

16. Other Ceramic and Miscellaneous Artifacts

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The overwhelming quantity of potsherds and anthropomorphic figurines recovered at Chalcatzingo and their importance in archaeological interpretation tend to obscure the minor quantity of other ceramic artifacts recovered. Nevertheless, these various kinds of artifacts provide a wealth of data on different aspects of daily life at Chalcatzingo, and may also be used to compare and contrast Middle Formative culture here and elsewhere in Mesoamerica.

The ceramic artifacts described in this chapter have been classified into three categories: personal adornment, ritual, and utilitarian. Objects of personal adornment include clay beads, earspools, pendants, and stamps which were presumably used for body decoration. Artifacts which may have been used in rituals are whistles, flutes, masks, miniature vessels, and animal figurines. Ceramic bars are included in this category as well because some of them are decorated and all lack wear marks. Easily identifiable utilitarian artifacts are spindle whorls and ceramic molds. In addition, ceramic "bananas" are classed with the utilitarian artifacts because they show wear patterns. There is also a fourth catch-all category of artifacts of unknown function. Within this last category are solid ceramic balls, ground sherds of various shapes, and hollow spheres.

The second part of this chapter describes artifacts manufactured from a variety of other materials—iron ore, shell, bone, and sinew. The chapter concludes with a description of the remarkable artifacts from Cave 2, many of them of wood and other perishable materials, which were apparently part of a tool kit related to spinning, weaving, and the manufacture of agave fiber cordage.

OTHER CERAMIC ARTIFACTS

Personal Adornments

Tubular Beads (5)

Tubular clay beads are rare in our artifact sample, and, interestingly, four out of five of those which do occur are from caves. The beads range from 12 to 22 mm in length, 4 to 8.5 mm in outside diameter, and 1.5 to 4.5 mm in inside diameter. Three are brown-black, but two from Cave 1 are of white clay.

Spherical Beads (2)

Only two spherical beads occur in our sample. One is an orange bead from T-11, 1.7 mm in diameter and 0.7 mm thick. It is possibly Cantera phase in date. The other bead, from Cave 1, is what Charlotte Thomson (Chapter 17) calls a "bag-shaped" bead ca. 18 mm in diameter and 1.2 mm thick. This bead may date to the Postclassic.

Solid Earspools (24; Fig. 16.1)

The fat solid disc earspools range in diameter from 13 to 45 mm, although most have a diameter of ca. 20–30 mm. In thickness they vary from 7 to 18 mm. Their sides are slightly concave. Most are plain, but a few have incised decorations. One from our sample has traces of a fugitive white slip; another has the side (circumference) painted red and highly polished.

George C. Vaillant (1931:296) observed that earspools of this type are "as diagnostic of this Ticoman culture complex as the figurine types and pottery." However, at least nine of the Chalcatzingo solid earspools come from unquestionably earlier, Cantera phase contexts, and there is evidence that similar earspools begin late in the Middle Formative at other central Mexican sites as well. One solid earspool was recovered by the Vaillants from a Gualupita I level at that site (Vaillant and Vaillant 1934: Fig. 30, no. 2, Table 3), and Christine Niederberger (1976:235) illustrates a

solid disc earspool from her Capa 3 (Middle Formative, Zacatenco phase) at Zohapilco. Angel García Cook (1976:47, Fig. 7) dates similar earspools from Tlaxcala as early as 1100 BC, with maximum percentages of this type occurring in Tlaxcala between 700 and 1 BC.

Michael Coe describes solid disc earspools from Conchas phase levels at La Victoria (1961:Fig. 60c). These earspools, while similar in form to Chalcatzingo and Ticoman examples, have slightly convex sides. A Francesa phase (Late Formative) Chiapa de Corzo example, with a slightly concave circumference, is illustrated by Thomas A. Lee (1969:89, Fig. 47h), who also cites other published examples. No such earspools are published from Gulf Coast sites.

The distribution of solid earspools at Chalcatzingo (Table 16.1) shows that only one occurred on the Plaza Central terrace, location of the site's Late Cantera subphase elite residence. Four were recovered from the T-23 house, which is also Late Cantera subphase, suggesting the possibility that this type of earspool may have been more typical of the site's non-elite. Interestingly, four solid earspools were recovered during excavations of Cave 1 on the Cerro Delgado, a cave which also yielded two Late Cantera subphase burials. A similar earspool was also found in Cave 8 excavations. Four were found during the excavation of the Middle Postclassic house on Tetla-11, including two found on the house floor itself. Because Tetla-11 is an artificial terrace with the fill containing quantities of Middle and Late Formative artifacts, the association of the earspools with the dwelling should be viewed at this time as coincidental.

Thin-walled Hollow Earspools (14; Fig. 16.2a)

Thin-walled ceramic earspool fragments, like their jadeite counterparts, were recovered in excavations of Cantera phase

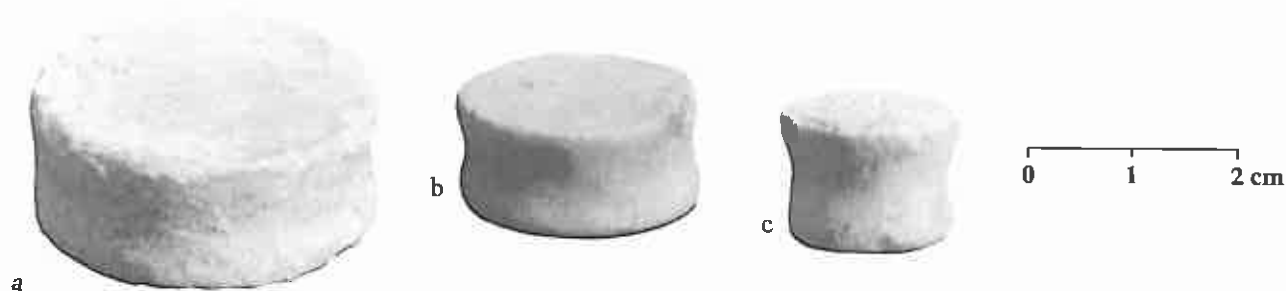


Figure 16.1. Solid clay earspools.

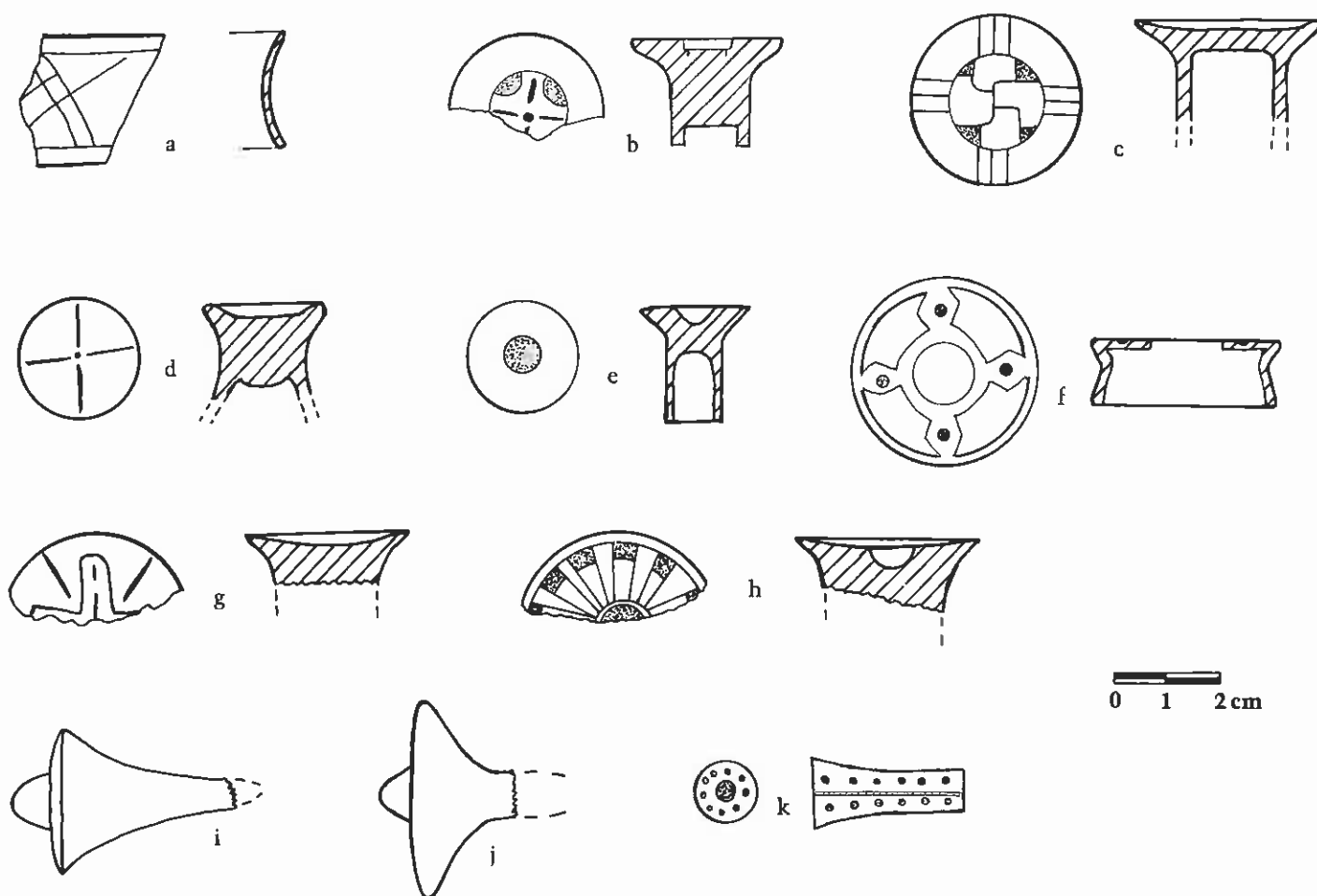


Figure 16.2. Earspools: *a*, thin-walled, hollow; *b-f*, capped, hollow and semi-hollow; *g-h*, solid flares; *i-k*, probable ear ornaments. Top and cross sections shown in *a-h*; side views in *i-j*, top and side in *k*.

deposits. For both ceramic and jadeite earspools, only fragments were found, and no whole pieces or large fragments were recovered. This earspool type is tubular, with very thin straight or very slightly convex walls, although some have a slight outward flare at one end. My impression from this limited and highly fragmentary sample is that the original length equaled or exceeded the diameter of the spool, thus setting these apart from so-called "napkin ring" earspools which also occur during the Formative period in Mesoamerica (although none were recovered at Chalcatzingo). Length of the spool fragments in our sample ranges from 22 to 35 mm, while diameters vary from 15 to 40 mm but cluster around 27–32 mm. Wall thickness is 2–3 mm. Only two of the fragments show incised surface decoration.

Our sample of this clay earspool type is small, and the distribution on the site therefore does not demonstrate any significant pattern. Two fragments were recovered from PC Structure 1, and one from the T-23 house. Significantly, while occurring in Cantera phase contexts such as the house structures, six of the fragments were recovered from Barranca phase levels.

Thin-walled tubular ceramic earspools were recovered by Vaillant at Zacatenco (1930:Pl. 40, bottom row no. 3) and El Arbolillo (1935:Fig. 25, nos. 11–14). He noted that the majority of those he recovered were black, as are the Chalcatzingo examples. At Zacatenco they occur in Middle Zacatenco levels, and at El Arbolillo in Late I and Early II levels. This temporal placement is in general agreement with the Chalcatzingo data.

The Mesoamerican distribution of tubular earspools is provided by Lee (1969:90). While the major La Venta publications do not mention clay earspools, one of Matthew Stirling's *National Geographic* articles (Stirling and Stirling 1942:642) briefly mentions a pair of blue-painted earspools found during his La Venta excavations. The San Lorenzo excavations recovered one fragment of a clay cylindrical earspool (Coe and Diehl 1980:288, Fig. 410) from a San Lorenzo A context.

Capped Hollow and Semi-hollow Earspools (8; Fig. 16.2b–f)

Eight spools are hollow to partially hollow, but have one end "capped." This "capped" end has carved or incised designs. The designs, individual characteristics, and size of these spools are shown

in Figure 16.2b–f. One simple spool (Fig. 16.2e) may be Late Barranca subphase. Other, more elaborate examples are Late Cantera subphase (Fig. 16.2b–d). Although our sample is small, the distribution seems general and not restricted to any particular area of the site. One Late Formative example is certain (Fig. 16.2f), and is very similar to carved examples from Ticoman (Vaillant 1931:Pl. 82, bottom row). Our specimen occurred with T-27 Burial 133 (see Appendix C).

Solid Flare Earspools (2; Fig. 16.2g–h)
Two solid clay flares occur in our sample. Both are decorated and are apparently Cantera phase in date.

Probable Ear Ornaments (3; Fig. 16.2i–k)

Two solid clay "flares" with slightly tapering stems occur in our sample (Fig. 16.2i–j). Both are from the Cantera phase. They are not stamps and may have functioned as ear ornaments.

One smaller artifact is enigmatic but may have served as ear ornamentation (Fig. 16.2k). It is a hollow tube, 30 mm long, with a diameter of 12 mm at one end and 10 mm at the other. The inside diameter is 5 mm at each end but tapers to ca. 2.5 mm in the center. The wide end is decorated with small punctations, and three sections of punctations run along the length of the tube, separated by incised lines.

Pendants (7; Fig. 16.3)

The sample of clay pendants is quite small. They vary from a small bird (Fig. 16.3a) to sherd discs which were drilled near the edge for suspension (Fig. 16.3d–f). One disc (Fig. 16.3e) was manufactured originally to be a suspended disc and the holes were perforated prior to firing. The most interesting of the pendants is from a Cantera phase context but unfortunately is a broken fragment apparently representing about one-half of the original piece (Fig. 16.3c). The pendant fragment depicts a shark-like face. The majority of the design is incised, but the eye is raised ca. 4 mm. Two suspension holes occur on the "fin." The pendant's broken length is 3.5 cm, and its original length must have been about 6 cm. Numerous small gold mica flecks occur in the temper of the clay of this artifact, an inclusion not found in local Chalcatzingo ceramics. Thus, the pendant is non-local in origin. While no similar pieces are known from other Formative sites in the highlands or the Gulf Coast, the shark-like profile suggests a provenience associated with the sea.

Roller Stamps (26; Fig. 16.4)

Roller stamps, or seals, both hollow and solid, were found at Chalcatzingo. Such artifacts have been discussed by Frederick U. Field (1967) and illustrated by Jorge Enciso (1947; 1953). In central Mexico

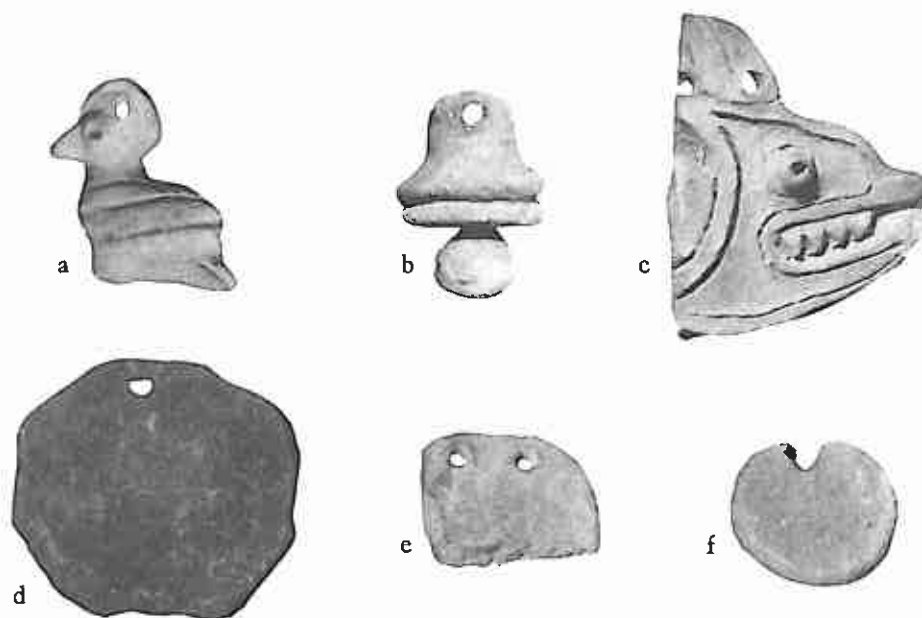


Figure 16.3. Pendants: a, small bird; b, bell-like; c, shark-like face; d–f, disc pendants.

