

PRE-COLUMBIAN POTTERY MUSHROOMS FROM MESOAMERICA

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ABSTRACT

Until recently, pre-Columbian mushroom-shaped pottery objects were known only from El Salvador. New evidence indicates that they were also used in Chiapas, Tabasco, and Veracruz, in Mexico, in the Lowland Maya Rain Forest area, and possibly on the Pacific coast of Guatemala. They seem to be diagnostics of the latter part of the Late Pre-Classic and Proto-Classic periods. Due to their resemblance, when turned upside down, to round-bottomed, tall-necked jars, an undetermined number of specimens may have been classified by archaeologists and illustrated in the literature as jars. Their function is still unknown, but it is believed that, like the mushroom stones, they were used in connection with the ceremonial consumption and adoration of hallucinogenic mushrooms.

WHILE mushroom-shaped stone objects have been illustrated and reported from archaeological sites and collections in Mexico, Guatemala, and El Salvador ever since the latter part of the 19th century (Brigham 1887, Sapper 1898, and Brinton 1898), it was not until the 1930's that Lothrop (1933, Fig. 11 b, c) and later on, Longyear (1944, Pl. IX, No. 26), called attention to similar mushroom-shaped objects made of clay. At this time it was assumed that while the plain and effigy mushroom stones had a fairly wide distribution, ranging from southern Mexico through Highland and Pacific coastal Guatemala to El Salvador, the use of plain, hollow pottery mushrooms in pre-Columbian times was restricted to eastern El Salvador (Kidder, Jennings, and Shook 1946: 142). This was still held to be true when the author began his study of the chronology and distribution of these enigmatic stone and pottery objects (De Borhegyi 1957). At this time, pottery mushrooms were designated as Type E objects (De Borhegyi 1957, Nos. 46 to 48 in the chart). Mushroom stones were classified into four types, A to D in chronological order. Type A mushroom stones, the earliest, dated to Early or Mid Pre-Classic times (1000 B.C. to 300 B.C.), Types B and C overlapped the Mid and Late Pre-Classic, and the Type D or tripod mushroom stones were assigned to the Late Classic (A.D. 600-900) period. All pottery (Type E) mushrooms were thought to be of Late Classic origin.

In 1959 Lowe described and illustrated a pottery "mushroom stand" and two Type C plain mushroom stones from Chiapas (Lowe 1959:

49, 55, 75, 76, Figs. 29 f, 50 a, 60 c-d). However, he (Lowe 1959: 75-6) cautiously ascribed the presence of this plain pottery mushroom (found at the archaeological site of Guanacaste, near the Grijalva River, in the Central Depression of Chiapas) to Late Classic influences emanating from El Salvador (Fig. 1).

Meanwhile, the author noted six previously unrecognized plain and effigy pottery mushrooms in several private and museum collections in Mexico and the United States. These specimens (four in the Villahermosa Museum in Tabasco, and two in the private collection of R. Gordon Wasson of New York) were reportedly found near the archaeological site of El Bellote a few miles north of the well-known Maya site of Comalcalco on the Gulf coast of Mexico (Stirling 1957: Map 15). The objects in question were similar to the pottery mushrooms reported by Lowe from Guanacaste, and by Lothrop and Longyear from El Salvador. Both plain and effigy forms, some of which were incised and punctate decorated, were made of a polished dull reddish-orange ware (Figs. 2, 3, and 4). They were all characterized by rounded bases, were hollow, and ranged in height from 20 to 25 cm. Were it not for the one specimen (Fig. 4), which had a modeled and incised figure of a bearded and moustached, conventionalized human face with two arms on the stem, the objects could have been easily mistaken for inverted tall-necked jars with rounded bottoms and extended outflaring rims. Each of these six pottery mushrooms bore textile and fingernail impressions or rough shell pecking (with the crinkled edges of pecten shells?) on the upper surface of the mushroom cap. As a matter of fact, the reason that pottery mushrooms have gone unrecognized in Mesoamerica outside of El Salvador is that a still undetermined number may have been published and illustrated upside down as tall-necked jars.

The discovery of pottery mushrooms from the El Bellote area led to a re-examination of the archaeological finds and publications from the Mexican Gulf coast region. Stirling, who worked intensively in this area, excavated in the vicinity of the El Bellote site. He illustrates, upside down (Stirling 1957: 238-9, Pls. 59 e, f, g, h, i, 65 a-3) five (Type E) plain pottery



FIG. 1. Plain hollow pottery mushroom from Guana-caste, Municipio La Concordia, Chiapas. Slipped dull reddish-orange ware. The mushroom cap shows extensive pecking and fingernail punching. Height: 23 cm.; top diameter: 16.5 cm. Late Pre-Classic or Proto-Classic (Lowe 1959: 49, 75-6; Figs. 29 f, 50 a, 60 c, d). Regional Museum, Tuxtla Gutierrez. New World Archaeological Foundation Collection (Milwaukee Public Museum Photo 2A59-8G).

