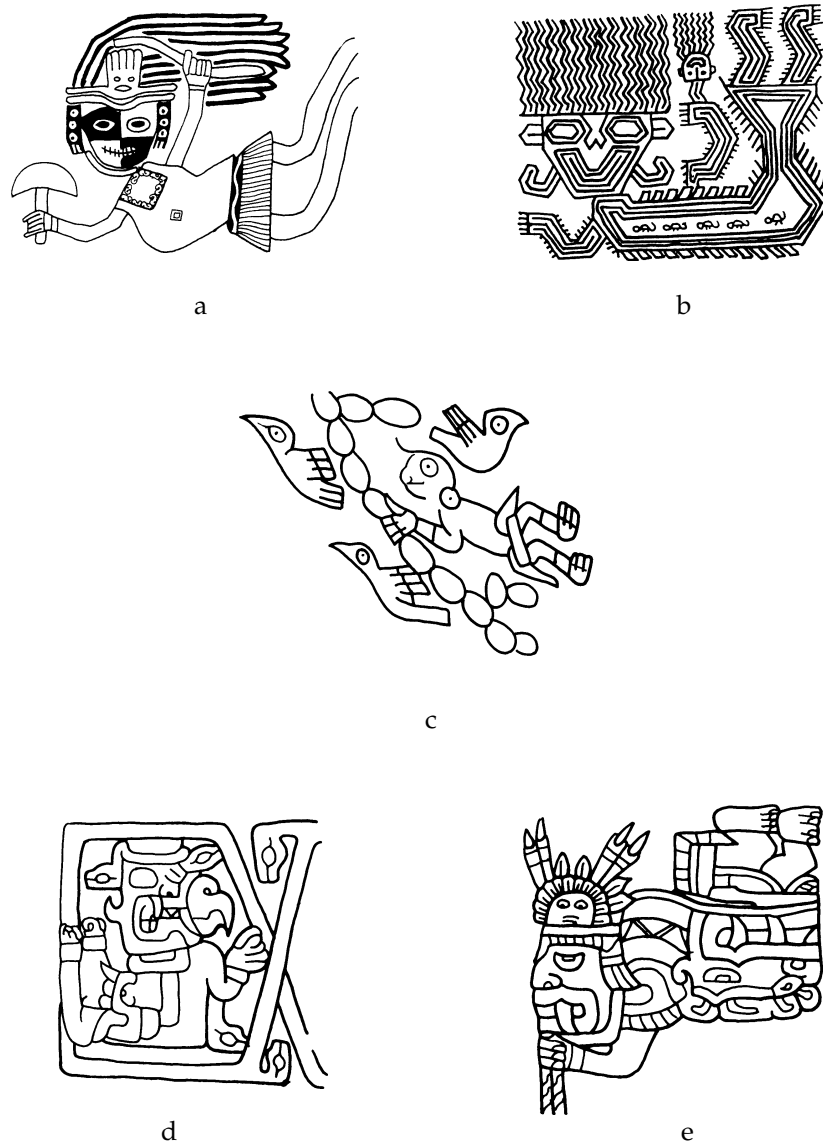


Fig. 78 The flying shaman position in early Andean iconography. (a) Flying figure from a Paracas textile. Late Early Horizon (after Paul and Turpin 1986: 24); (b) Flying figure from a Paracas textile. Early Intermediate (after Paul and Turpin 1986: 27); (c) Flying figure surrounded by birds. Detail of a Chavín-style textile from Karwa. Early Horizon (after Sawyer 1972: fig. 6); (d) Flying bird figure with rope forms. Detail of a Chavín-style gold plaque. Early Horizon (after Rowe 1976: fig. 23); (e) One of a pair of Chavín flying figures holding ropes (with the figure inverted for comparison). Detail of the Tello Obelisk at Chavín de Huantar (after Rowe 1976: fig. 6).

shamanic posture grasping sections of rope (Fig. 78e). The horizontal position of the Paracas and Chavín figures recalls not only the stone pendants under discussion, but also the flying Olmec figures grasping maize fetishes (see Fig. 50).

Michael Coe (1965a: 105) compares the position of the Olmec stone pendants to Early Formative Olmec reclining figurines known for Las Bocas and other sites that also often appear with one hand against the head (ibid.: no. 199; Easby and Scott 1970:

nos. 8–10; Feuchtwanger 1989: nos. 37–43, 73; *The Olmec World* 1995: nos. 237, 239a, b). Easby and Scott (1970: no. 10) suggest that the reclining pose was a position adopted during “a trancelike state produced by hallucinogenic mushrooms or other substances.” However, it is also possible that the figures are sleeping, as dreams are commonly regarded as a potent source of visions in Mesoamerican thought (Houston and Stuart 1989; Miller and Taube 1993: 80–81).

Peter David Joralemon (1988: no. 5) notes that



a



b

Fig. 79 Reclining female figurines, Early Formative period. (a) Reclining woman. Las Bocas (from Coe 1965a: no. 199); (b) Reclining woman. Las Bocas (after *The Olmec World* 1995: no. 239a).

whereas the Middle Formative stone pendant figures are male, the Early Formative reclining figurines tend to be female (Fig. 79). Moreover, whereas the Early Formative figurines could well represent reclining people, the pendants denote a more supernatural quality. Rather than lying comfortably on their sides, the stone figures seem to float or writhe in the air. Jeffrey Quilter (personal communication, 1996) notes that whereas the reclining females rest their heads solidly against one of their arms, the arms of the pendant figures do not support their heads

(see Fig. 76). Clearly, such a position could be maintained for only short intervals without extreme discomfort. Although both the ceramic and stone figures may depict the concept of visionary dreams, the thematic focus may differ slightly, with the Early Formative ceramic figurines portraying female shamans and curers. On the other hand, the more contorted Middle Formative examples may depict supernatural dream souls or companion spirits. In other words, these pendant figures may embody the dream or trance counterpart of the wearer.



Plate 36

DUCK-BILLED PENDANT

Plate 36
Middle Formative
Jadeite. H. 8.2 cm
B-22

History: Formerly in the collection of Joseph Brummer; purchased by Robert Bliss from V. G. Simkhovitch, 1948

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1952–62; Dumbarton Oaks, 1963–

Bibliography: Kelemen 1943: 291, pl. 237c; Bliss 1957: no. 3; Benson and Coe 1963: no. 33; Coe 1965b: fig. 25; Pohorilenko 1996: fig. 11

Fashioned from translucent, mottled blue-green jade, this finely worked pendant was first published in 1943 (Kelemen 1943: pl. 237c), when it was owned by the Brummer Gallery of New York. The pendant portrays an otherwise human head supplied with a

massive duck bill. Although the face appears to have considerable depth, it is actually quite shallow, being cut from the same planar surface as the broad bill. Both the septum and earlobes are pierced, and it is possible that small pendants once hung from the



Fig. 80 Classic Maya duck-head pendants. (a) Jade duck-head pendant. Uaxactun (after Kidder 1947: fig. 34c); (b) Jade duck-head pendant. Kaminaljuyu (after Kidder, Jennings, and Shook 1946: fig. 148b); (c) Probable Protoclassic form of God N wearing a duck-head pendant. Kaminaljuyu Stela 17 (from Taube 1992b: fig. 49a); (d) Protoclassic figure wearing a duck-head pendant. Uaxactun Structure H-Sub 10 (after Valdés 1987: fig. 5); (e) Figure wearing a duck-head pendant. Detail of an Early Classic censer lid (after Berjonneau, Deletaille, and Sonnery 1985: pl. 364); (f) Musicians wearing duck-head pendants. Detail of Early Classic mural from Uaxactun Structure B-XIII (after Smith 1950: fig. 46); (g) Early Classic ruler wearing a duck-head pendant. Tikal Stela 7 (detail from Jones and Satterthwaite 1982: fig. 11b).

ear holes. Rather than being an obvious mask, the duck bill curves organically with the contours of the lower cheeks, and connects directly to the nasal septum. The bill is incised with bold and fluid lines, with the vertical crescent elements representing nostrils.

The curling form at the top of the piece, probably braided hair, is considerably thicker than the face and bill. A laterally drilled hole passing through the sides of this section provides the means of suspension. Complex in form, the coiffure, or headdress, is slightly cleft in the lower center, mirroring the curving edge and pointed center of the beak below. The cleft lies upon a central area marked with in-

verted V-shaped incisions, evidently denoting braiding. At the back of the head, this element ends with a straight, rather than cleft edge. Similarly marked elements curl at the sides of this central section, effectively spiraling around the laterally drilled suspension hole.

Precious stone pendants with broad duck bills were notably popular and widespread in ancient Mesoamerica. This may derive partly from the broad and thin bill form, which allows light to readily pass through translucent stone. Elizabeth Easby and John Scott (1970: 48–50) illustrate three Olmec duck-head pendants carved in brilliant emerald-green jade. A

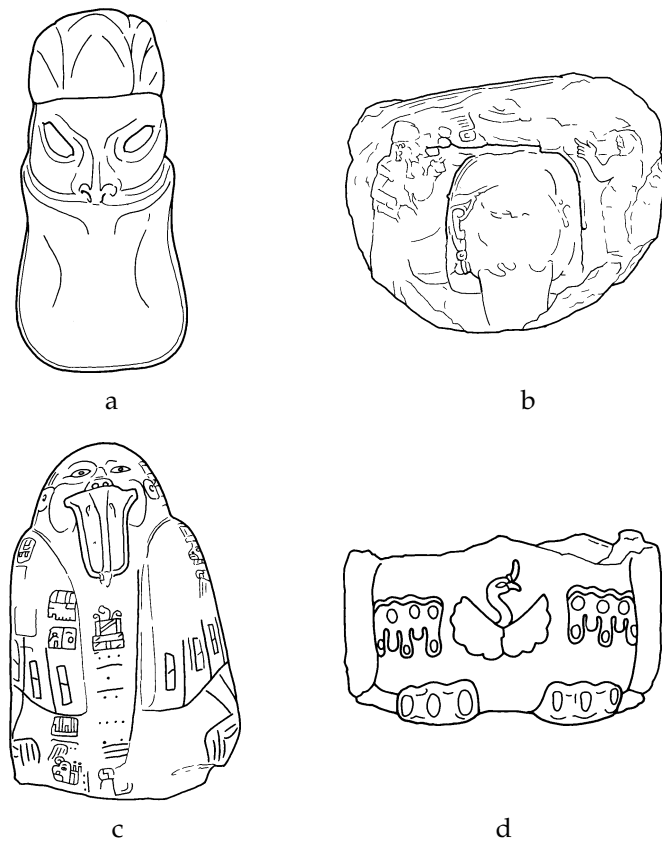


Fig. 81 Early duck imagery from the Gulf Coast region. (a) Human face with duck-bill pendant. Black stone. Middle Formative. Drawing by Elizabeth Wahle (after *The Olmec World* 1995: no. 181); (b) Face with a duck bill. La Venta Altar 7 (from Drucker 1952: pl. 65b); (c) The Tuxtla Statuette. Protoclassic. Drawing by Elizabeth Wahle (after Bernal 1969b: pl. 48); (d) Monumental duck basin. Note the bas-relief duck and clouds on the chest. San Lorenzo Monument 9. Drawing by Elizabeth Wahle (after Coe and Diehl 1980, 1: fig. 433).

similar jadeite duck-head pendant was excavated during 1942 excavations at La Venta (Drucker 1952: pl. 54). A jadeite duck-head pendant was discovered in a Middle Formative burial from Mound 20 at San Isidro, Chiapas (Lowe 1981: fig. 7g). At Kaminaljuyu, a duck-head pendant and other jade pendants and beads of late Olmec style were discovered in a Late Formative cache in association with the burial of Kaminaljuyu Stela 9, a monument probably dating to the Middle Formative period (Parsons 1986: 16, fig. 6). At least one jade duck-head pendant was discovered in a Middle Formative burial at Playa de los Muertos, Honduras (Heally 1992: fig. 7).

Pendants in the form of duck heads are also known from a number of Classic period Maya sites, including Kaminaljuyu, Uaxactun, Nebaj, Altun Ha, and Dzibilchaltún, where they have generally been misidentified as “alligator” heads (Fig. 80a–b; Kidder, Jennings, and Shook 1946: fig. 148b; Kidder 1947: fig. 34c; Smith and Kidder 1951: 57e, 62d; Pendergast 1990: 264, fig. 120a; Taschek 1994: fig. 11b–e). In addition, representations of duck-head pendants are

relatively common in Protoclassic and Early Classic Maya art and can be seen at Kaminaljuyu, Uaxactun, and Tikal (Fig. 80c–g). These duck-head jewels typically appear as the central pendant on a necklace formed of large beads. An Early Classic mural from Uaxactun portrays no fewer than three individuals wearing duck-head necklaces (Fig. 80f). Although this jewelry is poorly documented for the Late Classic period, the Aztec fashioned duck-head pendants in translucent amethyst and obsidian during the Late Postclassic (Easby and Scott 1970: nos. 301–302; Feest 1990: fig. 19). Obsidian examples in various stages of manufacture were excavated at Late Postclassic Otumba, Mexico (Otis Charlton 1993: 239–240, fig. 10g–i).

The Dumbarton Oaks jewel differs from the cited duck-head pendants in one significant way. Rather than simply representing a duck, the pendant depicts a human face with a duck bill. A similar fusion of human and duck can be found on an Early Formative effigy vessel representing a duck with human ears (*The Olmec World* 1995: no. 58). However,

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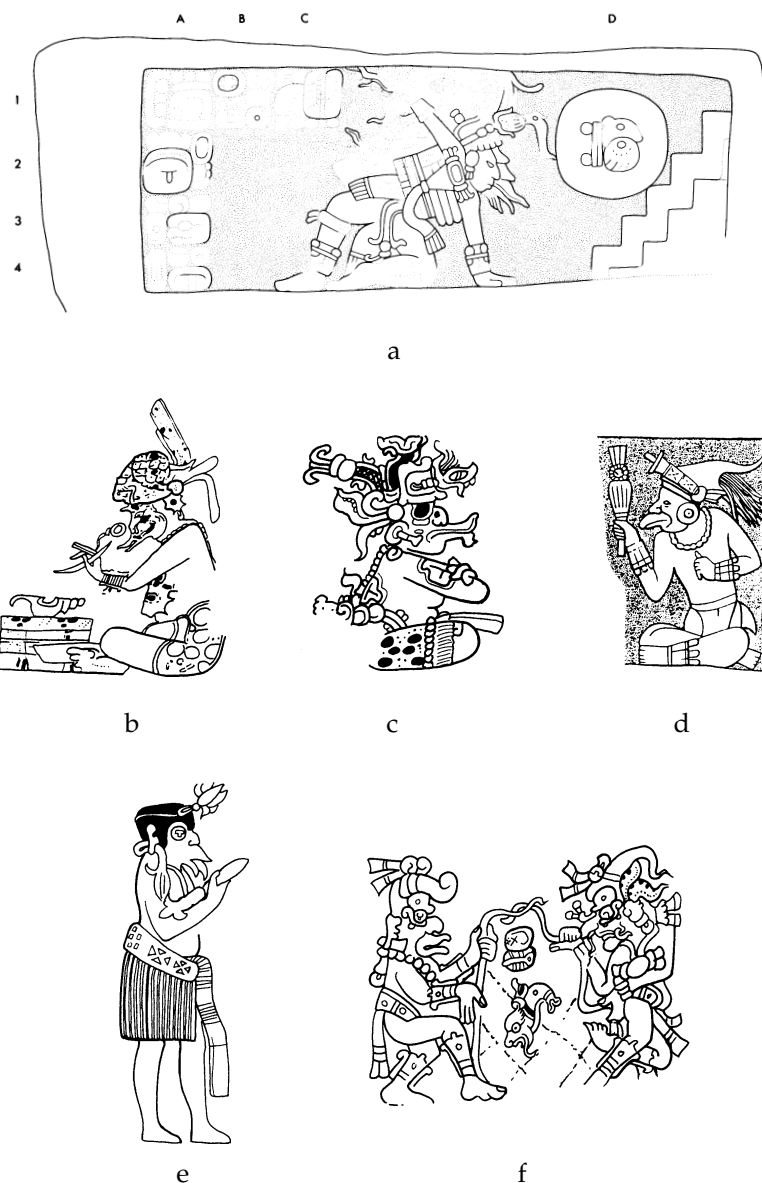


Fig. 82 Duck figures in ancient Maya art. (a) Ballplayer wearing a duck mask with accompanying text mentioning *ik' k'u*, or the "wind god." Yaxchilán, Hieroglyphic Stairway 2, Step X (from Graham 1982: 163); (b) Duck artisan. Note the shell pectoral. Detail of a Late Classic Maya vase (after Reents-Budet 1994: fig. 2.3); (c) Duck-billed figure marked with *ik'* wind signs. Detail of a Late Classic vessel (after Robicsek and Hales 1981b: no. 1); (d) Duck-billed figure shaking a rattle. Seibal Stela 3. Detail of drawing courtesy of James Porter; (e) Duck-billed character with eye marked by the *ik'* wind sign. Bonampak, Room 1 (after Ruppert, Thompson, and Proskouriakoff 1955); (f) Duck-billed figure with *ik'* eye and Chaak fishing from the Codex Dresden, p. 44c.

the Dumbarton Oaks piece is most similar to a virtually identical Olmec pendant carved in black stone (Fig. 81a). Along with the face and large bill, the black pendant also displays the same coiffure or headdress. La Venta Altar 7 portrays another Middle Formative example of this character, in this case within an altar niche (Fig. 81b). Both La Venta Altar 7 and the Dumbarton Oaks pendant have been compared to the famous Tuxtla Statuette, which portrays a bald-

headed man with a duck body and bill (Drucker 1952: 183; Kelemen 1943: 291; Bliss 1957: 233). Like the Middle Formative examples, the bill projects down below the nose as an integral part of the face (Fig. 81c). Although the jadeite statuette does appear to represent a related entity, it bears a Long Count date corresponding to A.D. 162, well after the Middle Formative Olmec.

In Late Postclassic highland Mexico, there was

one major deity known for his duck-billed mask, Ehecatl-Quetzalcoatl, the god of wind. According to Scott O'Mack (1991), this bucal mask is based on the *ecatototl*, or "wind bird," the hooded merganser (*Lophodytes cucullatus*). One particular species of duck, the *atapalcatl* (*Oxyura jamaicensis*) was believed to be a harbinger of rain: "It is named *atapalcatl* because if it is to rain on the next day, in the evening it begins, and all night [continues], to beat the water [with its wings]. Thus the water folk know that it will rain much when dawn breaks" (Sahagún 1950–82, 2: 36). Similarly, it was Ehecatl-Quetzalcoatl who brought the fertile clouds of rain: "Quetzalcoatl—he was the wind; he was the guide, the roadsweeper of the rain gods" (Sahagún 1950–82, 1: 9). Until recently, there was little evidence of such a concept among earlier cultures of Mesoamerica, but David Stuart (personal communication, 1993) has provided evidence of a duck wind deity among the Classic Maya. On a carved step from Yaxchilan Structure 33, a duck-billed character is epigraphically labeled *ik' k'u*, or "wind god" (Fig. 82a). Stuart also notes that in the scene of water beings from Bonampak Room 1, a duck-billed figure has the *ik'* wind sign in his eye (Fig. 82e). Further confirmation is provided by a Late Classic duck-billed figure displaying *ik'* signs on his body (Fig. 82c). Along with an augury indicating abundance, the Codex Dresden (p. 44c) features a Postclassic form of the *ik'*-eyed duck god fishing with Chaak, the Maya god of rain (Fig. 82f). The act of fishing, or raising fish into the sky, seems to have been regarded as a symbolic rain-making act (Taube 1995: 95 n. 53). Nikolai Grube notes that the Classic Maya glyph of conjuring gods and ancestors, the "fish in hand" sign is read as *tsak*, a Mayan term signifying the conjuring of clouds as well as fishing (cited in Freidel, Schele, and Parker 1993: 436 n. 650).

The Maya duck-billed deity shares other, secondary attributes with Ehecatl-Quetzalcoatl. In one Late Classic vessel scene, the Maya god wears a spoked shell pectoral very much like the cut conch "wind jewel" pectoral of the Aztec wind god (fig. 82b). Seibal Stela 3 portrays the duck deity as a musician shaking a rattle, and in Late Postclassic central Mexico, the wind god is also a maker and bringer of music. A passage of Codex Borgia (pp. 36–38), pertaining to the mythic origins of music, portrays instruments and articles of music and dance carried in a great spiraling wind stream personified as Ehecatl-Quetzalcoatl.

It appears that, like the later peoples of Late Postclassic highland Mexico, the Classic Maya considered an anthropomorphized duck-billed being as a god of wind. Although it is difficult to relate the Olmec being directly to wind, ducks, by their natural habitat, are obviously related to water. I previously suggested that Early Formative duck effigy vessels with beak spouts may allude to ducks as water bringers (see p. 50). For the aforementioned duck censer, the smoke clouds rise out of the beak, much as if the breath of this being is the cloud bringing wind. San Lorenzo Monument 9 provides a still more compelling case (Fig. 81d). Originally part of the elaborate Early Formative system of drains and pools at San Lorenzo, the monument portrays a great, web-footed duck (Coe and Diehl 1980, 1: 314). Another duck rendered in bas-relief appears on the chest of the bird. Flanked by probable rain clouds, the bird appears to be beating its wings, quite like the Aztec description of the *atapalcatl* duck. As among later peoples of ancient Mesoamerica, the Olmec identified the duck with rain, water, and fructifying powers of agricultural fertility.

TUBULAR BEADS

Plate 37
Middle Formative
Jadeite
B-26 L. 16.3 cm
B-27 L. 14.3 cm

History: Purchased by Robert Bliss from Earl Stendahl, 1949

Exhibition: *Indigenous Art of the Americas*, National Gallery of Art, 1952–62; Dumbarton Oaks, 1963–

Bibliography: Bliss 1957: no. 19; Benson and Coe 1963: no. 155



Plate 37

Due to their simple form, tubular jade beads often are difficult to source and date. Nonetheless, these two large beads can be reasonably attributed to the Middle Formative Olmec (Bliss 1957: pl. X). Both are carved from high quality, semi-translucent jadeite and exhibit considerable amounts of cinnabar staining, qualities that are relatively common to Olmec jades. Similar in size and general form, they were purchased from Earl Stendahl in 1949, and it is possible that they derive from the same archaeological source.

The more elaborately carved, thicker bead (*top*) is encircled with three broad bands in its middle. Suggestive of lashing, these bands appear to constrict the center of the piece, with the bead flaring out slightly from the banded center. Similar medial banding appears on a large calcite bead attributed to the Balsas River region of Guerrero (Gay 1995: no. 133).

The full, rounded, and sculptural appearance of the Dumbarton Oaks example belies the fact that only the ends are fully cylindrical. Two opposing planar surfaces run along most of the length, as if the bead was carved from a thick slab of cut jade. A hole drilled through the middle of the central band connects to the biconically drilled hole passing through the length of the bead. This smaller hole reveals that this item was part of a larger pendant assemblage, with one or more items hanging from the middle of the bead. Whereas one end of the bead is opaque and marblelike, the other end has dark veins that are an intense, translucent green color under strong light. The longer and narrower bead (*bottom*) is encircled with two parallel grooves at both ends. Near either end of the otherwise smoothly ground and polished surface, there are two shallow, facetlike indentations, evidently attempts to remove flawed areas of stone.