Table 16.1. Distribution of Ceramic Personal Ornaments

Area	Beads			Earspools				Roller Stamps		Flat Stamps	
	Tubular	Spheri- cal	Solid	Thin- Walled Hollow	Capped Hollow or Semi- Hollow	Solid Flare	Pen- dants	Hollow	Solid	Foot	Other
PC Str. 1	1			2				3	1	1	
PC Str. 2					1	1		1	1		1
PC Str. 3											
PC Str. 4							3	1			
PC Str. 6										2	
PC other			1	3				1		2	3
ER Drainage									1		
T-4											2
T-6				1							
T-9A					1						
T-9B											
T-11		1			1				1		
T-15			1				2	5	1		1
T-17				1							
T-20					1					1	1
T-21			2						1	1	
T-23			4	1					1		
T-24					1		1	1			
T-25				1				1	1	1	
T-27			7		2	1		1			
T-29				3	1				2		
T-37											
S-39											
N-2											
N-5											
N-7											
CT-1											
CT-2											1
Tetla			4				1				3
Cave 1	3	1	4								
Cave 2											
Cave 3				1							
Cave 4											
Cave 8	1		1	1							
Other caves											
Surface									2		
Telixtac											
Huazulco											
Totals	5	2	24	14	8	2	7	14	12	8	12

they have been mistakenly termed "Olmec" seals, either directly (Field 1967) or by implication (Coe 1965a:54, Figs. 170–173). However, the distribution of such artifacts (e.g., Lee 1969:73–77) shows that they occur over a wide area of southern Mesoamerica and apparently continue in some areas at least into the Late Formative.

There are two regions in which their occurrence is limited either temporally or in quantity. It is my impression that roller stamps occur in greatest quantity in central Mexico (Valley of Mexico, Morelos, Puebla) in the Early Formative (to ca. 900 BC). Roller seals are found

with Early Formative Tlatilco burials (Porter 1953:41–42, Fig. 16), in Ayotla (Early Formative) and Manantial phase (transitional Early–Middle Formative) levels at Zohapilco (Niederberger 1976:240, Pl. 89), at Las Bocas (Early Formative: Coe 1965a:Figs. 170–172; Field 1967:Figs. 33–46), and from Early Formative Tlatilco culture sites in Morelos including Nexpa (Grove 1974b:Fig. 13) and Cacahuamilpa (Jorge Angulo V., personal communication).

It is also my impression that the presence of roller stamps at Gulf Coast "Olmec" sites is very limited, but this may reflect biases in sampling and excava-

tion. Gulf Coast examples are illustrated from San Lorenzo (Coe and Diehl 1980:289, Fig. 412), La Venta (P. Drucker 1952:141–142, Fig. 43a, Pl. 42, left a, e [?]), Tres Zapotes (P. Drucker 1943a:130, 132, Pls. 32s, 41aa, bb; Weiant 1943:82, 117, Pl. 63), and Cerro de las Mesas (P. Drucker 1943b:66–67, Figs. 200–202). The temporal position of most of these artifacts is unclear, although the San Lorenzo example is Early Formative, while both the Tres Zapotes and La Venta stamps appear to be Middle Formative on the basis of the associated artifacts.

Chalcatzingo's roller stamps are all fragmentary. Two general categories can be defined (as with other Mesoamerican examples): solid and hollow stamps. There is no significant difference in quantity between solid and hollow in our sample (Table 16.1). Designs range from simple linear motifs to elaborate ones. The designs fall within the range depicted by Field (1967: Figs. 17–29, 33–46) and Lee (1969: Figs. 36–38). The distribution on the site is general enough to suggest that roller stamps were used by all members of the society (apparently for body decoration) and were not restricted to the elite or to elite areas.

This statement must be qualified, however, with the understanding that the sample is relatively small and that the contexts and temporal placements of these stamp fragments are questionable. While half come from Cantera or Barranca phase levels, only three occur associated with Cantera phase floors. The remainder are surface finds or from fill which includes Amate phase debris. Based on the dating of other central Mexican roller stamps, it is quite possible that the majority of Chalcatzingo's are Early Formative Amate phase fragments which in one way or another were introduced into the Middle Formative levels. In other words, it is still unclear how long into the Middle Formative the use of such stamps extended.

Flat Stamps (20; Fig. 16.5)

The majority of flat stamps excavated have a small stemmed handle on the back. Eight of the stamps are human feet (Fig. 16.5a–e), a common motif at Tlatilco (Field 1967: 23, Figs. 30, 32; Porter 1953: 42). Three of the Chalcatzingo foot stamps come from good Amate phase contexts; the remainder are from Cantera phase levels but may represent Amate phase stamps somehow introduced into later deposits. One Amate phase stamp shows a human figure with the head represented as concentric circles (Fig. 16.5f), again repeating a design found at Tlatilco (Enciso 1947: 128, no. iv). Stamps similar to those recovered from Formative period deposits at Chalcatzingo have been illustrated from Ticoman (Vaillant 1931: Pl. 83, bottom row, nos. 1–2) and Gualupita (Vaillant and Vaillant 1934: Fig. 29, no. 5). Illustrated Gulf Coast examples (Coe and Diehl 1980: Fig. 413; P. Drucker 1943a: Pls. 41x–ff, 42s–t, 43d, 47m; Weiant 1943: Pls. 62, 73, nos. 4–6) appear to be post-Middle Formative.

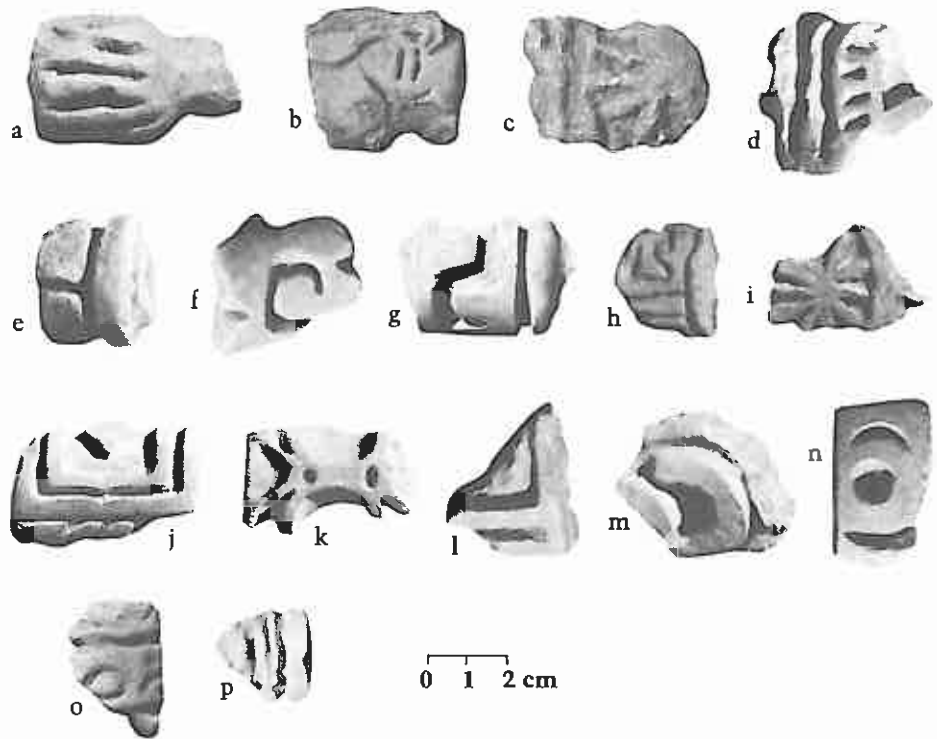


Figure 16.4. Roller stamp fragments: a–i, solid; j–p, hollow.

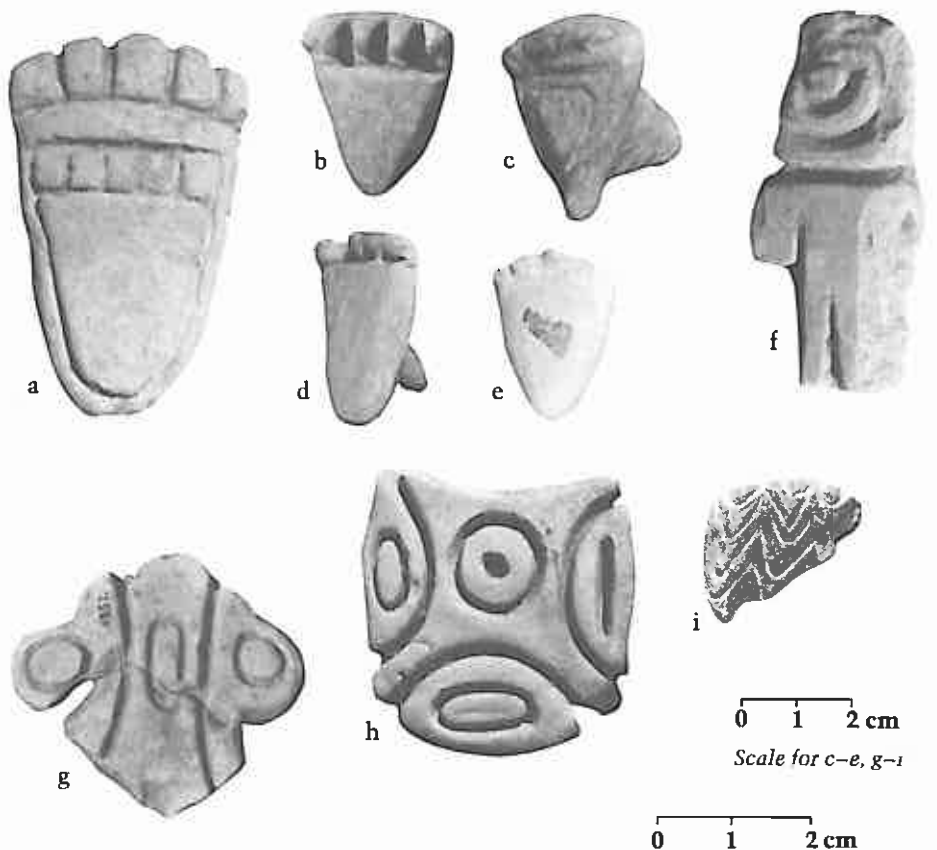


Figure 16.5. Flat stamps: a–e, feet; f, anthropomorphic figure; g–i, others.

Ritual Artifacts

Whistles and Ocarinas (105; Fig. 16.6)

Our artifact sample includes whistles, ocarinas, and flutes, most of which are from the Cantera phase. However, because we are working primarily with fragmentary artifacts, I have divided the sample into only two categories, whistles and flutes. Although I recognize the importance of the distinction Lee (1969: 65–66) makes between whistles (single note) and ocarinas (multi-note), it is difficult to ascertain whether most of our whistle-ocarina examples were originally single or multi-toned. Whistles are subdivided into four categories below, and mouthpiece types are also described. Flutes are discussed in a separate section.

Most whistles are manufactured from a sandy tan clay and are relatively simple in form. A few, however, are well-made zoomorphic representations. The majority of the whistle sherds recovered were fragments of the hollow oval sound (resonating) chambers. However, at least thirty percent of these have tab “wings” or other filleted appendages which suggest that many simple whistles are also bird effigies. Other fragmentary raised areas on some sound chambers also indicate that other large, possibly zoomorphic representations were appended as part of the whistles. Some artifacts have suspension holes.

Specific Zoomorphic or Anthropomorphic Whistles (11; Fig. 16.6a): Rather than being zoomorphic or anthropomorphic representations appended to the oval sound chambers, as in the case of the single and double chamber whistles discussed below, whistles in this category were created in the form of a particular animal. The animal is realistically depicted, and the form of the animal dictates the form of the whistle.

Single-Chamber Whistles (74; Fig. 16.6b–h): These are the most common whistle sherds from our excavations. The sound chamber is usually ellipsoidal, with outside diameters averaging 2–4 cm and lengths 2.5–5 cm. The chamber has one 3–4 mm hole at one end. The mouthpiece tab (see below) is constructed onto the chamber at this point. In addition, various appendages were often added to create a zoomorphic form. In all instances the animal or other representation is secondary to the oval shape of the sound chamber. In our sample most of the external appendages are broken and missing, and it is difficult to recreate the original forms that these

whistles had. From a few recovered fragments, it appears that the forms include ducks, turtles, and small mammals (possibly opossums). If these identifications are correct, it is interesting to note that some cultures consider these same animals as intermediaries due to their ambiguous natures.

Double-Chamber Whistles (7; Fig. 16.6i–j): These are identical to the sound chambers on single-chamber whistles except that they are often larger and contain two chamber holes, one at each end. These holes apparently were functional, and all samples of this type show scars of some additional previous appendage around the second hole. Two whistle fragments from T-20 excavations have remains of clay tubes extending outward from the second hole. It is therefore possible that a second tubular, flute-like chamber was added to provide a two-tone or multi-tone effect.

Fat-Cheeked Human Faces (2; Fig. 16.6k–l): These two artifacts are pudgy-cheeked heads, termed by some as representing the “Old Fat God.” Both of our examples are double whistles. On Figure 16.6l the forehead strap forms dual mouthpieces, one above each eye opening. These direct the air down into the eyes, the entrances to the sound chambers formed by the hollow cheeks. Neither head shows signs of having been attached to a body. A similar whistle was recovered by Niederberger at Zohapilco (1976: Fig. 2, no. 8).

Mouthpiece Types: Three different mouthpiece types (in addition to the specialized mouthpieces on fat-cheeked human face whistles) can be defined: *Direct or tab mouthpiece* (36; Fig. 16.6c–d). The mouthpiece is a clay protrusion or tab below the hole in the sound chamber. Usually 1–2 cm long, this tab serves to keep the lower lip the proper distance from the sound chamber. In about one-third of our sample, the mouthpiece tab was a wing-like fillet apparently representing a bird’s tail. *Tab-strap mouthpieces* (15; Fig. 16.6b). In addition to the projecting tab, a thin, flat strap of clay has been appended in a small loop above the tab. This loop acts as a tunnel to direct air over the hole in the sound chamber. The clay strap and tab are normally the same size. Both vary in size in proportion to the size of the whistle’s sound chamber. *Tubular mouthpieces* (4; Fig. 16.6m). A clay tube, attached to the sound chamber in front of the chamber hole, directs air to the hole.

Comments: The majority of the whistles come from Barranca and Cantera phase contexts. Both “Old Fat God” whistles come from subfloor levels of PC Structure 1, although one (Fig. 16.6k) is Barranca phase, the other (Fig. 16.6l) Cantera phase.

Few Chalcatzingo artifacts show close similarities to artifacts from Gulf Coast sites. One exception is the zoomorphic single chamber whistles. Certain Chalcatzingo examples portray animals with their paws held to their heads (Fig. 16.6e–f). Similar poses occur on Tres Zapotes whistles (P. Drucker 1943a: Pls. 28r–s, 41i–j; Weiant 1943: Pl. 50, nos. 1, 3–5, 7). General similarities occur with single chamber whistles (Coe and Diehl 1980: Fig. 405a; P. Drucker 1943a: Pl. 41l–m, o–p; Weiant 1943: 108–111, Pls. 47–52). Whistles similar to those from the Chalcatzingo sample were recovered by Vaillant at El Arbolillo (1935: 234–236), Zacatenco (1931: 155–156, Pl. 38, top row, nos. 1, 3–5, Pl. 40, top row, no. 4), Gualupita (Vaillant and Vaillant 1934: 98, Fig. 29, nos. 7–12), and Ticoman (Vaillant 1931: 400, top row, nos. 3–4).

Flutes (39; Fig. 16.7)

These are tubular ceramic pieces which range in outside diameter from ca. 1.5 to 3.5 cm. Wall thickness is usually no more than 3–4 mm. Fifteen come from excavations in Classic contexts. However, others are from unquestionable Middle Formative Cantera phase levels. Of these, several of the tubular sections have one finished end and one single hole penetrating the side of the tube. As mentioned in the description of ceramic whistles, several whistle chambers have tubular sections attached and interconnecting air holes. Thus, at least some of our Middle Formative “flute” sections may originally have been part of ceramic whistles (see Fig. 16.6i).