mushrooms, and describes them as tall, thick-walled, sand-tempered pottery jars, with round "bottoms" expanded to bowl shape. The "bottoms" of these objects are roughened by textile imprints and pecked with what appears to be the crinkled edges of pecten shells. One complete specimen (Pl. 232, 65 a-3) was found in a sealed tomb at the site of Isla (near Paraiso and El Bellote; see Map 15, in Stirling 1957) in association with such typical Lowland Maya, Proto-Classic (A.D. 200-300) pottery vessels as round-bodied, bridged spouted "teapots." Four similar but fragmentary dull red ware pottery mushrooms (Pl. 59 e, f, h, i) were found in a shell mound at Ceiba, also near El Bellote, not far from the shores of the Atlantic. Here again the associated pottery forms (tetrapod vessels with tapering mammiform feet, polychrome spouted vessel, etc.) are indicative of Proto-Classic and

Early Classic date. Stirling, in a personal communication dated November, 1961, now believes that the "round-bottomed jars" he found at Isla and Ceiba are actually hollow pottery mushrooms. Moreover, he believes that the specimen illustrated here as Fig. 2 (at right), from the Villahermosa Museum, is the very same one he reported from the sealed tomb at Isla (Stirling 1957, Pl. 65a-3).

A further examination of the archaeological literature has revealed red-brown ware, tall-necked, round-bottomed "jars" found by Drucker (1943: Pls. 16 c, d, e; 21 c, d, and 22 a, d) in Burials I-18 and II-18, at Cerro de las Mesas in Veracruz, which, when turned upside down, may represent pottery mushrooms similar to those of El Bellote. Because I have had no opportunity to examine these specimens, I am reluctant, at least for the time being, to classify them as pottery mushrooms.

It may be important to note that an unusual Remojadas style pottery figurine in the Wasson collection in New York, which is said to be from Tenenexpan, Veracruz (H: 30.5 cm.), represents a young woman seated crosslegged before what appears to be a small hollow pottery mushroom. Her right hand rests on the mushroom cap, while her left hand is extended upward trance-like or as if praying to the sky. She wears a square *quexquemilt* on her shoulders, a turban-like headdress, and what seems to be a necklace of beads. Her exposed legs, hands, and lips are smeared with black asphalt (*chapotote*) in



FIG. 2. Three plain, hollow pottery mushrooms from El Bellote, Tabasco. Slipped, dull reddish-orange ware. The caps show textile impressions and shell pecking. Height of specimen at left: 25.4 cm. Proto-Classic. Specimen on right found at Isla, near El Bellote and illustrated by Stirling 1957: Pl. 65 a-3. Regional Museum, Villahermosa, Tabasco (Milwaukee Public Museum Photo 205129D).

keeping with the well-known Late Pre-Classic to Early Classic period Remojadas style (Fig. 5). To my knowledge no pottery mushrooms have been reported from the Remojadas archaeological zone. However, this interesting figurine gives us food for thought as to the pre-Columbian use of pottery mushrooms as objects of adoration by initiated "*curanderas*" (cf. Wasson and Wasson 1957: Pls. XLVII and XLVIII; Heim and Wasson 1958: Pls. I to IV).

Since 1960 numerous pottery mushroom fragments have been turned up in investigations by the New World Archaeological Foundation in the Central Depression of Chiapas. From Santa Cruz, Chiapas, Sanders (1961: 16, 28; Fig. 15 b and Pl. 6 j) illustrates and describes a Type E, plain pottery mushroom fragment found in the excavation of this site in his Trench 2 (level 4). The fragment is of a coarse-paste, unslipped, unburnished, thick-walled utility ware (named Chiapilla ware). Although only one fragment



Fig. 3. Plain hollow pottery mushroom from El Bellote, Tabasco. Decorated with incised and tool punctated design (note tool-incised design encircling the cap). Slipped dull reddish-orange ware. The cap shows extensive shell pecking marks. Height: 20 cm.; top diameter: 15.5 cm.; base diameter: 17.5 cm. Proto-Classic. Milwaukee Public Museum Collection, Museum No. 52851/18541. Donated by R. Gordon Wasson (Milwaukee Public Museum Photos 205126C, 2A147A).

