Prehistory of West Mexico

Archeological studies give new understanding of a distinctive zone of prehistoric civilizations.

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While maximum attention is understandably given to the centers of the great civilizations of the past, the marginal zones of these ancient spheres of influence have their own importance for the cultural history of mankind. What is a center of influence in one era may become a backwater in another, and the so-called marginal areas are often the source of major innovations, as well as distinctive locally developed civilizations. Further, the marginal peoples are the filter of influences both from and to the major centers.

The western states of Mexico (Fig. 1) were peripheral to the central developments of ancient Mesoamerica, yet they reveal an important part of New World prehistory. Although fewer than a dozen archeologists have done substantial field studies in West Mexico, their findings have provided a reasonably coherent outline of man's history in this region over the past 3000 years or so. Since much of our picture of man in prehistoric West Mexico has developed from current work, summaries published as recently as 1971 (*1*) are already out of date and in part erroneous.

Historical and Geographic Background

Shortly after establishing their political dominance in Central Mexico in the 16th century, the Spanish moved to many new regions, among them the west coast of Mexico, where ports for Pacific trade were soon established. The earliest explorers found the western states to be heavily settled by dense agricultural communities sharing most of the features of native Mesoamerican civilization, as typified by the Aztec dominion. In a series of brutal military campaigns, the Spanish soon subjugated and largely eliminated the native civilizations of the west coast, leaving this area to be recorded in history as merely a marginal province of Mesoamerica (*2*).

The prehistory of this region is studied much less than that of central and southern Mexico, where the Aztecs, Maya, and their predecessors built the great cities of their civilizations. Archeological collecting in West Mexico began before 1900, but scientific studies are much more recent and date from the initial one of Sauer and Brand (*3*). The area has long attracted collectors because of the pottery figures looted from early tombs and sold in Mexico, the United States, and elsewhere. Aside from the lack of documentation, the extensive counterfeiting of tomb figures has introduced a number of fakes and pieces of questionable authenticity into existing collections.

For present purposes, the West Mexican cultural area is considered to include the states of Sinaloa, Nayarit, Jalisco, Colima, and Michoacan, the area between the Rio Fuerte and the Rio Balsas. The inland state of Durango is not considered here; although it has important relationships to states on the west coast, archeological studies indicate that it was largely pursuing its own line of development. Similarly, the state of Guerrero to the south, while almost unknown archeologically, does not seem to be closely related to the West Mexican zone discussed here.

West Mexico is marked by the major mountains of the Sierra Madre Occidental, which parallel the coast and border a coastal plain that is, for the most part, very narrow. Two of the major rivers of Mexico, the Balsas and the Santiago-Lerma, transect the mountains and provide routes of communication with the interior. In ancient times, the large settlements were on the river drainages, along the coastal plain, and in the lakeshore and flatland areas of the upland plains. All of these settlements were subjugated by the Spanish in the 16th century. The lightly populated mountainous areas remained the home of relict populations, including such tribal peoples as the Cora and Huichol. Today, the Huichol are probably the closest thing to survivors of the ancient cultural type that there is in West Mexico.

The Pacific coast provided a path of possible contact with other New World civilizations, particularly with the Andean area. So far, only tantalizing bits of evidence for such contact have been published (*4*). However, the distinctive ceramics and shaft tombs of the early periods, and the extensive metallurgy beginning about A.D. 900, must all be related in some way to developments in northern South America. West Mexico provides the most logical (although not necessarily the only) route of contact, with coastal travel by boat linking the Mesoamerican and Andean areas. Such connections must have been very limited and were probably absent for centuries at a time, yet even an occasional boatload of visitors or traders could have had exceptional effects in the introduction of new crops or new technology.

Sequence of West Coast Cultures

Although the general sequence of cultures has long been known from stratigraphic analysis and stylistic comparison, the placing in calendar time of the archeological remains of West Mexico has been worked out only within the past few years, as a result of an organized program of radiocarbon dating (*5*) supplemented by extensive obsidian dating (*6*) and combined approaches utilizing several dating methods on the same sites. General summaries of west coast chronology have been published [see (*5*, *7*) and numerous articles cited therein; see also Fig. 2, a simplified chart].