The distribution of ceramic flutes does not seem as general as that of ceramic whistles (see Table 16.2). T-23 had the largest number of flutes (sixteen), and they were rare on the Plaza Central, unlike the whistles.

Miniature Vessels (43; Fig. 16.8)

Miniature vessels were recovered which duplicate both common and special ceramic forms. Among the forms, miniature wide-mouth bowls appear most common (sixteen), followed by restricted neck olla forms (eleven), dishes (two), and double-loop handle censers (six, including handle fragments). Some of the olla forms include those similar to *can-*

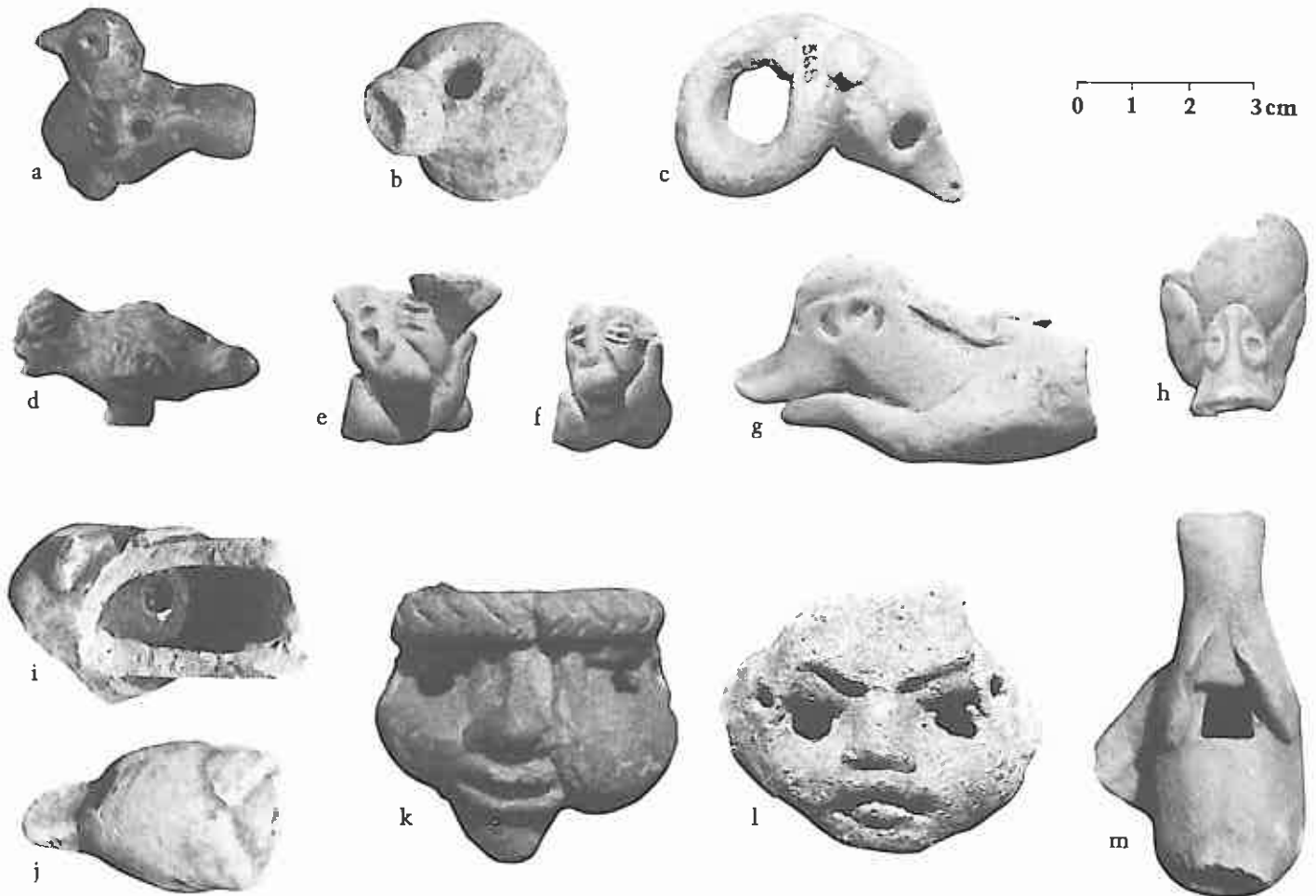


Figure 16.6. Whistles and ocarinas: *a*, bird; *b–h*, single chamber zoomorphics; *i–j*, double chamber; *k–l*, fat-cheeked human faces; *m*, whistle with tubular mouth-piece. Scale is approximate.

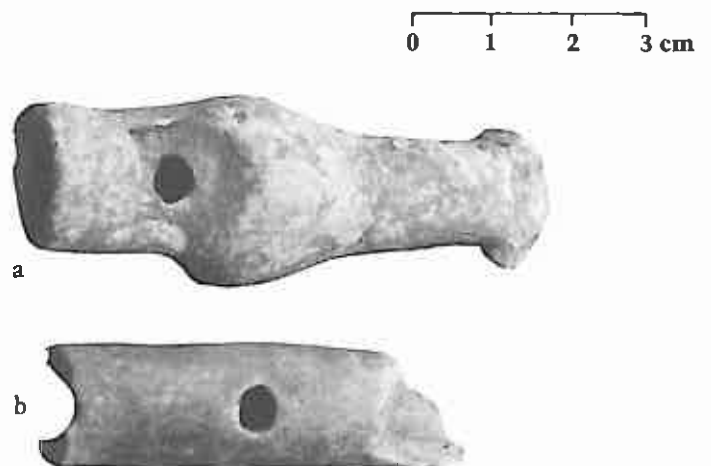


Figure 16.7. Flute fragments.

Table 16.2. Distribution of Ceramic Ritual Artifacts

Area	Whistles and Ocarinas					Flutes	Miniature Vessels	Masks	Bars
	Zoomorph	Single Chamber	Double Chamber	Fat-Cheeked Faces	Not Classified				
PC Str. 1	2	14	1	2		1	8	2	
PC Str. 2	1	16				3	5	1	1
PC Str. 3									
PC Str. 4									
PC Str. 6									
PC other		8				1	3		1
ER Drainage									
T-4	1	3				1	2	1	
T-6		1					1	1	
T-9A		2						1	
T-9B					1		1		
T-11	2	3					1		1
T-15		1			2	5	1	1	
T-17									
T-20	1	4	2		1	7	2		
T-21		2			1	1	2		1
T-23		3			1	16	4	2	
T-24	2	2	1				3		
T-25		3	2			1	2		
T-27	1	3			1	3	2	3	
T-29		2	1				1	1	
T-37		1			2		5		
S-39		2			1			2	3
N-2	1								
N-5									
N-7		1							
CT-1									
CT-2									
Tetla		2			1				
Cave 1									
Cave 2									
Cave 3									
Cave 4									
Cave 8									
Other caves		1							
Surface									
Telixtac									
Huazulco									
Totals	11	74	7	2	11	39	43	15	7

taritos, the small plain bottles often associated with higher status burials (see Chapter 8). Among the miniature vessels are small Amatzinac White bowls and Peralta Orange punctate bowls and ollas. Diameters of the bowls are approximately 8 cm, while miniature bowls and ollas range from 1.6 to 8 cm, although most average 2.5–5 cm. The double-loop handle censers average 2.4–2.8 cm in diameter. The distribution of miniature vessels on the site (Table 16.2) seems nonspecific, as they were found on most terraces excavated, but they are primarily associated with house structures on those terraces.

Circular Masks (14; Fig. 16.9)

Circular, slightly convex artifacts, usually depicting a simple human face, occur in Cantera phase contexts. Such artifacts are commonly referred to in the literature as masks (e.g., Coe 1965a: Figs. 161–169). No complete examples were found at Chalcatzingo. The fragments recovered represent rounded masks, ranging from 8 to 16 cm in diameter. Most examples have three suspension holes, two at the sides and one at the top. Open elliptical eyeholes are characteristic. The remainder of the face is depicted by appliqué strips and raised, horn-like tabs. The paste is generally an orange-

brown (ca. 5 YR 6/6) and of local temper. One fragment shows traces of a white slip; another has traces of a red slip.

Among the mask fragments recovered in good context, one was from T-9A, two from the T-23 house excavations, three from T-27 excavations, two from S-39 excavations, and two from the subfloor area of Plaza Central Structure 1 (see Table 16.2). This distribution suggests that masks were not an item restricted only to elite areas of the site.

Similar circular masks have been recovered at Tlatilco (Piña Chan 1958: Pls. 26–27; Coe 1965a: Figs. 165–168), in “greatest quantities” in Zacatenco levels

at Zohapilco (Niederberger 1976:233–234, Pl. 88), and in Vaillant's Middle period levels at Zacatenco (1930:156, Pl. 39). Vaillant labels his three illustrated fragments as "gorgets," raising the question of the actual function of these artifacts. An argument in favor of Vaillant's identification is that the slightly concave backs of these artifacts contain no room for a nose if worn on the upper face utilizing the eyeholes for seeing. Some Tlatilco figurines (Coe 1965a: Figs. 123–124; Covarrubias 1957: Fig. 6) illustrate that masks may have been worn in that manner. On the other hand, other Tlatilco figurines (e.g., Coe 1965a: Fig. 157) show circular masks being worn on the lower face area. Triple suspension holes would allow one supporting string to pass over the top of the head and two side strings to secure the mask at the back of the head.

Bars (7; Fig. 16.10)

These enigmatic ceramic objects are long bars with rounded ends. Most of them resemble long, slightly curved handles, although we do not believe they served that function. In fact, it is possible that not all these objects served the same or similar functions. Unfortunately, six of the seven examples are broken. All but one have oval cross-sections, and four are decorated. Each of the specimens is briefly described below:

a. This bar (Fig. 16.10a) is unslipped and the surface is smoothed but not polished. It is decorated on both sides, whereas other decorated specimens have only one decorated side. The broken length of this artifact is 4.8 cm. It exhibits no wear pattern.

b. This example (Fig. 16.10b) has a smoothed but eroded rough-textured surface. One surface has an 8 mm diameter shallow hole. The broken length is 5.3 cm. No wear pattern was detected.

c. This example (Fig. 16.10c) is also undecorated with a smoothed but eroded and unslipped surface. It is the only unbroken specimen of the seven. Unlike the others, which have a slightly convex lower surface, the under surface of this artifact is slightly concave. Its complete length is 7.0 cm, and it lacks an apparent wear pattern.

d. This and the next two artifacts are decorated and white-slipped, setting them apart from the others. This example (Fig. 16.10d) is a long, slightly curved bar, slipped in Amatzinac White on all but the convex, curving underside. The upper surface has an incised design

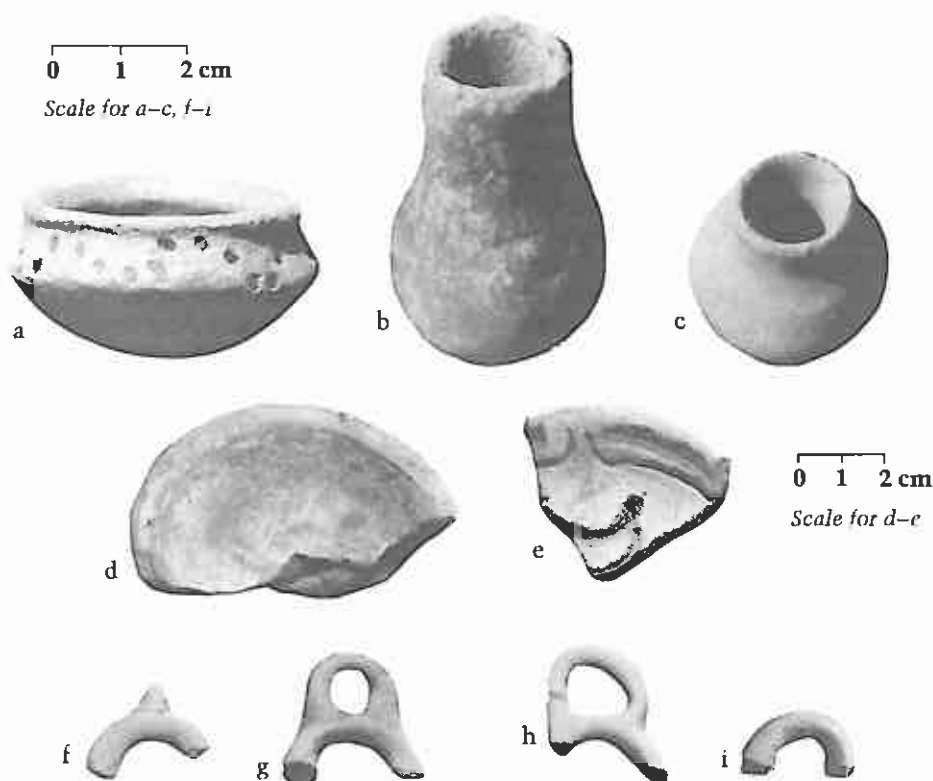


Figure 16.8. Miniature vessels: a, bowl; b–c, ollas; d–e, shallow dishes; f–i, double-loop handles from miniature censers.



Figure 16.9. Masks: a, T-23; b, PC Structure 2; c, T-9A.

which was executed after the white slip was applied. The undersurface is slightly roughened, but is smoothed in some areas, possibly representing use wear. The broken length is 10 cm.

e. This bar (Fig. 16.10*e*) is also slipped in Amatzinac White and has a design pattern identical to that of artifact *d*, although it is flat, not curved, and comes from a completely different site area. No basal wear is apparent. Broken length is 6.5 cm.

f. The decoration on this Amatzinac White slipped bar fragment (Fig. 16.10*f*) is unlike that of artifacts *d* and *e*, and the bar is more oval in cross-section. No visible wear pattern occurs. The broken length is 6.0 cm.

g. This specimen (not illustrated) was smooth, unslipped, and undecorated. Its broken length is 3.9 cm. No wear pattern is apparent.

Wear on most of these artifacts could be masked by the effects of erosion. Only *a*, an artifact decorated on two sides and far more pointed in shape than the others, comes from a Barranca phase context. All others are Cantera phase. As shown in Table 16.2, three of the bars, including two of the three white-slipped examples, come from excavation area S-39, an area which also yielded an abnormally large quantity of oval ground sherds (see below). Heavy co-occurrence of both types of artifacts at S-39 may indicate that they served similar functions, possibly related to ceramic manufacture.

Animal Figurines (Fig. 16.11)

A wide variety of animal figurines occur in Middle Formative contexts at Chalcatzingo, including birds, reptiles, and mammals. For some, the type of animal being portrayed is easily interpreted, while for others the identification is more difficult (e.g., were they depicting dogs or foxes?). As can be seen, the bird heads (Fig. 16.11*a–e*) include ducks, several possible turkeys, and numerous stylized and unidentifiable birds. Only a few reptilia are represented in the figurine sample: a turtle head and three snakes. Of these latter, two are relatively simple representations, while the third is a naturalistic depiction of a diamondback rattlesnake's head.