is illustrated (upside down), Sanders indicates (p. 28) that there were several of these "mushroom pots" or "mushroom vessels" in Trench 2 (Fig. 6). The Chiapilla period at the Santa Cruz site is equated by Sanders with the Late Pre-Classic (300 B.C.-A.D. 00) Francesa and Guanacaste phases at the site of Chiapa de Corzo (Chiapa IV-V periods). Due to the fact, however, that Level 4 in Trench 2 was a disturbed level, it is possible that the pottery mushrooms at this site are of the later Proto-Classic Santa Cruz period (Horcones, Istmo, Jiquipilas, Laguna phases at Chiapa de Corzo), A.D. 00-200. The above specimens are now in the Regional Museum at Tuxtla Gutierrez in Chiapas where I examined them early in 1962. The cap of each pottery mushroom specimen shows marks of shell pecking, and in general the specimens are similar in all respects to the pottery mushrooms of Tabasco and El Salvador. While at the Tuxtla Museum, I also studied seven pottery mushroom fragments excavated at the site of Chiapa de Corzo. Due to the kind permission of Bruce Warren of the New World Archaeological Foundation, five of them are illustrated here (Fig. 7). Warren tells me (personal communication 1962) that they were found during the excavation of Trench 131 in the back of Mound 5A, at Chiapa de Corzo, and that based on their pottery association they are of the Proto-Classic, Istmo phase (Period VII at Chiapa de Corzo).

Pottery mushroom specimens have also been excavated at the sites of Mirador and Berriozábal. They have been assigned to the Proto-Classic Chiapas VII (Istmo) and Early Classic Chiapas VIII (Jiquipilas) periods, and correspond in shape and time with the pottery mushrooms found at Guanacaste, Chiapa de Corzo, and Santa Cruz (personal communication, Lowe 1962).

Most recently, Richard E. W. Adams (personal communication 1962) has reported finding several plain pottery mushrooms at the Lowland Maya Rain Forest site of Altar de Sacrificios on the Usumacinta River in the El Peten District in Guatemala. The specimens, according to Adams, are of a streaky brown and dull-ware, and were found in association with Late Plancha (equivalent to Late Pre-Classic Chicanel) and Salinas (equal to Proto-Classic Matzanel) period pottery. Although I have not examined the specimens from Altar de Sacrificios, Mirador and Berriozábal, I feel certain that

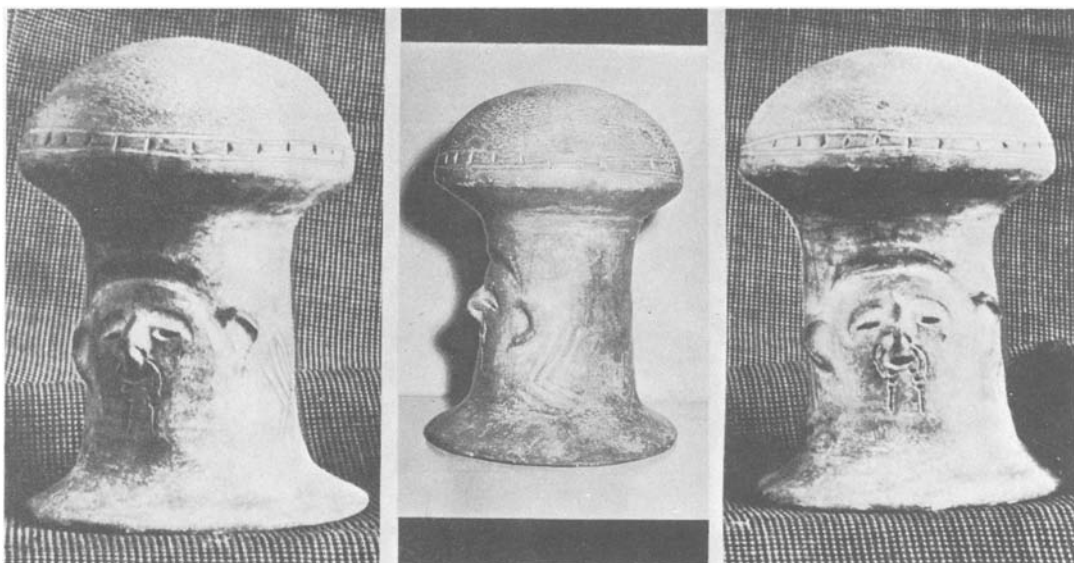


FIG. 4. Hollow effigy pottery mushroom from El Bellote, Tabasco. Incised and modeled features depict (on the stem) a bearded, moustached individual with conventionalized arms. Note tool-incised and indented design encircling the cap. Slipped dull reddish-orange ware. The surface of the cap shows extensive pecking (for stylistic similarity compare with a modeled and incised spouted vessel from Isla in Stirling 1957: Pl. 66 b). Height: 20.3 cm.; top diameter: 13.6 cm.; base diameter: 14.6 cm. Proto-Classic. Private collection of R. Gordon Wasson, New York (photo courtesy Wasson; Milwaukee Public Museum Photos 205126A, B; 205114A, B, C).

they are of the same type as those described earlier from El Bellote and Chiapa de Corzo.

CHRONOLOGY AND DISTRIBUTION

Pottery mushrooms are known with certainty from nine sites in Mesoamerica (Fig. 8):

- Chiapas (*Central Depression*): Guanacaste, Santa Cruz, Chiapa de Corzo, Mirador, and Berriozábal (for location of these sites, see map in Lowe 1959, Fig. 64).
- Tabasco (*Gulf Coast*): El Bellote, Isla, Ceiba.
- Lowland Guatemala (*El Peten*): Altar de Sacrificios.