Plate 38

STONE MASQUETTE

Plate 38
Middle Formative
Porphyry. H. 11.2 cm
B-4

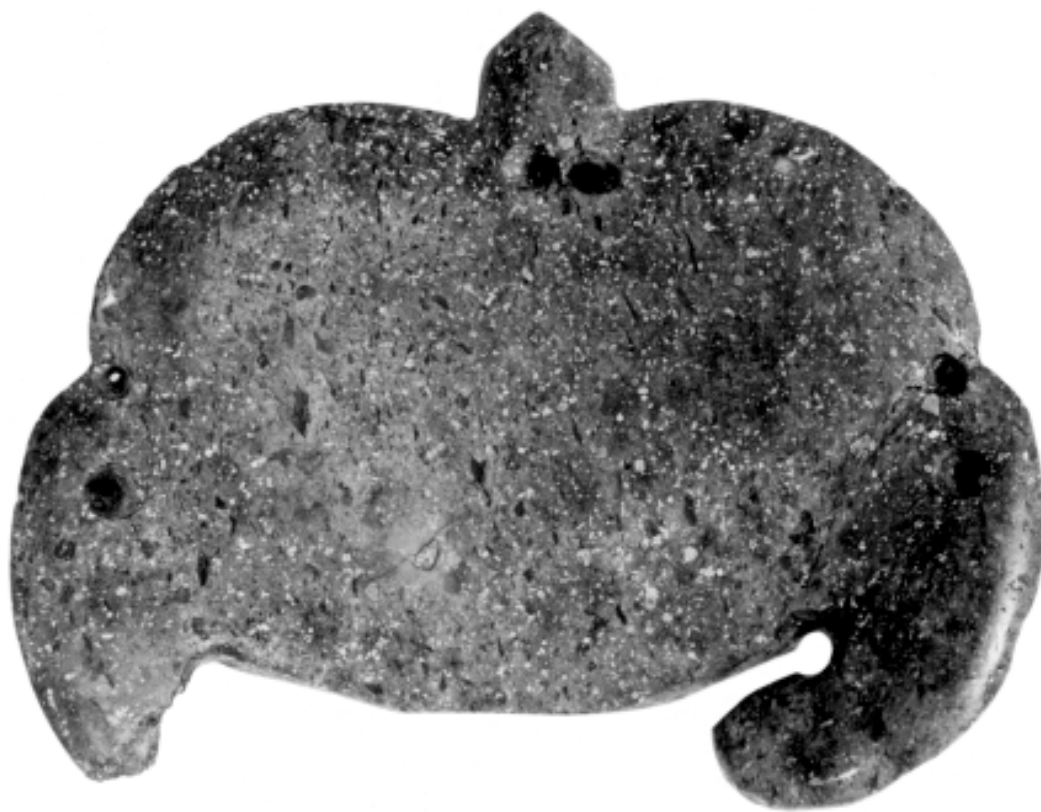
History: Purchased by Robert Bliss from Earl Stendahl, 1941

Exhibition: *Ancient American Art*, Santa Barbara Museum of Art, 1942, M. H. De Young Memorial Museum, 1942, Portland Museum of Art, 1942; *Indigenous Art of the Americas*, National Gallery of Art, 1947–48, 1952–56, 1960–62; Dumbarton Oaks, 1963– ; *Die Azteken und ihre Vorläufer: Glanz und Untergang des Alten Mexico*, Roemer- und Pelizaeus Museum, Hildesheim, 1986; *Ausstellungsleitung Haus der Kunst, Munich*, 1987; *Oberösterreichisches Landesmuseum, Linz*, 1987; Louisiana Museum of Modern Art, Humlebaek, Denmark, 1987; National Archaeology Museum, Athens, 1988; Société du Palais de la civilisation, Montreal, 1988; *The Ancient Americas: Art from Sacred Landscapes*, Art Institute of Chicago, 1992–93, Museum of Fine Arts, Houston, 1993, Los Angeles County Museum of Art, 1993

Bibliography: Bliss 1947: no. 131; Bliss 1957: no. 18; Benson and Coe 1963: no. 15; Townsend 1992: no. 207; de la Fuente 1992: fig. 10

This masquette is carved from a dark, olive green porphyry mottled with pale brown inclusions. In spite of its rather shallow relief, the piece conveys a strongly sculptural, almost muscular quality with gently rounded masses marked with broad and shal-

low indentations, an effect further enhanced by the gleaming, polished surfaces. The masquette was carved using a variety of techniques, including drilling, string sawing, and broad and fine line incision. Along with supplying suspension holes at the sides



38a, back view

of the masquette, solid-core drills also carved the six shallow whisker holes on the cheeks as well as two indentations on the upper lip. A series of eleven minute holes were drilled near the right corner of the mouth, with two others on the opposing side. Although clearly intentional, the meaning of these curious holes remains unknown. The hole closest to the right corner of the mouth contains an iron pyrite inlay, and it is quite possible that other portions of the sculpture—such as the whisker holes, eyes, and the projecting central element—were also inlaid with iron pyrite, which would beautifully complement the dark stone. The corners of the mouth were carved with large, solid-core drills. The better preserved proper right side of the mouth suggests that the mouth corners were opened by string sawing, beginning in the region of the large holes. Fine line incision defines large rounded masses and delineates the nose and portions of the upwardly projecting central element. The slightly concave back of the masquette is entirely smooth.

Although at first sight the masquette may appear to be a pendant, it was probably a diadem tied to the center of the brow (Roemer- und Pelizaeus

Museum 1986: no. 10; de la Fuente 1992: fig. 10). Along with a biconically drilled hole behind the projecting central element, two pairs of suspension holes are placed at the sides, indicating that the item was probably bound against the body. Moreover, the smooth and gently concave back is well-suited to fit comfortably against the brow.

The masquette has been generally interpreted as a jaguar face lacking the lower jaw (Bliss 1957: 235; Roemer- und Pelizaeus Museum 1986: no. 10; de la Fuente 1992: fig. 10). The form of the mouth area is notably similar to the “earth maw” toponymic sign of early southeastern Mesoamerican writing and art (see Figs. 21, 22). Through a form of visual punning, however, this masquette also displays a major avian component. Along with the frontal jaguar face, there are two profile bird heads facing away from the center, with each jaguar eye doubling as the eye of the bird. The strange, curving corners of the jaguar mouth double as the pendulous, raptorial beaks of the bird profiles (Fig. 83b). In addition, the lower set of suspension holes serves as the nostrils for the beaks. A very similar avian profile appears in a fine Olmec jadeite pendant in the form of a raptorial bird

Olmec Art at Dumbarton Oaks

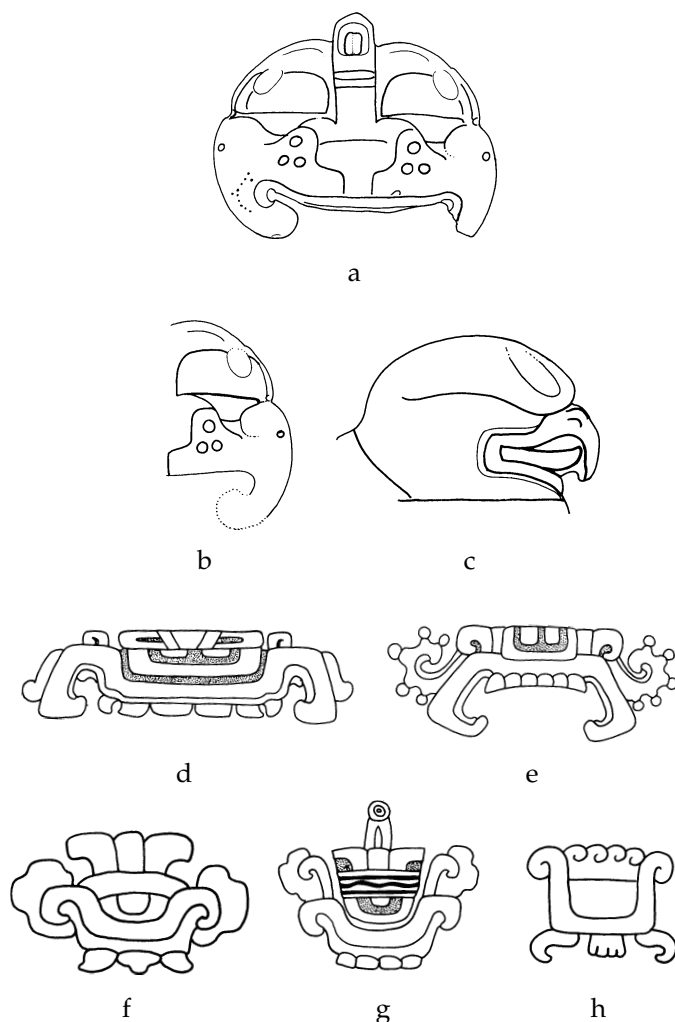


Fig. 83 The Dumbarton Oaks masquette and related Mesoamerican imagery. (a) Schematic drawing of the masquette (see Pl. 38); (b) Bird profile on the masquette (tip of beak reconstructed from opposite profile); (c) Detail of a Middle Formative jade bird pendant (after Easby and Scott 1970: no. 46); (d–e) Examples of the Jaws of the Sky motif. Classic Zapotec (after Leigh 1966: figs. 43, 48); (f) Zapotec Glyph C diadem (after Caso and Bernal 1952: fig. 303g); (g) Zapotec Glyph C, with undulating water band (after Leigh 1966: fig. 26); (h) The Mixtec day sign Water from the Codex Nuttall, page 42.

(Fig. 83c). Along with a sharply downcurving beak, the head also has a heavy brow furrowed with shallow indentations, quite like the indentations appearing in the brow region of the Dumbarton Oaks masquette. In addition, the projecting central element is an avian crest. Its sinuous profile is identical to Olmec representations of feathered crests, including examples appearing with anthropomorphic figures possessing both avian and feline attributes (Fig. 84). The Dumbarton Oaks masquette could well refer to the same composite being.

The profile heads on the stone masquette may depict an especially early form of the mythical avian entity known as the Principal Bird Deity in the Maya

region, and as *El Ave de Pico Ancho* among Zapotec specialists (Taube 1987; Miller and Taube 1993: 137–138). Becoming popular during the first century B.C., this being typically has a large, pendulous and inwardly curving beak—virtually identical to the profiles found on the Dumbarton Oaks masquette. One Classic period Zapotec motif features outwardly facing profiles of *El Ave de Pico Ancho* joined at the eye (Fig. 83d–e). With the inwardly curving beaks, the Zapotec sign is notably similar to the stone masquette (Fig. 83a). In addition, the Zapotec beaks typically flank a toothy, fanged upper maw, probably alluding to the same jaguar mouth of the masquette. Terming it the “Jaws of the Sky,” Alfonso

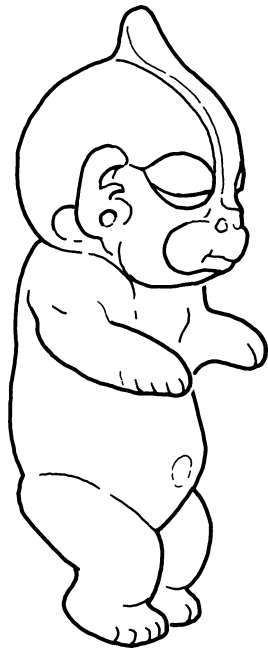


Fig. 84 Olmec statuette with a curving feather crest on its brow. Middle Formative period. Drawing by Elizabeth Wahle (after *The Olmec World* 1995: no. 179).



Fig. 85 Stone mask of Cocijo. Middle or Late Formative Zapotec (after Easby and Scott 1970: no. 70).

Caso (1928) identifies the Zapotec motif as a celestial sign (Fig. 83d–e).

The Jaws of the Sky is very similar to another Zapotec motif commonly referred to as Glyph C (Fig. 83f). In fact, in his discussion of Glyph C, Howard Leigh (1966) makes no distinction between the two signs. Along with a central eye, feather crest, and profile beaks, Glyph C typically is supplied with fangs at its base, probably once again referring to both bird and jaguar. At times, the crest has a central, featherlike spike, immediately recalling the central projecting element of the Dumbarton Oaks masquette (Fig. 83g). On Classic Zapotec urns, Glyph C commonly appears as a diadem on the brow of the rain god Cocijo, the maize god, and other Zapotec deities of agricultural fertility (Caso and Bernal 1952: 17–25, 91–100). According to Leigh (1966: 262), Glyph C represented the day name Water during only the Protoclassic Monte Albán II and Epoca de Transición periods. However, Glyph C always served as the Zapotec sign for the day Water. Thus during Early Classic Monte Albán IIIa, the sign still appears with the wavy water band (Fig. 83g). Moreover, the Late Postclassic Mixtec day sign Water clearly derives from Glyph C, and still retains the

curving beak profile form as well as fangs (Fig. 83h).

The combination of terrestrial jaguar and celestial bird on the Dumbarton Oaks masquette suggests a merging of sky and earth. Among the Olmec and later peoples of southeastern Mesoamerica, there appears to have been a similar conflation of jaguar and sky imagery. An important Olmec cosmic motif is a jaguar lifting a celestial serpent with avian attributes, a theme that is also found on the Late Formative Tres Zapotec Stela D (Fig. 64; see also, Feuchtwanger 1989: illus. 94; Taube 1995: fig. 13). I have suggested that for the Olmec, the jaguar lifting the serpent may constitute a rainmaking act (Taube 1995: 101). Like the later Glyph C diadems of the Zapotec, the Dumbarton Oaks masquette may have embodied the concept of celestial rain. Among both the Olmec and Protoclassic Maya, stone diadems are often represented as rain jewels dripping precious beads of water (ibid.: 99; Grove 1989a: 134). However, the Dumbarton Oaks masquette is especially similar to Zapotec iconography. In this regard, the piece recalls an early stone mask of Cocijo of similar style and workmanship (Fig. 85). Although these two objects evoke Olmec stylistic canons, they were probably both manufactured in the Oaxaca region.



Plate 39

WINGED PLAQUE

Plate 39
Middle Formative
Quartzite. W. 26.7 cm
B-538

History: Acquired by Dumbarton Oaks from Katherine W. Merkel, 1964

Exhibition: Dumbarton Oaks, 1964–; *The Blood of Kings: Dynasty and Ritual In Maya Art*, Kimbell Art Museum, 1986, The Cleveland Museum of Art, 1986; *Olmec Art of Ancient Mexico*, National Gallery of Art, 1996

Bibliography: Coe 1966; Benson 1967: 29; Benson 1969, no. 426; Joralemon; 1971: fig. 230; Joesink-Mandeville and Meluzin 1976: 102; Schele and Miller 1986: pl. 32; Niederberger 1987: fig. 89b; González Calderón 1991: pl. 469; Freidel 1993: 154, fig. 11.1; Benson and de la Fuente 1996: no. 97

Although of dark green quartzite, this plaque probably should be regarded as “social jade,” that is, a hard greenstone regarded as precious jadeite by the ancient Olmec. In a detailed discussion of the plaque, Michael Coe (1966: 6) notes that it was obtained from a missionary residing in Mérida, Yucatan. According to this missionary, it came from a village in Yucatan “about two days journey” from Mérida (Coe 1966: 6). At one point in its history, the object certainly was in the Maya region, as the flat reverse side bears a complex Protoclassic Maya inscription.²⁸

²⁸ For previously published discussions of the reverse side, see Coe 1966 and Schele and Miller 1986: pl. 32.

The Olmec carving on the frontal, obverse side portrays a central face flanked by a large pair of crossed bands. The incisions delineating the large crossed bands and details of the face are unusually deep and assured, quite unlike the rather sketchy and tentative incision commonly found on Olmec jades (cf. Pls. 18, 20). In this regard, the incision is quite like that appearing on the incised celt pendant in the Dumbarton Oaks collection (Pl. 24). Similar incision also appears on the Dumbarton Oaks avian jaguar masquette (Pl. 38) and the early stone mask of Cocijo, both probably carved in Oaxaca (Fig. 85). It is noteworthy that although finely carved, all four of these examples are not of the highly treasured, translucent blue-green jade but rather from dark, opaque stones, such as quartzite, diopside jadeite,



39a, back view

and porphyry. It is possible that rather than being carved in the Olmec heartland, these objects derive from one or more regional workshops in Oaxaca or perhaps Guerrero.

The large, crossed bands on the plaque may first appear as relatively simple devices, but they actually display a complex symmetry. Both the central axis and two interior ends of each crossed band are marked by circles, but these shapes do not appear on the exterior ends. On both sides, the lower exterior ends curve slightly upward, and terminate against the incised lines that border the lower perimeters of the crossed bands. In contrast, the exterior upper ends of the crossed bands are not closed, but open, with the bordering incision stopping at the sides. Although the carving of the crossed bands is careful and deliberate, it remains unknown whether the complex symmetry is simply stylistic convention or bears symbolic significance.

A pair of large drilled holes partly obliterates the central portions of the crossed bands. Whereas these holes begin as broad, conical depressions, they narrow into straight-sided bores. Coe (1966: 6) suggests that these funnel-shaped holes represent jade earspools. In fact, a very similar pair of funnel-shaped holes is found on an Olmec-style stone *yuguito*, here in the region of the earlobes (Fig. 86). For both this *yuguito* and the Dumbarton Oaks plaque, the holes closely correspond to the exterior form of earspools, which are typically flaring and with narrower, straight-sided necks. The holes of the stone *yuguito* and the Dumbarton Oaks plaque were probably to

receive separately carved earspools of jade or other materials. The fitting of earspools in fine stone sculpture is not limited to the Olmec. An Early Classic jade skull excavated at Nebaj, Guatemala, contains a pair of beautifully fitted earspools of the same material (Smith and Kidder 1951: fig. 56).

The central face of the plaque projects beyond the flat plane of the crossed bands, a quality reinforced by its upper and lower edges, which also extend beyond the perimeter of the crossed bands. The entire appearance suggests a mask placed atop a crossed-band panel. The two holes for suspending the plaque flank the upper sides of the face. When secured for suspension, the knots of the supporting cord would appear as if they were holding a central mask. When inserted into the crossed-band areas, the suggested earspools would reinforce the appearance of stone items placed on top of a flat planar surface.

Although the central face is fairly flat, it is also broadly and deeply carved in the areas of the eyes, nose, and mouth. The carving is especially deep in the interiors of the eyes and mouth, which were partly carved with hollow-core drills (Coe 1966: 7). Remnants of this drilling are particularly evident in the right corner and central region of the mouth. Given the probable insertion of earspools on the crossed-band panel, it is quite possible that the deeply carved areas also held inlays. In fact, Coe (*ibid.*) notes the presence of dark staining in the eyes and left corner of the mouth, and suggests that these areas originally contained inlays of iron pyrite. Such pyrite in-



Fig. 86 Stone *yuguito* with holes supplied for ear spools. Note the recessed zones for the inlay in the hair and headdress areas (after *The Olmec World* 1995: no. 138).

lays were part of a number of Olmec pieces in the Dumbarton Oaks collection (see Pls. 6, 7, 38). Deep incised lines delineate both the perimeter and some interior regions of the mouth. In some areas, one side of the incision was partly removed, creating a slightly lower surface. This can be seen in the curving line separating the upper lip and teeth, with the upper border of the teeth being at a lower plane than the lip. Although only the long canines are plainly indicated as teeth, both the central T-shaped element and the horizontal elements at the upper corners of the mouth all represent the upper teeth. Aside from the long canines, the dentition is quite similar to that of the large jadeite mask of the Olmec Maize God in the Dumbarton Oaks collection (Pl. 30).

Flanking vertical lines and a V-shaped form surrounding a central cleft constitute the incisions on the upper brow. The deep medial cleft extends atop the flat, uppermost surface of the head. On this upper surface, a deep incised line borders the sides and front of the head. This line runs around, rather than across, the brow cleft, creating a form resembling the letter "M." Coe (1966: 8) interprets the cen-

tral brow cleft as a sign of fertility, and notes that maize frequently emerges from this Olmec motif. In fact, although lacking a central projecting cob, the cleft indicates that this being is probably the Olmec Maize God, here in his aspect as young, growing corn. In this form, the Olmec Maize God typically appears with cleft foliage without a mature maize ear (see pp. 94–99). The short vertical lines at the sides of the brow recall the pair of vertical lines frequently appearing with the foliated aspect of the corn god (Figs. 43, 45, 46). However, although the central face can be identified as the Olmec Maize God, the fangs are somewhat unusual. Such prominent canines are more typical of the strongly feline Olmec Rain God (see Fig. 15). Nonetheless, some Olmec Maize Gods from Oaxaca do possess long canines (Caso and Bernal 1952: figs. 481, 483a, 485, 487, 488, 494; Benson and de la Fuente 1996: no. 96).

An Early Formative bottle from Las Bocas, Puebla, contains an especially early version of the plaque motif, a cleft maize sign flanked by a pair of crossed bands (Fig. 87a). As in the case of the quartzite plaque, the maize sign appears to lie atop a crossed-band form. The central rectangle marked by diagonal hatchure is probably a stylized mouth of the Olmec Maize God, with the three surrounding elements being the mouth brackets often found among images of the corn deity (see Figs. 43f, 48a, 57h).

The form of the Dumbarton Oaks plaque—a central face with narrower lateral extensions at the sides—occurs on other Middle Formative Olmec jewelry (Fig. 87b–d). Although of smaller scale, these examples portray masklike faces flanked by narrower, slablike extensions. As in the case of the Dumbarton Oaks example, the central heads have cleft brows (Fig. 87b–d). With its cleft, deeply furrowed brow and flame eyebrows, one of these examples is notably like the entity appearing on a massive anthropomorphic axe in the British Museum (Fig. 87d; see Bernal 1969b: pl. 49a). However, although the example may also represent the same being, the cleft-headed face in Figure 87d is very much like the Dumbarton Oaks character, and probably represents the same aspect of the Olmec Maize God.

The Dumbarton Oaks plaque and the other three

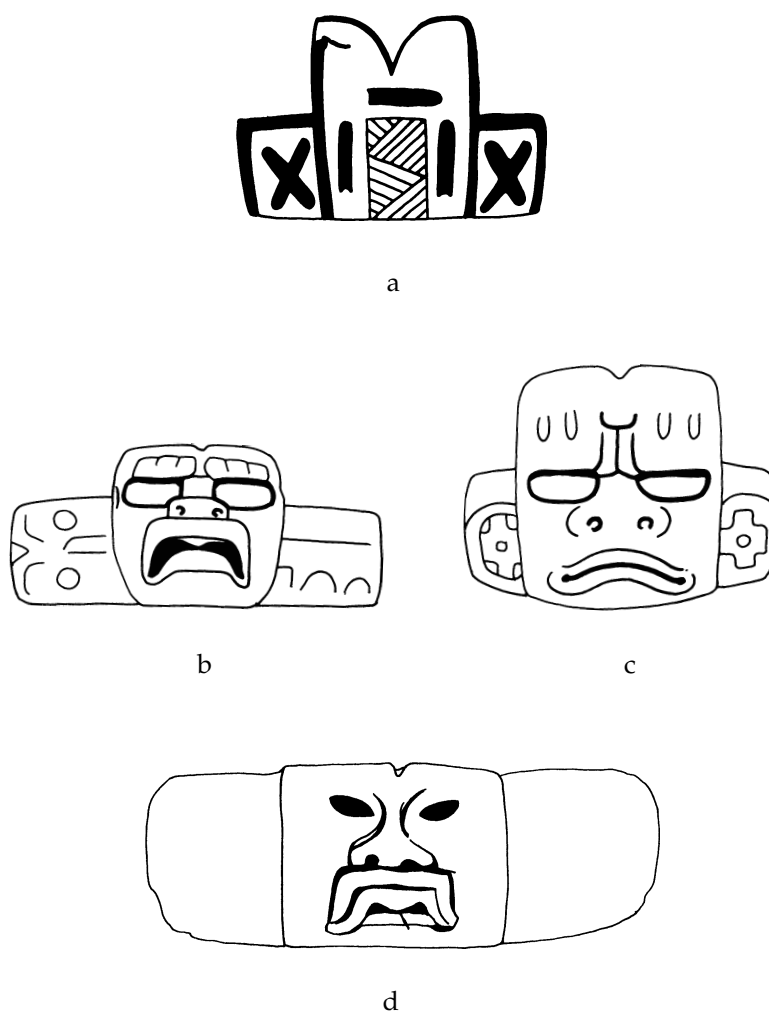


Fig. 87 Olmec forms related to the Dumbarton Oaks plaque. (a) Design carved on an Early Formative ceramic vessel. Las Bocas (after Parsons 1980: no. 40); (b) Jadeite plaque with a central face (after Saville 1929: fig. 93); (c) Serpentine plaque with earspools incised on flanges (after *The Olmec World* 1995: no. 231b); (d) Flanged serpentine plaque (after *The Olmec World* 1995: no. 231a).

cited examples have been identified as pectorals (Saville 1929: fig. 93; Coe 1966; Joralemon 1971: fig. 230; *The Olmec World* 1995: no. 231a, b). Although a reasonable interpretation, this is not the only possibility. In Olmec art, miniature masks rarely appear as breast ornaments. Instead, they are more commonly worn in the center of the brow as part of a headband or headdress assemblage. The pair of large crossed bands on the Dumbarton Oaks plaque commonly appears on the headband of Middle Formative headdresses (Fig. 88). The emerging figure from La Venta Altar 5 wears a headband closely resembling the Dumbarton Oaks carving, a central mask flanked by smaller crossed bands (Fig. 88a). As items

on the uppermost portion of the body, Olmec headbands and headdresses frequently contain celestial imagery (see p. 114). Thus headbands can contain inverted U-shaped sky signs and related forms (see Figs. 43d, 88b). In addition, David Grove (1989a: 134) notes that the triple drops above the central mask of the Altar 5 headband denote rain (Fig. 88a). The crossed bands found in Olmec headdresses are probably also celestial signs. In Olmec scenes, crossed-band motifs commonly appear in the uppermost region, probably to denote the sky (Taube 1995: 88). In many cases, these celestial motifs appear as bound bundles, with the crossed bands denoting lashing (ibid.; see also, Figs. 20a, 21a–b, d). This is

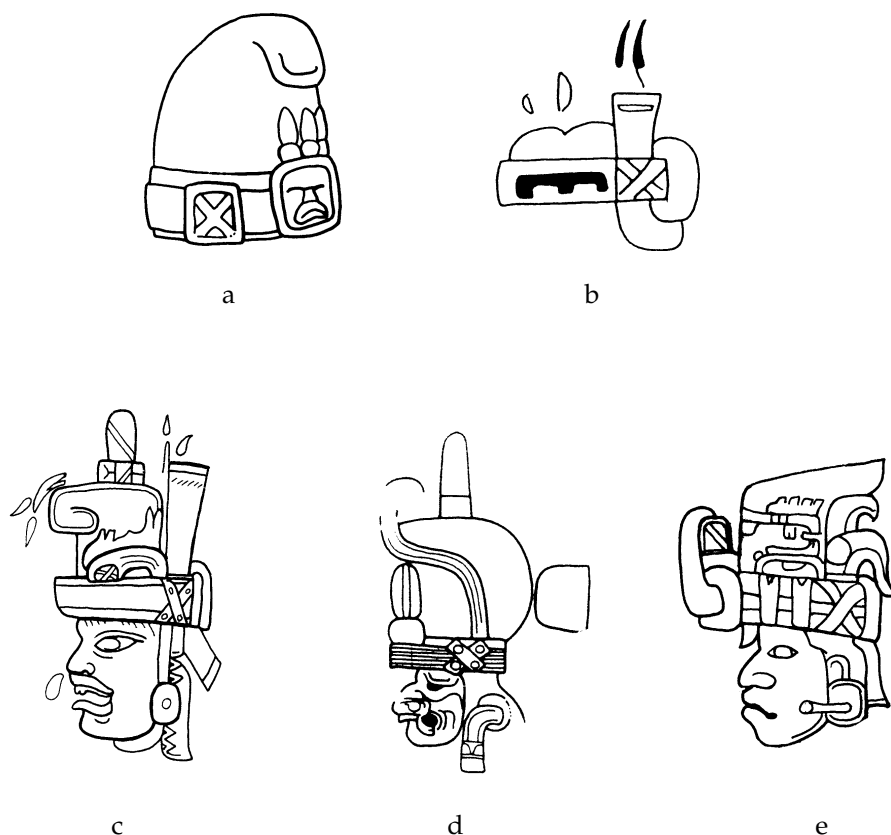


Fig. 88 Middle Formative Olmec headdresses with pairs of crossed bands. (a) Headdress with central mask and flanking crossed bands. La Venta Altar 5 (after Piña Chan 1989: pl. 67); (b) Profile view of a headdress with crossed bands. Detail of an incised celt (after *The Olmec World* 1995: no. 127); (c) Figure with crossed-bands on its headdress. Detail of incised slate celt from Simojovel, Chiapas (after Benson and de la Fuente 1996: no. 115); (d) Supernatural with crossed bands in its headdress. Detail of a carved relief at Xoc, Chiapas (see Fig. 23b); (e) Figure with crossed-band lashing in headdress. Detail of carved jadeite belt celt (see Fig. 50d).

also true for the Olmec headbands under discussion. The crossed bands extend to the upper and lower edges of the headbands, as if binding them together (Fig. 88). In other words, these headbands are essentially the bound celestial band wrapped around the head.