Among the many mammals depicted are dogs (Fig. 16.11*f–i*) both with and without fangs showing, animals with antlers which are probably deer (Fig. 16.11*j*), one squirrel (Fig. 16.11*k*; this figurine has a polished orange slip, a treatment usually reserved for C8 figu-

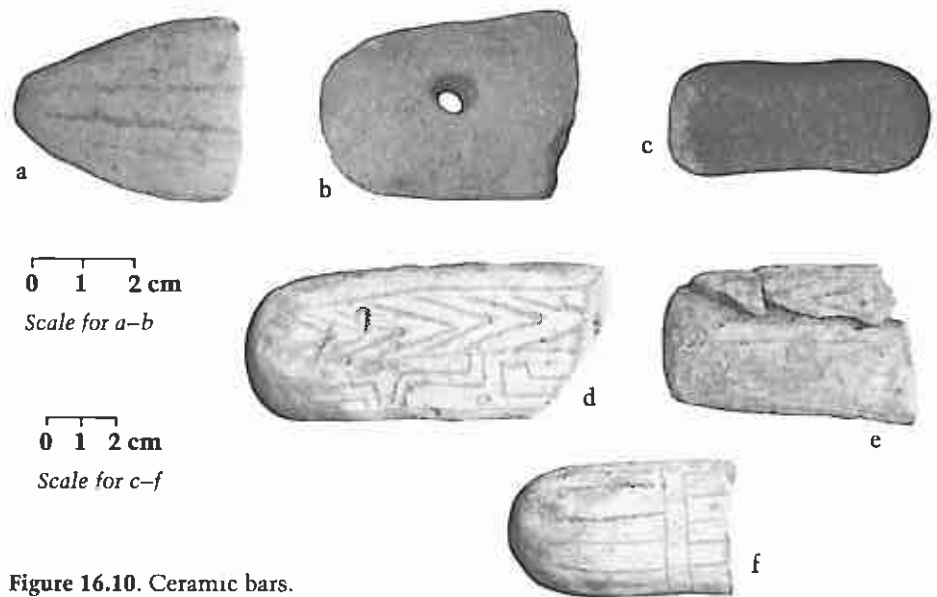


Figure 16.10. Ceramic bars.

rines), peccaries (Fig. 16.11*k*), numerous unidentifiable examples (a few of which may be opossums; e.g., Fig. 16.11*m*), a variety of monkeys (Fig. 16.11*n–p*), and a fish-shaped figurine fragment which has two breasts and thus may represent an aquatic mammal such as a manatee (Fig. 16.11*q*). Neither monkeys nor aquatic mammals are native to Mexico's central highlands.

As mentioned earlier, some of the animal figurine heads are probably broken-off clay whistles. It is important to note in this regard that animal figurine bodies (as compared to heads) are rare in the total figurine sample. This is in contrast to anthropomorphic figurines, for which bodies greatly outnumber heads recovered.

Only one figurine, relatively complete, combines both human and animal characteristics (Fig. 16.12). This unique figurine has an animal head (opossum?) and a woman's body. The animal's eyes are executed in the manner of Ch type figurines (see Chapter 14).

Utilitarian Artifacts

Spindle Whorls (57)

Twenty-five spindle whorls were recovered during excavations on the main site area and caves during the project's three field seasons, while thirty-two whorls were excavated at Tetla in 1974. All spindle whorls are analyzed and discussed in

Chapter 25 and tabulated in Table 16.3.

Molds (5; Fig. 16.13)

Two types of molds occur in our sample, all apparently Late Classic and Middle Postclassic. The first type, represented by three examples, is a flat, shallow, stamp-like mold, apparently for use in mold-made vessel designs (*a–c*). The second type is a deeply concave figurine mold (*d–e*).

a. A nearly complete mold, this artifact is trapezoidal in shape, with the top wider than the base (Fig. 16.13*a*). A tapered or trapezoidal shape would seem logical for stamping designs onto vessels in order to avoid design overlap. The design is a human head wearing a plumed headdress. A speech scroll occurs in front of the person's mouth. This mold is from T-29.

b. This mold fragment has a design showing a seated human in profile (Fig. 16.13*b*). The person holds a plumed object or torch. The mold was found on the surface of T-29.

c. This is a flat-stemmed mold with a rabbit design (Fig. 16.13*c*), found on the surface of the T-15 ballcourt (T-15 Str. 2).

d. From a Classic period context on T-20, this figurine mold creates an eagle's head (Fig. 16.13*d*).

e. The second figurine mold (not illustrated) is from Tetla-11. Apparently Middle Postclassic in date, it is fragmentary, and the design is uncertain.

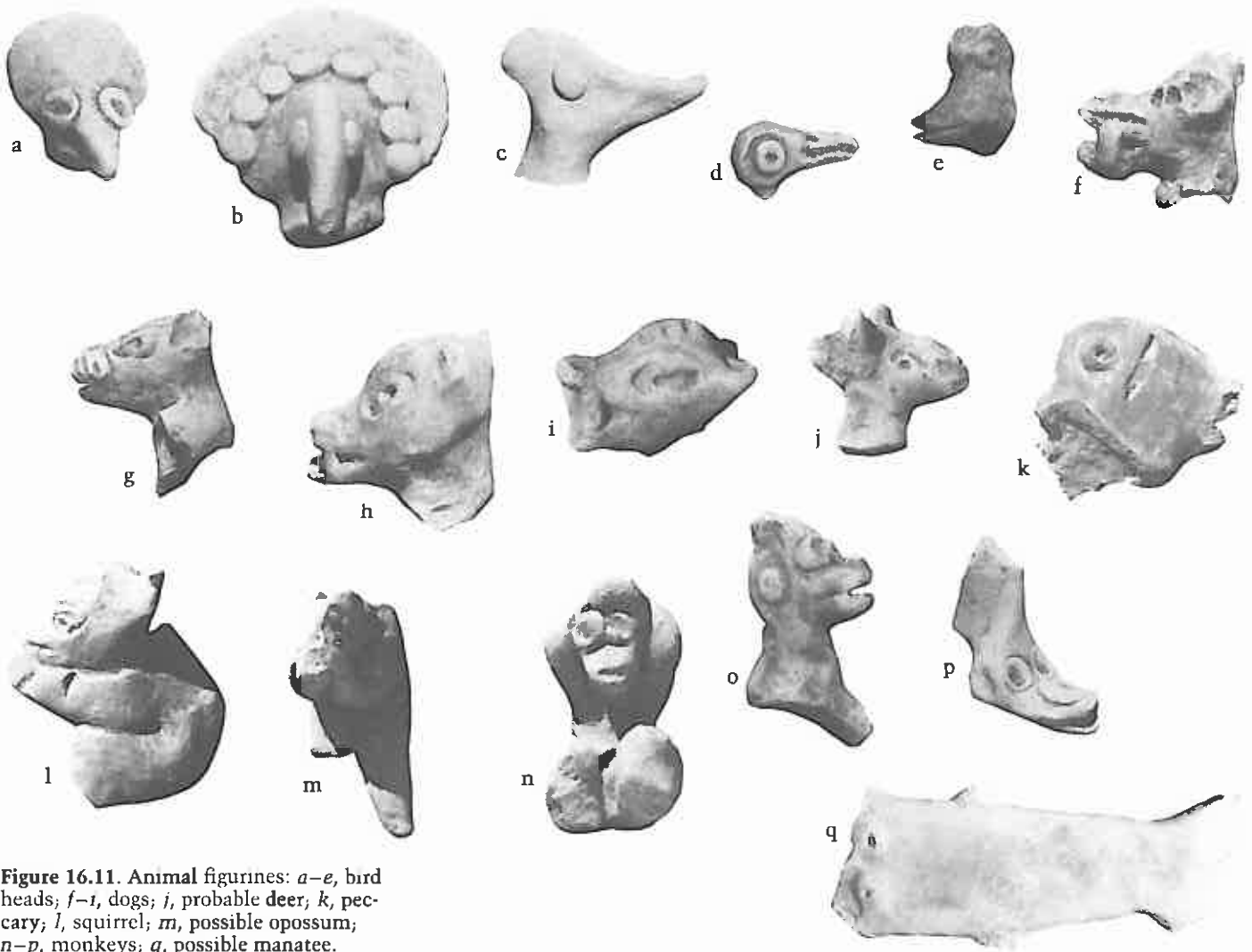


Figure 16.11. Animal figurines: *a-e*, bird heads; *f-i*, dogs; *j*, probable deer; *k*, pecary; *l*, squirrel; *m*, possible opossum; *n-p*, monkeys; *q*, possible manatee.

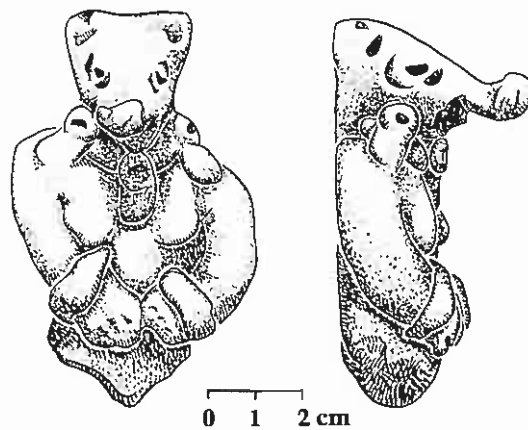


Figure 16.12. Animal figurine with opossum-like face and female human body.

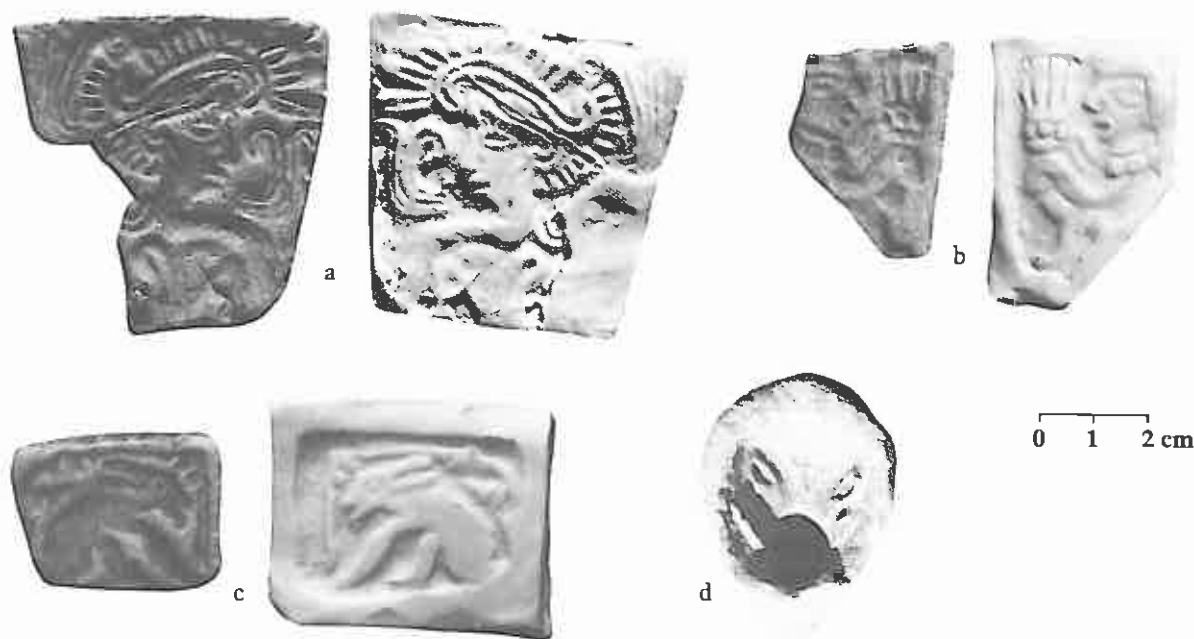


Figure 16.13. Ceramic molds: *a*, human head mold (left) and cast (right); *b*, seated human mold (left) and cast (right); *c*, rabbit mold (left) and cast (right); *d*, eagle head mold.

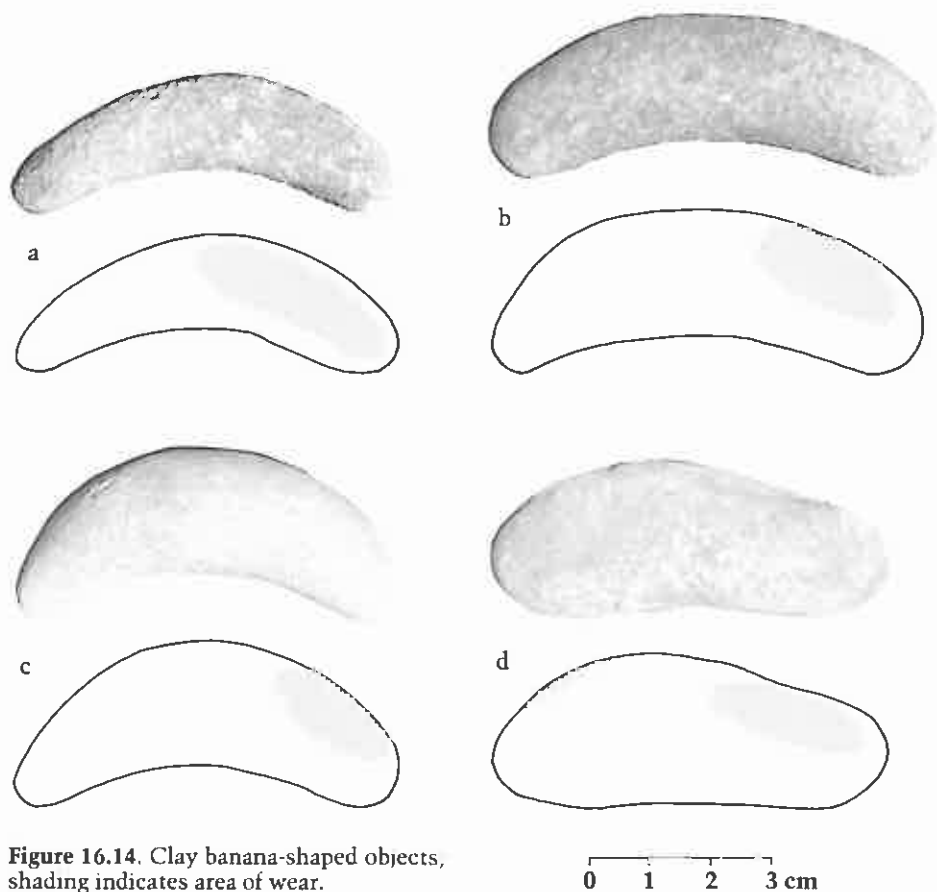


Figure 16.14. Clay banana-shaped objects, shading indicates area of wear.

"Bananas" (9; Fig. 16.14)

These unusual crescent- or banana-shaped artifacts are rounded or oval in cross section. The surfaces of all nine examples are eroded, but several still show traces of polishing. All exhibit a specific wear pattern—a flattish worn area along one side, near one end of the crescent. Only two specimens have the wear pattern on both sides of the artifact. The largest of our specimens is 7.5 cm long; the smallest is 5.8 cm. Thus, the size range is relatively small. Maximum diameter is 3.6 cm and minimum is 1.5 cm. Surface color is variable, ranging from grey (ca. 10 YR 6/2–6/3–6/4) to brown (7.5 YR 5/2–4/2).

These artifacts were found only in Cantera phase contexts. Two come from the S-39 excavations, an area we believe may have been a ceramic workshop. The unusual wear pattern suggests that these crescent-shaped objects performed a smoothing or polishing function. Similar artifacts have been found at other Formative period sites in central Mexico but have drawn little attention. Harold McBride (1974:214–216) mentions those other occurrences, which include both Cuicuilco and Chupicuaro, and tends to favor the idea that these artifacts may have been potter's tools. Recent excavations at Loma Torremote in the Valley of Mexico (Santley 1977b:50; personal communication) recovered twenty-four

such objects. Florencia Muller (personal communication to Robert Santley) notes that similar artifacts are used today in some areas of rural Mexico to support the base of pottery vessels during manufacture. However, an interesting similarity is seen with the limestone banana-shaped smoothers found in caches at Muna, Dzibilchaltun, and Mayapan in Yucatan (Andrews and Rovner 1973). In general the Yucatecan examples are nearly twice as large as those at Chalcatzingo but show the same general wear pattern. The Maya crescents were probably used in plaster working, and while we have no evidences of Cantera phase lime plaster, the S-39 excavations yielded both crescent-shaped artifacts and a Middle Formative lime deposit (Chapter 4).

Artifacts of Uncertain Function

Solid Balls (27; Fig. 16.15)

Solid ceramic balls occur at Chalcatzingo and other highland and lowland sites. Those from our sample are made from local clays. Their diameters range from 8 to 40 mm, with an average of ca. 20 mm.