I present here a brief review of the archeological remains by broad cultural stages. Until recently, nothing older than about 2000 years was

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described for West Mexico, and it is still true that well over 90 percent of the reported archeological finds falls within the Christian era. During the past few years, however, discoveries of older remains have been reported, and it is clear that West Mexico has participated in all the major cultural developments known in Mesoamerica, from Preceramic peoples through fully developed civilizations. Very little is known about earlier West Mexican developments, and there are surely many older sites yet to be discovered, some probably dating back to early man associated with the large animals of the terminal Pleistocene. Fossils of mammoths and other Pleistocene animals have been found in numerous locations around the lake basins of Jalisco, but so far no convincing evidence of associated human remains has been found. The known archeological sequence must therefore begin with early shell-mounds along the coast.

The stages of cultural development, and their approximate time periods in West Mexico, are discussed individually as follows.

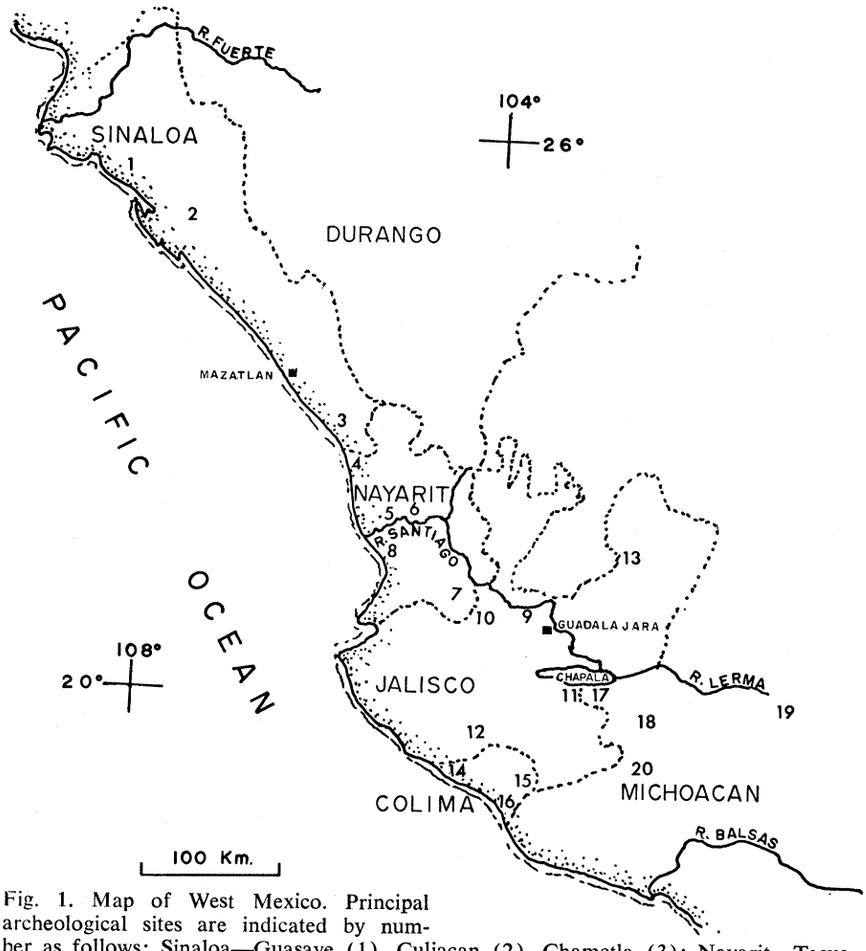

Fig. 1. Map of West Mexico. Principal archeological sites are indicated by number as follows: Sinaloa—Guasave (1), Culiacan (2), Chametla (3); Nayarit—Tecualilla (4), Amapa (5), Peñitas (6), Ixtlan del Rio (7), San Blas (8); Jalisco—Ixtepete (9), San Sebastian (10), Tizapan el Alto (11), Tuxcacuesco (12), Teocaltiche (13); Colima—Morett (14), Los Ortices (15), Tecoman (Chanchopa) (16); Michoacan—Cojumatlan (17), El Opeño (18), Chupicuaro (19), Apatzingan (20).

Preceramic (before 2000 B.C.)

Knowledge of pottery was early and widespread in Mesoamerica; therefore, sites entirely lacking in pottery can be expected to date before 2000 B.C. Two early shell-mounds that lack ceramics have been found, and there are surely many more. In Nayarit, a Preceramic shell-mound has been dated by the radiocarbon method at 2000 B.C.; it provides an assemblage of simple artifacts defined as the Matanchen complex (*8*). This site also has an upper layer containing pottery and later artifacts.