With its central mask and flanking crossed bands, the Dumbarton Oaks object corresponds closely to the celestial iconography of Olmec headbands. Rather than pectorals, these Olmec flanged pieces could have served as head ornaments. The three examples fashioned from jadeite and serpentine could have been readily worn as headdress

elements, quite possibly in the center of the brow. However, the Dumbarton Oaks example is decidedly larger, and is more than twice the width of the largest of the other greenstone plaques (Fig. 87d). Although it is conceivable that the Olmec could have worn the Dumbarton Oaks plaque as a headdress, it could have also been fashioned for a deity image of stone or wood. Examples of oversized jewelry are not unknown for the Olmec. A Middle Formative cache from San Isidro, Chiapas, contained a pair of jade earspools more than 10 centimeters in width (Lowe 1981: 243, 245).

BIBLIOGRAPHY

- ACOSTA, JORGE R.
 1949 El pectoral de jade de Monte Albán. *Anales del Instituto Nacional de Antropología e Historia* 3: 17–25.
- ALCINA FRANCH, JOSÉ
 1983 *Pre-Columbian Art* (I. Mark Paris, trans.). Harry N. Abrams, New York.
- ANDERSON, DANA
 1978 Monuments. In *The Prehistory of Chalchuapa, El Salvador*, vol. 1 (Robert Sharer, gen. ed.): 155–180. University of Pennsylvania Press, Philadelphia.
- ANDREWS, E. WYLLYS, V
 1986 Olmec Jades from Chacsinkin, Yucatan, and Maya Ceramics from La Venta, Tabasco. In *Research and Reflections in Archaeology and History: Essays in Honor of Doris Stone* (E. Wyllys Andrews, V, ed.): 11–47. Middle American Research Institute, Publication 57. Tulane University, New Orleans.
- n.d. Spoons and Knuckle-dusters in Formative Mesoamerica. Paper presented at the Third Texas Symposium, “Olmec, Izapa, and the Development of Maya Civilization,” Austin, 1987.
- ANGULO V., JORGE
 1987 The Chalcatzingo Reliefs: An Iconographic Analysis. In *Ancient Chalcatzingo* (David. C. Grove, ed.): 132–158. University of Texas Press, Austin.
- 1994 Observaciones sobre su pensamiento cosmogónico y la organización sociopolítica. In *Los Olmecas en Mesoamérica* (John Clark, ed.): 223–237. El Equilibrista, México, D.F.
- ARROYO, BARBARA
 1995 Early Ceramics from El Salvador: The El Carmen Site. In *The Emergence of Pottery: Technology and Innovation in Ancient Societies* (William K. Barnett and John W. Hoopes, eds.): 199–208. Smithsonian Institution, Washington, D.C.
- BARRERA VÁSQUEZ, ALFREDO (ED.)
 1980 *Diccionario Maya Cordemex: Maya-Español, Español-Maya*. Ediciones Cordemex, Mérida.
- BENSON, ELIZABETH P.
 1967 *The Maya World*. Crowell, New York.
- 1969 *Supplement to the Handbook of the Robert Woods Bliss Collection of Pre-Columbian Art*. Dumbarton Oaks, Washington, D.C.
- 1971 *An Olmec Figure at Dumbarton Oaks*. Studies in Pre-Columbian Art and Archaeology 8. Dumbarton Oaks, Washington, D.C.
- 1972 *The Mochica: A Culture of Peru*. Praeger Publishers, New York.
- 1981 Some Olmec Objects in the Robert Woods Bliss Collection at Dumbarton Oaks. In *The Olmec and Their Neighbors: Essays in Memory of Matthew W. Stirling* (Elizabeth P. Benson, ed.): 95–108. Dumbarton Oaks, Washington, D.C.
- 1993 The Robert Woods Bliss Collection of Pre-Columbian Art: A Memoir. In *Collecting the Pre-Columbian Past* (Elizabeth Hill Boone, ed.): 15–34. Dumbarton Oaks, Washington, D.C.
- BENSON, ELIZABETH P., AND MICHAEL D. COE
 1963 *Handbook of the Robert Woods Bliss Collection of Pre-Columbian Art*. Dumbarton Oaks, Washington, D.C.
- BENSON, ELIZABETH P., AND BEATRIZ DE LA FUENTE (EDS.)
 1996 *Olmec Art of Ancient Mexico*. National Gallery of Art, Washington, D.C.
- BENSON, ELIZABETH P., AND PETER DAVID JORALEMON
 1980 *Pre-Columbian Art from Mesoamerica and Ecuador*. Lowe Art Museum, University of Miami, Coral Gables.
- BERDAN, FRANCES F.
 1992 Economic Dimensions of Precious Metals, Stones, and Feathers: The Aztec State Society. *Estudios de Cultura Náhuatl* 22: 291–323.
- BERJONNEAU, GERALD, EMILE DELETAILE, AND JEAN-LOUIS SONNERY
 1985 *Rediscovered Masterpieces of Mesoamerica: Mexico-Guatemala-Honduras*. Editions Arts, Bologne.

Bibliography

- BERLIN, HEINRICH
 1958 El glifo "emblema" en las inscripciones mayas. *Journal de la Société des Américanistes*, n.s., 47: 111–119.
- BERNAL, IGNACIO
 1969a *100 Great Masterpieces of the Mexican National Museum of Anthropology*. Harry N. Abrams, New York.
 1969b *The Olmec World*. University of California Press, Berkeley.
 1973 Stone Reliefs from the Dainzu Area. In *The Iconography of Middle American Sculpture*: 13–23. Metropolitan Museum of Art, New York.
- BERRIN, KATHLEEN, AND ESTHER PASZTORY (EDS.)
 1993 *Teotihuacan: Art from the City of the Gods*. Thames and Hudson, London and New York.
- BEYER, HERMANN
 1927 Review of Blom and La Farge, *Tribes and Temples*. *El Mexico Antiguo* 2: 305–313.
 1930 A Deity Common to Teotihuacan and Totonac Cultures. *Proceedings of the Twenty-third International Congress of Americanists*: 82–84.
- BIERHORST, JOHN
 1992 *History and Mythology of the Aztecs: The Codex Chimalpopoca*. University of Arizona Press, Tucson.
- BISHOP, RONALD L., AND FREDERICK W. LANGE
 1993 Sources of Maya and Central American Jadeites: Data Bases and Interpretations—A Summary. In *Precolumbian Jade: New Geological and Cultural Interpretations* (Frederick W. Lange, ed.): 125–130. University of Utah Press, Salt Lake City.
- BISHOP, RONALD W., EDWARD V. SAYRE, AND JOAN MISHARA
 1993 Compositional and Structural Characterization of Maya and Costa Rican Jadeites. In *Precolumbian Jade: New Geological and Cultural Interpretations* (Frederick W. Lange, ed.): 30–60. University of Utah Press, Salt Lake City.
- BISHOP, RONALD W., EDWARD V. SAYRE, AND LAMBERTUS VAN ZELST
 1985 Characterization of Mesoamerican Jade. In *Application of Science in Examination of Works of Art* (P. A. England and Lambertus van Zelst, eds.): 151–156. The Research Laboratory, Museum of Fine Arts, Boston.
- BLACK, JEREMY, AND ANTHONY GREEN
 1992 *Gods, Demons and Symbols of Ancient Mesopotamia: An Illustrated Dictionary*. British Museum Press, London.
- BLAKE, MICHAEL
 1991 An Emerging Early Formative Chiefdom at Paso de la Amada, Chiapas, Mexico. In *The Formation of Complex Society in Southeastern Mesoamerica* (William R. Fowler, ed.): 27–46. CRC Press, Boca Raton, Fla.
- BLAKE, MICHAEL, BRIAN S. CHISHOLM, JOHN E. CLARK, BARBARA VOORHIES, AND MICHAEL W. LOVE
 1992 Prehistoric Subsistence in the Soconusco Region. *Current Anthropology* 33: 83–94.
- BLAKE, MICHAEL, JOHN E. CLARK, BARBARA VOORHIES, GEORGE MICHAELS, MICHAEL W. LOVE, MARY E. PYE, ARTHUR A. DEMAREST, AND BARBARA ARROYO
 1995 Radiocarbon Chronology for the Late Archaic and Formative Periods on the Pacific Coast of Southeastern Mesoamerica. *Ancient Mesoamerica* 6: 161–183.
- BLISS, ROBERT WOODS
 1947 *Indigenous Art of the Americas: Collection of Robert Woods Bliss*. National Gallery of Art, Washington, D.C.
 1957 *Pre-Columbian Art: Robert Woods Bliss Collection* (text and critical analysis by Samuel Lothrop, W. F. Foshag, and Joy Mahler). Phaidon Publishers, London, distributed by Garden City Books, New York.
- BLOM, FRANS, AND OLIVER LA FARGE
 1926 *Tribes and Temples*, 2 vols. Middle American Research Institute, Publication 1. Tulane University, New Orleans.
- BOHANNAN, PAUL, AND GEORGE DALTON
 1962 Introduction. In *Markets in Africa* (Paul Bohannan and George Dalton, eds.): 1–26. Northwestern University Press, Evanston, Ill.
- BOLZ, INGBORG
 1975 *Meisterwerke Altindianischer Kunst: Die Sammlung Ludwig im Rautenstrauch-Joest-Museum Köln*. Aurel Bongers, Recklinghausen.
- BOOT, ERIK
 1999 Early Maya Hieroglyphic Writing: An Analysis of Text and Image of a Small Stela in the Ethnographic Museum of Antwerp, Belgium. *Yumtzilob* 11: 105–116.
- BORHEGYI, STEPHAN F. DE
 1980 *The Pre-Columbian Ballgames: A Pan-Mesoamerican Tradition*. Contributions in Anthropology and History 1. Milwaukee Public Museum, Milwaukee, Wis.
- BRADLEY, DOUGLAS E.
 1991 A Power Player: The Iconography of Rulership and Fertility on a Tlapacoya Ballplayer. In *The Mesoamerican Ballgame* (Gerard W. van Bussel, Paul L. F. van Dongen, and Ted Leyenaar, eds.): 161–170. Rijksmuseum voor Volkenkunde, Leiden.
- BRADLEY, DOUGLAS E., AND PETER DAVID JORALEMON
 1993 *The Lords of Life: The Iconography of Power and Fertility in Preclassic Mesoamerica*. Snite Museum of Art, Notre Dame, Ind.
- BRAINERD, GEORGE W.
 1958 *The Archaeological Ceramics of Yucatan*.

Bibliography

- Anthropological Records 19. University of California, Berkeley.
- BRICKER, VICTORIA R.
1973 *Ritual Humor in Highland Chiapas*. University of Texas Press, Austin.
- BRUEGGEMANN, JUERGEN, SARA LADRÓN DE GUEVARA, AND JUAN SÁNCHEZ BONILLA
1992 *Tajín*. El Equilibrista, México, D.F.
- BURCHWOOD, KATHARINE TYLER
1971 *The Origin and Legacy of Mexican Art*. A. S. Barnes, South Brunswick.
- BURGER, RICHARD L.
1992 *Chavin and the Origins of Andean Civilization*. Thames and Hudson, London and New York.
- CAMPBELL, LYLE, AND TERRENCE S. KAUFMAN
1976 A Linguistic Look at the Olmec. *American Antiquity* 41: 80–89.
- CARLSON, JOHN B.
1981 Olmec Concave Iron-Ore Mirrors: The Aesthetics of a Lithic Technology and the Lord of the Mirror. In *The Olmec and Their Neighbors: Essays in Memory of Matthew W. Stirling* (Elizabeth P. Benson, ed.): 117–147. *Dumbarton Oaks*, Washington, D.C.
1993 The Jade Mirror: An Olmec Concave Jadeite Pendant. In *Precolumbian Jade: New Geological and Cultural Interpretations* (Frederick W. Lange, ed.): 242–250. University of Utah Press, Salt Lake City.
- CARNIERO, ROBERT L.
1970 A Theory on the Origin of the State. *Science* 169 (3947): 733–738.
- CASO, ALFONSO
1928 *Las estelas Zapotecas*. Monografías del Museo Nacional de Arqueología, Historia, y Etnografía. Talleres Gráficos de la Nación, México, D.F.
1938 *Exploraciones en Oaxaca, quinta y sexta temporadas, 1936–1937*. Instituto Panamericano de Geografía e Historia, Publication 34. México, D.F.
1942a Definición y extensión del complejo “Olmeca.” In *Mayas y Olmecas: Segunda reunión de Mesa Redonda sobre problemas antropológicos de México y Centro América*: 43–46. Talleres de la Editorial Stylo, México, D.F.
1942b Resumen del informe de las exploraciones en Oaxaca, durante la séptima y la octava temporadas, 1937–1938 y 1938–1939. *Vigesimoséptimo Congreso Internacional de Americanistas* 2: 159–187. Instituto Nacional de Antropología e Historia, México, D.F.
- CASO, ALFONSO, AND IGNACIO BERNAL
1952 *Urnas de Oaxaca*. Instituto Nacional de Antropología e Historia, México, D.F.
- CASTILLO TEJERO, NOEMÍ, AND FELIPE R. SOLÍS OLGUÍN
1975 *Ofrendas Mexicanas en el Museo Nacional de Antropología*. Corpus Antiquitatum Americanensium 8. Instituto Nacional de Antropología e Historia, México, D.F.
- CASTRO-LEAL, MARCIA, BEATRIZ OLIVER, AMALIA CARDÓS DE MÉNDEZ, CLARA LUZ DÍAZ, AND MARÍA TERESA GARCÍA (EDS.)
1986 *El juego de pelota: Una tradición prehispánica viva*. Museo Nacional de Antropología, Instituto Nacional de Antropología e Historia, México, D.F.
- CEJA TENORIO, J. F.
1985 *Paso de la Amada: An Early Preclassic Site in the Soconusco, Chiapas*. Papers of the New World Archaeological Foundation 49. Brigham Young University, Provo, Utah.
- CERVANTES, MARÍA ANTONIETA
1969 Dos elementos de uso ritual en el arte olmeca. *Anales del Instituto Nacional de Antropología e Historia*, ser. 7a, 1: 37–51.
- CHAVERO, ALFREDO
1887 Historia antigua. In *México a través de los siglos*. Espasa y Compañía, Barcelona.
- CHRISTENSEN, ERWIN O.
1955 *Primitive Art*. Crowell, New York.
- CLARK, GRAHAME
1965 Traffic in Stone Axe and Adze Blades. *Economic History Review* 28: 1–28.
1986 *Symbols of Excellence: Precious Materials as Symbols of Status*. Cambridge University Press, Cambridge.
- CLARK, JOHN E.
1991 The Beginnings of Mesoamerica: Apologia for the Soconusco Early Formative. In *The Formation of Complex Society in Southeastern Mesoamerica* (William R. Fowler, ed.): 13–26. CRC Press, Boca Raton, Fla.
1994 Antecedentes de la cultura olmeca. In *Los Olmecas en Mesoamérica* (John Clark, ed.): 31–41. El Equilibrista, México, D.F.
n.d. Governmentality and Olmec Kingship in Early Mesoamerica. Unpublished manuscript in possession of author.
- CLARK, JOHN E., AND MICHAEL BLAKE
1989 El origen de la civilización en Mesoamérica: Los Olmecas y Mokaya del Soconusco de Chiapas, Mexico. In *El Preclásico o Formativo: Avances y perspectivas* (Martha Carmona Macias, ed.): 385–403. Museo Nacional de Antropología, México, D.F.
1994 The Power of Prestige: Competitive Generosity and the Emergence of Rank Societies in Lowland Mesoamerica. In *Factional Competition and Political Development in the New World* (Elizabeth M. Brumfiel and John W. Fox, eds.): 17–30. Cambridge University Press, Cambridge, Eng.

Bibliography

- CLARK, JOHN E., AND MARY E. PYE
 2000 The Pacific Coast and the Olmec Question. In *Olmec Art and Archaeology: Social Complexity in the Formative Period* (John E. Clark and Mary Pye, eds.): 216–251. Studies in the History of Art 58. National Gallery of Art, Washington, D.C.
- CLARK, JOHN E., AND TOMÁS PÉREZ SUÁREZ
 1994 Los Olmecas y el primer milenio de Mesoamérica. In *Los Olmecas en Mesoamérica* (John Clark, ed.): 261–275. El Equilibrista, México, D.F.
- CLEWLOW, WILLIAM
 1968 Comparación de dos extraordinarios monumentos olmecas. *Boletín del Instituto de Antropología e Historia* 34: 7–41.
- COE, MICHAEL D.
 1961 *La Victoria: An Early Site on the Pacific Coast of Guatemala*. Papers of the Peabody Museum of Archaeology and Ethnology 53. Harvard University, Cambridge, Mass.
 1962a *Mexico*. Frederick A. Praeger, New York.
 1962b An Olmec Design on an Early Peruvian Vessel. *American Antiquity* 27: 579–580.
 1965a *The Jaguar's Children: Pre-Classic Central Mexico*. Museum of Primitive Art, New York.
 1965b The Olmec Style and Its Distributions. In *Handbook of Middle American Indians*, vol. 3 (Robert Wauchope, gen. ed.): 739–775. University of Texas Press, Austin.
 1966 *An Early Stone Pectoral from Southeastern Mexico*. Studies in Pre-Columbian Art and Archaeology 1. Dumbarton Oaks, Washington, D.C.
 1967 An Olmec Serpentine Figure at Dumbarton Oaks. *American Antiquity* 32 (1): 111–113.
 1968 *America's First Civilization*. American Heritage, New York.
 1972 Olmec Jaguars and Olmec Kings. In *The Cult of the Feline* (Elizabeth P. Benson, ed.): 1–12. Dumbarton Oaks, Washington, D.C.
 1981a Gift of the River: Ecology of the San Lorenzo Olmec. In *The Olmec and Their Neighbors: Essays in Memory of Matthew W. Stirling* (Elizabeth P. Benson, ed.): 15–19. Dumbarton Oaks, Washington, D.C.
 1981b San Lorenzo Tenochtitlán. In *Archaeology: Supplement to the Handbook of Middle American Indians*, vol. 1 (Victoria R. Bricker, gen. ed.): 117–146. University of Texas Press, Austin.
 1988 Ideology of the Maya Tomb. In *Maya Iconography* (Elizabeth P. Benson and Gillett G. Griffin, eds.): 222–235. Princeton University Press, Princeton.
- 1989a The Hero Twins: Myth and Image. In *The Maya Vase Book*, vol. 1 (Justin Kerr, ed.): 161–184. Kerr Associates, New York.
 1989b The Olmec Heartland: Evolution of Ideology. In *Regional Perspectives on the Olmec* (Robert J. Sharer and David C. Grove, eds.): 68–82. Cambridge University Press, Cambridge.
 1992 Los Olmecas. In *Museo de Antropología de Xalapa* (Beatrice Trueblood, ed.): 32–75. Gobierno del Estado de Veracruz, Xalapa.
- COE, MICHAEL D., AND RICHARD A. DIEHL
 1980 *In the Land of the Olmec: The Archaeology of San Lorenzo Tenochtitlán*, 2 vols. University of Texas Press, Austin.
- COE, MICHAEL D., RICHARD A. DIEHL, AND MINZE STUIVER
 1967 Olmec Civilization, Veracruz, Mexico: Dating of the San Lorenzo Phase. *Science* 155: 1399–1401.
- COE, MICHAEL D., AND GORDON WHITTAKER
 1982 *Aztec Sorcerers in Seventeenth-Century Mexico: The Treatise on Superstitions by Hernando Ruiz de Alarcón*. Institute for Mesoamerican Studies, Publication 7. State University of New York, Albany.
- COE, WILLIAM
 1990 *Excavations in the Great Plaza, North Terrace and North Acropolis of Tikal*. Tikal Report, no. 14. The University Museum, University of Pennsylvania, Philadelphia.
- COLES, JOHN
 1974 A Jade Axe from the Somerset Levels. *Antiquity* 48: 216–220.
- COOK DE LEONARD, CARMEN
 1959 La Escultura. In *Esplendor del México Antiguo* 2: 519–606.
- CORONA NÚÑEZ, JOSÉ
 1964 *Antigüedades de México*, 4 vols. Secretaría de Hacienda y Crédito Público, México, D.F.
- CORTÉS RUIZ, EFRAÍN
 1992 El juego de pelota mixteca. In *El juego de pelota en el México precolombino y su pervivencia en la actualidad: Museu Etnològic, del 16 de julio al 31 de octubre de 1992* (Jordi Fernando, ed.): 169–173. Fundacio Folch, Barcelona.
- COUCH, N. C. CHRISTOPHER
 1988 *Pre-Columbian Art from the Ernest Erickson Collection*. American Museum of Natural History, New York.
- COVARRUBIAS, MIGUEL
 1942 Origen y desarrollo del estilo artístico "Olmeca." In *Mayas y Olmecas: Segunda reunión de Mesa Redonda sobre problemas antropológicos de México y Centro América*: 46–49. Talleres de la Editorial Stylo, México, D.F.