Chronologically the solid ceramic balls from Chalcatzingo range from Early Formative to Middle Postclassic. Two balls (Fig. 16.15*d-e*) from Late Cantera subphase deposits (one from PC Str. 2, the other from T-24) have a light groove circling the circumference. Clay balls with an encircling groove have also been found at Tres Zapotes (Weiant 1943: 117-118, Pl. 65, bottom right). Clay balls of the same approximate size as our sample were found at San Lorenzo (Coe and Diehl 1980:287), at El Arbolillo, Zacatenco, and Ticoman (Vaillant 1930: 156, Pl. 39, middle row, Table I, 1931: 297, 396, Pl. 81, first two rows; 1935: 237, Table 18), and at Gualupita (Vaillant and Vaillant 1934:98, Fig. 29, no. 2).

Table 16.3. Distribution of Ceramic Utilitarian Artifacts

Area	Spindle Whorls						"Ba-nanas"
	TYPE I			TYPE II			
	Un-decorated	Incised	Mold	Incised	Mold	Molds	
PC Str. 1	1						1
PC Str. 2							
PC Str. 3							
PC Str. 4							2
PC Str. 6							
PC other							
ER Drainage							
T-4							
T-6							
T-9A							1
T-9B							
T-11	1						1
T-15	1	1				1	
T-17							1
T-20	1					1	
T-21	2						
T-23							
T-24							
T-25							
T-27		1					
T-29						2	
T-37							
S-39							2
N-2							
N-5							
N-7							
CT-1							1
CT-2							
Tetla	4	11	13	2	2	1	
Cave 1	3	5	6				
Cave 2							
Cave 3							
Cave 4	1						
Cave 8				1	1		
Other caves							
Surface							
Telixtac							
Huazulco							
Totals	14	18	19	3	3	5	9

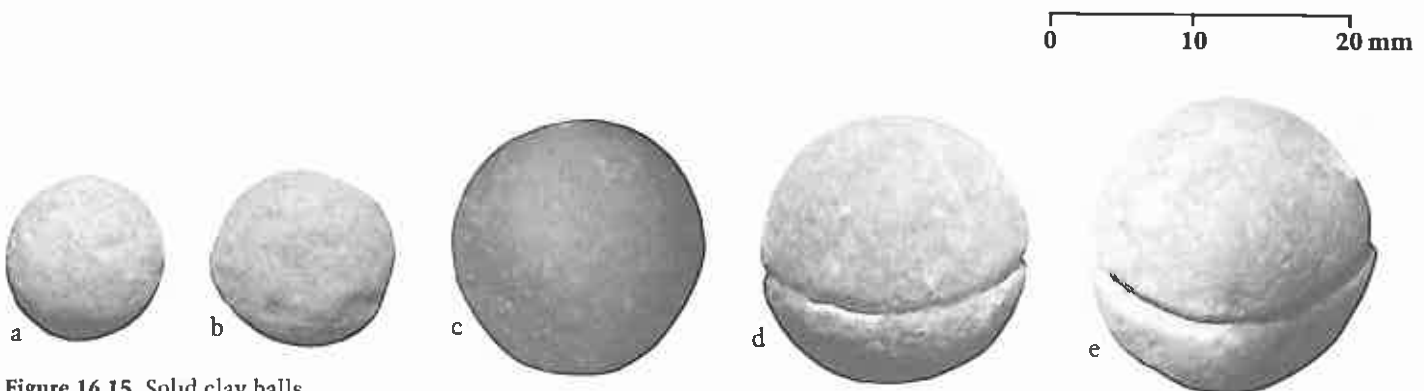


Figure 16.15. Solid clay balls.

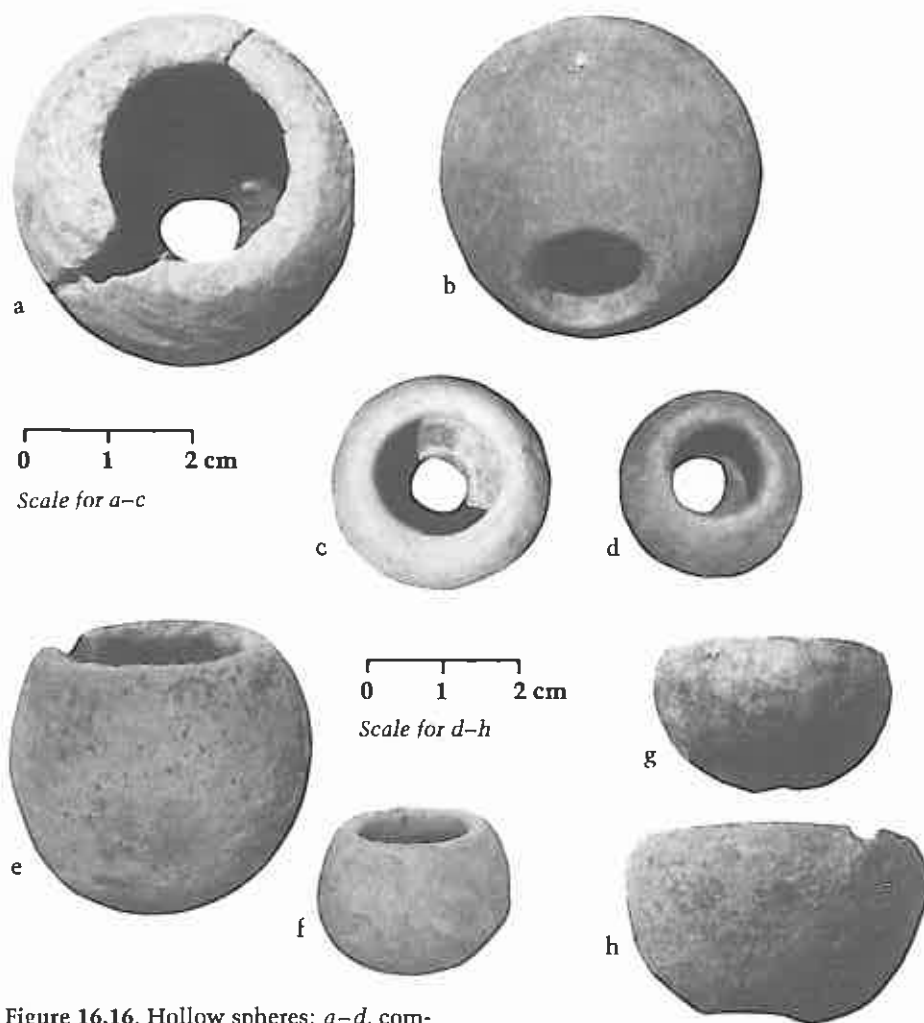


Figure 16.16. Hollow spheres: a–d, complete; e–f, three-quarter spheres; g–h, hemispheres.

Hollow Spheres (433; Fig. 16.16)

During the excavation of PC Structure 2, fragments of hollow clay spheres were uncovered, and soon thereafter three complete specimens were found. Sherds of similar hollow spheres were recognized in other excavation units, and the 1974 excavations at Telixtac produced further examples. Three basic sphere types can be distinguished based on the completeness of the sphere: complete spheres, three-quarter spheres, and hemispheres. All share certain attributes. One important feature is that all have well-made holes (finished as with vessel rims) at one end. By "end" I mean the portion of the sphere opposite the wide mouths of three-quarter and hemispherical examples. Complete spheres have a hole at each "end," with the holes unequal in size. The diameter of the

smaller hole fairly consistently ranges from 0.8 to 1.2 cm.

In size, the majority of the spheres range between 3.8 and 5 cm in diameter. The smallest specimen has a diameter of 2.8 cm; the largest, 7.5 cm. Most of the artifacts are essentially true, round spheres, but elliptical and oval (along the axis between the holes) "spheroid" examples also occur. Elliptical spheroids are most common among the three-quarter sphere type.

In size, form, and quality of workmanship, sherds from spheres are easily distinguishable from miniature vessel fragments or sherds from the oval sound chambers of clay whistles. Hollow spheres have well-polished outer surfaces but rough interiors. Many show traces of either an orange or a fugitive white slip. Orange slip, which also oc-

curs on some C8 figurines, appears to have been a treatment restricted to certain clay artifacts, perhaps marking them as "special." Red pigment traces are also found on some examples. Most of the spheres are undecorated, but a few have simple incised "rim" designs.

Complete Spheres (89; Fig. 16.16a–d): Among the complete spheres recovered were four whole specimens. Three were found in PC Structure 2, and the fourth came from excavations at the north end of T-25. The spheres, as mentioned above, generally vary between 3.8 and 5 cm in diameter. Ellipsoidal examples have a long-axis diameter about 10 percent greater than that of the short axis. The larger hole tends to vary in size proportionally with the sphere's size and ranges from 1.2 to 2.0 cm in diameter.

Three-quarter Spheres (85; Fig. 16.16e–f): This type has the same basic form as the complete sphere, with the exception that the sphere is only about three-quarters complete (this actually varies from 60 to 80 percent of the short-axis diameter). Essentially this is a truncated sphere which resembles a miniature *tecomate* with a well-made hole in the bottom. The larger opening is approximately 50 percent of the sphere's diameter.

From our sherd sample we know that most of these three-quarter spheres were manufactured originally in this form, with rounded or tapered rims on the larger opening. However, in about 10 percent of the sherds, the large opening has a flat, ground rim edge, suggesting that these artifacts may originally have been complete spheres which were then ground down to three-quarters form. Such grinding not only produces a flat rim, but also leaves grinding marks and exposes the carbon streak in the interior of the thin clay wall.

Hemispheres (67; Fig. 16.16g–h): These are simply half spheres, but with the characteristic small hole at the bottom. The exterior rim diameter of the "mouth" or large hole essentially equals the diameter of the sphere. Rims are usually rounded or slightly tapered, and interiors are often smoothed and polished along the interior rim area. Seven sherds of this sample have flat ground rims, indicating, as with three-quarter spheres, possible modification of a larger sphere. **Unclassifiable** (192): These artifacts are so fragmentary that they cannot be classed into one of the three types above. **Comments:** All three sphere types occur

Table 16.4. Distribution of Ceramic Artifacts of Uncertain Function

Area	Ground Sherds												
	Hollow Spheres					Discs			Rectilinear				Cut and Shaped Sherds
	Solid Balls	Complete	Three-quarter	Hemi-spheres	Not Classified	Plain	Partly Perforated	Perforated	Rect-angular	Trape-zoidal	Tri-angular	Oval	
PC Str. 1	4	4	10	3	8	13	5	5					
PC Str. 2	2	13	15	10	8	9	1	2					1
PC Str. 3													
PC Str. 4													
PC Str. 6													
PC other	3	5	5	2	7	20	3	3		1		1	
ER Drainage												3	
T-4	4	1	2	2	7	2		2					
T-6	2					7		1					
T-9A	1		3		4	6		1					
T-9B		2	2		1								
T-11		4	5	1	13	10	2	2	2			1	
T-15	1	3	1		2	5	1	2					
T-17													
T-20		3	5	3	16	2						1	
T-21		4		2	7	9						1	1
T-23	2	10	9	6	20	23		1				1	
T-24	1	11	5	3	25	16	1	1				1	
T-25		12	3	2	13	28	1		3				
T-27		6	4	2	28	2	2	1				1	1
T-29		1				2							
T-37		1	3	5	6	3	1		1				
S-39	1	3	4	10	17	28		1	3			17	
N-2		2	3	1	3	5	2		1	1			
N-5			1		2	2							
N-7			1		1	1							
CT-1	2					1							
CT-2						1							
Tetla	4					5		2					
Cave 1						1							
Cave 2													
Cave 3							1						
Cave 4									1		1	1	
Cave 8													
Other caves													
Surface													
Telixtac		4	4	15	4	6	1	2	1			1	
Huazulco													
Totals	27	89	85	67	192	207	21	26	12	2	1	29	3

in both Barranca and Cantera phase deposits. They are fairly generally distributed around the site, with only three major units actually lacking sphere sherds. Interestingly, the areas lacking spheres are the major platform structures: the two Cantera phase stone-faced platform mounds with stelae (T-6 Str. 1 and T-15 Str. 5), and the 70 m long earthen platform mound on the Plaza Central (PC Str. 4).

Current data do not elucidate the function of these artifacts. While the complete spheres could have functioned as clay rattles, no pebbles or clay balls occur within the four complete examples, and

sherds from complete spheres show no unusual interior wear (if such wear would indeed be visible in a rattle). Further, I am assuming that all three types had a similar function, and a rattle function does not explain three-quarter spheres and hemispheres.

Only 6 of the 218 classifiable sphere sherds from Chalcatzingo (less than 3 percent) showed incised or engraved rim designs (unclassifiable sherds do not have rim areas and thus are not included in this tally). On the other hand, 3 of the 23 identifiable sherds (13 percent, including one complete hemisphere) from the smaller site of Telixtac had decorated

rim. Interestingly, too, 65 percent of the Telixtac sample, as opposed to only 24 percent of the Chalcatzingo sample, are hemispheres. At both sites, complete and three-quarter spheres occur in almost equal proportions (see Table 16.4).

I have found only one similar artifact in the literature on the Formative period. Vaillant (1930: Pl. 40, bottom row, no. 4) illustrates a "hollow hemisphere, light brown pottery, perforated for suspension" from Late period deposits at Zacatenco.

Ground Sherd Discs (248; Fig. 16.17)

These artifacts occur as part of the cultural assemblage at many Mesoamerican sites and have been identified in the

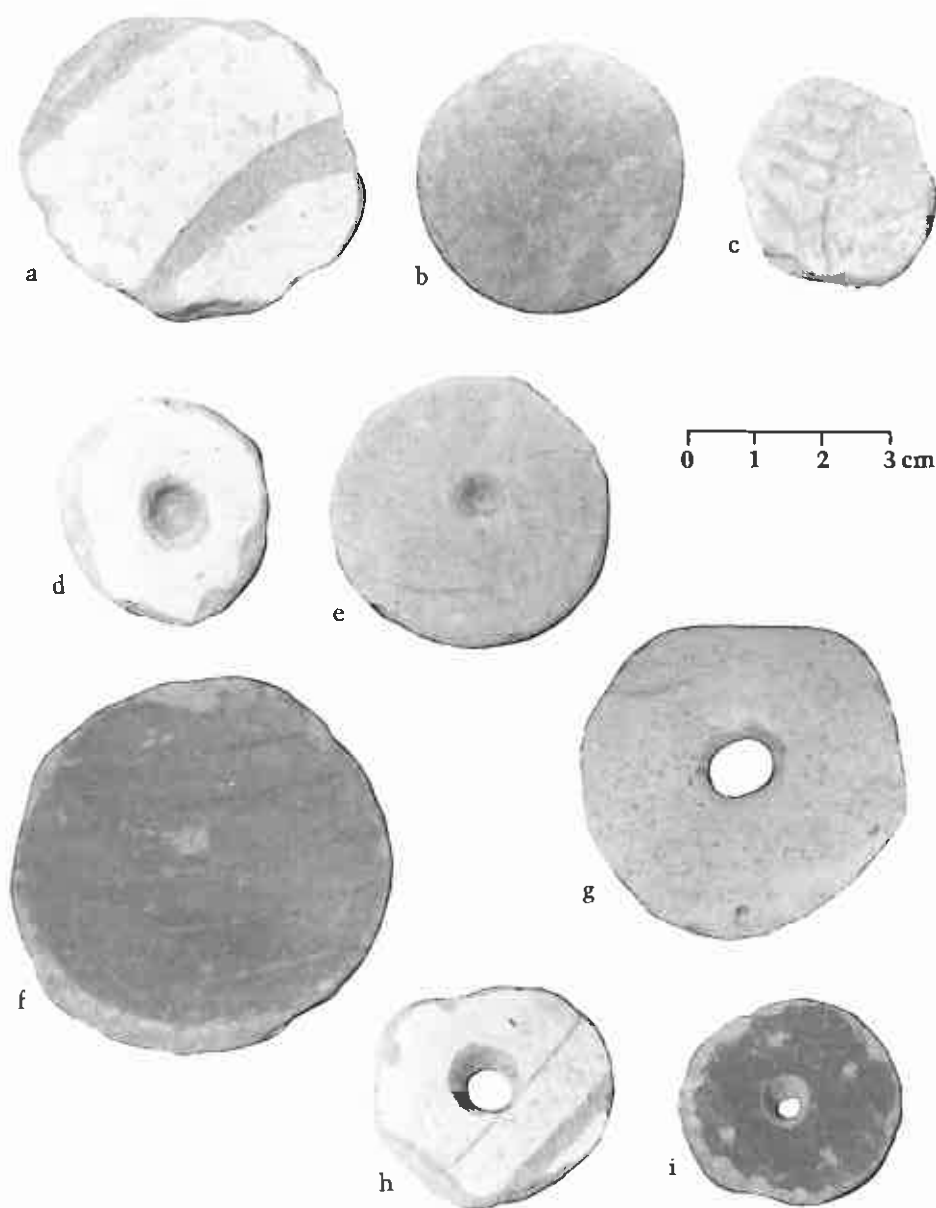


Figure 16.17. Ground sherd discs: *a-c*, plain; *d-f*, partially perforated; *g-i*, perforated.

literature as everything from gaming pieces to spindle whorls. Lee (1969: 99–103) provides a good discussion and bibliographic coverage of sherd discs, and there is no need to repeat his comments here. The discs are reworked fragments of broken pots, and it would be, as Lee (1969:97) notes, a valueless exercise to describe the pottery types from which these were manufactured.