To this list of distribution in Mexico one can add tentatively:

Veracruz: Tenenexpan (Remojadas; see Fig. 5); and Cerro de Las Mesas (Drucker 1943).

Oaxaca: Xaaga, near Mitla.

From Xaaga, near Mitla, Heim and Wasson (1958: 121, Fig. 23 b) illustrate and describe nine crudely-manufactured miniature clay cups with mushroom-like appliqué designs, collected

by Saville between 1898–1900. These curious cups are now in the collection of the American Museum of Natural History in New York, and may or may not be part of the pottery mushroom complex of Mesoamerica. It may be significant, however, that the nine were found together, like the nine miniature mushroom stones found in a Pre-Classic cache at Kaminaljuyú, Guatemala (De Borhegyi 1961).

Since in these areas the pottery mushrooms seem to be restricted to the Late Pre-Classic (Chiapa IV–V) Francesa and Guanacaste phases and to the Proto-Classic (Chiapa VII, VIII, Istmo and Jiquipilas phases), they may be considered as diagnostic pottery shapes of these periods, along with such other diagnostics as mammiform and swollen vessel supports and bridged spouts (Wauchope 1950: Figs. 1–2).

Present evidence seems to point to their origin in the Central Depression of Chiapas during Late Pre-Classic times. They became increasingly popular during the ensuing Proto-Classic period in Chiapas. Their use and manufacture may have spread to the Gulf coast of Mexico via the Grijalva River and to other parts of the Lowland and Highland Maya areas. When more information becomes available, an equally



FIG. 5. Four views of a Remojadas style pottery figurine from Tenenexpan, Veracruz. Represents a seated, cross-legged woman wearing a turban-like headdress, a square *quexquemil*, and a beaded necklace. Her left hand rests on a plain, hollow pottery mushroom, while her right arm is extended upward as if in prayer. Part of base near pottery mushroom is missing. Made of yellowish-orange ware. The exposed sections of the woman's arms, legs, and lips are covered with black asphalt paint (*chapopote*). Height: 30.5 cm. Late Pre-Classic or Proto-Classic. Private collection of R. Gordon Wasson, New York (photo courtesy of Wasson; Milwaukee Public Museum Photos 205175B, C; 2A171D).



FIG. 6. Plain hollow pottery mushroom from Santa Cruz, Chiapas (Trench 2, level 4). Coarse paste, unslipped, unburnished, thick-walled utility pottery (Chiapilla ware). Part of stem and base missing. Cap shows shell pecking marks. Top diameter: 12.3 cm. Late Pre-Classic or Proto-Classic. Regional Museum, Tuxtla Gutierrez, Chiapas. New World Archaeological Foundation Collection (photo courtesy Bruce Warren; Milwaukee Public Museum Photo 2A59-8G). This specimen is illustrated upside down by Sanders 1961: 16, 28; Fig. 15 b, Pl. 6 j.

good case may be brought forward for a Mexican Gulf coast origin. From here, along the same Usumacinta and Grijalva rivers, they could have reached the Highland and Lowland Maya areas and distant El Salvador, along with other Mid and Late Pre-Classic influences deriving from the great Olmec culture center of La Venta (Fig. 8). Be that as it may, we think the plain pottery mushrooms found in El Salvador represent an influence from southern Mexico via coastal Guatemala during Proto-Classic times, rather than the opposite situation previously postulated by Lowe (1959: 75-6). They may even help to explain the presence of many Mid and Late Pre-Classic and Proto-Classic La Venta-Olmec-like traits in El Salvador and further south (cf. Richardson 1940 and Boggs 1950).

Plain pottery mushrooms are known from El Salvador from the following sites (for the location of the sites, see map in Longyear 1944: 77; and Fig. 8):

Hacienda Mapilapa				Western El Salvador
Chinameca	(Dept. San Miguel)			Eastern El Salvador
Quelepa	" "	" "	" "	" "
San Rafael Oriente	" "	" "	" "	" "
Lolotique	" "	" "	" "	" "
Santa Elena	(Dept. Usulután)			" "

This information comes from personal correspondence with Stanley Boggs (1953) who studied and photographed about 20 plain pottery mushrooms in private and museum collections in El Salvador (see also Longyear 1944: Pl. IX, No. 26; and de Borhegyi 1961: Fig. 2, Nos. 46-8; for Boggs' photos see Carnegie Institution of Washington files in Cambridge). According to Boggs, pottery mushrooms are more common in eastern El Salvador, while mushroom stones predominate west of the Rio Lempa. I believe that an unusual incised, red ware pottery drum from Costa Rica (Lothrop 1926: 275, Fig. 168 a) when turned upside down, may actually be a pottery mushroom. If so, it is the furthest known specimen of its kind south of El Salvador. Unfortunately, none of the pottery mushrooms recorded by Boggs and Longyear came from controlled excavations, and so their dating remains a question. However, since some of the pottery mushrooms from El Salvador were made of Usulután resist ware (Guillemin personal communication 1962; see Fig. 9), it is quite possible that the pottery mushrooms in El Salvador were roughly contemporaneous.