Bibliography

- 1944 La Venta, Colossal Heads and Jaguar Gods, *Dyn* 6: 24–33.
- 1946a El arte olmeca o de La Venta. *Cuadernos Americanos* 4: 154–179.
- 1946b *Mexico South: The Isthmus of Tehuantepec*. Alfred A. Knopf, New York.
- 1957 *Indian Art of Mexico and Central America*. Alfred A. Knopf, New York.
- CRAVEN, ROY C., JR.
1995 An Iconographic Note: ‘Wrestler’ or ‘Shaman’? *Mexicon* 27: 30–31.
- CULBERT, T. PATRICK
1993 *The Ceramics of Tikal: Vessels from the Burials, Caches and Problematical Deposits*. Tikal Report, no. 25, part A. The University Museum, University of Pennsylvania, Philadelphia.
- CULIN, STEWART
1907 *Games of the North American Indians*. Twenty-fourth Annual Report of the Bureau of American Ethnology, 1902–1903. Smithsonian Institution, Washington, D.C.
- CYPHERS GUILLÉN, ANN
1984 The Possible Role of a Woman in Formative Exchange. In *Trade and Exchange in Early Mesoamerica* (Kenneth G. Hirth, ed.): 115–123. University of New Mexico Press, Albuquerque.
- 1994 San Lorenzo Tenochtitlán. In *Los Olmecas en Mesoamérica* (John Clark, ed.): 43–67. El Equilibrista, México, D.F.
- 1996a Reconstructing Olmec Life at San Lorenzo. In *Olmec Art of Ancient Mexico* (Elizabeth P. Benson and Beatriz de la Fuente, eds.): 61–71. National Gallery of Art, Washington, D.C.
- 1996b San Lorenzo, Veracruz. *Arqueología Mexicana* 4 (19): 62–65.
- 1997 *Población, subsistencia y medio ambiente en San Lorenzo Tenochtitlán*. Universidad Nacional Autónoma de México, México, D.F.
- 1999 From Stone to Symbols: Olmec Art in Social Context at San Lorenzo Tenochtitlán. In *Social Patterns in Pre-Classical Mesoamerica* (David C. Grove and Rosemary A. Joyce, eds.): 155–181. Dumbarton Oaks, Washington, D.C.
- n.d. Rulership at San Lorenzo. Paper presented at the Princeton Symposium on the Olmec, Princeton University, December 16, 1995.
- n.d.a San Lorenzo Sculpture. Paper presented at “Olmec Art and Archaeology in Mesoamerica: Social Complexity in the Formative Period,” Center for Advanced Study in the Visual Arts, National Gallery of Art, Washington D.C., September 20, 1996.
- DALTON, GEORGE
1977 Aboriginal Economies in Stateless Societies. In *Exchange Systems in Prehistory* (Timothy K. Earle and Jonathan E. Ericson, eds.): 191–212. Academic Press, New York.
- D’ALTROY, TERENCE, AND TIMOTHY K. EARLE
1985 Staple Finance, Wealth Finance, and Storage in the Inka Political Economy. *Current Anthropology* 26: 187–206.
- DANZEL, THEODOR-WILHELM
1923 *Mexiko*, vol. 1. Volkvang-Verlag, Berlin.
- D’ARGENCÉ, RENÉ-YVON LEFEBVRE
1977 *Chinese Jades in the Avery Brundage Collection*. Asian Art Museum of San Francisco, San Francisco.
- DAVIES, NIGEL
1983 *The Ancient Kingdoms of Mexico*. Penguin Books, Middlesex, U.K.
- DAVIS, WADE, AND ANDREW T. WEIL
1992 Identity of a New World Psychoactive Toad. *Ancient Mesoamerica* 3: 51–59.
- DAVIS, WHITNEY
1978 So-called Jaguar-Human Copulation Scenes in Olmec Art. *American Antiquity* 43 (3): 453–457.
- DELETAÏLLE, LIN, AND ÉMILE DELETAÏLLE
1992 *Tresors du Nouveau Monde*. Musées royaux d’art et d’histoire, Brussels.
- DELGADO, AGUSTÍN
1965 Infantile and Jaguar Traits in Olmec Sculpture. *Archaeology* 18: 55–62.
- DEMAREST, ARTHUR
1986 *The Archaeology of Santa Leticia and the Rise of Maya Civilization*. Middle American Research Institute, Publication 52. Tulane University, New Orleans.
- DÍAZ OYARZÁBAL, CLARA LUZ
1990 *Colección de objetos de piedra, obsidiana, concha, metales y textiles del Estado de Guerrero: Museo Nacional de Antropología*. Instituto Nacional de Antropología e Historia, México, D.F.
- DIEHL, RICHARD A.
1990 The Olmec at La Venta. In *Mexico: Splendors of Thirty Centuries* (Kathleen Howard, ed.): 51–71. Metropolitan Museum of Art and Bullfinch Press, New York.
- 1996 The Olmec World. In *Olmec Art of Ancient Mexico* (Elizabeth P. Benson and Beatriz de la Fuente, eds.): 29–33. National Gallery of Art, Washington, D.C.
- 2000 Olmec Archaeology after Regional Perspectives: An Assessment of Recent Research. In *Olmec Art and Archaeology: Social Complexity in the Formative Period* (John E. Clark and Mary Pye, eds): 18–29. *Studies in the History of Art* 58. National Gallery of Art, Washington, D.C.

Bibliography

- DIEHL, RICHARD A., AND MICHAEL D. COE
 1995 Olmec Archaeology. In *The Olmec World: Ritual and Rulership*: 10–25. The Art Museum, Princeton University, Princeton.
- DISSSELHOFF, HANS DIETRICH, AND SIGVALD LINNÉ
 1960 *The Art of Ancient America: Civilizations of Central and South America* (Ann E. Kemp, trans.). Crown Publishers, New York.
- DORSEY, GEORGE A., AND H. R. VOTH
 1902 *The Mishongnovi Ceremonies of the Snake and Antelope Fraternities*. Field Colombian Museum, Anthropological Series 3.3: 159–261.
- DRUCKER, PHILIP
 1952 *La Venta, Tabasco: A Study of Olmec Ceramics and Art*. Smithsonian Institution, Bureau of American Ethnology, Bulletin 153. Government Printing Office, Washington, D.C.
 1955 *The Cerro de las Mesas Offering of Jade and Other Materials*. Smithsonian Institution, Bureau of American Ethnology, Bulletin 157. Government Printing Office, Washington, D.C.
- DRUCKER, PHILIP, ROBERT F. HEIZER, AND ROBERT J. SQUIER
 1959 *Excavations at La Venta, Tabasco, 1955*. Smithsonian Institution, Bureau of American Ethnology, Bulletin 170. Government Printing Office, Washington, D.C.
- DURÁN, FRAY DIEGO
 1971 *Book of the Gods and Rites and the Ancient Calendar* (Fernando Horcasitas and Doris Heyden, trans. and eds.). University of Oklahoma Press, Norman.
- DYCKERHOFF, URSULA, AND HANNS J. PREM
 1972 Los Petrograbados de Tecaltzingo. *Katunob* 7 (4).
- EARLE, TIMOTHY
 1990 Style and Iconography as Legitimation in Complex Chiefdoms. In *The Uses of Style in Archaeology* (Margaret W. Conkey and Christine A. Hastorf, eds.): 73–81. Cambridge University Press, Cambridge.
- EASBY, ELIZABETH KENNEDY, AND JOHN F. SCOTT
 1970 *Before Cortés: Sculpture of Middle America*. Metropolitan Museum of Art, New York.
- EINZIG, PAUL
 1966 *Primitive Money in Its Ethnological, Historical, and Economic Aspects*, 2nd ed. Pergamon Press, Oxford.
- EKHOLM, GORDON F.
 1970 *Ancient Mexico and Central America*. American Museum of Natural History, New York.
 1973 The Archaeological Significance of Mirrors in the New World. *Atti del XL Congresso Internazionale degli Americanisti*, 1: 133–135. Casa Editrice Tilgher, Genoa.
- EKHOLM-MILLER, SUSANNA
 1973 *The Olmec Rock Carving at Xoc, Chiapas, Mexico*. Papers of the New World Archaeological Foundation 32. Brigham Young University, Provo, Utah.
- ELLIS, FLORENCE HAWLEY
 1967 Use and Significance of the Tcamahia. *El Palacio* 74 (1): 35–43.
- EMMERICH, ANDRÉ
 1984 *Masterpieces of Pre-Columbian Art from the Collection of Mr. and Mrs. Peter G. Wray*. André Emmerich and Perls Galleries, New York.
- ETNOGRAFISCH MUSEUM (ANTWERP)
 1967 *Kunst van Afrika, Oceanic, Amerika*. Gemeentedrukkerij, Rotterdam.
- FASH, WILLIAM L.
 1987 The Altar and Associated Features. In *Ancient Chalcatzingo* (David. C. Grove, ed.): 82–94. University of Texas Press, Austin.
 1988 A New Look at Maya Statecraft from Copán, Honduras. *Antiquity* 62 (234): 157–169.
 1991 *Scribes, Warriors, and Kings: The City of Copán and the Ancient Maya*. Thames and Hudson, London.
- FEEST, CHRISTIAN F.
 1990 Vienna's Mexican Treasures: Aztec, Mixtec, and Tarascan Works from Sixteenth-Century Austrian Collections. *Archiv für Völkerkunde* 44.
- FELDMAN, JEROME
 1985 Ancestral Manifestations in the Art of Nias Island. In *The Eloquent Dead: Ancestral Sculpture of Indonesia and Southeast Asia* (Jerome Feldman, ed.): 45–78. UCLA Museum of Cultural History, University of California, Los Angeles.
- FENYVESI, CHARLES
 1996 A Tale of Two Cultures: A Beijing Scholar Links an Ancient Chinese Dynasty to the New World's Earliest Civilization. *U.S. News & World Report* (November 4): 46.
- FERNANDO, JORDI (ED.)
 1992 *El juego de pelota en el México precolombino y su pervivencia en la actualidad*. Ajuntament de Barcelona, Barcelona.
- FEUCHTWANGER, FRANZ
 1989 *Ceramica olmeca*. Editorial Patria, México, D.F.
- FIELDS, VIRGINIA
 1991 The Iconographic Heritage of the Maya Jester God. In *Sixth Palenque Round Table, 1986* (Merle Greene Robertson and Virginia Fields, eds.): 167–174. University of Oklahoma Press, Norman.
- FLANNERY, KENT V.
 1968 The Olmec and the Valley of Oaxaca: A Model for Inter-Regional Interaction in Formative Times. In *Dumbarton Oaks Conference on the Olmec* (Elizabeth P.

Bibliography

- Benson, ed.): 79–117. *Dumbarton Oaks*, Washington, D.C.
- FLANNERY, KENT V., AND JOYCE MARCUS
 1994 *Early Formative Pottery of the Valley of Oaxaca, Mexico*. *Memoirs of the Museum of Anthropology* 27. University of Michigan, Ann Arbor.
- 2000 Formative Mexican Chiefdoms and the Myth of the “Mother Culture.” *Journal of Anthropological Archaeology* 19: 1–37.
- FLANNERY, KENT V., AND JAMES SCHOENWETTER
 1970 Climate and Man in Formative Oaxaca. *Archaeology* 23: 144–152.
- FLORES VILLATORO, DOLORES
 1992 El juego de pelota, práctica habitual en Michoacán y Guerrero. In *El juego del pelota en el México precolombino y su pervivencia en la actualidad: Museu Etnològic, del 16 de julio al 31 de octubre de 1992* (Jordi Fernando, ed.): 105–118. Fundacio Folch, Barcelona.
- FONDO EDITORIAL DE LA PLÁSTICA MEXICANA
 1964 *Flor y canto del arte prehispánico de México*. Banco Nacional de Comercio Exterior, S.A., México, D.F.
- FOSHAG, WILLIAM F.
 1955 Chalchihuitl: A Study in Jade. *American Mineralogist* 40: 1062–1069.
- FOSHAG, WILLIAM F., AND ROBERT LESLIE
 1955 Jadeite from Manzanal, Guatemala. *American Antiquity* 21: 81–83.
- FOSTER, GEORGE M.
 1945 *Sierra Popoluca Folklore and Beliefs*. University of California Publications in American Archaeology and Ethnology 42.2. University of California Press, Berkeley.
- FREIDEL, DAVID
 1993 The Jade Ahau: Toward a Theory of Commodity Value in Maya Civilization. In *Precolumbian Jade: New Geological and Cultural Interpretations* (Frederick W. Lange, ed.): 149–165. University of Utah Press, Salt Lake City.
- 1995 Preparing the Way. In *The Olmec World: Ritual and Rulership*: 3–9. The Art Museum, Princeton University, Princeton, N.J.
- FREIDEL, DAVID, LINDA SCHELE, AND JOY PARKER
 1993 *Maya Cosmos: 3000 Years on the Shaman's Path*. William Morrow and Company, New York.
- DE LA FUENTE, BEATRIZ
 1973 *Escultura monumental Olmeca: Catálogo*. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, D.F.
- 1977a *Los hombres de piedra: Escultura olmeca*. Universidad Nacional Autónoma de México, México, D.F.
- 1977b Pequeña obra maestra de la escultura olmeca. *Anales del Instituto de Investigaciones Estéticas* 47: 5–10.
- 1992 Order and Nature in Olmec Art. In *The Ancient Americas: Art from Sacred Landscapes* (Richard Townsend, gen. ed.): 122–133. Art Institute of Chicago, Chicago.
- 1994 Arte monumental olmeca. In *Los Olmecas en Mesoamérica* (John Clark, ed.): 203–221. El Equilibrista, México, D.F.
- 1995 Tepantitla. In *La pintura mural prehispánica en México: Teotihuacán*, vol. 1 (Beatriz de la Fuente, ed.): 139–155. Universidad Nacional Autónoma de México, México, D.F. Furst, Peter T.
- 1965 West Mexican Tomb Sculpture as Evidence for Shamanism in Prehispanic Mesoamerica. *Antropológica* 15: 29–80. Caracas.
- 1968 The Olmec Were-Jaguar Motif in the Light of Ethnographic Reality. In *Dumbarton Oaks Conference on the Olmec* (Elizabeth P. Benson, ed.): 143–174. *Dumbarton Oaks*, Washington, D.C.
- 1981 Jaguar Baby or Toad Mother: A New Look at an Old Problem in Olmec Iconography. In *The Olmec and Their Neighbors: Essays in Memory of Matthew W. Stirling* (Elizabeth P. Benson, ed.): 149–162. *Dumbarton Oaks*, Washington, D.C.
- 1995 Shamanism, Transformation, and Olmec Art. In *The Olmec World: Ritual and Rulership*: 69–81. The Art Museum, Princeton University, Princeton, N.J.
- GARCÍA COOK, ANGEL
 1981 The Historical Importance of Tlaxcala in the Cultural Development of the Highlands. In *Supplement to the Handbook of Middle American Indians: Archaeology* (Victoria Bricker, gen. ed.): 244–276. University of Texas Press, Austin.
- GARCÍA MOLL, ROBERTO
 1976 El Monumento 13 de Tlalancaleca, Puebla. *Boletín del Instituto Nacional de Antropología e Historia*, ser. 2, 17: 47–50.
- 1979 Un relieve olmeca en Tenosique, Tabasco. *Estudios de Cultura Maya* 12: 53–59.
- GARIBAY, ANGEL MARIA
 1979 *Teogonía e historia de los Mexicanos: Tres opúsculos del siglo XVI*. Editorial Porrda, México, D.F.
- GAY, CARLO T. E.
 1972a *Chalcacingo*. International Scholarly Book Services, Portland, Ore.
- 1972b *Xochipala: The Beginnings of Olmec Art*. The Art Museum, Princeton University, Princeton, N.J.
- 1995 *Ancient Ritual Stone Artifacts: Mexico, Guatemala, Costa Rica*. Académie royale de Belgique, Gilly, Belgium.

Bibliography

- GEERTZ, ARMIN W.
1987 *Hopi Indian Altar Iconography*. Iconography of Religions, sec. 10, fasc. 5. E. J. Brill, Leiden.
- GLUBOCK, SHIRLEY
1968 *The Art of Ancient Mexico*. Harper and Row, New York.
- GOLDSTEIN, MARILYN M.
1988 *Ceremonial Sculpture of Ancient Veracruz*. Hillwood Art Gallery, Long Island University, Brookville, N.Y.
- GONZÁLEZ CALDERÓN, O. L.
1991 *The Jade Lords*. O. L. González Calderón, Coatzacoalcos, Mexico.
- GONZÁLEZ LAUCK, REBECCA B.
1994 La antigua ciudad olmeca en La Venta, Tabasco. In *Los Olmecas en Mesoamérica* (John E. Clark, ed.): 93–111. El Equilibrista, México, D.F.
n.d. Recent Research on the Earthen Pyramid (C-1) at La Venta, Tabasco. Paper presented at the Sixty-first Annual Meeting of the Society for American Archaeology, New Orleans, 1996.
- GOODMAN, FELICITAS
1988 *Ecstasy, Ritual, and Alternative Reality: Religion in a Pluralistic World*. Indiana University Press, Bloomington.
- GRAHAM, IAN
1982 *Yaxchilan: Corpus of Maya Hieroglyphic Inscriptions*, vol. 3.3. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, Mass.
- GRAHAM, JOHN
1982 Antecedents of Olmec Sculpture at Abaj Takalik. In *Pre-Columbian Art History: Selected Readings* (Alana Cordy-Collins, ed.): 7–22. Peek Publications, Palo Alto, Calif.
1989 Olmec Diffusion: A Sculptural View from Pacific Guatemala. In *Regional Perspectives on the Olmec* (Robert J. Sharer and David C. Grove, eds.): 227–246. Cambridge University Press, Cambridge, Eng.
- GREEN, DEE F., AND GARETH W. LOWE (EDS.)
1967 *Altamira and Padre Piedra: Early Preclassic Sites in Chiapas, Mexico*. Papers of the New World Archaeological Foundation 20. Brigham Young University, Provo, Utah.
- GROVE, DAVID C.
1970a *Los murales de la cueva de Oxtotitlán, Acatlán, Guerrero*. Serie Investigaciones 23. Instituto Nacional de Antropología e Historia, México, D.F.
1970b *The Olmec Paintings of Oxtotitlán Cave, Guerrero, Mexico*. Studies in Pre-Columbian Art and Archaeology 6. Dumbarton Oaks, Washington, D.C.
1984 *Chalcatzingo: Excavations on the Olmec frontier*. Thames and Hudson, London and New York.
1987a Comments on the Site and Its Organization. In *Ancient Chalcatzingo* (David C. Grove, ed.): 420–433. University of Texas Press, Austin.
1987b Miscellaneous Bedrock and Boulder Carvings. In *Ancient Chalcatzingo* (David C. Grove, ed.): 159–170. University of Texas Press, Austin.
1987c Other Ceramics and Miscellaneous Artifacts. In *Ancient Chalcatzingo* (David C. Grove, ed.): 271–294. University of Texas Press, Austin.
1987d “Torches,” “Knuckle Dusters” and the Legitimization of Formative Period Rulership. *Mexicon* 9: 60–65.
1989a Chalcatzingo and Its Olmec Connection. In *Regional Perspectives on the Olmec* (Robert J. Sharer and David C. Grove, eds.): 122–147. Cambridge University Press, Cambridge, Eng.
1989b Olmec: What’s in a Name? In *Regional Perspectives on the Olmec* (Robert J. Sharer and David C. Grove, eds.): 8–14. Cambridge University Press, Cambridge, Eng.
1996 Archaeological Contexts of Olmec Art outside of the Gulf Coast. In *Olmec Art of Ancient Mexico* (Elizabeth P. Benson and Beatriz de la Fuente, eds.): 105–117. National Gallery of Art, Washington, D.C.
2000 Faces of the Earth at Chalcatzingo, Mexico: Serpents, Caves, and Mountains in Middle Formative Period Iconography. In *Olmec Art and Archaeology: Social Complexity in the Formative Period* (John E. Clark and Mary Pye, eds): 277–295. National Gallery of Art, Washington, D.C.
- GROVE, DAVID C., AND JORGE ANGULO V.
1987 A Catalog and Description of Chalcatzingo’s Monuments. In *Ancient Chalcatzingo* (David C. Grove, ed.): 114–131. University of Texas Press, Austin.
- GROVE, DAVID C., SUSAN D. GILLESPIE, PONCIANO ORTÍZ C., AND MICHAEL HAYTON
1993 Five Olmec Monuments from the Laguna de los Cerros Hinterland. *Mexicon* 15 (5): 91–95.
- GRUBE, NIKOLAI
1991 An Investigation of the Primary Standard Sequence on Classic Maya Ceramics. In *Sixth Palenque Round Table, 1986* (Merle Greene Robertson and Virginia Fields, eds.): 223–232. University of Oklahoma Press, Norman.
- GRUBE, NIKOLAI, AND WERNER NAHM
1994 A Census of Xibalba: A Complete Inventory of Way Characters on Maya Ceramics. In *The Maya Vase Book* (Barbara and Justin Kerr, eds.): 686–715. Kerr Associates, New York.
- GUMP, RICHARD
1962 *Jade: Stone of Heaven*. Doubleday, Garden City, N.Y.

Bibliography

- HALL, ROBERT L.
1997 *An Archaeology of the Soul: North American Belief and Ritual*. University of Illinois Press, Urbana and Chicago.
- HALL, ROBERT L., AND ARTHUR E. DENNIS
1986 Cultivated and Gathered Plant Foods. In *Archaeological Excavations at Antelope House* (Donald P. Morris, senior author): 110–141. National Park Service, Washington, D.C.
- HAMMOND, NORMAN
1988 Cultura Hermana: Reappraising the Olmec. *Quarterly Review of Archaeology* 9 (4): 1–4.
- HARLOW, GEORGE E.
1993 Middle American Jade: Geologic and Petrologic Perspectives on Variability and Source. In *Precolumbian Jade: New Geological and Cultural Interpretations* (Frederick W. Lange, ed.): 9–29. University of Utah Press, Salt Lake City.
1996 Rocks and Minerals Employed by the Olmec as Carvings. In *The Olmec World: Ritual and Rulership*: 123–124. The Art Museum, Princeton University, Princeton, N.J.
- HARMER ROOKE GALLERIES
1984 *Fine Pre-Columbian Art from the Collection of Mr. and Mrs. Peter G. Wray*. Harmer Rooke Galleries, New York.
- HEALY, PAUL F.
1974 An Olmec Vessel from Northeast Honduras. *Katunob* 8 (4): 73–79.
1992 Ancient Honduras: Power, Wealth, and Rank in Early Chiefdoms. In *Wealth and Hierarchy in the Intermediate Area* (Frederick W. Lange, ed.): 85–108. Dumbarton Oaks, Washington, D.C.
- HELLMUTH, NICHOLAS
1987 *Monster und Menschen in der Maya-Kunst*. Akademische Druck- u. Verlagsanstalt, Graz.
- HIBBEN, FRANK C.
1975 *Kiva Art of the Anasazi at Pottery Mound*. KC Publications, Las Vegas, Nev.
- HILL, WARREN D.
n.d. Mesoamerica's Earliest Ballcourt and the Origins of Inequality. Paper presented at the Sixty-first Annual Meeting of the Society for American Archaeology, New Orleans, 1996.
- HIRTH, KENNETH G.
1978 Interregional Trade and the Formation of Prehistoric Gateway Communities. *American Antiquity* 43: 35–45.
- HIRTH, KENNETH G., AND SUSAN GRANT HIRTH
1993 Ancient Currency: The Style and Use of Jade and Marble Carvings in Central Honduras. In *Precolumbian Jade: New Geological and Cultural Interpretations* (Frederick W. Lange, ed.): 173–190. University of Utah Press, Salt Lake City.
- HOUSTON, STEPHEN D.
1998 Classic Maya Depictions of the Built Environment. In *Function and Meaning in Classic Maya Architecture* (Stephen D. Houston, ed.): 333–372. Dumbarton Oaks, Washington D.C.
- HOUSTON, STEPHEN, AND DAVID STUART
1989 The Way Glyph: Evidence for “Co-essences” among the Classic Maya. *Research Reports on Ancient Maya Writing* 30. Center for Maya Research, Washington, D.C.
- HOUSTON, STEPHEN, AND KARL TAUBE
2000 An Archaeology of the Senses: Perception and Cultural Expression in Ancient Mesoamerica. *Cambridge Archaeological Journal* 10: 253–286.
- HOWELL, STEVE N. G., AND SOPHIE WEBB
1995 *A Guide to the Birds of Mexico and Northern Central America*. Oxford University Press, Oxford.
- ICHON, ALAIN
1973 *La religión de los Totonacos de la sierra*. Instituto Nacional Indigenista, México, D.F.
- JEFF, STEPHEN C., AND PETER B. BOYLE
1986 The Exotic Origins of Fishes Depicted on Prehistoric Mimbres Pottery from New Mexico. *American Antiquity* 51: 688–720.
- JIMÉNEZ MORENO, WIGBERTO
1942 Relación entre los Olmecas, los Toltecas y los Mayas, según las tradiciones. In *Mayas y Olmecas: Segunda reunión de Mesa Redonda sobre problemas antropológicos de México y Centro América*: 19–23. Talleres de la Editorial Stylo, México, D.F.
- JOESINK-MANDEVILLE, L. R. V., AND SYLVIA MELUZIN
1976 Olmec-Maya Relationships: Olmec Influence in Yucatan. In *Origins of Religious Art and Iconography in Preclassic Mesoamerica* (Henry B. Nicholson, ed.): 89–105. UCLA Latin American Center Publications, Los Angeles.
- JONES, CHRISTOPHER, AND LINTON SATTERTHWAITHE
1982 *The Monuments and Inscriptions of Tikal: The Carved Monuments*. Tikal Report, no. 33, part A. The University Museum, University of Pennsylvania, Philadelphia.
- JONES, JULIE
1969 *Precolumbian Art in New York: Selections from Private Collections*. Museum of Primitive Art, New York.
- JORALEMON, PETER DAVID
1971 *A Study of Olmec Iconography*. Studies in Pre-Columbian Art and Archaeology 7. Dumbarton Oaks, Washington, D.C.
1976 The Olmec Dragon: A Study in Pre-Columbian Iconography. In *Origins of Religious Art and Iconography in Preclassic Mesoamerica* (Henry B. Nicholson, ed.): 27–71. UCLA Latin American Center Publications, Los Angeles.