In analyzing these artifacts a few simple tests were made to look for patterning in various attributes ("type," color, surface wear, etc.). No statistically significant pattern was detected. About 50 percent of the discs show surface erosion (as compared to abrasion), suggesting that any sherd on the site could be chosen at random to be made into a disc (or into other geometric forms described below). Many discs found in Barranca and Cantera phase contexts have been manufactured from Amate phase sherds, again suggesting that older surface sherds were collected and reworked. Most of the discs in our sample are made from plainwares, a fact to be expected if the original selection was random. Some sherd discs were made from decorated pot fragments, but in only two instances in our sample does the old design element appear to have been important to the disc's function. In these two instances the design was centered on the disc.

Smaller discs are generally better made than larger examples. The edges on small discs are generally ground smooth, while larger discs have most often been chipped rather than ground into a circular form (Lee 1969:99). Chiapa de Corzo discs include various examples with notched sides (Lee 1969:97–98, Fig. 52*q-u*). While those of the Chalcatzingo sample are not directly similar, nearly one-third of our whole discs (partial discs cannot be included in this observation) have one chipped area on the edge. Such "chip-notching" occurs not only on Middle Formative discs, but also on three Middle Postclassic discs from the Tetla area of the site. It is, however, difficult to tell at this time whether the chip-notched edges are functional or simply the result of natural actions over time.

Sherd discs vary in size from less than 2 cm to slightly over 8 cm in diameter. Three types of discs occur in our sample: plain, partially perforated, and perforated. Those with partial or complete perforations usually range in size from 2 to 5 cm. Of the six sherds with diameters

of slightly over 8 cm, three were from Amate phase levels.

Plain Discs (201; Fig. 16.17a–c): These artifacts are circular to slightly oval in shape. Smaller specimens often have the edges well ground. The quality of edge grinding generally decreases as disc diameter increases.

Partially Perforated Discs (21; Fig. 16.17d–f): These are like plain discs except that on one side (normally the sherd's original interior side) there is a drilled hole at the disc's center. Holes vary from quite small and shallow (ca. 3 mm depth) to wide holes (ca. 10 mm diameter) which nearly penetrate the thickness of the disc. Most drilled perforations are conical, but several are more spherical and may have been reamed out.

Perforated Discs (26; Fig. 16.17g–i): These are identical to the partially perforated discs except that all have the center hole drilled completely through the disc. In the majority of our sample a conical hole was drilled through to the other side, and the disc was then turned over and the hole enlarged. The result is an asymmetrical hourglass-shaped perforation. There are a few instances when the perforation was drilled from both sides, with the intention for the holes to meet. In some of these latter cases the holes did not meet exactly, resulting in a lop-sided perforation.

Perforations vary in diameter (at their narrowest point) from 3 to 10 mm. Perforation diameter does not relate to disc diameter. Some of the largest discs have both the largest and smallest holes.

Comments: Many investigators have speculated upon the use of ground sherd discs, but their actual function remains unclear. Although discs may have served a variety of functions, no single hypothesized use accounts for the three different types.

It is possible that some of the perforated discs functioned as spindle whorls, although we have no firm data on textiles or cotton from the Formative period in Morelos. Perforated discs comprise only a little over 10 percent of the total sample, and it should be noted that many perforated discs have holes too small to accommodate spindles and that many of the perforated holes are off-center. Partially perforated discs could also have served a function related to the spinning of fiber, for they could have been held in the palm of the hand to act as a bearing or resting place for the base of the spindle. Gourd pieces often serve

that function today in areas of Mesoamerica where cotton is still spun on hand spindles. Such a "bearing" function might explain the "reamed" appearance of some of the partially perforated holes. Although I believe that evidence for a spinning function is very tenuous for perforated and partially perforated sherds, they both occur in approximately the same low percentages on the site. They co-occur in the same excavation units about 50 percent of the time, which statistically suggests that the co-occurrence could be random.

Unperforated ground discs have often been called "gaming pieces," the implication being that they were used in a prehispanic game such as *patolli*. Apparently stacks of ceramic *patolli* markers were found at Teotihuacan, and according to Robert Santley (personal communication), they exhibit the same size range as the Late Formative sherd discs which he recovered at Loma Torremote. If sherd discs did function as gaming pieces at Chalcatzingo, and if differentiation between discs was an important aspect of the game, then disc size, surface color, or even chip-notched edges may have served as differentiating attributes. However, our analysis of eighty-eight discs from our sample indicates that diameter, surface color, and edge chipping are not correlated with each other but appear to be random in occurrence.

Santley (personal communication) has also suggested that some discs may have served as scrapers or polishers for pottery manufacturing. Our studies show that edge grinding is uniform around the circumference of the disc, suggesting that our specimens were not used for scraping. Similarly, they lack surface wear which is indicative of use as polishers.

Finally there is the remote possibility that discs were used for record-keeping and differentiated into three types for use perhaps as tally or counting markers, each disc having a specific numerical value. This might account for the stacks of discs ("*patolli* markers") found at Teotihuacan. If Chalcatzingo's houses served storage functions (Chapter 6), the use of discs as record-keeping devices might explain their abundance in some house contexts. However, there currently is no good evidence for this hypothesis.

One Middle Postclassic disc from the Tetla area of the site has two small bi-conical suspension holes on the edges of the disc, indicating that it was worn or more probably sewn onto a garment. The

design was also carefully incorporated into the sherd. This is the only example with small suspension holes near the circumference of the disc.

The distribution of sherd discs at Chalcatzingo appears to correlate strongly to house areas (see Table 16.4). Within the T-23 Cantera phase house remains, plain sherd discs and hollow clay spheres (see above) cluster in one area of the house. Of the twenty-five discs recovered from the T-25 altar area, twenty-four are plain.

Our present data do not provide information on finer temporal distinctions among the types. The discs begin with the Early Formative Amate phase and continue through the Cantera phase. Few were recovered from clear Late Formative or Classic contexts, and thus information on discs from those periods is tenuous. Seven Middle Postclassic discs from Tetla, ground from Middle Postclassic sherds, indicate their continued importance in that period.

Finer chronological distinctions may be possible in the future based on an observation made by Sheets (1978: Fig. 20) on discs from Chalchuapa, El Salvador. There, perforated discs begin in the Early Formative and continue into the Postclassic. Partially perforated discs also begin during the Early Formative but end sometime in the Late Formative. Plain discs do not begin until well into the Middle Formative but continue into the Postclassic. At Chalcatzingo, plain discs appear as early as the other two types.

Lee (1969: 97–103) and Sheets (1978: 66–68) have provided detailed distribution studies of ground sherd discs in Mesoamerica. Here I will only make some comparisons to the Formative Valley of Mexico and the Gulf Coast. Philip Drucker illustrates and discusses sherd discs from La Venta (1952: 143–144, Pl. 42, right, a–d, g, j, k). Notched examples (unlike the chip-notching from Chalcatzingo) he classifies as "weights" (ibid.: 144, Pl. 45). Tres Zapotes sherd discs are also shown by Drucker (1943a: 130–131, Pl. 30l–m; 32t–u). At San Lorenzo discs begin in the Ojochi phase and continue into the Villa Alta phase (Coe and Diehl 1980: 283). Central Mexican discs are found at El Arbolillo (Vaillant 1935: 237), where plain discs appear less frequent in the earliest deposits; Zacatenco (Vaillant 1930: 155, Pl. 38, middle row, nos. 3–7; bottom row, nos. 1–5); and Ticoman (Vaillant 1931: 396, Pl. 81, fourth row, nos. 1–2, 4–6; bottom row, nos. 1–3, 8–9).

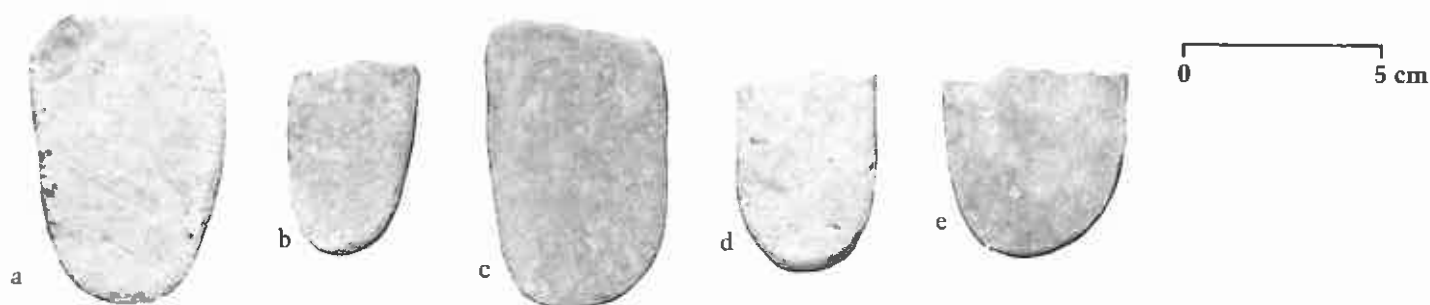


Figure 16.18. Oval ground sherds.

Oval Ground Sherds (29; Fig. 16.18)

These artifacts are generally rectangular sherd pieces with rounded ends. They range from 2.8 to 5 cm in width and up to 7 cm long. Most of our specimens are broken, and thus actual length is difficult to establish. They occur from Early Barranca through the Late Cantera subphase.

Lee (1969:97) suggests that ground sherds of this shape functioned as scrapers in pottery manufacturing. This function was independently suggested to us by the distribution of these sherds at Chalcatzingo (see Table 16.4). Over 60 percent of the Chalcatzingo examples (seventeen sherds) come from one small site area, S-39. This area is enigmatic, with a large lime deposit and other unusual artifacts, such as ceramic bars. Although no kilns were located, S-39 may have been a ceramic workshop. However, even if these sherds functioned as ceramic manufacturing tools, their presence in Cave 4 and other site areas in minor numbers suggests that they could have had other functions as well.

Lee's Chiapa de Corzo examples (1969: Fig. 52a-e) are similar to those from Chalcatzingo. The one sherd illustrated from Chalchuapa and noted by Sheets as similar to the Chiapa de Corzo sample (Sheets 1978:66-67, Fig. 10c4) appears in the photograph to be closer to our rectilinear category, but his Figure 10c3, an "unperforated potsherd disc," looks similar to our sherd ovals. Two Ocos phase sherds from La Victoria (Coe 1961: Fig. 51a, d) also appear similar.

Ground Sherd Rectilinear Shapes (15; Fig. 16.19)

Other ground sherds from our sample occur as rectangles (twelve), trapezoids (two), and one triangle. In most cases the

sides of these are slightly curved rather than absolutely straight. The largest rectangular sherd is almost 9 × 8 cm, and the smallest 5 × 3.5 cm. All other examples regardless of shape fall within that range.

Ground rectilinear sherds are not commonly mentioned in the literature but do appear to occur in minor numbers at sites over a large area. Lee illustrates one from Chiapa de Corzo (1969: Fig. 52, no. 1), and five from Chalchuapa are discussed by Sheets (1978:66-67, Fig. 10c4). Two Conchas phase rectangles from La Victoria are illustrated by Coe (1961: Fig. 59h), and two trapezoids from the Jocotal phase at Salinas La Blanca are shown by Coe and Flannery (1967: Pl. 21m, o, n?). A notched rectangular sherd, possibly a net weight, is illustrated from San Lorenzo (Coe and Diehl 1980: Fig. 398h). Vaillant illustrates a rectangle and trapezoid from Ticoman (1931:396, Pl. 81, bottom row, nos. 4-5) and an unusual example from Gualupita (Vaillant and Vaillant 1934: 100, Fig. 30, no. 9).

Most of the Chalcatzingo specimens occur in Barranca and Cantera phase contexts.

Cut and Shaped Sherds (3; Fig. 16.20)

Three sherds were unusually cut and shaped, and they are described individually as follows:

a. This is a sherd shaped and ground to a rounded, awl-like point (Fig. 16.20a). The point is smoothed and evenly rounded, suggesting it was used in a rotary motion. The broken length is 4.3 cm, and the width is 2 cm. This specimen dates to the Cantera phase.

b. Trapezoidal shaped, this sherd has notches on the sides near the small end (Fig. 16.20b). No wear marks were present aside from those of shaping this

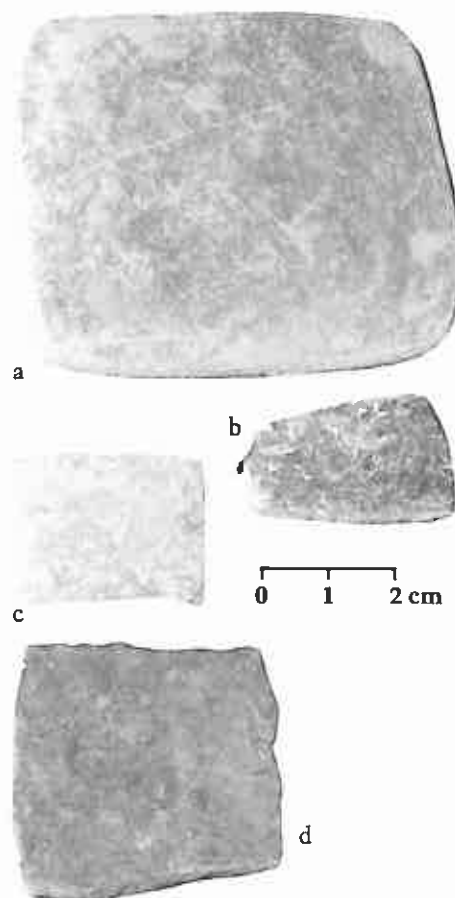


Figure 16.19. Rectangular ground sherds.

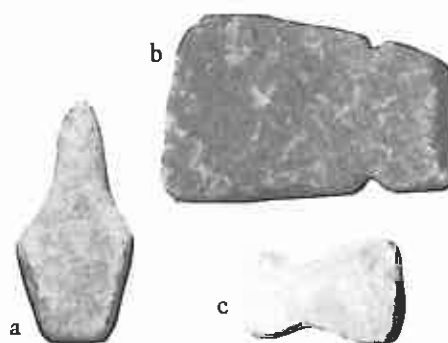


Figure 16.20. Cut and shaped sherds. (Scale varies; see text for dimensions.)

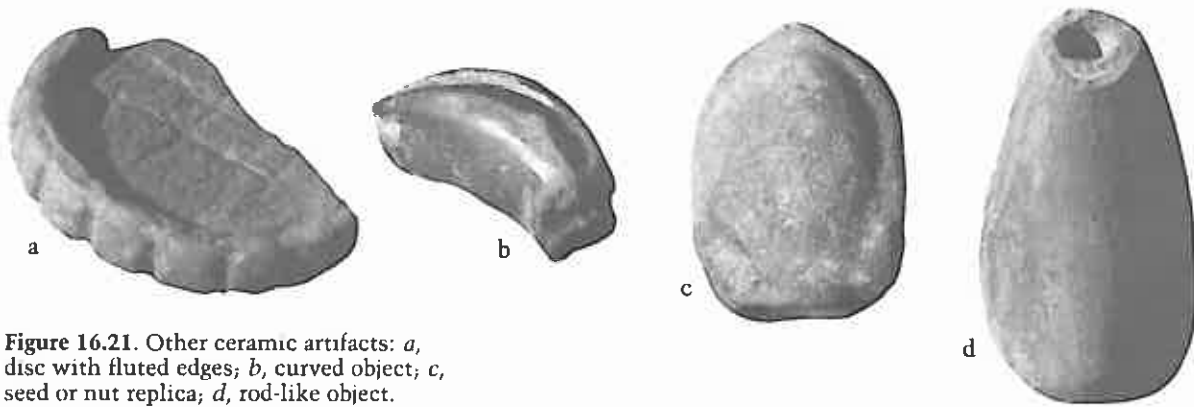


Figure 16.21. Other ceramic artifacts: *a*, disc with fluted edges; *b*, curved object; *c*, seed or nut replica; *d*, rod-like object. (Scale varies; see text for dimensions.)

object. Its length is 4.5 cm; maximum width is 3 cm. It has a plow zone context but was in an area of purely Cantera phase deposits.

c. This is a small bottle-shaped sherd (Fig. 16.20*c*). It is 2.8 cm long and 1.7 cm maximum width. Its context suggests a Late Cantera subphase date.