The Matanchen complex, described by Mountjoy (*8*), is little known but appears to represent coastal communities that depended very heavily on mollusks. This is not the usual pattern, even for shell-mound sites, but Mountjoy recovered only a single fish bone, a bird bone, and a few bones of marine turtles from dense shell layers including 13 species of mollusks. There were only a few crude stone tools and flakes. The apparent poverty and simplicity of the Matanchen complex may be a result of the small excavation sample, however.

Preceramic levels have also been found in a deep shell-mound in Guer-

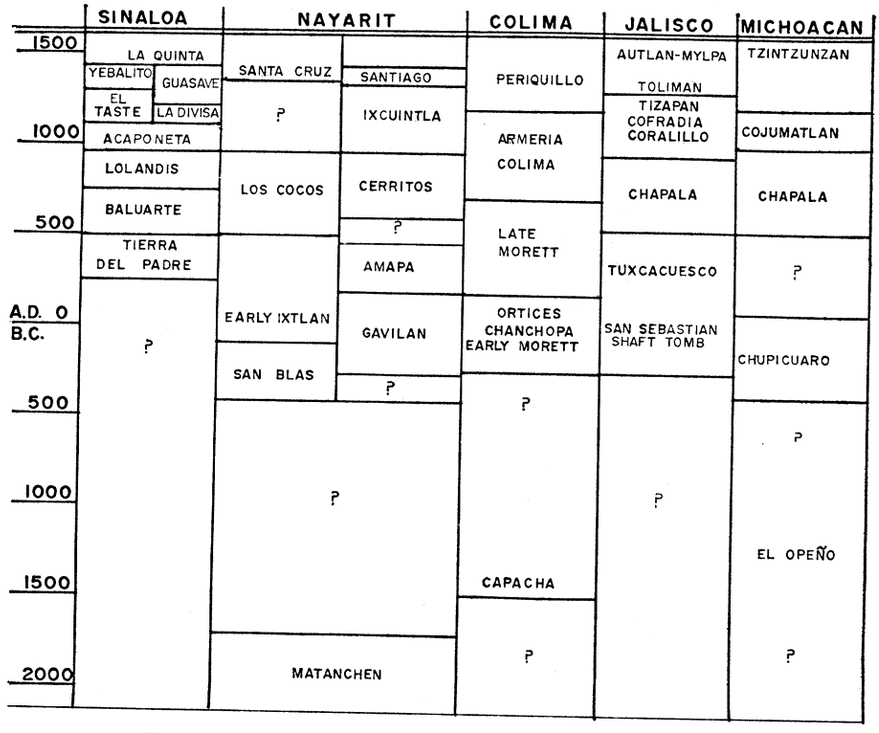

Fig. 2. Chronological chart of West Mexican sites and cultures.

rero, just to the south of the area discussed in this article. The site is reported by Brush (*9*) to be like the Nayarit site in that it contains Preceramic levels beneath layers attributable to later, pottery-using peoples. Very early pottery has been found here, the earliest coming from layers dated about 2400 B.C. (this is at present the oldest dated pottery in Mexico). Detailed descriptions of the associated cultural remains have not been published. Note that the Matanchen complex of Nayarit, although 400 years later than the early pottery of Guerrero, has no pottery at all.

Other shell-mounds are common along the west coast of Mexico, but the great majority of those that have been studied are not Preceramic or particularly old, and they extend into the times of later cultures and even down to the Historic period.

Early Preclassic (2000 to 1000 B.C.)

Kelly (*10*) has identified an early assemblage of pottery, called the Capacha complex, based on discoveries in Colima. Characterized by stirrup-mouth vessels (Fig. 3), the complex has been radiocarbon dated to 1500 B.C. Preliminary efforts at obsidian dating (based on pieces of uncertain association) suggest an age of 800 to 1000 B.C., but neither the radiocarbon date nor the obsidian evidence can be considered definitive. It is clear, however, that these finds are older than any other West Mexican culture described, and they provide the first real evidence for ancient civilizations on the west coast. The Capacha complex is not closely similar to known Mesoamerican cultures of about the same age (such as early Olmec), but the characteristic pottery is similar to some of the finds at Tlatilco in the Valley of Mexico. Kelly points out strong resemblances to early cultures of South America and suggests ocean contacts along the Pacific Coast as early as 1500 B.C. The early ceramic features of Colima may have been transmitted to such sites as Tlatilco, making the west coast the donor, rather than the recipient, of significant beginnings in Mesoamerican civilization. However, more complete descriptions and better dating evidence are required before firm conclusions can be drawn. It must be noted that the dating evidence in the Valley of Mexico is also somewhat uncertain for this early period (*11*).