Bibliography

- 1981 The Old Woman and the Child: Themes in the Iconography of Preclassic Mesoamerica. In *The Olmec and Their Neighbors: Essays in Memory of Matthew W. Stirling* (Elizabeth P. Benson, ed.): 163–180. Dumbarton Oaks, Washington, D.C.
- 1988 The Olmec. In *The Face of Ancient America: The Wally and Brenda Zollman Collection of Precolumbian Art* (Lee Parsons, John B. Carlson, and Peter David Joralemon): 9–50. Indiana University Press, Bloomington.
- 1996 In Search of the Olmec Cosmos: Reconstructing the World View of Mexico's First Civilization. In *Olmec Art of Ancient Mexico* (Elizabeth P. Benson and Beatriz de la Fuente, eds.): 51–59. National Gallery of Art, Washington, D.C.
- JOYCE, ROSEMARY, RICHARD EDGING, KARL LORENZ, AND SUSAN D. GILLESPIE
- 1991 Olmec Bloodletting: An Iconographic Study. In *Sixth Palenque Round Table, 1986* (Merle Greene Robertson and Virginia Fields, eds.): 143–150. University of Oklahoma Press, Norman.
- JOYCE, T. A.
- 1933 The Pottery Whistle-Figurines of Lubaantun. *Journal of the Royal Anthropological Institute* 63: 15–25.
- KELEMEN, PÁL
- 1943 *Medieval American Art*, 2 vols. Macmillan Co., New York.
- KELLY, DAVID H.
- 1976 *Deciphering the Maya Script*. University of Texas Press, Austin.
- KERR, JUSTIN
- 1989 *The Maya Vase Book*, vol. 1. Kerr Associates, New York.
- 1992 *The Maya Vase Book*, vol. 3. Kerr Associates, New York.
- 1994 *The Maya Vase Book*, vol. 4. Kerr Associates, New York.
- 1997 *The Maya Vase Book*, vol. 5. Kerr Associates, New York.
- KIDDER, ALFRED V.
- 1942 Archaeological Specimens from Yucatan and Guatemala. *Notes on Middle American Art and Archaeology* 1 (9): 35–40. Carnegie Institution of Washington.
- 1947 *The Artifacts of Uaxactun, Guatemala*. Carnegie Institution of Washington, Publication 576. Washington, D.C.
- KIDDER, ALFRED V., AND GORDON F. EKHOLM
- 1951 Some Archaeological Specimens from Pomona, British Honduras. *Notes on Middle American Archaeology and Ethnology* 5 (102): 125–142.
- KIDDER, ALFRED V., JESSE D. JENNINGS, AND EDWIN M. SHOOK
- 1946 *Excavations at Kaminaljuyu, Guatemala*. Carnegie Institution of Washington, Publication 561. Washington, D.C.
- KOLATA, ALAN
- 1993 *The Tiwanaku: Portrait of an Andean Civilization*. Blackwell, Cambridge.
- KROTSEY, G. RAMON
- 1973 El agua ceremonial de los Olmecas. *Boletín del Instituto Nacional de Antropología e Historia*, n.s., no. 6: 43–48.
- KUBLER, GEORGE
- 1962 *The Art and Architecture of Ancient America*. Penguin Books, Middlesex, U.K.
- 1984 Ancient American Gods and Their Living Impersonations. *Apollo* 119 (266): 10–16.
- KUBLER, GEORGE (ED.)
- 1986 *Pre-Columbian Art of Mexico and Central America*. Yale University Art Gallery, New Haven, Conn.
- LANGE, FREDERICK W.
- 1993 Introduction. In *Precolumbian Jade: New Geological and Cultural Interpretations* (Frederick W. Lange, ed.): 1–6. University of Utah Press, Salt Lake City.
- LARRALDE DE SÁENZ, JACQUELINE
- 1986 *Crónicas en barro e piedra: Arte prehispánico de México en la Colección Saenz, el período formativo*. Universidad Nacional Autónoma de México, México, D.F.
- LEE, THOMAS A., JR.
- 1969 *The Artifacts of Chiapa de Corzo, Chiapas, Mexico*. Papers of the New World Archaeological Foundation 26. Brigham Young University, Provo, Utah.
- LEIGH, HOWARD
- 1966 The Evolution of the Zapotec Glyph C. In *Ancient Oaxaca: Discoveries in Mexican Archaeology and History* (John Paddock, ed.): 256–269. Stanford University Press, Stanford, Calif.
- LEÓN-PORTILLA, MIGUEL
- 1984 *Literaturas de Mesoamérica*. Secretaría de Educación Pública, México, D.F.
- LESURE, RICHARD G.
- 2000 Animal Imagery, Cultural Unities, and Ideologies of Inequality in Early Formative Mesoamerica. In *Olmec Art and Archaeology: Social Complexity in the Formative Period* (John E. Clark and Mary Pye, eds.): 193–215. Studies in the History of Art 58. National Gallery of Art, Washington, D.C.
- LEYENAAR, TED J. J., AND LEE A. PARSONS
- 1988 *Ulama: The Ballgame of the Mayas and Aztecs*. Spruyt, van Mantgem and de Does, Leiden.
- LEYENAAR, TED J. J., GERARD W. VAN BUSSEL, AND GESINE WEBER
- 1992 *Von Küste zu Küste: Prä-kolumbische Skulpturen aus Meso-Amerika*. Verlag Weber und Weidemeyer, Kassel.
- LILLIOS, KATINA
- 1999 Objects of Memory: The Ethnography and Archaeology of Heirlooms. *Journal of Archaeological Method and Theory* 6: 235–262.

Bibliography

- LINNÉ, SIGVALD
 1942 *Mexican Highland Cultures*. Ethnographic Museum of Sweden, Stockholm.
- 1948 Modern Blowguns in Oaxaca, Mexico. *Ethnos* 48 (3–4): 111–119.
- 1956 *Treasures of Mexican Art: Two Thousand Years of Art and Art Handicraft* (Albert Read, trans.). Nordisk Rotogravyr, Stockholm.
- LÓPEZ AUSTIN, ALFREDO
 1979 Iconografía mexicana: El monolito verde de Templo Mayor. *Anales de Antropología* 16: 133–153.
- 1988 *The Human Body and Ideology: Concepts of the Ancient Nahuas* (Thelma Ortíz de Montellano and Bernard Ortíz de Montellano, trans.). University of Utah Press, Salt Lake City.
- 1994 Homshuk: A Thematic Analysis of the Narrative. In *Chipping Away on Earth: Studies in Prehispanic and Colonial Mexico in Honor of Arthur J. O. Anderson* (Eloise Quiñones Keber, ed.): 131–139. Labyrinthos, Lancaster, Calif.
- LÓPEZ LUJÁN, LEONARDO
 1989 *La recuperación Mexica del pasado Teotihuacano*. Instituto Nacional de Antropología e Historia, México, D.F.
- LOTHROP, SAMUEL K.
 1963 Robert Woods Bliss, 1875–1962. *American Antiquity* 29 (1): 92–93.
- LOVE, MICHAEL W.
 1991 Style and Social Complexity in Formative Mesoamerica. In *The Formation of Complex Society in Southeastern Mesoamerica* (William R. Fowler, ed.): 47–76. CRC Press, Boca Raton, Fla.
- LOWE, GARETH W.
 1975 *The Early Preclassic Barra Phase of Altamira, Chiapas*. Papers of the New World Archaeological Foundation 38. Brigham Young University. Provo, Utah.
- 1981 Olmec Horizons Defined in Mound 20, San Isidro, Chiapas. In *The Olmec and Their Neighbors: Essays in Memory of Matthew W. Stirling* (Elizabeth P. Benson, ed.): 231–255. Dumbarton Oaks, Washington, D.C.
- 1994 Comunidades de Chiapas relacionadas con los Olmecas. In *Los Olmecas en Mesoamérica* (John E. Clark, ed.): 113–127. El Equilibrista, México, D.F.
- LUMBRERAS, LUIS, MARINO GONZÁLEZ, AND B. LIETAER
 1976 *Acerca de la función del sistema hidráulico de Chavín*. Investigaciones de Campo 2. Museo Nacional de Antropología y Arqueología, Lima.
- MALINOWSKI, BRONISLAW
 1922 *Argonauts of the Western Pacific: An Account of Native Enterprise and Adventure in the Archipelagos of Melanesian New Guinea*. Routledge and Kegan Paul, London.
- 1934 Stone Implements in Eastern New Guinea. In *Essays Presented to C. G. Seligman* (E. E. Evans-Pritchard, Raymond Firth, Bronislaw Malinowski, and Isaac Schapera, eds.): 189–196. Kegan Paul, Trench, Trubner, and Co., London.
- MANZANILLA, LINDA, AGUSTÍN ORTÍZ BUTRÓN, AND MIGUEL ÁNGEL JIMÉNEZ
 1993 La cerámica del conjunto residencial excavado. In *Anatomía de un conjunto residencial Teotihuacano en Oztoyahualco* (Linda Manzanilla, ed.), 1: 195–387. Universidad Nacional Autónoma de México, México, D.F.
- MARCUS, JOYCE
 1989 Zapotec Chiefdoms and the Nature of Formative Religions. In *Regional Perspectives on the Olmec* (Robert J. Sharer and David C. Grove, eds.): 148–197. Cambridge University Press, Cambridge, Eng.
- 1992 *Mesoamerican Writing Systems: Propaganda, Myth, and History in Four Ancient Civilizations*. Princeton University Press, Princeton, N.J.
- 1999 Men's and Women's Ritual in Formative Oaxaca. In *Social Patterns in Pre-Classical Mesoamerica* (David C. Grove and Rosemary A. Joyce, eds.): 67–96. Dumbarton Oaks, Washington, D.C.
- MARCUS, JOYCE, AND KENT V. FLANNERY
 1994 Ancient Zapotec Ritual and Religion: An Application of the Direct Historical Approach. In *The Ancient Mind: Elements of Cognitive Archaeology* (Colin Renfrew and Ezra B. W. Zubrow, eds.): 55–74. Cambridge University Press, Cambridge, Eng.
- MARTÍ, SAMUEL
 1961 *Canto, danza, y música precortesianos*. Fondo de Cultura Económica, México, D.F.
- MARTÍNEZ DONJUÁN, GUADALUPE
 1985 El sitio olmeca de Teopantecuanitlán en Guerrero. *Anales de Antropología* 22: 216–226.
- 1994 Los Olmecas en el estado de Guerrero. In *Los Olmecas en Mesoamérica* (John Clark, ed.): 143–163. El Equilibrista, México, D.F.
- MASON, J. ALDEN
 1958 Pre-Columbian Art. *Archaeology* 11 (2): 123–124.
- MATOS MOCTEZUMA, EDUARDO
 1987 *Cacaxtla*. Citicorp, México, D.F.
- MATOS MOCTEZUMA, EDUARDO, AND LEONARDO LÓPEZ LUJÁN
 1993 Teotihuacan and Its Mexica Legacy. In *Teotihuacan: Art from the City of the Gods* (Kathleen Berrin and Esther Pasztory, eds.): 156–165. Thames and Hudson, New York.

Bibliography

- MAUDSLAY, ALFRED P.
 1889–1902 *Archaeology*. 5 vols. Biologia Centrali-Americana. R. H. Porter and Dalau and Company, London.
- MAYAS Y OLMECAS
 1942 Conclusiones. In *Mayas y Olmecas: Segunda reunión de Mesa Redonda sobre problemas antropológicos de México y Centro América*: 75–82. Talleres de la Editorial Stylo, México, D.F.
- MCNEAR, EVERETT
 1982 *High Culture in the Americas before 1500*. Arts Club of Chicago, Chicago.
- MEDELLÍN ZENIL, ALFONSO
 1960 Monolitos inéditos olmecas. *La palabra y el hombre* 16: 75–97. Universidad Veracruzana, Jalapa.
 1971 *Monolitos olmecas y otros en el Museo de la Universidad Veracruzana*, Corpus Antiquitatum Americanensium 5. Instituto de Antropología e Historia, México, D.F.
- MELGAR Y SERRANO, JOSÉ MARÍA
 1869 Antigüedades mexicanas. *Sociedad Mexicana de Geografía y Estadística Boletín*, ser. 2, 1: 292–297.
- METCALF, GEORGE, AND KENT FLANNERY
 1967 An Olmec “Were-Jaguar” from the Yucatan Peninsula. *American Antiquity* 31: 109–111.
- MEYER, ANTHONY J. P.
 1995 *Oceanic Art*, 2 vols. Könemann, Cologne.
- MILBRATH, SUSAN
 1979 *A Study of Olmec Sculptural Chronology*. Studies in Pre-Columbian Art and Archaeology 23. Dumbarton Oaks, Washington, D.C.
- MILES, SUZANNE W.
 1957 The Sixteenth Century Pokom Maya: A Documentary Analysis of Social Structure and Archaeological Setting. *Transactions of the American Philosophical Society* 47: 731–81.
 1965 Sculpture of the Guatemala-Chiapas Highlands and Pacific Slopes and Associated Hieroglyphs. In *Handbook of Middle American Indians* (Robert Wauchope and Gordon Willey, eds.), vol. 2: 237–275. University of Texas Press, Austin.
- MILLER, MARY ELLEN
 1984 Four Maya Reliefs. *Apollo* 119 (266): 17–20.
 1989 The Ballgame. *Record of the Art Museum, Princeton University* 48 (2): 22–31.
- MILLER, MARY ELLEN, AND KARL A. TAUBE
 1993 *The Gods and Symbols of Ancient Mexico and the Maya*. Thames and Hudson, London and New York.
- MILLER, VIRGINIA E.
 1985 The Dwarf Motif in Classic Maya Art. In *Fourth Palenque Round Table, 1980* (Merle Greene Robertson and Elizabeth P. Benson, eds.): 141–153. Pre-Columbian Art Research Institute, San Francisco.
- MILLIKEN, WILLIAM M.
 1946 *Art of the Americas*. Cleveland Museum of Art, Cleveland, Ohio.
- MOHEN, JEAN-PIERRE
 1989 *The World of Megaliths*. Facts on File, New York.
- MORLEY, SYLVANUS G.
 1946 *The Ancient Maya*. Stanford University Press, Stanford, Calif.
- MÜNCH, GUIDO
 1983 *Etnología del Istmo Veracruzano*. Universidad Nacional Autónoma de México, México, D.F.
- MUSÉE RATH
 1998 *Mexique: Terre des Dieux*. Musées d’Art et d’Histoire, Geneva.
- NAVARRETE, CARLOS
 1971 Algunas piezas olmecas de Chiapas y Guatemala. *Anales de Antropología* 8: 69–82.
 1974 *The Olmec Rock Carvings at Pijijiapan, Chiapas, Mexico, and Other Pieces from Chiapas and Guatemala*. Papers of the New World Archaeological Foundation 35. Brigham Young University, Provo, Utah.
- NICHOLSON, HENRY B.
 1971 Major Sculpture in Pre-Hispanic Central Mexico. In *Handbook of Middle American Indians* (Robert Wauchope, gen. ed.), vol. 10: 92–134. University of Texas Press, Austin.
 1976 Preclassic Mesoamerican Iconography from the Perspective of the Postclassic: Problems in Interpretational Analysis. In *Origins of Religious Art and Iconography in Preclassic Mesoamerica* (Henry B. Nicholson, ed.): 157–175. UCLA Latin American Center Publications, Los Angeles.
- NICHOLSON, H. B., AND ELOISE QUINONES KEBER
 1983 *Art of Aztec Mexico: Treasures of Tenochtitlán*. National Gallery of Art, Washington, D.C.
- NIEDERBERGER BETTON, CHRISTINE
 1987 *Paleopaysages et archeologie pre-urbaine du bassin de Mexico*, 2 vols. Centre d’Etudes Mexicaines et Centramericaines, México, D.F.
 1996 The Basin of Mexico: A Multimillennial Development toward Cultural Complexity. In *Olmec Art of Ancient Mexico* (Elizabeth P. Benson and Beatriz de la Fuente, eds.): 83–93. National Gallery of Art, Washington, D.C.
- NORMAN, V. GARTH
 1973 *Izapa Sculpture*, part 1, album. Papers of the New World Archaeological Foundation. Brigham Young University, Provo, Utah.

Bibliography

- 1976 *Izapa Sculpture*, part 2, text. Papers of the New World Archaeological Foundation 30. Brigham Young University, Provo, Utah.
- OCHOA SALAS, LORENZO
1976 Un hacha de Etzatlán-San Marcos, Jal. *Anales de Antropología* 13: 47–54.
- THE OLMEC WORLD
1995 *The Olmec World: Ritual and Rulership*. The Art Museum, Princeton University, Princeton, N.J.
- O'MACK, SCOTT
1991 Yacatecuhtli and Ehecatl-Quetzalcoatl: Earth-Divers in Aztec Central Mexico. *Ethnohistory* 38: 1–33.
- ORR, HEATHER SUSAN
n.d. Power Games in the Late Formative Valley of Oaxaca: The Ballplayer Carvings at Dainzú. Ph.D. dissertation, Department of Art History, University of Texas at Austin, 1997.
- ORTÍZ, PONCIANO
n.d. Proyecto Martín, 1996: Sitio Martín, un espacio sagrado Olmeca. Paper presented at "Olmec Art and Archaeology in Mesoamerica: Social Complexity in the Formative Period," Center for Advanced Study in the Visual Arts, National Gallery of Art, Washington, D.C., September 20, 1996.
- ORTÍZ, PONCIANO, AND MARIA DEL CARMEN RODRÍGUEZ
1994 Los espacios sagrados Olmecas: El Manatí, un caso especial. In *Los Olmecas en Mesomamérica* (John E. Clark, ed.): 69–91. El Equilibrista, México, D.F.
1999 Olmec Ritual Behavior at El Manatí: A Sacred Space. In *Social Patterns in Pre-Classical Mesoamerica* (David C. Grove and Rosemary A. Joyce, eds.): 225–254. Dumbarton Oaks, Washington, D.C.
2000 The Sacred Hill of El Manatí: A Preliminary Discussion of the Site's Ritual Paraphernalia. In *Olmec Art and Archaeology: Social Complexity in the Formative Period* (John E. Clark and Mary Pye, eds.): 74–93. *Studies in the History of Art* 58. National Gallery of Art, Washington, D.C.
- OTIS CHARLTON, CYNTHIA
1993 Obsidian as Jewelry: Lapidary Production in Aztec Otumba, Mexico. *Ancient Mesoamerica* 4: 231–243.
- PAHL, GARY W.
1975 The Iconography of an Engraved Olmec Figure. *Masterkey* 49 (3): 84–94.
- PALMER, J. P.
1967 *Jade*. Spring Books, London.
- PARSONS, ELSIE CLEWS
1939 *Pueblo Indian Religion*. University of Chicago Press, Chicago.
- PARSONS, LEE ALLEN
1969 *Bilbao, Guatemala*, vol. 2. Publications in Anthropology 12. Milwaukee Public Museum, Milwaukee, Wis.
- 1980 *Pre-Columbian Art: The Morton D. May and the Saint Louis Art Museum Collections*. Harper and Row, New York.
- 1986 *The Origins of Maya Art: Monumental Stone Sculpture of Kaminaljuyu, Guatemala, and the Southern Pacific Coast*. *Studies in Pre-Columbian Art and Archaeology* 28. Dumbarton Oaks, Washington, D.C.
- PASO Y TRONCOSO, FRANCISCO DEL
1892 *Catálogo de los objetos que presenta la República de México en la Exposición Histórico-Americana de Madrid*, 2 vols., Madrid.
- PASZTORY, ESTHER
2000 The Portrait and the Mask: Invention and Translation. In *Olmec Art and Archaeology: Social Complexity in the Formative Period* (John E. Clark and Mary Pye, eds.): 264–275. *Studies in the History of Art* 58. National Gallery of Art, Washington, D.C.
- PAUL, ANNE, AND SOLVEIG A. TURPIN
1986 The Ecstatic Shaman Theme of Paracas Textiles. *Archaeology* 39 (5): 20–27.
- PENDERGAST, DAVID M.
1990 *Excavations at Altun Ha, Belize, 1964–1970*, vol. 3. Royal Ontario Museum, Toronto.
- PÉREZ SUÁREZ, TOMÁS
1997 Los Olmecas y los dioses del maíz en Mesoamérica. In *De hombres y dioses* (Xavier Noguez and Alfredo López Austin, eds.): 17–58. El Colegio de Michoacán and El Colegio Mexiquense, Zamora and Toluca.
- PETERS, ANN
1991 Ecology and Society in Embroidered Images from the Paracas Textiles. In *Paracas Art and Architecture: Object and Context in South Coastal Peru* (Anne Paul, ed.): 240–314. University of Iowa Press, Iowa City.
- PETERSON, FREDERICK, AND FERNANDO HORCASITAS
1957 Recent Finds at Tlatilco. *Tlalocan* 3 (4): 363–365.
- PIÑA CHAN, ROMAN
1968 *Jaina: La Casa en el agua*. Instituto Nacional de Antropología e Historia, México, D.F.
1989 *The Olmec: Mother Culture of Mesoamerica* (Laura Laurencich Minelli, ed.). Rizzoli, New York.
- PIÑA CHAN, ROMAN, AND MIGUEL COVARRUBIAS
1964 *El pueblo del jaguar*. Museo Nacional de Antropología, México, D.F.
- PLEASANTS, FREDERICK
1940 Pre-Columbian Art at the Fogg. *Magazine of Art* 33 (2): 89.
- POHORILENKO, ANATOLE
1981 The Olmec Style and Costa Rican Archaeology. In *The Olmec and Their*

Bibliography

- Neighbors: Essays in Memory of Matthew W. Stirling* (Elizabeth P. Benson ed.): 309–327. Dumbarton Oaks, Washington, D.C.
- 1996 Portable Carvings in the Olmec Style. In *Olmec Art of Ancient Mexico* (Elizabeth P. Benson and Beatriz de la Fuente, eds.): 119–131. National Gallery of Art, Washington, D.C.
- POLANYI, KARL
1968 *Primitive, Archaic, and Modern Economies* (George Dalton, ed.). Anchor Books, Garden City, N.Y.
- POOL, CHRISTOPHER A.
2000 From Olmec to Epi-Olmec at Tres Zapotes, Veracruz, Mexico. In *Olmec Art and Archaeology: Social Complexity in the Formative Period* (John E. Clark and Mary Pye, eds.): 137–153. Studies in the History of Art 58. National Gallery of Art, Washington, D.C.
- PORTER, JAMES B.
1989 Olmec Colossal Heads as Recarved Thrones: “Mutilation,” Revolution, and Recarving. *Res: Anthropology and Aesthetics* 17–18: 23–29.
1996 Celtiform Stelae: A New Olmec Sculpture Type and Its Implication for Epigraphers. *Beyond Indigenous Voices: LAILA/ALILA Eleventh International Symposium on Latin American Indian Literatures, 1994* (Mary H. Preus, ed.): 65–72. Labyrinthos, Lancaster, Calif.
- PORTER, MURIEL NOÉ
1953 *Tlatilco and the Pre-Classic Cultures of the New World*. Wenner-Gren Foundation for Anthropological Research, New York
- POZORSKI, THOMAS, AND SHEILA POZORSKI
1995 An I-Shaped Ball-Court Form at Pampa de las Llamas-Moxeke, Peru. *Latin American Antiquity* 6 (3): 274–280.
- PROSKOURIAKOFF, TATIANA
1950 *A Study of Classic Maya Sculpture*. Carnegie Institution of Washington, Publication 593. Washington, D.C.
1960 Historical Implications of a Pattern of Dates at Piedras Negras, Guatemala. *American Antiquity* 25: 454–475.
1974 *Jades from the Cenote of Sacrifice, Chichen Itza, Yucatan*. Memoirs of the Peabody Museum of Archaeology and Ethnology 10.1. Harvard University, Cambridge, Mass.
- PYNE, NANETTE
1976 The Fire-Serpent and Were-Jaguar in Formative Oaxaca: A Contingency Table Analysis. In *The Early Mesoamerican Village* (Kent V. Flannery, ed.): 272–280. Academic Press, New York.
- QUIGGIN, A. HINGSTON
1970 *A Survey of Primitive Money: The [1949] Beginning of Currency*. Barnes and Noble, New York, and Methuen & Co., London.
- REENTS-BUDET, DORIE
1988 The Iconography of Lamanai Stela 9. *Research Reports on Ancient Maya Writing* 22: 17–32.
1991 The “Holmul Dancer” Theme in Maya Art. In *Sixth Palenque Round Table, 1986* (Merle Greene Robertson and Virginia Fields, eds.): 217–222. University of Oklahoma Press, Norman.
1994 *Painting the Maya Universe: Royal Ceramics of the Classic Period*. Duke University Press, Durham, N.C.
- REILLY, FRANK KENT, III
1989 The Shaman in Transformation Pose: A Study of the Theme of Rulership in Olmec Art. *Record of the Art Museum, Princeton University* 48 (2): 4–21.
1991 Olmec Iconographic Influences on the Symbols of Maya Rulership: An Examination of Possible Symbols. In *Sixth Palenque Round Table, 1986* (Merle Greene Robertson and Virginia Fields, eds.): 151–166. University of Oklahoma Press, Norman.
1994 Cosmología, soberanismo y espacio ritual en la Mesoamérica del Formativo. In *Los Olmecas en Mesoamérica* (John Clark, ed.): 238–259. El Equilibrista, México, D.F.
n.d. Visions to Another World: Art, Shamanism, and Political Power in Middle Formative Mesoamerica. Ph.D. dissertation, Department of Art History, University of Texas at Austin, 1994.
- ROBICSEK, FRANCIS
1978 *The Smoking Gods: Tobacco in Maya Art, History, and Religion*. University of Oklahoma Press, Norman.
- ROBICSEK, FRANCIS, AND DONALD M. HALES
1981a *The Maya Book of the Dead: The Ceramic Codex*. University of Virginia Art Museum, Charlottesville.
1981b *Maya Ceramic Vases from the Late Classic Period: The November Collection of Maya Vases*. University of Virginia Art Museum, Charlottesville.
- RODAS, SERGIO
1993 Catalogo de barrigones de Guatemala. *U tz’ib* 1 (5): 1–36. Guatemala City.
- RODRÍGUEZ, MARÍA DEL CARMEN
n.d. The Offerings of La Merced: A Propitiatory Agricultural Event? Paper presented at the Princeton Symposium on the Olmec, Princeton, New Jersey, December 16, 1995.
- RODRÍGUEZ, MARÍA DEL CARMEN, AND PONCIANO ORTÍZ
2000 A Massive Offering of Axes at La Merced, Hidalgotitlán, Veracruz, Mexico. In *Olmec Art and Archaeology: Social Complexity in the Formative Period*