Other Ceramic Artifacts (6; Fig. 16.21)

a. Ceramic disc with raised fluted edges (Fig. 16.21*a*). The diameter is 3.7 cm and thickness at the edge is 5.5 mm. It probably dates from the Cantera phase.

b. A fragment of a black, curved object, oval in cross section (Fig. 16.21*b*). It has one suspension hole. The broken length is 2.7 cm, the maximum width is 1.2 cm, and the thickness is 10.5 mm. The outer edge has a 4 mm deep, V-shaped groove in which hematite stains occur. It dates to the Cantera phase.

c. A seed or nut replica (Fig. 16.21*c*). This unusually shaped object may replicate a fruit, seed, or nut. Its surface is smoothed but not polished. The color is brown. Its length is 6 cm, the width 4.5 cm, and it is 2.8 cm in maximum thickness. The bottom is slightly concave. It dates to the Late Barranca subphase.

d. A rod-like object (Fig. 16.21*d*), 6.5 cm long and 3.6 cm in diameter at the base, tapering upward to 1.6 cm. The small end has a hole in the center which is 8 mm in diameter and about 7 mm deep. It was found in Cave 4.

e. A circular clay ball, 45 mm in diameter (not illustrated). The ball has a cylindrical hole 15 mm in diameter and ca. 25 mm deep on one side. It may be significant that this object is unfired. It dates to the Cantera phase.

f. A clay pipe (Fig. 24.19) 34 cm long with an outside diameter of 10 cm. Clay pipes have been found at Tula (Healan

1974:22; Richard A. Diehl, personal communication) and at Tehuacan (MacNeish, Peterson, and Flannery 1970:Fig. 109). This pipe was found adjacent to a looter's pit at Tetla. It is apparently Middle Postclassic in date, as are the drain pipes at Tula and the one at Tehuacan.

MISCELLANEOUS ARTIFACTS

Iron Ore Artifacts

The thirteen iron ore mirrors and artifacts are almost all fragmentary. Seven of them were subjected to source analysis tests, the results of which are presented in Chapter 23. Although the total sample is small, the artifacts fall into tentative categories based primarily on shape: concave mirrors, mosaic segments, rectangle and disc mirrors, and miscellaneous. This last category is composed mainly of irregularly shaped fragments with one polished side, possibly from broken mirrors. All the mirrors date to the Cantera phase unless noted otherwise in the descriptions below.

Concave Mirror (1)

Burial 40, presumed to be one of the highest-ranking burials excavated (Chapter 8), was found with a concave mirror lying on the mandible (Fig. 8.4*f*). Two conical suspension holes in the mirror and its position on the skeleton suggest it had been worn as a pendant at the time of interment and had fallen onto the jaw area when the person was placed in the grave.

The mirror (M-1; Fig. 16.22*a*) was manufactured from high-purity magnetite. It is slightly trapezoidal in form, with tapered side and basal edges. The longest side (top) is 4.5 cm, the maximum width 3.3 cm. The thickness varies from 3.5 to 5 mm. Only one side of the

mirror is polished. The concavity ground into the polished face is elliptical, 2.1 cm long and 1.6 cm wide, with a depth of about 1 mm. The axis of the ellipse is at an angle rather than perpendicular to any of the mirror's sides, a common trait in such mirrors (Carlson 1981).

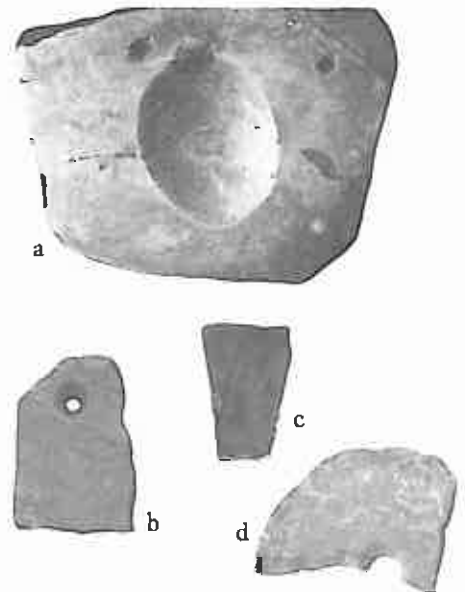


Figure 16.22. Iron ore mirrors: *a*, concave mirror (M-1) found with Burial 40; *b*, pendant (M-4); *c*, mosaic wedge (M-6); *d*, perforated disc (M-10). (Scale varies; see text for dimensions.)

Mosaic Segment (1)

A second polished mirror piece was found near the eye sockets of the skull of Burial 40. The mirror (M-2) is wedge-shaped and while nearly complete, the slight curvature of the top and bottom indicate it may have been part of a circular mosaic disc or ring. If this surmise is correct, and assuming the other pieces of the mosaic were of the same approximate form and size, the disc or ring would have been composed of ten segments, with an estimated outside diameter of 4.7 cm and inside diameter of 2.5 cm. Obviously the entire mosaic was not included in the burial. An alternative suggestion by the excavator (William Fash, personal communication) is that this mirror segment was part of a perishable object which included over ninety tiny turquoise mosaic squares (see Chapters 8, 17, Appendix F) also found around the skull.

The mirror segment is of ilmenite, with a thickness of 1.7–2.0 mm, sides 11.5 mm in length, and a taper from 12 mm at the top to 6.5 mm at the base.

Rectangles (3)

Three small, thin, and essentially rectangular mirrors comprise this category. Two are whole and one is a fragment. All are characterized by having one polished side and beveled edges.

a. Measuring 19 × 12 mm, with a thickness of 1.2–1.5 mm, this rectangle (M-4; Fig. 16.22*b*) has a conical suspension hole drilled from the back (unpolished side). The polished face is also the beveled face. The provenience is PC Structure 1*d*. The ore type is unidentified.

b. This trapezoidal specimen (M-6; Fig. 16.22*c*) lacks a suspension hole, and, unlike specimen *a*, has the polished face on the unbeveled side. The piece is 10 mm wide at one end and 5.5 mm at the other. The sides are 14 mm long, and the thickness is 1.8–2.0 mm. The material from which this was manufactured has not been identified. The piece was found in the plow zone level of PC Structure 6 excavations.

c. This specimen is a broken fragment (M-13) of unidentified iron ore. It is ca. 15 mm in length, with the edge beveled to the unpolished side. The broken width is ca. 9 mm, and these edges bevel to the polished face. The provenience is Cave 1.

Discs (3)

All one-piece circular mirrors have been placed within the category of discs. Only one unbroken disc occurs in our sample.

a. This specimen, associated with Bar-

ranca phase Burial 150, is a fragment of a perforated iron ore disc (M-10; Fig. 16.22*d*). The original diameter was ca. 26 mm, and the thickness ca. 4 mm. The conical perforation in the center of the disc, drilled from one side only, left a hole of ca. 3.5 mm diameter. The disc, manufactured from an unidentified iron ore, has a slightly rough surface and roughly rounded edges. It is unpolished.

b. Both sides of this broken magnetite disc (M-8) are polished. The specimen's diameter is 18 mm, and it is 2 mm thick. The edges are rounded. Found during the excavation of T-27 Structure 1, this artifact probably dates to the Cantera phase.

c. The ore from which this complete 13 mm disc (M-11) was manufactured has not been identified. The disc's thickness is ca. 2 mm. It is polished only on one side. It was found in the mixed uppermost 12 cm of Cave 1, a cave with both Middle Postclassic and Cantera phase deposits. Dating of this artifact is therefore uncertain.

Miscellaneous (5)

Three small irregular iron ore fragments, each with one polished surface, one irregular fragment with two polished surfaces, and a wafer-thin fragment with a rounded corner and one polished surface make up the specimens of this catch-all category. The irregular fragments include both hematite and magnetite specimens, and come from PC Structure 2 (M-5), PC Structure 6 (M-3), the surface of S-39 (M-9), and near Late Formative Burial 123 on T-27 (M-7). The wafer-thin specimen (M-12) comes from Cave 1, and its age is uncertain.

Shell Artifacts

Thirteen worked and six unworked shell fragments were recovered by our excavations. Importantly, twelve of these come from excavations of Caves 1 and 8. This may reflect better preservation within the caves, but may as likely be due to specific manufacturing or use loci. Only the shell earpool inset (artifact *a*) comes from a context which is currently clearly datable to the Middle Formative (Cantera phase). The shell fragments from the caves are from stratigraphic contexts which are still under analysis, and while probably Middle Postclassic, their exact dating is uncertain at this moment. Only the thirteen worked fragments are discussed here.

a. This piece of worked shell is a square, 1.5 cm on a side, with cruciform extensions and a diamond-shaped cut-

out in the center (Fig. 16.23*a*). It apparently functioned as an inset to one of the earpools associated with Burial 40, one of the highest-ranked Cantera phase burials uncovered at Chalcatzingo (Chapter 8). No matching inset was found with the burial's second earpool.

b. Excavations on the Barranca phase water-control construction at the northeast corner of T-15 (Str. 1) recovered one piece of a partially worked bivalve (genus unidentified) ca. 3 cm long and 1.8 cm wide. Its worked areas suggest it may be a section of a simple shell pendant (Fig. 16.23*b*). The shell's hinge has been drilled, as if for suspension. Because the drilling occurs on the interior of the hinge area, it is without question human-made and not the work of a predator gastropod. Further working on the shell includes a cut groove at the base of the hinge and the removal by cutting of an area of the right side of the valve. The context of this piece is mixed Barranca and Amate phase fill dirt.

c. This piece (Fig. 16.23*c*), 10 mm in length and 6 mm in width, may also be a pendant fragment. It is notched along one side, while the opposite side (broken) has the partial remains of a drilled hole. The provenience of this artifact is Cave 1.

d. It is unfortunate that this piece is fragmentary because it is the only one of our sample with an engraved design (Fig. 16.23*d*). The fragment is ca. 14 × 13 mm in size and has two drilled holes. One hole is partially outlined by an engraved arc, and is positioned in such a way as to suggest that it was a suspension hole. The engraved design cannot be determined. This artifact is from Cave 1.

e. This long triangular-like pendant, 25 × 11 mm, has the suspension hole drilled somewhat off center (Fig. 16.23*e*). It was found in the Cave 8 excavations.

f. Also found in Cave 8, this small rectangular artifact, 12 × 14 mm, has tiny "suspension" holes at two corners, and a crude central hole which may have broken the piece during drilling (Fig. 16.23*f*).

g. This worked Cave 1 shell is a small gastropod, 11 mm in length. It has been ground flat on each side to expose the shell's interior column.

h. This 10 × 6 mm fragment has one drilled hole. It was recovered during Cave 8 excavations.

i. These are five triangular shell pieces recovered from cremation Burial 161 at Tetla. Each triangular section is about 3 cm in length and has a transverse sus-

pension hole drilled at the apex, indicating that these are neckline pieces.

Bone Artifacts

A variety of worked bone fragments were recovered, the majority of them awls. Other distinguishable categories are needles, bird bone tubes, and cut sections. Their proveniences are given in Table 16.5. Several notched bone fragments (listed as one item in Table 16.5; Fig. 16.24a) are reminiscent of musical instruments, although this function is hypothetical. Among the cut or "sawed" bone pieces of unknown function is one from T-20, which is a long bone with the end cut and the edges rounded (Fig. 16.24b). An awl fragment from T-27 exhibits several long straight cuts, almost as if they were thread cuts.

Sinew

During the excavation of Burial 40, a piece of sinew thread was recovered from beneath the skull. This thread, over 40 cm in length, is knotted near the center with a double loop knot. The jadeite beads found around the skull had probably been strung on this sinew thread. Whether this strand of beads was intentionally broken at the time of the interment or broke later is a matter for speculation. The orderly arrangement of most of the beads suggests the latter event.

Obsidian Bloodletters

Chapters 18 and 19 discuss Chalcatzingo's lithics in general terms rather than separating out certain specific artifacts. One small group of artifacts warrants special mention, thin, finely worked obsidian objects which most probably served for ritual drawing of blood. The majority of the objects are needle-like and retouched around their entire circumference, giving them a round or oval cross-section (Fig. 16.25a-e). Several specimens however are manufactured from blades and include the needle-like section, which then expands to a section of blade. On at least two examples the blade edge has been intentionally serrated (e.g., Fig. 16.25h); in others it has been reshaped by retouching (Fig. 16.25f-g). If these latter bloodletters were pulled entirely through the tongue or earlobe, they would have lacerated the area, an act similar to types of Maya bloodletting in which a cord with attached spines was pulled through the tongue. Obsidian bloodletters are found across the site and do not appear to have

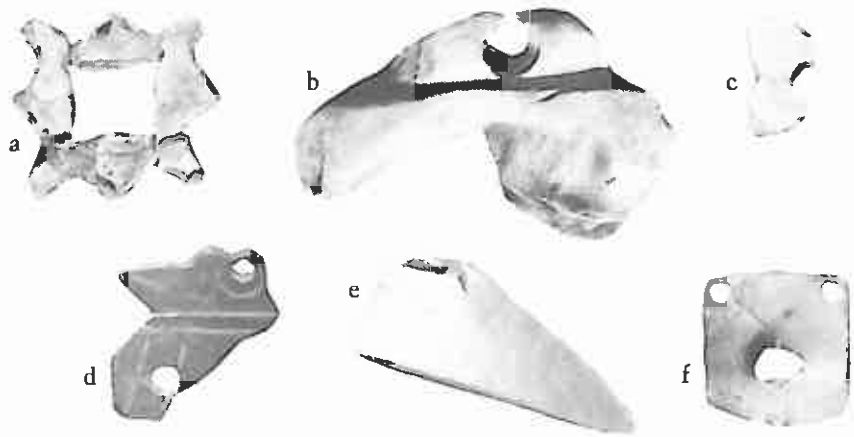


Figure 16.23. Worked shell artifacts. (Scale varies; see text for dimensions.)



Figure 16.24. Notched (a) and cut (b) bone artifacts.

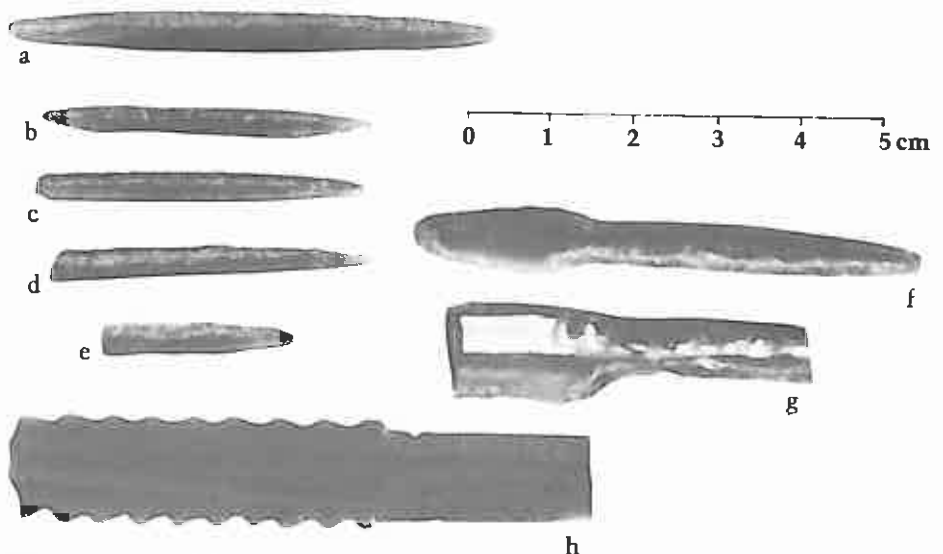


Figure 16.25. Obsidian bloodletters: a-e, needles; f-h, reworked blades (in h the blade area is serrated).

any special restricted distribution. The only other instance of the needle-serrated blade type bloodletter (Fig. 16.25*h*) of which I am aware is from San José Mogote, Oaxaca [Kent Flannery, personal communication].