FIG. 7. Five plain hollow pottery mushroom fragments from Chiapa de Corzo, Chiapas (Trench 131, back of Mound 5A). Coarse paste; unslipped ware. Parts of stems and bases missing. The caps of all five specimens show shell pecking. Range of top diameters: 13-17 cm. Proto-Classic. Regional Museum, Tuxtla Gutierrez, Chiapas. New World Archaeological Foundation Collection (photo courtesy Bruce Warren; Milwaukee Public Museum Photos 2A59-8E, F).

DISTRIBUTION OF POTTERY MUSHROOMS IN PRE-COLUMBIAN MESO-AMERICA

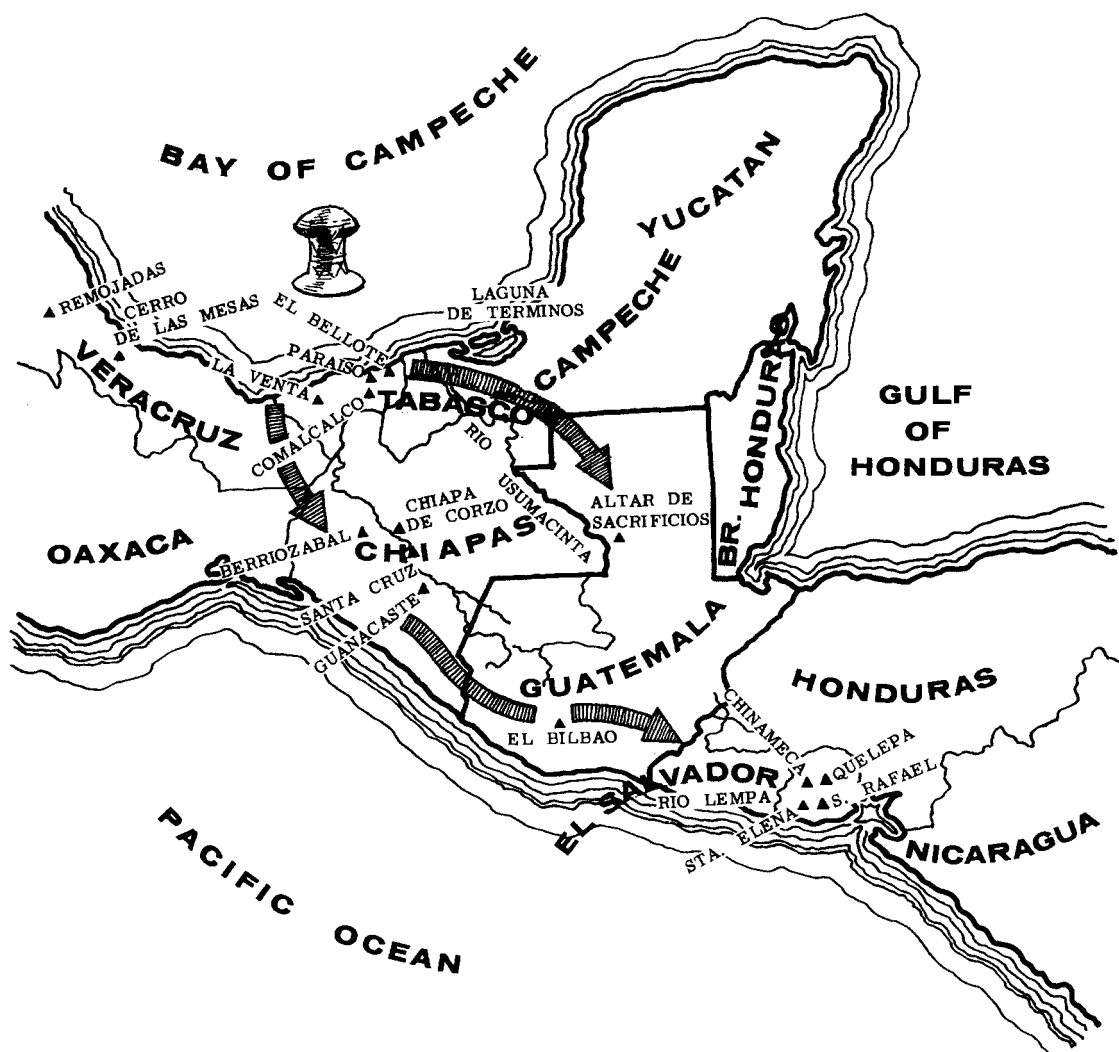


Fig. 8.

raneous with their Mexican and Lowland Maya counterparts. It should be noted, however, that Usulután — a diagnostic ware for the Late Pre-Classic and Proto-Classic periods in the Highland and Central Lowland Maya regions — survived well into the Classic period in various parts of western Honduras and El Salvador (Shook and Kidder 1952: 97-100).