Bibliography

- (John E. Clark and Mary Pye, eds.): 154–167. *Studies in the History of Art* 58. National Gallery of Art, Washington, D.C.
- ROEMER-UND PELIZAEUS MUSEUM
1986 *Glanz und Untergang des Alten Mexico*. Verlag Phillip von Zabern, Mainz.
- ROWE, JOHN H.
1967 Form and Meaning in Chavin Art. In *Peruvian Archaeology: Selected Readings* (John Rowe and Dorothy Menzel, eds.): 72–103. Peek Publications, Palo Alto, Calif.
- RUPPERT, KARL, J. ERIC S. THOMPSON, AND TATIANA PROSKOURIAKOFF
1955 *Bonampak, Chiapas, Mexico*. Carnegie Institution of Washington, Publication 602. Washington, D.C.
- RUST, WILLIAM F., AND BARBARA F. LEYDEN
1994 Evidence of Maize Use at Early and Middle Preclassic La Venta Olmec Sites. In *Corn and Culture in the Prehistoric New World* (Sissel Johannessen and Christine Hastorf, eds.): 181–201. Westview Press, Boulder, Colo.
- SAHAGÚN, FRAY BERNARDINO DE
1950–*Florentine Codex: General History of the*
1982 *Things of New Spain* (A. J. O. Anderson and C. E. Dibble, trans.). School of American Research, Santa Fe, N.M.
- SALAZAR-BURGER, LUCY, AND RICHARD L. BURGER
1996 Cupisnique. In *Andean Art at Dumbarton Oaks*, 2 vols. (Elizabeth H. Boone, ed.): 87–100. Dumbarton Oaks, Washington, D.C.
- SANDSTROM, ALAN R.
1991 *Corn Is Our Blood: Culture and Ethnic Identity in a Contemporary Aztec Indian Village*. University of Oklahoma Press, Norman.
- SAUNDERS, NICHOLAS J.
1988 *Chatoyer: Anthropological Reflections on Archaeological Mirrors*. In *Recent Studies in Pre-Columbian Archaeology* (Nicholas J. Saunders and Olivier de Montmollin, eds.): 1–39. BAR International Series 421, Oxford.
1989 *People of the Jaguar: The Living Spirit of Ancient America*. Souvenir Press, London.
- SAVILLE, MARSHALL H.
1925 *The Wood-Carver's Art in Ancient Mexico*. The Museum of the American Indian, Heye Foundation, contribution 9. New York.
1929 Votive Axes from Ancient Mexico. *Indian Notes* 6: 266–299, 335–342. Museum of the American Indian, Heye Foundation, New York.
- SAWYER, ALAN R.
1972 The Feline in Paracas Art. In *The Cult of the Feline* (Elizabeth P. Benson, ed.): 91–115. Dumbarton Oaks, Washington, D.C.
- SCHELE, LINDA
1985 Balan-Ahau: A Possible Reading of the Tikal Emblem Glyph and a Title at Palenque. In *Fourth Palenque Round Table* (Merle Greene Robertson, gen. ed.): 59–65. Pre-Columbian Art Research Institute, San Francisco.
1995 The Olmec Mountain and Tree of Creation in Mesoamerican Cosmology. In *The Olmec World: Ritual and Rulership*: 105–117. The Art Museum, Princeton University, Princeton, N.J.
- SCHELE, LINDA, AND DAVID FREIDEL
1990 *A Forest of Kings: The Untold Story of the Ancient Maya*. William Morrow and Co., New York.
1991 The Courts of Creation: Ballcourts, Ballgames, and Portals to the Otherworld. In *The Mesoamerican Ballgame* (Vernon L. Scarborough and David R. Wilcox, eds.): 289–315. University of Arizona Press, Tucson.
- SCHELE, LINDA, AND MARY ELLEN MILLER
1986 *The Blood of Kings: Dynasty and Ritual in Maya Art*. George Braziller, New York.
- SCHMIDT, PETER, MERCEDES DE LA GARZA, AND ENRIQUE NALDA
1998 *Maya*. Rizzoli, New York.
- SCHRÖDER, E. E. W. GS.
1917 *Nias: Ethnographische, Geographische en Historische Aanteekeningen en Studiën*, 2 vols. E. J. Brill, Leiden.
- SCOTT, JOHN F.
1978 *The Danzantes of Monte Albán*. *Studies in Pre-Columbian Art and Archaeology* 19. Dumbarton Oaks, Washington, D.C.
- SÉJOURNÉ, LAURETTE
1959 *Un palacio en la ciudad de los dioses*. Instituto Nacional de Antropología e Historia, México, D.F.
- SELER, EDUARD
1902–*Gesammelte Abhandlungen zur*
1923 *Amerikanischen Sprach- und Altertumskunde*, 5 vols. Ascher, Berlin.
1963 *Comentarios al Código Borgia*, 3 vols. (M. Fenk, trans.). Fondo de Cultura Económica, México, D.F.
- VAN SERTIMA, IVAN
1976 *They Came before Columbus*. Random House, New York.
- SHACK, WILLIAM A.
1985 *The Kula: A Bronislaw Malinowski Centennial Celebration*. Robert H. Lowie Museum of Anthropology, University of California, Berkeley.
- SHARER, ROBERT J.
1989 Olmec Studies: A Status Report. In *Regional Perspectives on the Olmec* (Robert J. Sharer and David C. Grove, eds.): 3–7. Cambridge University Press, Cambridge, Eng.
1994 *The Ancient Maya*, 5th ed. Stanford

Bibliography

- n.d. University Press, Stanford, Calif.
 n.d. Excavation of Early Classic Royal Architecture at Copán, Honduras. Interim Report for the Foundation for the Advancement of Mesoamerican Studies, unpublished manuscript in possession of author, 1995.
- SISSON, EDWARD B.
 1970 Máscara olmeca de San Felipe. *Boletín de Instituto Nacional de Antropología e Historia*, ser. 2, 40: 45–48.
- SMITH, A. LEDYARD
 1950 *Uxactun, Guatemala: Excavations of 1931–1937*. Carnegie Institution of Washington, Publication 588. Washington, D.C.
 1982 Major Architecture and Caches. In *Excavations at Seibal* (Gordon R. Willey, gen. ed.). Memoirs of the Peabody Museum of Archaeology and Ethnology 15.1. Harvard University, Cambridge, Mass.
- SMITH, A. LEDYARD, AND A. V. KIDDER
 1951 *Excavations at Nebaj, Guatemala*. Carnegie Institution of Washington, Publication 594. Washington, D.C.
- SMITH, WATSON
 1952 *Kiva Mural Decorations at Awatovi and Kawaika-a, with a Survey of Other Wall Paintings in the Pueblo Southwest*. Papers of the Peabody Museum of Archaeology and Ethnology 37. Harvard University, Cambridge, Mass.
- SOUSTELLE, JACQUES
 1967a *Arts of Ancient Mexico* (Elizabeth Carmichael, trans.). Thames and Hudson, London and New York.
 1967b *Mexico* (James Hogarth, trans.). World Publication, Cleveland.
 1984 *The Olmecs: The Oldest Civilization in Mexico* (Helen R. Lane, trans.). Doubleday, New York.
- STARK, BARBARA L.
 2000 Framing the Gulf Olmecs. In *Olmec Art and Archaeology: Social Complexity in the Formative Period* (John E. Clark and Mary Pye, eds.): 31–53. Studies in the History of Art 58. National Gallery of Art, Washington, D.C.
- STERN, THEODORE
 1949 *The Rubber-Ball Game in the Americas*. Monographs of the American Ethnological Society 17. University of Washington Press, Seattle.
- STEVENSON, MATILDA C.
 1894 *The Sia*. Eleventh Annual Report of the Bureau of American Ethnology for the Years 1889–1890, Smithsonian Institution, Washington, D.C.
- STIRLING, MATTHEW W.
 1940 Great Stone Faces of the Mexican Jungle. *National Geographic* 78 (3): 309–334.
- 1943 *Stone Monuments of Southern Mexico*. Smithsonian Institution, Bureau of American Ethnology, Bulletin 138. Government Printing Office, Washington, D.C.
- 1955 *Stone Monuments of the Río Chiquito*. Smithsonian Institution, Bureau of American Ethnology, Bulletin 157. Government Printing Office, Washington, D.C.
- 1957 *An Archaeological Reconnaissance in Southeastern Mexico*. Smithsonian Institution, Bureau of American Ethnology, Bulletin 164. Government Printing Office, Washington, D.C.
- 1961 The Olmecs: Artists in Jade. In *Essays in Pre-Columbian Art and Archaeology*: 43–59. Harvard University Press, Cambridge, Mass.
- STONE, ANDREA
 1991 Aspects of Impersonation in Classic Maya Art. In *Sixth Palenque Round Table, 1986* (Merle Greene Robertson and Virginia Fields, eds.): 194–202. University of Oklahoma Press, Norman.
- STROSS, BRIAN
 1992 Maize and Blood: Mesoamerican Symbolism on an Olmec Vase and a Maya Plate. *Res: Anthropology and Aesthetics* 22: 83–107.
- STUART, GEORGE
 1993 New Light on the Olmec. *National Geographic* 184 (5): 88–115.
 1995 The Timeless Vision of Teotihuacan. *National Geographic* 188 (6): 2–35.
- STUART, GEORGE, AND GENE STUART
 1993 *Lost Kingdoms of the Maya*. National Geographic Society, Washington, D.C.
- TAÇON, PAUL
 1991 The Power of Stone: Symbolic Aspects of Stone Use and Tool Development in Western Arnhem Land, Australia. *Antiquity* 65: 192–207.
- TASCHEK, JENNIFER T.
 1994 *The Artifacts of Dzibilchaltun, Yucatan, Mexico: Shell, Polished Stone, Bone, Wood, and Ceramics*. Middle American Research Institute, Publication 50. Tulane University, New Orleans.
- TATE, CAROLYN E.
 1995 Art in Olmec Culture. In *The Olmec World: Ritual and Rulership*: 47–67. The Art Museum, Princeton University, Princeton, N.J.
 1999 Patrons of Shamanic Power: La Venta's Supernatural Entities in Light of Mixe Beliefs. *Ancient Mesoamerica* 10: 169–188.
- TAUBE, KARL A.
 1985 The Classic Maya Maize God: A Reappraisal. In *Fifth Palenque Round Table*,

Bibliography

- 1983 (Merle Greene Robertson and Virginia Fields, eds.): 171–181. Pre-Columbian Art Research Institute, San Francisco.
- 1986 The Teotihuacan Cave of Origin: The Iconography and Architecture of Emergence Mythology in Mesoamerica and the American Southwest. *Res: Anthropology and Aesthetics* 12: 51–82.
- 1987 A Representation of the Principal Deity in the Paris Codex. *Research Reports on Ancient Maya Writing* 6. Center for Maya Research, Washington, D.C.
- 1988a *The Albers Collection of Pre-Columbian Art*. Hudson Hills Press, New York.
- 1988b A Study of Classic Maya Scaffold Sacrifice. In *Maya Iconography* (Elizabeth P. Benson and Gillett G. Griffin, eds.): 331–351. Princeton University Press, Princeton, N.J.
- 1989 Ritual Humor in Classic Maya Religion. In *Word and Image in Maya Culture: Explorations in Language, Writing, and Representation* (William F. Hanks and Don S. Rice, eds.): 351–382. University of Utah Press, Salt Lake City.
- 1992a The Iconography of Mirrors at Teotihuacan. In *Art, Ideology, and the City of Teotihuacan* (Janet Catherine Berlo, ed.): 169–204. Dumbarton Oaks, Washington, D.C.
- 1992b *The Major Gods of Ancient Yucatan*. Studies in Pre-Columbian Art and Archaeology 32. Dumbarton Oaks, Washington, D.C.
- 1992c Uses of Sport, book review of *The Mesoamerican Ballgame*, by Vernon Scarborough and David R. Wilcox. *Science* 256: 1064–1065.
- 1993 *Aztec and Maya Myths*. British Museum Press, London.
- 1995 The Rainmakers: The Olmec and Their Contribution to Mesoamerican Belief and Ritual. In *The Olmec World: Ritual and Rulership*: 83–103. The Art Museum, Princeton University, Princeton, N.J.
- 1996 The Olmec Maize God: The Face of Corn in Formative Mesoamerica. *Res: Anthropology and Aesthetics* 29/30: 39–81.
- 1998 The Jade Hearth: Centrality, Rulership, and the Classic Maya Temple. In *Function and Meaning in Classic Maya Architecture* (Stephen D. Houston, ed.): 427–478. Dumbarton Oaks, Washington D.C.
- 2000a Lightning Celts and Corn Fetishes: The Formative Olmec and the Development of Maize Symbolism in Mesoamerica and the American Southwest. In *Olmec Art and Archaeology: Social Complexity in the Formative Period* (John E. Clark and Mary Pye, eds.): 296–337. Studies in the History of Art 58. National Gallery of Art, Washington, D.C.
- 2000b *The Writing System of Teotihuacan*. Ancient America 1. Center for Ancient American Studies, Barnardsville, N.C. and Washington, D.C.
- n.d. Cosmic Crawlers: The Symbolism of Centipedes and Caterpillars in Ancient Mesoamerican Thought. Paper presented at the Sixteenth Annual Maya Weekend, University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia, 1998.
- TAYLOR, PAUL MICHAEL, AND LORRAINE V. ARAGON
1991 *Beyond the Java Sea: Art of Indonesia's Outer Islands*. Harry N. Abrams, New York.
- TEDLOCK, BARBARA
1982 *Time and the Highland Maya*. University of New Mexico Press, Albuquerque.
- TEDLOCK, DENNIS
1996 *Popol Vuh: The Mayan Book of the Dawn of Life*, rev. ed. Simon and Schuster, New York.
- THOMPSON, GUNNAR
1989 *Nu Sun: Asian-American Voyages, 500 B.C.* Pioneer Publishing, Fresno, Calif.
- THOMPSON, J. ERIC S.
1941 *Dating of Certain Inscriptions of Non-Maya Origin*. Theoretical Approaches to Problems 1. Carnegie Institution of Washington, Washington, D.C.
1954 *The Rise and Fall of Maya Civilization*. University of Oklahoma Press, Norman.
1960 *Maya Hieroglyphic Writing: An Introduction*. University of Oklahoma Press, Norman.
- THOMSON, CHARLOTTE
1971 *Ancient Art of the Americas from New England Collections*. Museum of Fine Arts, Boston.
1987 Chalcatzingo Jade and Fine Stone Objects. In *Ancient Chalcatzingo* (David C. Grove, ed.): 295–304. University of Texas Press, Austin.
n.d. A Study of Olmec Art. Ph.D. dissertation, Department of Anthropology, Harvard University, 1975.
- TOWNSEND, RICHARD F. (ED.)
1992 *The Ancient Americas: Art from Sacred Landscapes*. Art Institute of Chicago, Chicago, and Prestel Verlag, Munich.
- TOZZER, ALFRED M.
1941 *Landa's "Relación de las Cosas de Yucatan."* Papers of the Peabody Museum of American Archaeology and Ethnology 18. Harvard University, Cambridge, Mass.
1957 *Chichen Itza and Its Cenote of Sacrifice: A Comparative Study of Contemporaneous Maya and Toltec*. Memoirs of the Peabody Museum of Archaeology and Ethnology

Bibliography

- 11/12. Harvard University, Cambridge, Mass.
- TUTHILL, CARR
1947 *The Tres Alamos Site on the San Pedro River, Southeastern Arizona*. Publication 4. The Amerind Foundation, Dragoon.
- TWOHIG, ELIZABETH SHEE
1981 *The Megalithic Art of Western Europe*. Clarendon Press, Oxford.
- UMBERGER, EMILY
1987 Antiques, Revivals, and References to the Past in Aztec Art. *Res: Anthropology and Aesthetics* 13: 62–105.
- URUÑUELA, GABRIELA, PATRICIA PLUNKET, GILDA HERNÁNDEZ, AND JUAN ALBAITERO
1997 Biconical God Figurines from Cholula and the *Codex Borgia*. *Latin American Antiquity* 8 (1): 63–70.
- VAILLANT, GEORGE C.
1930 *Excavations at Zacatenco*. Anthropological Papers of the American Museum of Natural History 32, part 1. New York.
1931 *Excavations at Ticoman*. Anthropological Papers of the American Museum of Natural History 32, part 2. New York.
1932 A Pre-Columbian Jade: Artistic Comparisons Which Suggest the Identification of a New Mexican Civilization. *Natural History* 32 (6): 512–520, 557–558.
1935 *Excavations at El Arbolillo*. Anthropological Papers of the American Museum of Natural History 35, part 2. New York.
- VAILLANT, SUZANNAH B., AND GEORGE C. VAILLANT
1934 *Excavations at Gualupita*. Anthropological Papers of the American Museum of Natural History 35, part 1. New York.
- VALDÉS, JUAN ANTONIO
1987 Los Mascarones Preclásicos de Uaxactún: El caso del Grupo H. In *Primer Simposio Mundial sobre Epigrafía Maya*: 165–181. Asociación Tikal, Guatemala City.
- VOTH, H. R.
1901 The Oraibi Powamu Ceremony. *Field Colombian Museum Anthropological Series* 3 (2): 61–158.
1903 The Oraibi Summer Snake Ceremony. *Field Colombian Museum Anthropological Series* 3 (4): 262–358.
- WATT, JAMES C. Y.
1980 *Chinese Jades from Han to Ch'ing*. Asia Society, New York.
- WEIANT, C. W.
1943 *An Introduction to the Ceramics of Tres Zapotes, Veracruz, Mexico*. Smithsonian Institution, Bureau of American Ethnology, Bulletin 139. Government Printing Office, Washington, D.C.
- WHEATLEY, PAUL
1971 *The Pivot of the Four Quarters: A Preliminary Enquiry into the Origins and Character of the Ancient Chinese City*. Aldine Publishing, Chicago.
- WHITE, LESLIE A.
1962 *The Pueblo of Sía, New Mexico*. Smithsonian Institution, Bureau of American Ethnology, Bulletin 184, Washington, D.C.
- WHITTLE, ALASDAIR
1995 Gifts from the Earth: Symbolic Dimensions of the Use and Production of Neolithic Flint and Stone Axes. *Archaeologia Polona* 33: 247–259.
- WILKERSON, S. JEFFREY K.
1990 El Tajín: Great Center of the Northeast. In *Mexico: Splendors of Thirty Centuries* (Kathleen Howard, ed.): 155–181. Metropolitan Museum of Art and Bullfinch Press, New York.
- WILLEY, GORDON
1966 *An Introduction to American Archaeology*, 2 vols. Prentice-Hall, Inglewood Cliffs, N.J.
1978 Artifacts. In *Excavations at Seibal, Department of Peten, Guatemala* (Gordon R. Willey, gen. ed.): 1–189. Memoirs of the Peabody Museum of Archaeology and Ethnology 14.1. Harvard University, Cambridge, Mass.
- WILLIAMS, EDUARDO
1992 *Las Piedras Sagradas: Escultura prehispánica del occidente de México*. El Colegio de Michoacán, Zamorra.
- WINFIELD CAPITAINE, FERNANDO
1988 *La Estela 1 de la Mojarra, Veracruz, México*. Research Reports on Ancient Maya Writing 16. Center for Maya Research, Washington, D.C.
- VON WINNING, HASSO
1968 *Pre-Columbian Art of Mexico and Central America*. Harry N. Abrams, New York.
1976 Late and Terminal Preclassic: The Emergence of Teotihuacan. In *Origins of Religious Art and Iconography in Preclassic Mesoamerica* (Henry B. Nicholson, ed.): 141–156. UCLA Latin American Center Publications, Los Angeles.
1987 *La iconografía de Teotihuacan*, 2 vols. Universidad Nacional Autónoma de México. México, D.F.
- WYATT, JAMES C.
1980 *Chinese Jades from Han to Ch'ing*. Asia Society, New York.
- XU, H. MIKE
1996 *Origin of the Olmec Civilization*. University of Central Oklahoma Press, Edmund.

THE SOURCING OF MESOAMERICAN JADE:
Expanded Geological Reconnaissance
in the Motagua Region, Guatemala

Karl A. Taube, Virginia B. Sisson, Russell Seitz, and George E. Harlow

The first European interest in jade arose from contact not with China, but with the New World. During the early sixteenth century, the Spanish conquistadors and later chroniclers were fascinated by the extremely high value the Aztec placed on jadeite, known as *chalchihuitl* in Nahuatl.¹ In many early Spanish accounts, lacking prior knowledge of jade, it is commonly referred to as emerald, an incorrect term clearly derived from the precious as well as verdant quality of the stone. A direct participant in the conquest of Mexico, Bernal Díaz mentioned that soon after delivering a rich treasure to Cortés at San Juan Ulua, an emissary of Moctezuma offered Cortés a group of extremely precious jades along with other rare goods:

[H]e presented ten loads of fine rich feather

¹ Citing Ramón Mena (1927: 7), Foshag noted that the term *chalchihuitl* probably derives from the Nahuatl terms for sand, *xalli*, and herb or herb colored, *xihuitl*. According to Foshag (1957: 8), the reference to sand probably derives from the frequently grainy, crystalline texture of freshly broken jade. Strangely, neither author mentioned that *xihuitl* also signifies turquoise in Nahuatl. Thus, the etymology of the term *chalchihuitl* could well be “sandy turquoise.” If this derivation is correct, the Nahuatl term for jade is of relatively recent origin, as turquoise was generally absent in Central Mexico until the Early Postclassic (ca. A.D. 900–1250). This etymology could also indicate that despite its great value and rarity, jadeite was of secondary economic importance to turquoise, as it bears a name derivative of this now far more pervasive stone, that is, “sand turquoise.”

cloth, and four chalchihuitles, which are green stones of very great value, and held in the greatest esteem among the Indians, more than emeralds are by us, and certain other gold articles.

(Díaz 1956: 76)

The Aztec officials also informed Cortés that as the four jades were among the most precious items in the entire treasure offered, they should be delivered directly to Charles V: “these rich stones should be sent to the great Emperor as they were of the highest value, each one being worth more and being esteemed more highly than a great load of gold . . . ” (ibid.: 76–77). This information may well have saved the life of Díaz, who during the “Noche Triste” Spanish escape from Tenochtitlán, carried not heavy gold but only a few, precious jade beads (ibid.: 313–314).

The fate of the stones mentioned by Bernal Díaz is unknown, although Mesoamerican jadeite is documented in royal collections of sixteenth-century Europe. The Ambras Collection, assembled between 1567 and 1595 by Archduke Ferdinand of Tyrol, contained a number of jadeite objects, including a highly polished celt pendant of translucent green stone (Feest 1990: 3, fig. 21). Another Mesoamerican jade, in this case a Late Formative Maya bib head pendant, was acquired by Albrecht V of Bavaria probably before 1611, and was subsequently placed in an elaborate gilt sculpture during the eighteenth cen-

tury (Easby and Scott 1970: no. 307).

In addition to its value as a precious stone, jadeite was thought to have unique medicinal properties by the sixteenth-century Spanish, including as a cure for urinary ailments. In the oft-cited 1565 tract of Nicolas Monardes, the stone is termed *pedra de ijada*, or stone of the loins, *ijada* being the source of the modern words “jade” and “jadeite” (see Foshag 1957). Similarly, Francisco Hernández (1959, 3: 410–411) describes Mesoamerican jade as *pedra nefretica*, that is, a stone pertaining to nephritis, an inflammation of the kidneys. From the Latin *lapis nephriticus* comes the term for the jade known as nephrite, a stone of very different chemical composition than jadeite though consisting, like it, of an extremely hard, and frequently green, translucent lapidary material. Although many have attributed the *pedra de ijada* epithet to Monardes, Marc Thouvenot (1982: 131–132) suggests that the use of jade for urinary conditions may have derived from the Aztecs. Thus Thouvenot (*ibid.*) notes that whereas the sixteenth-century dictionary of Alonso de Molina (1970, part 2: 11, 161) glosses the Nahuatl *chalchihuitl* as “emerald,” the more specific *xuchitonal chalchihuitl* is termed “stone for the loins or urine (*pedra para la hijada o orina*).” The Aztec use of this special *xuchitonal* jade for urinary ailments suggests that this perceived curative quality was Mesoamerican in origin.