ARTIFACTS FROM CAVE 2

Cave 2, on the eastern side of the Cerro Delgado (Fig. 12.37), had already been disturbed by looters at the time our project visited it in 1973. However, the looters' backdirt was screened, and a small remaining section of unlooted cave floor deposits was excavated and screened as well.

A large quantity of plant remains was recovered from both contexts as were a number of wooden artifacts, fiber, threads, etc. The plant macro-fossils are discussed in Chapter 3 and listed in Appendix A. The other major artifacts are described below. These are all presumed to date to the Middle Postclassic (through associated ceramics), although since the looters destroyed any significant stratigraphic data some might be more recent.

a. Wooden lath strip, 13.7 cm long, 2.7 cm wide, 0.5 cm thick, well smoothed and worked. This rectangular strip (Fig. 16.26*a*) and its counterpart (artifact *b*) have slightly beveled ends, and may be shuttles or other pieces of a back-strap loom.

b. Wooden lath strip, 11.8 cm long (broken), 2.7 cm wide, 0.3 cm thick, well smoothed and worked (Fig. 16.26*b*). This is presumed to be part of the loom described above.

c. Wooden tool tip, 4 cm long, 1.5 cm wide, and 1 cm thick. This piece (Fig. 16.26*e*) has a triangular shape and cross-section. The sides appear to have a light coating of some sort of pitch or resin, while the tip is polished.

d. Wooden tool, 19 cm long, 1.2 cm wide, with a triangular cross section (Fig. 16.26*c*). The rounded tip and edges are polished.

e. Wooden tool fragment, 18.5 cm long, 1.2 cm wide (Fig. 16.26*d*). This rectangular piece has a tapered, wedge-shaped tip. The tip and upper side are polished from wear.

f. Wooden lath piece, 16.5 cm long, 0.8 cm wide, 0.2 cm thick, with cut ends (not illustrated). This piece lacks the finishing of artifacts *a* and *b* above.

g. Wood chip, shaped, both ends burnt (Fig. 16.26*f*). Dimensions are 3.0 × 1.5 × 0.4 cm.

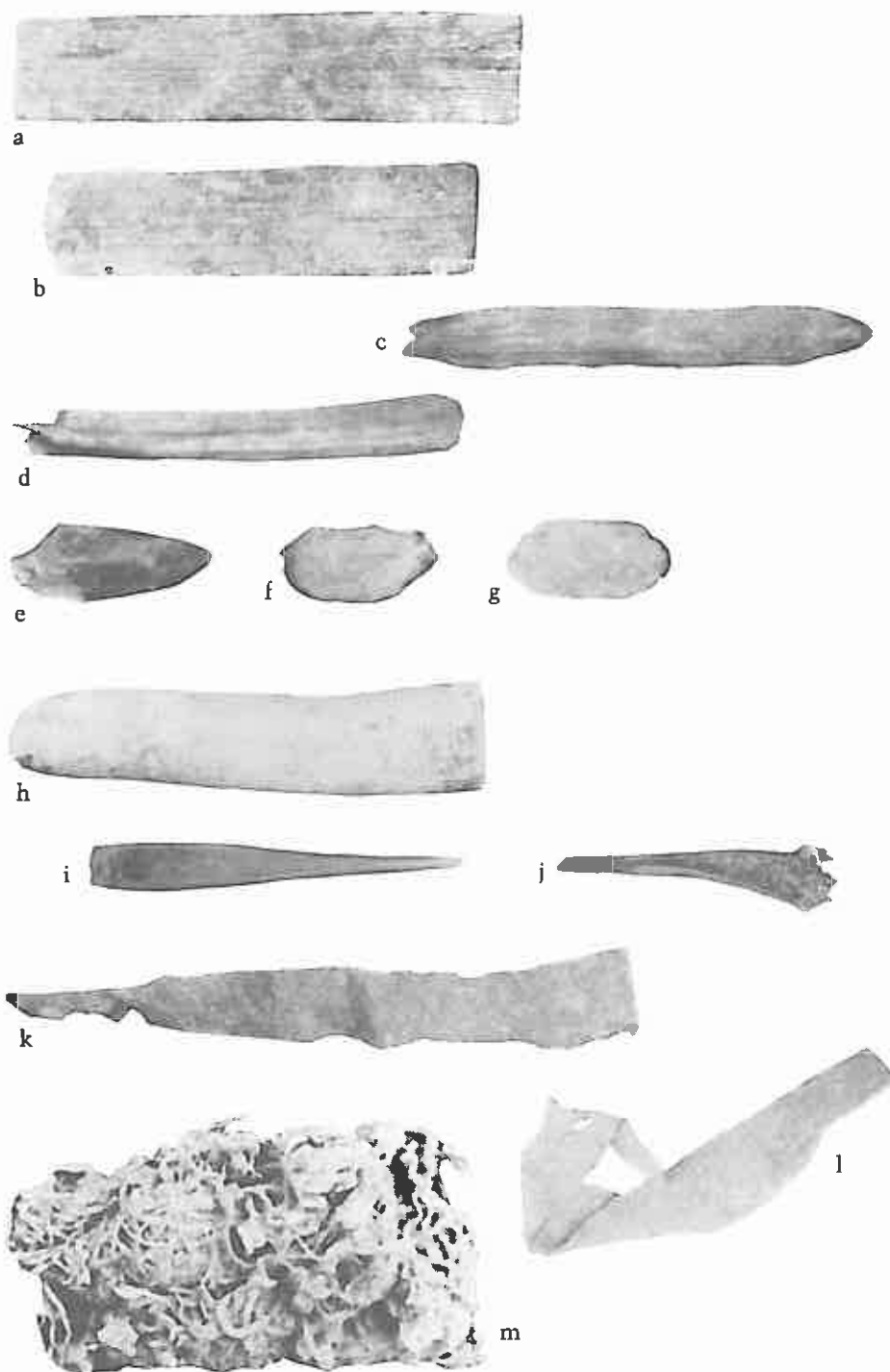


Figure 16.26. Artifacts recovered from Cave 2: *a–g*, wood; *h–i*, bone; *j*, maguey spine; *k–l*, leather; *m*, cotton. (Scale varies; see text for dimensions.)

h. Wood chip, shaped, burnt, $2.1 \times 1.5 \times 0.9$ cm (not illustrated).

i. Wood chip, shaped, $3.3 \times 1.5 \times 0.3$ cm (Fig. 16.26g).

j. Wooden spindle, 20 cm long, with a maximum diameter of 0.6 cm (Fig. 16.27a). This piece is tapered and worn at one end, suggesting that a clay spindle whorl had been wedged onto that section. The pointed tip is worn and rounded, also indicating that this piece was a spindle.

k. Polished bone section, 8.7 cm long, 2.0 cm wide (Fig. 16.26h). One end is rounded and the other is cut flat. The piece is well polished, and numerous cuts occur near the blunt end.

l. Bone awl, 17.2 cm long, with the tip highly polished (Fig. 16.26i).

m. Two leather strips, ca. 12 cm long, 1.5 cm wide, each with a short longitudinal slit near one end (Fig. 16.26k–l).

n. Wadded textile fragment, cotton, 5×4 cm. It has a double-warp, twined weave (Fig. 16.26m).

o. Twisted ixtli fiber cord and twisting stick (Fig. 16.27b), three twisted strands. This was apparently the end of a longer cord, with this section cut off after the cord was twisted and finished.

p. Two corn leaves, knotted (Fig. 16.27c–d).

q. Cotton thread wound onto a stick (not illustrated).

r. Ixtli fiber net fragments (?) (2) (Fig. 16.27e).

s. Maguey spine with attached but cut fibers (Fig. 16.26j).

t. Small hemispherical cut gourd section (broken), 7 cm in diameter (Fig. 16.27f). It was probably used as a small bowl.

In addition to the artifacts listed above, there were a number of pieces of twisted ixtli fiber cord and cotton thread. This assemblage, with few exceptions, is unquestionably part of a spinning–weaving–cord-manufacturing tool kit. Even the small gourd bowl may have been used to hold cotton (?) fiber as it was being spun.

The cotton recovered was studied by Juan DuBernard, a textile manufacturer with an extensive interest and knowledge of prehispanic textiles and fibers. The analysis indicated that this short-fibered cotton, similar to Egyptian cotton, was a “wild” cotton that had once been domesticated (DuBernard, personal communication). This identification suggests at least two possible explanations. If this is Middle Postclassic cotton, it may have been collected from

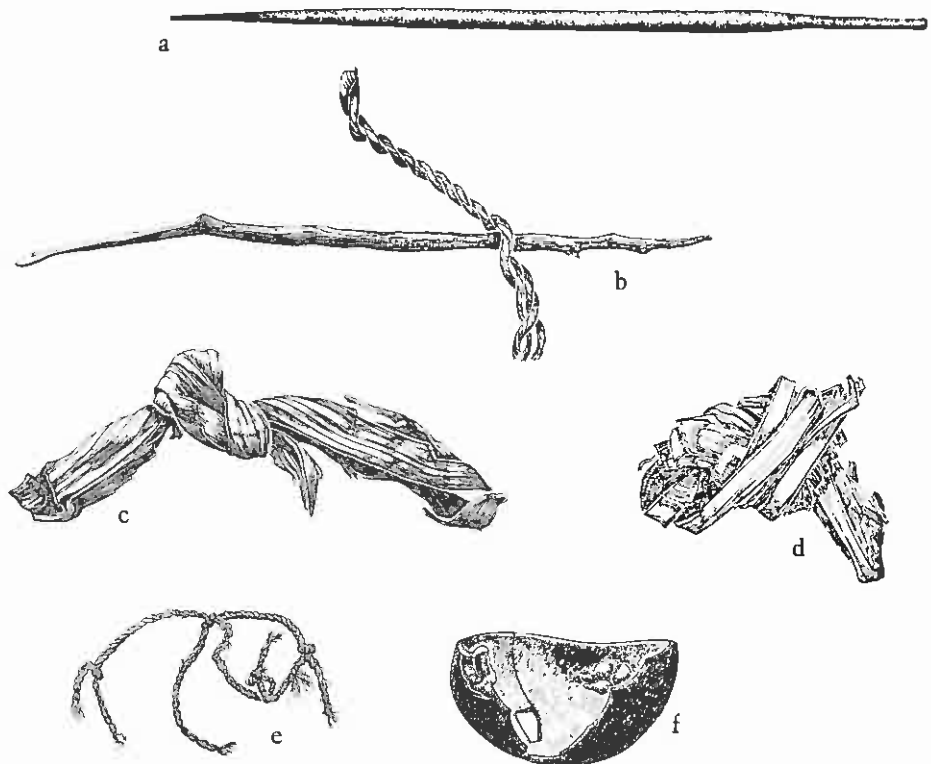


Figure 16.27. Artifacts recovered from Cave 2: a, spindle; b, twisted ixtli fiber and stick; c–d, knotted corn leaves; e, ixtli fiber net fragment; f, cut gourd. [Scale varies; see text for dimensions.]

Table 16.5. Distribution of Worked Bone Artifacts

Area	Cut Sections	Awls	Needles	Bird Bone Tubes	Other
PC Str. 1					Notched fragments
PC Str. 2	1				
PC Str. 6			1	1	Engraved fragment
PC other	1				
T-11					Bone “spindle”
T-15W	1				
T-20	1 (femur, end cut and rounded)				Notched human tooth
T-21	1		1		
T-23		1			
T-27 Level 1	2	1 (with cuts)			
T-25		2			Animal incisor pendant
T-37		1	1		Reworked femur head
N-2		1			
Tetla Exc. 1-A		1			
Tetla-11		7		1	
Cave 1		3	1	1	
Cave 2		1			
Cave 4		1			
Totals	7	19	4	3	6

relict "wild" plants in the area, remnants of domesticated cotton grown in the southern valley during the Classic period. Such an explanation would imply that access to domesticated cotton during the Middle Postclassic here was difficult. However, although the artifacts associated with the cotton in the disturbed deposit suggest that it is Middle Postclassic, it may instead be colonial and in fact an actual imported Egyptian cotton variety.

RESUMEN DEL CAPÍTULO 16

Además de los tepalcates y las figurillas, se recuperaron muchos otros objetos de cerámica en Chalcatzingo. Estos han sido clasificados en tres categorías: de adorno personal, rituales, y utilitarios. Los objetos de adorno personal son cuentas de barro, orejeras, pendientes, y sellos. Las cuentas y los pendientes son bastante raros, en tanto que las orejeras sólidas o huecas son más comunes. Tanto los sellos huecos como sólidos, de rollo, así como los planos, aparecen en el muestrario.

Los artefactos de la categoría ritual consisten en pitos y ocarinas, flautas, máscaras, vasijas en miniatura, figurillas de animales, y barras de cerámica. El muestrario de pitos y ocarinas es grande y éstos ocurren en variedad de formas. Las "flautas" encontradas en Chalcatzingo bien pudieron haber sido parte de los pitos. Las vasijas en miniatura incluyen los tazones de boca ancha, ollas de cuello restringido, platos, y los incensarios de doble asa. Los fragmentos de "máscaras" con perforaciones para suspensión, se encontraban en los contextos de la fase Cantera, y del mismo modo que otros artefactos, que caen en la categoría ritual, no parecen ocurrir de modo restringido al sitio. Las barras de cerámica, por otra parte, se encontraron fundamentalmente en S-39, un área posible de manufactura de cerámica, y bien pudieron haber sido artefactos utilitarios asociados a la manufactura de vasijas, pero deben haber sido incluidos como objetos rituales dado que la mayoría aparecen con decoraciones y parecen no haber sufrido desgaste. Las figurillas zoomórficas ocurren con una gran variedad en su representación de animales, la cual incluye pájaros, reptiles, mamíferos, y peces. Algunas bien pueden ser partes desprendidas de los pitos zoomórficos.

Los artefactos utilitarios fácilmente identificables son las malacates y los moldes de cerámica. Además se incluyen en esta categoría los "plátanos" de cerámica porque presentan patrones de desgaste interesantes. Los plátanos aparecen solamente en los contextos de la fase Cantera, y es probable que sirvieran para pulir o refinar. Las malacates y los moldes presentan fechamientos del Clásico y Postclásico.

También hay artefactos de cerámica enigmáticos porque no caen en ninguna de las tres categorías dadas arriba.

Éstos incluyen bolas sólidas, más de 400 esferas huecas, y más de 250 discos y óvalos de tepalcate molido, algunos de los cuales presentan perforación completa o parcial. No se ha podido determinar cuáles son las funciones de estos artefactos.

Además, hay artefactos entre los cuales se incluyen aquellos hechos de mineral de hierro, concha, hueso, y tendón. Se encontraron varios espejos de mineral de hierro y segmentos de mosaico, así como fragmentos de forma irregular. La mayoría se fecha en la fase Cantera. Los pocos artefactos de concha consiguen fundamentalmente fechamiento en el Postclásico Medio, y provienen de las excavaciones de las Cuevas 1 y 8. La mayoría de los artefactos de hueso son leznas, y ocurren en los contextos Formativo y Postclásico. Una pieza de tendón, el cordón para un collar para cuentas de jade, se recuperó del Entierro 40 de la fase Cantera.

Finalmente, se encontraron bien conservados en la Cueva 2 un número de artefactos de madera, hueso, y fibra, debido a que es ésta una cueva seca ubicada en la parte oriente del Cerro Delgado. Estas herramientas y las fibras de agave y algodón son parte de un juego de herramientas para la manufactura del hilado y tejido de cordel.