Just how and by what route the use of pottery mushrooms spread from Mexico to El Salvador

is not clear. They have not been reported from the intermediate area even though Pre-Classic (De Borhegyi 1961: Table 1, Types A, B, C) and Classic period (Types C and D) mushroom stones are abundant at Highland and Pacific Coastal sites in Guatemala and also in western El Salvador (De Borhegyi 1961: Table 1, Nos. 33, 35, 37, and 39). It is possible, however, that a few hollow, flat-topped, bell-bottomed pottery fragments found during our recent excavations

at Bilbao¹ and also whole specimens noted from the nearby archaeological sites of Los Tarros and El Baul, all located in the Cotzumalhuapa archaeological zone in Guatemala, may represent a local variant of pottery mushrooms. They are made of a coarse reddish-brown "mud" ware, and unlike the pottery mushrooms of Mexico and El Salvador, have solid, flat, seat-like tops (Fig. 10). They are of Early Classic date and bear a slight resemblance to some of the "duck pots" of the Northern Highlands of Guatemala of the same and later periods, although they have neither handles nor effigy features (De Borhegyi 1952: Figs. 5, 6). Further study is necessary before it can be determined whether these seat-like pottery objects from coastal Guatemala form a link in the distribution of pottery mushrooms from Chiapas to El Salvador.

POSTULATED USE OF POTTERY MUSHROOMS

Although many theories have been brought forth to explain the shape and use of mushroom stones (phallic representations, markers, seats, etc.; see Kidder, Jennings, and Shook 1946: Pl. 142; De Borhegyi 1961), nothing has been suggested so far concerning their pottery counterparts. If, as I believe, they are related in concept to mushroom stones, then they must have been used in the sacred mushroom ceremonies of Pre-Columbian times during which mushrooms (*teo-nanacatl*; *Psilocybe mexicana* Heim) were ritually consumed to induce hallucinatory trances and fantasmagoric color dreams (Wasson and Wasson 1957: 223-4; De Borhegyi 1961: 503).

The humble pottery mushrooms, unlike their stone counterparts, are generally plain and do not represent any human or animal forms. The only exception is the specimen from El Bellote (Fig. 4) which represents a bearded and mouse-tailed individual, possibly a manifestation of the rain god (Tlaloc). Due to the fact that the distribution of mushroom stones and pottery

mushrooms overlaps in Tabasco, Chiapas, and El Salvador, it is clear that pottery mushrooms are not simply regional substitutes for stone mushrooms. Mushroom stones are numerous in all parts of Highland Guatemala and also in Oaxaca (especially in the Mixtequilla region), areas where pottery mushrooms have so far not been found (De Borhegyi 1961: Fig. 2). Both are present in areas where stone for carving was abundant, and are hardly beautiful enough to have been luxury or trade items. Moreover, pottery mushrooms were manufactured from local clay and in the prevalent local style. Nor do pottery mushrooms seem to represent a chronological variant, since Types A, B, C, and D mushroom stones are present in southern Mexico, Guatemala, and El Salvador from Early Pre-Classic times until the end of the Late Classic with a possible hiatus during the Early Classic.

It can be suggested that pottery mushrooms were probably used in Pre-Columbian times by persons unable to afford the undoubtedly more valuable and harder-to-come-by mushroom stones, although the rich content of the sealed tombs at Isla, which contained a plain pottery mushroom (Stirling 1957: Pls. 65-6), seems to contradict this theory. That pottery mushrooms

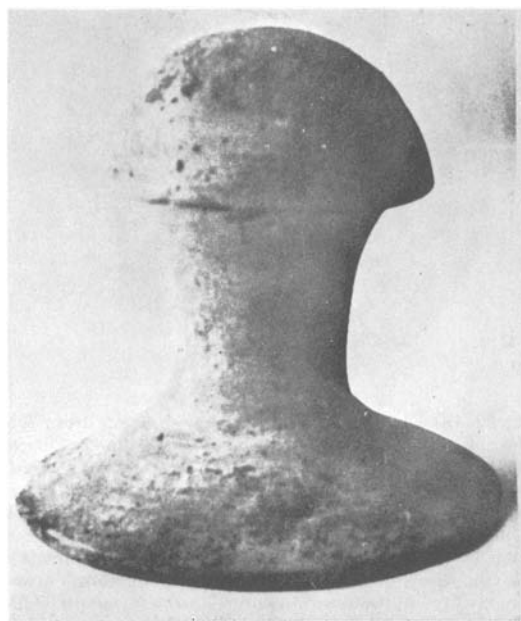


Fig. 9. Plain hollow pottery mushroom from the Department of Usulután, El Salvador. Negative-painted Usulután ware. Height: 22 cm. Proto-Classic. Private collection in Guatemala City (photo courtesy Guillemín).