Despite the high commercial value and medicinal properties attributed to jade in the sixteenth century, Spanish interest in the stone quickly waned. Gold rather than jade constituted the most prized commodity in colonial New Spain and Europe. In addition, although highly prized, jade was not widely popular in Late Postclassic Mesoamerica (Foshag 1957: 6; Bishop et al. 1991: 318–319). Jade is notably scarce at Mayapan, the major capital of the northern Maya lowlands during the Late Postclassic period: “There is very little reason to suppose that Mayapan had its own lapidary craftsmen, or even that there was an established trade in jades and other fine worked stones . . .” (Proskouriakoff 1962: 351). Of the Mayapan carved jades encountered by the Carnegie Institution of Washington, all appear to be heirlooms deriving from the Classic and Formative periods (*ibid.*: fig. 25). Moreover, despite the power and size of the Aztec empire, very few jade carvings

of Aztec style are known (e.g. Easby and Scott 1970: no. 304; Pasztory 1983: pl. 263). In part, the waning of the jade industry during the Postclassic period may derive from the advent of new precious materials—turquoise and metals, most notably copper and gold. In this regard, it is noteworthy that a number of Toltec-style carved jade plaques from the Sacred Cenote at Chichen Itza resemble repoussé work on sheet metal discovered during the same excavations (cf. Proskouriakoff 1974: pls. 47d, 48a, 78a; Lothrop 1952). The fact that Moctecuhzoma’s emissaries specifically noted the value of jade, however, suggests that the stone was still regarded as precious among the highest Aztec elite.

Due to the rapidly diminished interest in jade during the early colonial period, native sources of the stone were soon forgotten. It was not until the nineteenth century that researchers began to investigate the source or sources of Mesoamerican jade. As Pál Kelemen (1943: 284) noted, this renewed Western interest in jade largely derived from the British and French looting of the Summer Palace in Beijing in 1861. In 1863, French mineralogist Damour first identified the mineral jadeite as a sodium aluminum silicate of the pyroxene group in Old World jade. He subsequently identified a piece of Chinese jade and found it was made of an amphibole that he termed nephrite, a calcium magnesium silicate mineral entirely distinct from jadeite. Later, nephrite was found to be part of a solid solution series in the actinolite-tremolite series of the amphibole group. Nephrite is now used solely as a rock name. According to the German mineralogist Heinrich Fischer (1875), ancient jade objects in the New World were imports from Asia, as there were no sources of jadeite or nephrite in the Americas. However, in a methodical and detailed study, Thomas Wilson (1900) challenged this theory, and noted the natural occurrence of nephrite in Alaska and British Columbia. In addition, Wilson (*ibid.*: 186) was confident that the jadeite of Mesoamerica was also native in origin, and that the source would eventually be found:

jade was indigenous to Mexico and Central America . . . its mystery in these countries arises from the failure to discover the original mine or quarry. That this can be done is the belief of

the writer and when done the great mystery of jade in Mexico and Central America will be satisfactorily and completely solved.

Thus according to Wilson, field documentation of jade sources was of primary importance.

Zelia Nuttall (1901) also argued that Mesoamerican jadeite was local in origin, and probably derived from the Pacific region of southeastern Mexico. Nuttall (*ibid.*: 228–229) noted that the Aztec Florentine Codex graphically describes the native prospecting and mining of jade in its natural setting (see Sahagún 1950–82, 11: 221–222). In addition, Nuttall (1901: 227) called attention to a passage in the *Crónica Mexicana* of Alvaro Tezozomoc, which mentions that near the region of Tehuantepec in eastern Oaxaca, the victorious Aztec ruler Ahuizotl was offered abundant jade and turquoise as tribute. According to Nuttall, this account demonstrates that jade sources are local to this area. However, the turquoise was certainly foreign, and probably derived from the distant American Southwest (see Weigand et al. 1977).

Nuttall also examined another Aztec manuscript, the “Tribute Roll of Montezuma” to determine jade sources from tribute localities. Although the “Tribute Roll of Montezuma” generally refers to the *Matrícula de Tributos* (see Glass 1975: 225), it is clear that Nuttall was actually referring to the very similar tribute list appearing in the *Codex Mendoza*. Thus, although Nuttall refers to the Aztec tribute province of Tochtepec, corresponding to present-day southern Veracruz and neighboring Oaxaca, this passage is missing in the *Matrícula* (see Berdan and Anawalt 1992, 2: 113). From her careful and systematic marshaling of colonial data, Nuttall concluded that jadeite sources were to be found in Chiapas, fairly close to the Motagua Valley region, the only presently known source of jadeite in Mesoamerica.

In a monograph published in Mexico in 1907, gemologist George Kunz wrote approvingly of Nuttall’s study and her careful use of ethnohistoric documents. However, Kunz (1907: 31) also suggested that the specific types of jade items mentioned in the Aztec tribute provinces may hold important clues regarding jade sources:

A point not alluded to by Mrs. Nuttall, yet nevertheless of much significance, is the kind of

material called for as tribute . . . i.e., whether “beads,” that is pebbles and rolled pieces, or larger single pieces are specified.

According to Kunz, the beads were fashioned from rolled pebbles in loose alluvial float in contrast to large pieces deriving from the original outcrop sources. Kunz (*ibid.*) noted that the aforementioned province of Tochtepec was to provide three large pieces of jade (*tres piezas grandes de chalchihuitl*) along with abundant strings of jade beads (see *Codex Mendoza*: fol. 45v). Because of this passage, Kunz was confident that the source of jade could be readily located: “Here is a well-defined region, southeast of the City of Mexico, and not far from Vera Cruz, in which the mineral must certainly exist in place.” (Kunz, *ibid.*) However, both Nuttall and Kunz failed to note one important aspect of the jades appearing in both Aztec tribute lists. In the *Codex Mendoza* and *Matrícula de Tributos*, the jade is never rough, freshly quarried material but rather finished beads, including the three large stones illustrated for Tochtepec province. Instead of deriving from local mines, the jade tribute beads from the southeastern provinces of the Aztec empire could readily have been obtained from trade, heirlooms, and the systematic looting of conquered towns and ancient sites.

Although unknown to Nuttall and Kunz at the time, the Aztec tribute lists could not provide the precise source or sources of jadeite, as the only known jade locales are in or near the Motagua Valley, a region never controlled by the Aztec empire. Nonetheless, Kunz (1907: 32) does mention that according to Eduard Seler, the Motagua was a region where Central Mexican merchants obtained jade:

He [Seler] stated that there had existed an ancient commercial road leading from the highlands of Central Mexico to Tabasco and Yucatan, and to the Río Montagua [sic] in Guatemala; that along this road there had grown up trading stations where the Mexicans met the Mayas, and that jade was an important article of traffic at these points.²

² Although Kunz (1907: 32) notes that Seler presented his jade information at the 1902 session of the International Congress of Americanists in New York, no citation is provided. Moreover, neither of Seler’s papers published in the 1902 proceedings includes a discussion of jade exchange in the Maya region.

Although the description by Kunz of this trade “road” is none too clear, it may refer to a maritime route skirting the coast of Yucatan and Belize and then following the Río Motagua at the Gulf of Honduras.

As Nuttall (1901: 238) acknowledges in her pioneering study, the colonial sources are fairly vague concerning ancient sources of Mesoamerican jadeite. Of course, as was noted by Thomas Wilson (1900), geological field reconnaissance is an essential means to document specific jade sources. Given the very limited knowledge of New World geology and geomorphology in the nineteenth century, the assertion by Fischer (1875) that the Americas lacked jade deposits was premature and ultimately incorrect. Aside from the numerous sources of nephrite, jadeite is now known from two localities, San Benito, California, and most importantly, the Motagua Valley region of eastern Guatemala (Harlow 1994: 49).

By the mid-twentieth century, a great deal of geological reconnaissance and research had been performed in Mexico and Central America, including an important contribution by the German geographer, geologist, ethnohistorian, and ethnographer, Karl Sapper (1937). Based on the geological occurrence of jadeite in Myanmar (formerly Burma), Japan, and California, William Foshag (1957: 12) noted that “intrusive” beds of serpentine rock are an essential precondition for locating Mesoamerican jadeite: “Any Mesoamerican location of serpentine, therefore, is a possible source of jadeite.” Although Foshag (*ibid.*) examined a small serpentine area near Tehuizingo, Puebla, no jadeite was found. However, thanks to the previous work of Sapper, Foshag (*ibid.*: 14, fig. 1) suggested that the large masses of serpentine in the Sierra de Chuacús and Sierra de las Minas mountains of southern Guatemala were likely candidates for jadeite-bearing rock. On the basis of the occurrence of serpentine and the presence of natural or partially worked alluvial jade cobbles from Kaminaljuyu and the Motagua Valley sites of San Agustín Acasaguastlán and Quiriguá, Foshag (*ibid.*: 14) argued that the jadeite derived from the Motagua Valley and the adjacent mountains of the Sierra de las Minas:

The favorable geology of jade in the Sierra de Chuacús and Sierra de las Minas, as well as the concentration of unworked and partially worked

jade materials in sites and contiguous to the Motagua River Valley, suggests this area as a source of some, if not all, of the Mesoamerican jade.

In 1952, Robert Leslie discovered a jadeite boulder field in the Río Motagua Valley approximately 1 kilometer north of the town of Manzanotal (Foshag and Leslie 1955). In addition, the authors noted a nearby site with abundant jadeite debitage as well as a partly worked bead, indicating that the Manzanotal jade source was used in antiquity (*ibid.*: 81).

Following the initial identification of the jadeite outcrop at Manzanotal by Foshag and Leslie, geologists and archaeologists began to investigate systematically jadeite outcrops and lithic processing areas in the Middle Motagua region, primarily between the modern communities of San Agustín Acasaguastlán and La Palmilla (da Silva 1967; Becquelin and Bosc 1973; Feldman et al. 1975; Hammond et al. 1977: fig. 3; Harlow 1994: fig. 1). In addition, loose jadeite cobbles and boulders, at times approaching three meters in diameter, have been documented from this area in the Uyu, Huijo, and La Palmilla rivers (Harlow 1994: fig. 1). These jade-bearing streams, outcrops, and archaeological sites are all located on the north side of the Río Motagua within a maximum of seven kilometers from the river (*ibid.*).

Aside from geological and archeological research in the Middle Motagua region, commercial interest in jadeite sources soon developed in the 1970s (see Hammond 1977: 50; Ward 1987). There are at present a host of companies in Antigua, Guatemala, specializing in the production of Motagua jadeite jewelry and sculpture. Despite decades of academic and commercial interest in Guatemalan jadeite, finds of “Olmec”-type jade have been notably rare.³ Whereas

³ By the designation of “Olmec”-type jade, we are referring to specific types of jades commonly found with objects carved in Olmec style, such as have been discovered at the Middle Formative Olmec site of La Venta. However, we are by no means correlating Olmec-type jade exclusively with the Olmec people of the southern Gulf Coast as, during the Middle Formative, Olmec-style objects were surely made in many regions outside of the Olmec heartland. In addition, it is at present entirely unknown whether the Olmec were directly involved in the extraction of jade from the Motagua region.

most of the jade currently collected in the Central Motagua region tends to be rather opaque, with muted greens grading to white, grey, and black, many Olmec jade carvings are strongly translucent, with colors ranging from blue to emerald green (see Catalog: Pls. 14–16, 21–23, 27–28, 30–33, 36–37). In addition, Olmec jades frequently have white, cloudy inclusions in the form of streaks or spots, a trait generally missing from the jadeite currently documented for the Motagua region (see Catalog: Pls. 8, 15, 21–23, 27–28, 30, 33, 36).

It is clear that in ancient Mesoamerica, Olmec-type jade was especially revered and esteemed. The sixteenth-century Florentine Codex provides a detailed list of the types of jade admired by the Aztec, including a type known as *quetzalitzli*:

The name of this comes from *quetzalli* [quetzal feather] and *itztli* [obsidian], because its appearance is like a green quetzal feather. And its body is as transparent and as dense as obsidian.

(Sahagún 1950–82, 11: 222).

Although jadeite is considerably denser than obsidian, the described color and translucency of this especially valued stone closely approximate Olmec-type jadeite. In this regard, it is also noteworthy that *quetzalitzli* is a stone of antiquity as well as royalty: “It is one’s lot, the lot of the rulers, of the old ones (ibid.)” The aforementioned translucent celt of the sixteenth-century Ambras Collection is quite probably *quetzalitzli* (see Feest 1990: fig. 21). In addition, carved Olmec jades were among the offerings found at the Aztec Templo Mayor (López Luján 2001: 24). Olmec jade carvings were also present in Postclassic Yucatan, including a plaque from Cozumel, a celt from Mayapan and pendants from the Sacred Cenote at Chichen Itza (see *ibid.*: 23; Proskouriakoff 1962: 350, fig. 24g; *ibid.*: 6, plate 3). A Classic Maya cache from Chacsinkin, Yucatan, contained some forty carved jades, almost all of which were Olmec heirlooms (see Andrews 1986; 1987). The famous Early Classic jade cache from Cerro de las Mesas, Veracruz, contained a number of Olmec jades, with some of outstanding quality (see Drucker 1955). Olmec-style jade heirlooms are also known for Early Classic Teotihuacan, including offerings within the Temple of Quetzalcoatl (see Gamio 1922: 216, pl. 121; Rubín de la Borbolla 1947: fig. 19).

The abundance of Olmec-style heirlooms in the cultures of Classic and Postclassic Mesoamerica reveals the high esteem by which the peoples of ancient Mesoamerica regarded Olmec jade. However, these heirlooms are noteworthy in another regard, as Olmec-type jadeite is almost exclusively limited to objects in Olmec style. For example, the jade used by the Classic Maya tends to be opaque rather than translucent, including examples of rich, emerald green color. Thus, just as much of the contemporary work in the Motagua has not located Olmec-type jade, this material also appears to have been very rare, or rarely used, in post-Olmec ancient Mesoamerica.

One of the most debated topics in Olmec archaeology is the natural source of the translucent jadeite used by the ancient Olmec lapidaries. Because of the great amount of Olmec-style jade carvings attributed to the Mexican state of Guerrero, it has been often suggested as a possible jade source (e.g., Coe 1968: 100, 102; Easby 1968: 87; Griffin 1993: 203; Hauff 1993: 93; Paradis 1981: 206; Weaver 1981: 110).⁴ According to Louise Paradis (*ibid.*: 202), the majority of carved jades in Olmec style occurring in Guerrero derive from the Balsas drainage region, and Gillett Griffin (1981: 219, 221) notes the Tepecuacuilco Valley as an especially important area. Although Olmec-style jade carvings are known for Guerrero and still further west in Mexico, the vast majority are looted and therefore have essentially no documented provenience. It has been rumored that William Spratling used a local Guerrero jadeite source for fashioning Olmec replicas in his workshops in Taxco (Garber et al. 1993: 212). It is by no means clear, however, what stone or stones were actually worked. Serpentine is another likely possibility (*ibid.*), and aventurine, a green quartz, is widely used to imitate far rarer and more valuable jadeite. A number of authors have mentioned that natural cobbles of jadeite have been found in streams and rivers in Guerrero (Proskouriakoff 1974: 1; Tibón 1983: 102; Weaver 1981: 205). These reports, however, have not been corroborated by geological reconnaissance, and no

⁴ Among the earliest documented Olmec-style objects from Guerrero was a finely polished jadeite celt from Teloloapan, near Pascalan de Oro (Mena 1927: no. 196).

natural occurrences of jadeite as alluvial float or as outcrops have been documented for Guerrero.

Aside from Guerrero, Costa Rica has also been widely cited as a likely source of the translucent blue and green jades favored by the ancient Olmec (e.g., Coe 1968: 103; Easby 1968: 14, 87; 1981: 138; Hauff 1993: 93; Lothrop 1955: 50; Griffin 1981: 219). This attribution is primarily based on the remarkable quantity of fine jadeite carvings known from the Guanacaste and Línea Vieja regions of Costa Rica (see Balser 1974; Easby 1968; 1981; Jones 1998b). The types of translucent jadeite found with many of the Costa Rican carvings are often comparable with, if not identical to, examples known for the Formative Olmec.

Elizabeth Easby (*ibid.*: 14) suggests that because ancient Costa Rican jade working displays little attempt to conserve the original mass of the natural material, jade was relatively abundant and derived from local sources. Easby (1981: 138) also notes that in Costa Rica, fine, translucent blue jadeite, with or without chromium-rich veins of emerald green “Imperial” material, is found as relatively large carvings. Both of these qualities are also known for jade carvings in Olmec style, however, which are commonly fashioned from large pieces of translucent material with little apparent concern for preserving the mass or form of the original stone. It has also been noted that a number of Costa Rican pieces were reworked, suggesting that jadeite was actually a rare stone in the region (Lange et al. 1981: 172). This is corroborated by the general lack of raw or partially worked stone at Costa Rican sites, with almost all of the finished pieces found in funerary contexts (*ibid.*). In addition, jade carvings are not known for Costa Rica until after the Middle Formative apogee of Olmec jade working (ca. 900–500 B.C.). In Costa Rica, there is little documentation of jade working until circa 300 B.C. (Balser 1974: 3; Garber et al. 1993: 219; Jones 1998a: 11; Graham 1998: 42). Thus, if the Olmec were obtaining their jade from this area, it is difficult to explain why there is virtually no jade in archaeological contexts in Costa Rica before 300 B.C.

According to Easby (1968: 14), jadeite pebbles have been retrieved from river beds in Costa Rica, suggesting that local outcrops are to be found in mountains upstream. As in the case of similar re-

ports for Guerrero, however, these alluvial finds have not been corroborated by X-ray, chemical data, or subsequent geological reconnaissance. Thus, geological surveys performed in 1979 in the Santa Elena and Nicoya peninsulas failed to discover jadeite as outcrop or alluvial float (Lange et al. 1981: 169–170, Lange and Bishop 1988: 76–77). Moreover, despite continued academic interest, no jadeite source has yet been documented for Costa Rica (Jones 1998a: 19; Guerrero M. 1998: 23).

In summary, in discussions of the source of Olmec blue jadeite, many researchers have favored either Guerrero or Costa Rica, or sometimes both regions. Despite the fact that natural jade sources have yet to be located in these areas, a number of scholars suggest that they may be in future (e.g., Hauff 1993: 93; Jones 1998a: 19; Snarskis 2003). The current problem of the origin of Olmec blue jadeite relates to a current geologic debate, one side arguing that jadeite derived from a number of sources in Mesoamerica and Costa Rica, and the other, that jadeite derives from a single region, the Motagua area. According to the multiple-source hypothesis, the types of jadeite analyzed from artifacts and known sources are chemically and structurally too different to derive from a single region (Bishop et al. 1985; Bishop et al. 1991: 330–331; Bishop et al. 1993). Much of this argument is based on the analytical methods of neutron activation for chemical composition as well as X-ray diffraction for structural comparisons. These techniques often assume that the jade is homogeneous and use bulk geochemical analysis of rocks and artifacts or selected jade crystals. The inherent problem is that each body of jade is not homogeneous (Harlow 1993). In fact, mineralogist George Harlow notes that individual crystals of jade are often strongly zoned chemically. This will result in a different chemistry for each body even within a small region. Correlation of artifacts with different jade bodies is then almost impossible with bulk geochemical methods. Bishop and co-workers postulated several different sources for jade, which does not preclude the Motagua River region as a sole source region as many different bodies of jade occur here (Seitz et al. 2001).

Harlow (1993) argues that the known jadeite source materials as well as Pre-Columbian artifacts

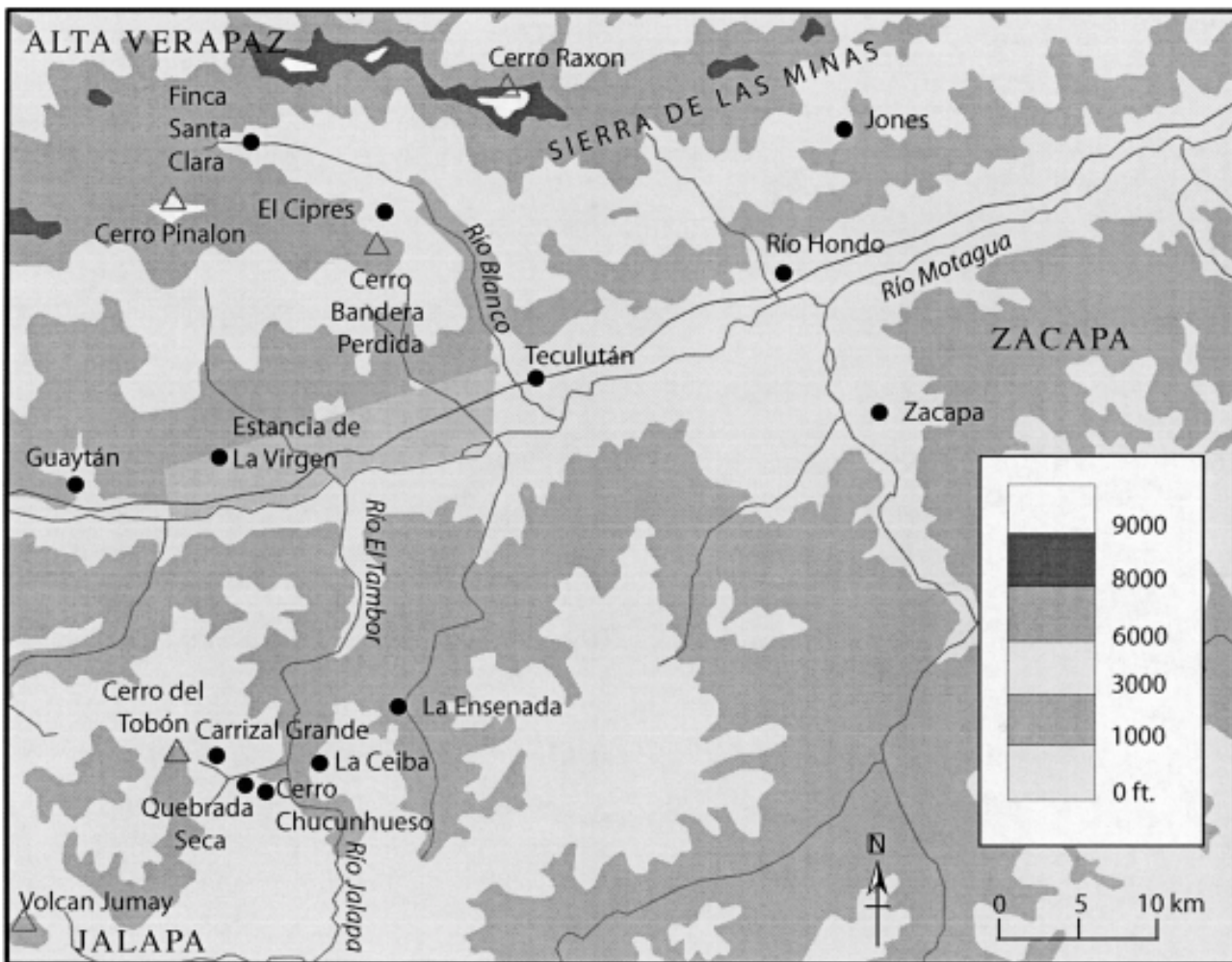


Fig. 1 Map of central Motagua region, Guatemala

could well derive from the Motagua region, using inferences from plate tectonics, the world-wide distribution of jadeite-related rocks and minerals, and data from thin sections and electron microprobe analysis. His argument is that in the eight or ten other known jade localities around the world, jade is associated with sheared serpentinite as well as with high-pressure metamorphic rocks. In addition, many of the jade localities occur near major strike-slip faults such as the Motagua fault, Guatemala; San Andreas fault, California; Saigang fault, Myanmar (formerly Burma); and the Itoigawa-Shizuoka tectonic lineament, Japan. The only serpentinites in Central America and Mexico that have all of these geological characteristics are in the vicinity of the Motagua River (Fig. 1). The other serpentinites at Sierra Santa Cruz, Guatemala; Punta Santa Elena, Costa Rica; and Guerrero, Mexico, have neither the

high-pressure metamorphic rocks nor a major strike-slip boundary.

The lack of known jade sources from Costa Rica or Guerrero has been explained by a number of scenarios. According to Elizabeth Easby (1981: 138), the source of translucent blue jadeite may have been buried or destroyed by volcanism. A still more widely cited theory suggests that the source or sources were depleted by mining in antiquity (Lothrop 1955: 50; Easby 1981: 138; Hauff 1993: 93). Thus, according to Hauff (*ibid.*):

It may not be feasible to find existing natural deposits of the enigmatic blue jades. There was probably very little material initially, because the translucent jadeites, being the purest, are also the least abundant. (Hauff 1993: 93).

Rather than as a result of volcanism or depletion by mining, "Olmec blue" jadeite has remained largely



Fig. 2 Carlos Gonzalez and Rolando Alvarado inspecting jade from Río Palmilla (photo by Virginia Sisson)

unknown due to the extremely rugged terrain of the Motagua region and the relatively little interest in this material by local prospectors as well as jade merchants in Guatemala.