¹ The fragments were found by Parsons in his test pit excavation (levels 8-11) during the Milwaukee Public Museum's 1961-62 excavation at Bilbao, sponsored by the National Science Foundation. Their resemblance to pottery mushrooms was first noted by Parsons. The ceramic association (Esperanza "mud" ware, Tiquisate ware, and San Juan Plumbate) indicates an Early and/or Late Classic date. Thompson's (1948) excavation at El Baúl yielded one whole and several fragmentary specimens. They were not illustrated or reported by him, but were found by Parsons in the Guatemalan National Museum among Thompson's El Baúl collections (Lot 96) deposited in the Museum.

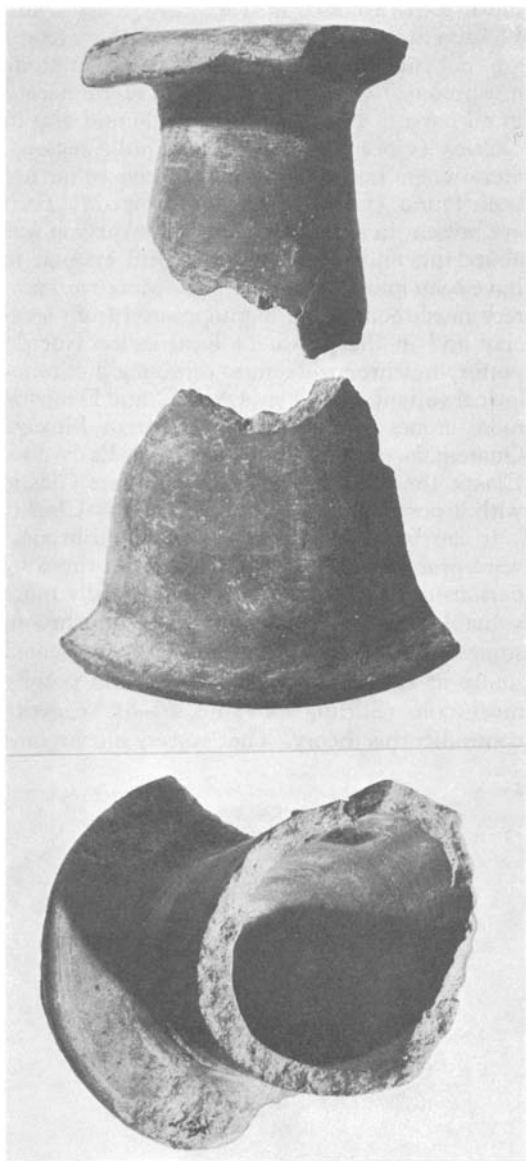


FIG. 10. Plain hollow mushroom-like object from Bilbao, Cotzumalhuapa, Department of Escuintla, Guatemala (test pit, levels 8-11). Crudely manufactured; coarse paste; thick-walled reddish-brown "mud" ware. Parts of stem and base missing. Cap is solid and shows thumb marks, but no other markings. Approximate height: 26 cm.; top diameter: 13 cm.; base diameter: 15 cm. Early or Late Classic. National Museum, Guatemala City. Milwaukee Museum Bilbao excavations (Milwaukee Public Museum Photos 2A147J, L).

were for use exclusively by females in mushroom ceremonies, as suggested by our unusual specimen from Remojadas (Fig. 5), is an equally weak supposition, since many of the mushroom stones also represent females, either seated or grinding the sacred mushroom or *ololiuque* seeds on a metate (De Borhegyi 1961: Fig. 2, No. 7, and Fig. 3).

A curious fact that should not be overlooked is that many of the pottery mushrooms, unlike the mushroom stones, show textile and finger-nail imprints and signs of shell pecking on their caps. In this respect, they resemble the mushroom-shaped ceramic molds used today for making pottery in many parts of Mexico, such as Tzintzuntzan (Michoacan) and Metepec (state of Mexico; see Foster 1948: Figs. 2-3). Moreover, some of the Pre-Columbian pottery anvils from North America, although much smaller in size (Foster 1948: Fig. 6; and Barrett 1933: 342, Pl. 95), bear a slight resemblance to the pottery mushrooms of Mexico and El Salvador (Fig. 11). In this respect it is important to note that the mushroom-shaped modern ceramic molds of Mexico and the Pre-Columbian pottery anvils always have solid stems (handles), while the stems of the Pre-Columbian pottery mushrooms are invariably hollow. This suggests a major difference in concept and function.

Until further evidence linking these pottery mushrooms to the Pre-Columbian mushroom cult comes to light, there remains a disconcerting possibility that some "pottery mushrooms" were actually molds used to form humble culinary pottery objects. But if they had no more exalted function, why were some of them included in rich tombs along with such luxury objects as carved shell gorgets and jade beads (Stirling 1957: Pls. 65-66); and why have paddles, the necessary tools to the anvil process, never been encountered among the archaeological finds of Mesoamerica?

These and other questions still await answers. Meanwhile, it becomes increasingly clear that "pottery mushrooms," like mushroom stones, had a wide spatial distribution in Mesoamerica, and that a cautious re-examination of all round-bottomed, tall-stemmed, Late Pre-Classic and Proto-Classic jars in archaeological finds in the areas cited above, is in order.

Acknowledgments. I wish to express my gratitude to the Trustees of the Milwaukee Public Museum and to the National Science Foundation, under whose auspices

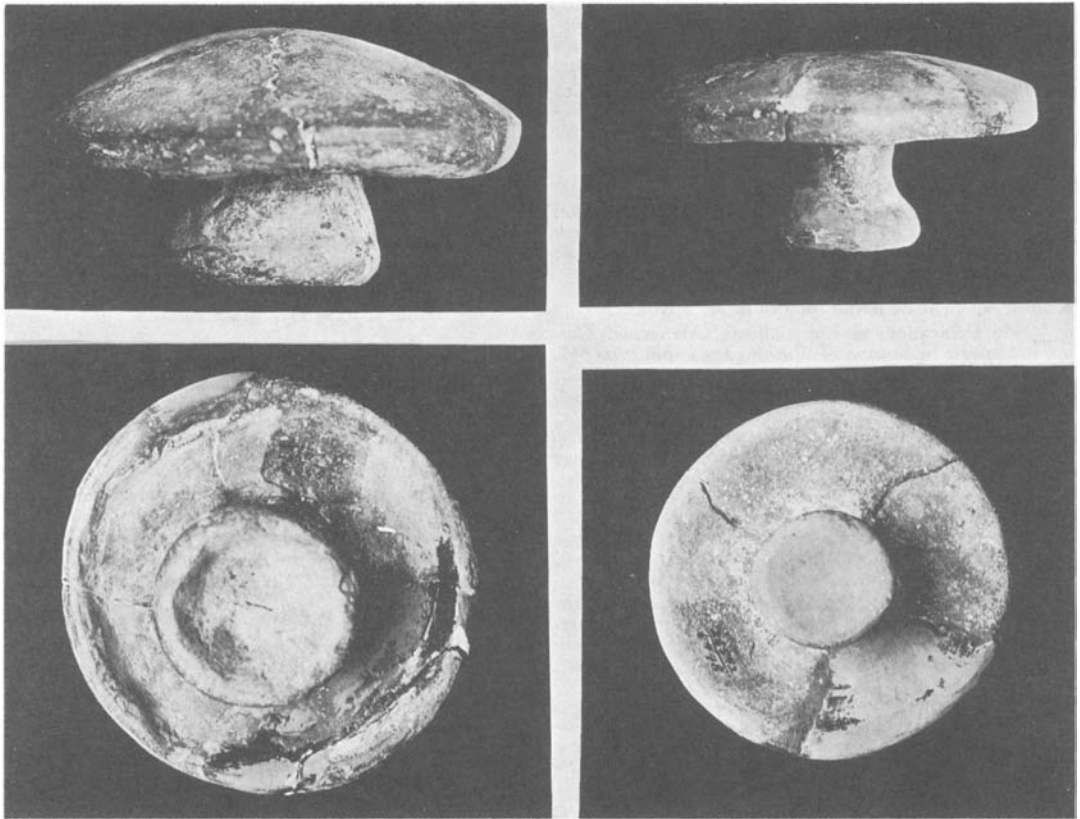


FIG. 11. Two pottery shapers and modeling implements of mushroom form from the site of Aztalan, Wisconsin. Coarse ware. Heights: 5.7 and 4.4 cm.; top diameters 10.5 and 9 cm. Dated as approximately A.D. 1200. Milwaukee Public Museum Collection, Museum Nos. 26542, 26543. See Barrett 1933: Pl. 95. Photo Milwaukee Public Museum.

the 1961-62 archaeological research in Guatemala and Mexico was undertaken. Thanks are also extended to Gordon Wasson for the use and photographs of the specimens in his collection (Figs. 2-5) and for his never-failing help and encouragement toward research in mushroom lore. To Bruce Warren and Lee Parsons goes my appreciation for their stimulating ideas and comments, and for the use and photographs of the various specimens shown in this article as Figs. 1, 6, 7, and 10. Thanks are also due to José Luis Franco, Matthew Stirling, Stanley Boggs, Gareth Lowe, Richard E. W. Adams, and Jorge Guillemin, for supplying various useful data and comments. The map (Fig. 8) was prepared by Milwaukee Public Museum artist, Leland Tishler.

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