In an effort to resolve the Olmec jade source question, the Peabody Museum of Harvard University and the Boston Museum of Fine Arts inaugurated the Mesoamerican Jade Project in 1976. It sought to bring new technical resources such as satellite reconnaissance and neutron activation analysis of artifacts to bear on the problem. However, the intrinsic geochemical variability of jadeitites hampered efforts at correlation. Procuring the geological “ground truth” about the poorly mapped areas around the Motagua valley proved equally problematic, for the terrain is difficult and the prevailing wisdom was that jadeite did not exist south of the Motagua Fault.⁵

Much of the jade production for commercial jade

⁵ However, major jadeite bodies, primarily of pink and purple hues, have been exploited in the vicinity of La Ensenada, for over a decade. The community of La Ensenada is adjacent to the Río El Tambor, a southern tributary of the Río Motagua. In 1996, archaeologist François Gendron (Gendron et al. 2002: 839) discovered a single pebble of bluish-green jadeite some 3.5 cm in total length on a bank of the Río El Tambor.

used for the Guatemalan tourist trade has been the result of local, part-time prospectors simply picking up rocks from the rivers and delivering them to the Atlantic Highway for collection by dealers and agents (see Fig. 2). Since the prevailing price of jade for tourist souvenirs was low, there was little incentive for searches of the higher elevations, let alone organized hard-rock mining operations. In the late 1990s, several factors, both human and natural, coincided to change the scene.

In 1997, a Taiwanese entrepreneur seeking carvable translucent serpentine termed “Bowenite,” began exploration in the area south of the Motagua Valley, where he subsequently encountered jadeite as well. In 1998, torrential rains of Hurricane Mitch caused flash floods that launched a pulse of loose alluvial jade from its resting places in the higher elevations. The Motagua River crested at thirty-one feet past flood stage, and the Río El Tambor (also known as Río Jalapa) was recharged with seldom-seen varieties of jade. Some months later, Russell Seitz, who had served as field director of the Mesoamerican Jade Project two decades earlier, visited Antigua, Guatemala, and was shown several examples of jade with visual characteristics similar to those of Olmec-period artifacts by Carlos Morales

of El Reino del Jade. This jade was collected by a Zacapan jade prospector, Carlos Gonzalez Ramires, who in January of 2000, led Seitz to the jade workings at El Ciprés (Fig. 2). Situated at 1750 m in elevation, this source is located in the Río Blanco drainage in the Sierra de las Minas (Figs. 2–4).

Whereas El Ciprés lies north of the Motagua, new discoveries of jadeite were also occurring to the south, especially in the Río El Tambor (Río Jalapa) drainage. In 1996, the French archaeologist François Gendron located a jadeite sample from this area that contained a mineral composition suggesting that it was formed at a depth of some sixty to seventy km, far below the roughly twenty km depth generally known for jadeite (Smith and Gendron 1997). During December of 1999, Dr. Richard Mandell, Professor Emeritus of the University of South Carolina, was shown translucent blue jade collected from the lower Río El Tambor by the local prospector Vicente Gutierrez (Mandell 2002). He subsequently encouraged Vicente Gutierrez as well as prospectors José Loyo and Raúl Marroquín to search for types of similar material in the southern tributaries of the Motagua, especially in the Río El Tambor (Río Jalapa) drainage (Fig. 5). Both large blocks of jadeites and *in situ* outcrops were encountered especially in *quebradas* (ravines) near Carrizal Grande and San José. In 2001, the authors confirmed these recent findings that jades with visual characteristics and mineralogy similar to Olmec period artifacts are found both in the El Ciprés jade workings and in a seven-km band from La Ceiba to Carrizal Grande (Seitz et al. 2001). During January of 2002, the authors were led by Cerminio Leon and Carlos Gonzalez to a source known as Quebrada Seca, southeast of Carrizal Grande and near the community of San José (Fig. 6a). Along with translucent jadeites in blue and light purple hues, the Quebrada Seca locality has a massive jadeite boulder of roughly 300 tons, quite possibly the largest jadeite boulder known (Fig. 6b).

Aside from the mountainous areas north and south of the Río Motagua, translucent Olmec-type jades are also being discovered in localities within the Motagua Valley. One translucent, rich green variety locally known as “Princesa” derives from Panaluya, just north of the Atlantic Highway near the town of Río Hondo (Fig. 7a). The heavy orange

rind on many Panaluya pieces suggests that this jade is of local origin. During the summer of 2002, prospector Carlos Gonzalez discovered a roughly 140 lb jadeite boulder in a recent bulldozer excavation in the Río Hondo region, only some fifty meters south of the Atlantic Highway. This well-worn alluvial boulder is of light blue, translucent jade with clouds of white and is well within the range of Olmec jade (see Fig. 7b). Although the source of this alluvial piece is clearly not local, it indicates that in antiquity, jadeite of this type was available in the Motagua Valley as jade float in the form of cobbles and boulders.

The geological setting of the jade bodies from the El Ciprés jade workings as well as those from La Ceiba, Quebrada Seca, and Carrizal Grande are similar to jade bodies in the Motagua River region. In all regions, jade is hosted by sheared serpentine. Often in these same tectonic slivers are other rocks (eclogites, blueschists, and garnet amphibolites) that indicate high-pressure metamorphic conditions. Due to tropical weathering and extreme erosion, complete outcrops are rare, and most of the jade occurs as alluvial boulders in small to large *quebradas*. As a result, exact geological relationships between the jade bodies and the host rock are difficult to ascertain. In addition, the recent motion on the Motagua fault may have broken up the jade bodies that occur just north of this fault. Often jade bodies can be identified from their surrounding host rock as a lush, grassy region caused by the weathering of jade into nutrient-rich clayey soils. These conditions are in striking contrast to surrounding serpentine-derived soils, which are not only nutrient poor but contain toxic elements, including nickel. The Aztec may well have been aware of this soil pattern. The Florentine Codex explicitly describes rich, verdant growth as an indication of jadeite:

And thus do they know that this precious stone is there: [the herbs] always grow fresh; they grow green. (Sahagún 1950–82, 11: 222)

This account suggests that although the Aztec did not directly control the ancient jade sources in the Motagua region, they may have had considerable understanding of its natural occurrence there.

In contemporary times, jade-bearing regions are often marked not only by grass but also by grazing



Fig. 3a



Fig. 3b

Fig. 3 Jade from the Río Blanco region, Sierra de las Minas (photos by Karl Taube)
a) View of Río Blanco Valley, El Ciprés source on grass knoll to far right of scene
b) Jade boulders exposed at El Ciprés



Fig. 4 Body of jade sheared with minerals parallel, El Ciprés (photo by Virginia Sisson)

cattle, such as in the mountainous region of El Ciprés (see Fig. 3). Located in the Sierra de las Minas north of the Motagua, El Ciprés has two jade bodies that appear to be largely intact. These bodies are elongated parallel to the regional structural trend, and the edge of one is sheared, with the minerals aligned parallel to the edge of the jade body (Fig. 7). Also in this region are blocks of albitite with white micas. Mafic schists also occur parallel to the regional structural grain. No high-pressure metamorphic rocks have been found in the immediate vicinity of the El Ciprés jade workings, though Bosc (1971) mentions a high-pressure metamorphic rock from near the crest of the Sierra de las Minas, about four km from El Ciprés.

Although the jade bodies in the region between La Ceiba and Carrizal Grande mostly occur as alluvial boulders, there is one small jade body on a hillslope near La Ceiba that may be intact and is surrounded by serpentinite. Similar to the El Ciprés jade workings, it is elongated parallel to the regional structural trend. In the region near Carrizal Grande, there are also abundant bodies of garnet-bearing

eclogite and blueschist. Foshag (1957: 50) suggested that due to its hardness garnet was possibly used as an abrasive in ancient Mesoamerica. It is thus especially noteworthy that garnet occurs locally in areas of jadeite-bearing rock.

The future holds much promise for both geological and archaeological research to further pinpoint the origins of jade artifacts. One new avenue to pursue is the identification of distinctive minerals occurring in different jade bodies. For example, jade bodies near the Motagua River often have a variety of amphibole called taramite, whereas those from the southern region seem to lack amphibole. There may also be white micas with distinctive chemistries to serve as markers of geologic source regions. In addition, applying new geochemical techniques such as cathodoluminescence and microanalysis—by either laser ablation, inductively coupled plasma spectrometry, or ion microprobe—can identify the chemical heterogeneities within single jade crystals (Harlow and Sorensen 2001). If these techniques yield distinctive chemical signatures, it may be possible to correlate these with artifacts.



Fig. 5a



Fig. 5b

Fig. 5 Carrizal Grande and the Río El Tambor region (photos by Karl Taube)

a) View of Río El Tambor drainage, Carrizal Grande source in foreground with Cerro Chucunhueso to far right

b) Micaceous boulder with vein of translucent jadeite, Carrizal Grande



Fig. 6a

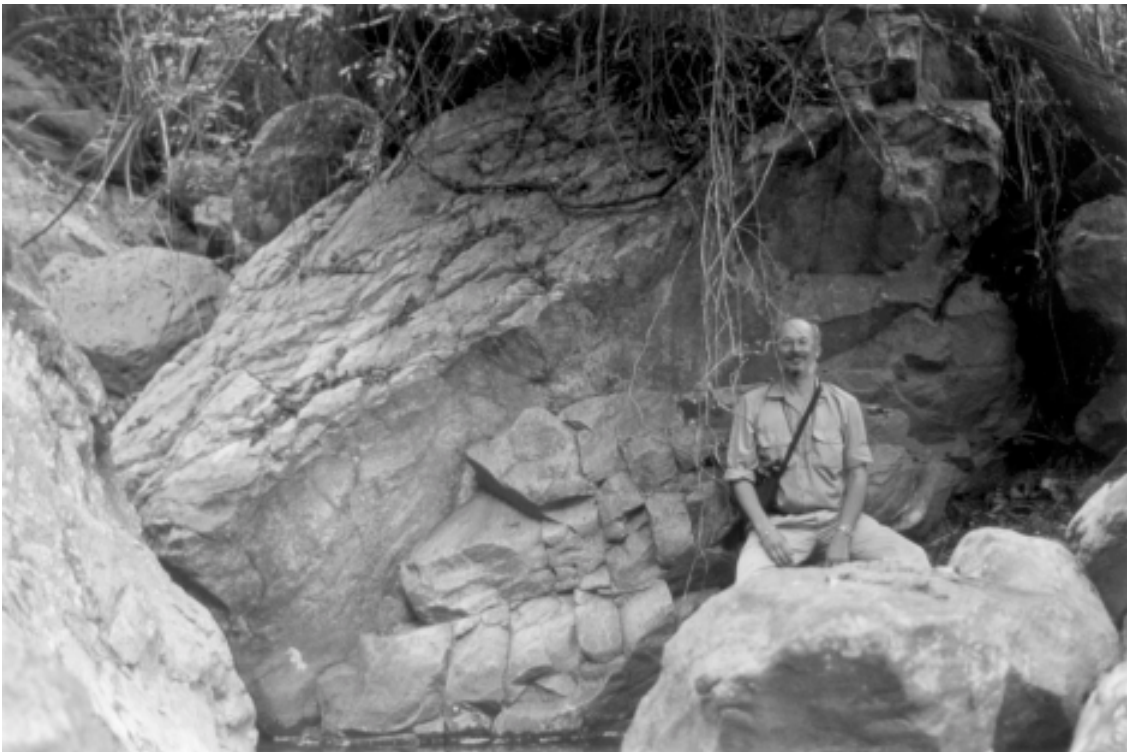


Fig. 6b

Fig. 6 Quebrada Seca, Río El Tambor drainage (photos by Karl Taube)
a) View of hillside immediately above Quebrada Seca
b) Partly exposed massive boulder of roughly 300 tons in Quebrada Seca



Fig. 7a



Fig. 7b

Fig. 7 Jade from the region of Río Hondo, Motagua Valley (photos by Karl Taube)
a) Panaluya, jade source on left side of saddle in foreground
b) Fragment of translucent blue jade boulder discovered adjacent to Atlantic Highway by Carlos Gonzalez. Polished piece placed where sample flake originally chipped off.

Appendix

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Bibliography to the Appendix

- ANDREWS, E. WYLLYS V
 1986 Olmec Jades from Chacsinkin, Yucatan, and Maya Ceramics from La Venta, Tabasco. In *Research and Reflections in Archaeology and History: Essays in Honor of Doris Stone* (E. Wyllys Andrews V, ed.): 11–47. Middle American Research Institute, Pub. 57. Tulane University, New Orleans.
- 1987 A Cache of Early Jades from Chacsinkin, Yucatan. *Mexicon* 9: 78–85.
- BALSER, CARLOS
 1974 *El jade de Costa Rica*. Lehmann, San José, Costa Rica.
- BARBOUR, GEORGE B.
 1957 A Note on Jade from Manzanal, Guatemala. *American Antiquity* 22: 411–412.
- BECQUELIN, PIERRE, AND ERIC BOSC
 1973 Notas sobre los nacimientos de albíta y jadeíta de San Cristóbal Acasaguastlan, Guatemala. *Estudios de Cultura Maya* 9: 67–73.
- BERDAN, FRANCES
 1992 *The Codex Mendoza*, 4 vols. University of California Press, Berkeley.
- 1992 Economic Dimensions of the Aztec State. *Estudios de Cultura Nahuatl* 22: 291–323.
- BISHOP, RONALD L., E. V. SAYRE, AND LAMBURTUS VAN ZELST
 1985 Characterization of Mesoamerican Jade. In *Application of Science in Examination of Works of Art* (Pamela A. England and Lambertus van Zelst, eds.): 151–156. The Research Laboratory, Museum of Fine Arts, Boston.
- BISHOP, RONALD L., FREDERICK W. LANGE, AND ELIZABETH KENNEDY EASBY
 1991 Jade in Mesoamerica: Pre-Columbian Jade in the Central and Southern Americas. In *Jade* (Roger Keverne, ed.): 316–341. Anness Publishing, London.
- BOSC, ERIC A.
 n.d. Geology of the San Agustín Acasaguastlán Quadrangle and North-eastern Part of El Progreso Quadrangle. Ph.D. diss., Rice University, 1971.
- DAMOUR, ALEXIS
 1863 Notice et analyse sur le jade vert: Réunion de cette matière minérale à la famille des wernerites. *Comptes Rendus des Séances de l'Académie des Sciences* 56: 861–865.
- DÍAZ DEL CASTILLO, BERNAL
 1956 *The Discovery and Conquest of Mexico*, Alfred P. Maudslay, trans. Kingsport Press, Kingsport, Tenn.
- DRUCKER, PHILIP
 1955 *The Cerro de las Mesas Offering of Jade and Other Materials*. Bureau of American Ethnology, Bulletin 157: 25–68, Washington, D.C.
- EASBY, ELIZABETH KENNEDY
 1968 *Pre-Columbian Jade from Costa Rica*. André Emmerich, New York.
- 1981 Jade. In *Between Continents/Between Seas: Precolumbian Art of Costa Rica* (Elizabeth P. Benson, ed.): 135–151. Harry N. Abrams, New York.
- EASBY, ELIZABETH KENNEDY, AND JOHN F. SCOTT
 1969 *Before Cortés: Sculpture of Middle America*. The Metropolitan Museum of Art, New York.
- FEEST, CHRISTIAN F.
 1990 Vienna's Mexican Treasures: Aztec, Mixtec, and Tarascan Works From 16th-Century Austrian Collections. *Archiv für Völkerkunde* 44: 1–64.
- FELDMAN, LAWRENCE H., ROBERT TERZUOLA, PAYSON SHEETS, AND CONSTANCE CAMERON
 1974 *Jade Workers in the Motagua Valley: The Late Classic Terzuola Site*. Columbia Museum Brief 7. The University of Missouri, Columbia.
- FISCHER, HEINRICH
 1875 *Nephrit und Jadeit nach ihren mineralogischen Eigenschaften sowie nach ihrer urgeschichtlichen und ethnographischen Bedeutung*. E. Schweizerbart, Stuttgart.

Bibliography to the Appendix

- FOSHAG, WILLIAM F.
 1956 *Mineralogical Studies on Guatemalan Jade*. Smithsonian Miscellaneous Collections 135, no. 5. Smithsonian Institution, Washington, D.C.
- FOSHAG, WILLIAM F., AND ROBERT LESLIE
 1955 Jadeite from Manzanal, Guatemala. *American Antiquity* 21: 81–83.
- GAMIO, MANUEL
 1922 *La población del Valle de Teotihuacan*. Secretaría de Agricultura y Fomento, México, D.F.
- GARBER, JAMES F., DAVID C. GROVE, KENNETH G. HIRTH, AND JOHN W. HOOPES
 1992 Jade Use in Portions of Mexico and Central America: Olmec, Maya, Costa Rica and Honduras, A Summary. In *Precolumbian Jade: New Geological and Cultural Interpretations* (Frederick W. Lange, ed.): 211–231. University of Utah Press, Salt Lake City.
- GLASS, JOHN B.
 1975 A Census of the Native Middle American Pictorial Manuscripts. In *Handbook of Middle American Indians* (Robert Wauchope, ed.) 14: 81–252. University of Texas Press, Austin.
- GRAHAM, MARK MILLER
 1998 Mesoamerican Jade and Costa Rica. In *Jade in Ancient Costa Rica* (Julie Jones, ed.): 39–57. The Metropolitan Museum of Art, New York.
- GRIFFIN, GILLET
 1981 Olmec Forms and Materials Found in Central Guerrero. In *The Olmec and Their Neighbors: Essays in Memory of Matthew W. Stirling* (Elizabeth P. Benson, ed.): 209–222. Dumbarton Oaks, Washington, D.C.
 1993 Formative Guerrero and Its Jade. In *Precolumbian Jade: New Geological and Cultural Interpretations* (Frederick W. Lange, ed.): 203–210. University of Utah Press, Salt Lake City.
- GUERRERO M., JUAN VICENTE
 1998 The Archaeological Context of Jade in Costa Rica. In *Jade in Ancient Costa Rica* (Julie Jones, ed.): 23–37. The Metropolitan Museum of Art, New York.
- HAMMOND, NORMAN, ARNOLD ASPINALL, STUART FEATHER, JOHN HAZELDEN, TREVOR GAZARD, AND STUART AGRELL
 1976 Maya Jade: Source Location and Analysis. In *Exchange Systems in Prehistory* (Timothy K. Earle and Jonathan E. Ericson, eds.): 35–67. Academic Press, New York.
- HARLOW, GEORGE E.
 1994 Middle American Jade: Geologic and Petrologic Perspectives on Variability and Source. In *Precolumbian Jade: New Geological and Cultural Interpretations* (Frederick W. Lange, ed.): 9–29. University of Utah Press, Salt Lake City.
 1995 Jadeitites, Albitites and Related Rocks From the Motagua Fault Zone, Guatemala. *Journal of Metamorphic Geology* 12: 49–68.
- HARLOW, GEORGE E., AND SORENA SVEA SORENSEN
 2001 Jade: Occurrence and Metasomatic Origin. *The Australian Gemmologist* 21: 7–10.
- HAUFF, PHOEBE L.
 1993 The Enigma of Jade, with Mineralogical Reference to Central American Source Materials. In *Precolumbian Jade: New Geological and Cultural Interpretations* (Frederick W. Lange, ed.): 82–103. University of Utah Press, Salt Lake City.
- HERNÁNDEZ, FRANCISCO
 1959 *Historia natural de Nueva Espana*, 3 vols., José Rojo Navarro, trans. Universidad Nacional de México, México, D.F.
- JONES, JULIE
 1998a Introduction. In *Jade in Ancient Costa Rica* (Julie Jones, ed.): 11–21. The Metropolitan Museum of Art, New York.
- JONES, JULIE (ED.)
 1998b *Jade in Ancient Costa Rica*. The Metropolitan Museum of Art, New York.
- KELEMEN, PÁL
 1943 *Medieval American Art*, 2 vols. Macmillan, New York.
- KUNZ, GEORGE FREDERICK
 1907 *Precious Stones of Mexico*. Secretaría de Fomento, México, D.F.
- LANGE, FREDERICK W., AND RONALD L. BISHOP
 1988 Abstraction and Jade Exchange in Precolumbian Southern Mesoamerica and Lower Central America. In *Costa Rican Art and Archaeology: Essays in Honor of Frederick F. Mayer* (Frederick W. Lange, ed.): 65–88. The University of Colorado, Boulder.
- LANGE, FREDERICK W., RONALD L. BISHOP, AND LAMBERTUS VAN ZELST
 1981 Perspectives on Costa Rican Jade: Compositional Analyses and Cultural Implications. In *Between Continents/Between Seas: Precolumbian Art of Costa Rica* (Elizabeth P. Benson, ed.): 167–175. Harry N. Abrams, New York.
- LÓPEZ LUJÁN, LEONARDO
 2001 Arqueología de la Arqueología en México. *Arqueología Mexicana* 9 (52): 20–27.
- LOTHROP, SAMUEL K.
 1955 Jade and String Sawing in Ancient Costa Rica. *American Antiquity* 29: 43–51.
 1952 *Metals from the Cenote of Sacrifice, Chichen Itza, Yucatan*. Memoirs of the Peabody Museum of American Archaeology and

Bibliography to the Appendix

- Ethnology 10.2. Harvard University, Cambridge, Mass.
- MANDELL, RICHARD D.
2002 A Short Jade Memoir. Unpublished manuscript in possession of authors.
- MENA, RAMÓN
1927 *Catálogo de la colección de objetos de jade*. Museo Nacional, Departamento de Arqueología, México, D.F.
1921 *Catálogo de la colección de objetos de jade*. Talleres gráficos del Museo Nacional de Arqueología, Historia y Etnografía, México, D.F.
- MOLINA, ALONSO DE
1970 *Vocabulario en lengua Castellana y Mexicana y Mexicana y Castellana*. Biblioteca Porrúa, México, D.F.
- NUTTALL, ZELIA
1901 Chalchihuitl in Ancient Mexico. *American Anthropologist* n.s.: 227–238.
- PARADIS, LOUISE ISEUT
1981 Guerrero and the Olmec. In *The Olmec and Their Neighbors: Essays in Memory of Matthew W. Stirling* (Elizabeth P. Benson, ed.): 195–208. Dumbarton Oaks, Washington, D.C.
- PASZTORY, ESTHER
1983 *Aztec Art*. Harry Abrams, New York.
- PROSKOURIAKOFF, TATIANA
1962 The Artifacts of Mayapan. In *Mayapan Yucatan Mexico* (H. E. D. Pollock, Ralph L. Roys, Tatiana Proskouriakoff, and A. Ledyard Smith, eds.): 321–442. Carnegie Institution of Washington, Pub. 619. Washington, D.C.
1974 *Jades from the Cenote of Sacrifice, Chichen Itza, Yucatan*. Memoirs of the Peabody Museum of Archaeology and Ethnology 10.1. Harvard University, Cambridge, Mass.
- RUBÍN DE LA BORBOLLA, DANIEL
1947 Teotihuacan: Ofrendas de los templos de Quetzalcoatl. *Anales del Instituto Nacional de Antropología e Historia* 2: 61–72.
- SAPPER, KARL T.
1937 *Mittelamerika*. Handbuch der Regionalen Geologie 23. C. Winter, Heidelberg.
- SEITZ, RUSSELL, GEORGE E. HARLOW, VIRGINIA B.
SISSON, AND KARL TAUBE
2001 "Olmec Blue" and Formative Jade Sources: New Discoveries in Guatemala. *Antiquity* 75: 687–688.
- DA SILVA, ZENAIDE CARVALHO GONÇALVES
1967 Studies on Jadeites and Albitites from Guatemala. M.S. thesis, Rice University.
- SMITH, DAVID C., AND FRANÇOISE GENDRON
1997 New Locality and a New Kind of Jadeite Jade from Guatemala: Rutile-Quartz-Jadeite. Paper presented at Fifth International Eclogite Conference. *Terra Nova* 9, Abstracts Supplement 1: 35.
- SNARSKIS, MICHAEL J.
2003 From Jade to Gold in Costa Rica: How, Why, and When. In *Gold and Power in Ancient Costa Rica, Panama, and Colombia* (Jeffrey Quilter and John W. Hoopes, eds.): 159–204. Dumbarton Oaks, Washington, D.C.
- THOUVENOT, MARC
1982 *Chalchihuitl: Le jade les Azteques*. Mémoires National de l'Institut d'Ethnologie, Musée de l'Homme, Paris.
- TIBÓN, GUTIERRE
1983 El jade de México: El mundo esotérico del "chalchihuite." Panorama Editorial, México, D.F.
- WARD, FRANK
1987 Jade: Stone of Heaven. *National Geographic* 172: 282–315.
- WEAVER, MURIEL PORTER
1981 *The Aztecs, Maya, and Their Predecessors*. Academic Press, New York.
- WEIGAND, PHIL C., GARMAN HARBOTTLE, AND EDWARD V. SAYRE
1977 Turquoise Sources and Source Analysis: Mesoamerica and the Southwestern USA. In *Exchange Systems in Prehistory* (Timothy K. Earle and Jonathan E. Ericson, eds.): 15–34. Academic Press, New York.
- WILSON, THOMAS
1900 Jade in America. *Congrès International de Américanistes*, 12th session: 140–187. Paris.

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