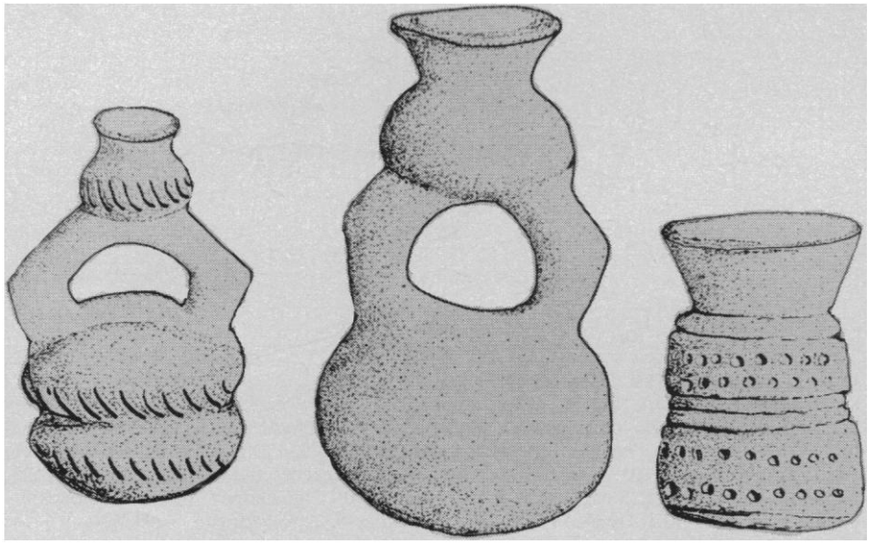

Fig. 3. Pottery vessels attributed to early Preclassic culture (Capacha, about 1500 B.C.) from Jalisco. The vessel on the right is a miniature (5.8 centimeters high); the others are about 18 centimeters high [drawings after Crain (*12*)].

Although Kelly describes the Capacha complex of ceramics on the basis of her sites in Colima, she notes similarities with finds from Nayarit and Michoacan. Such ceramics also occur in Jalisco (*12*), indicating that the Capacha culture was widespread throughout West Mexico.

There is one other radiocarbon date of 1500 B.C. from West Mexico—it applies to tomb finds at the important El Opeño site in Michoacan (*13*). The cultural associations of this date have not yet been published and the date seems too early to apply to most of the artifacts from El Opeño published by previous investigators.

Preclassic-Classic (1000 B.C. to A.D. 500)

The hollow pottery figures of human beings and animals that cluster around the beginning of the Christian era

Fig. 4. Pottery figures from shaft tombs in highland Jalisco [from Long (*14*)]. Lower drawings show the painted designs characteristic of this particular style. Actual height of figures is about 38 centimeters; age is between 200 B.C. and A.D. 200.

typify the period about which most is known. Early recognition of the distinctive and dramatic art of such figures (Fig. 4) led to massive collecting by tomb robbers, as well as to the erroneous belief that the tomb figures were characteristic of the whole of West Mexican archeology. With detailed dating evidence, it became apparent that the figures, while quite variable in regional styles, are sharply restricted in both time and space.

The tomb figures are known to occur in shaft tombs—pits of varying depth, with one or more adjacent chambers at the bottom containing human bones and pottery figures as well as other offerings. Unfortunately, the looting of antiquities of this kind has been so much greater in extent than the efforts of the handful of scholars conducting scientific excavations in this part of Mexico that no archeologist has ever recovered such tomb figures in an undisturbed context. A few have been found in partially looted tombs, but the best description is of a tomb studied by Long (*14*) near Etzatlan, Jalisco. Although he did not excavate it himself, he studied the empty tomb, got access to the entire collection of offerings and human bones, and was able to obtain direct statements from the tomb robbers about their excavation. This tomb collection provided the first extensive evidence of the context and assemblage of artifacts to be found, including not only the figures but many kinds of ornaments and pottery vessels (Fig. 5). The same tomb provided specimens for the first radiocarbon dating and resolved a long period of controversy and speculation about the age of the shaft tombs and their associated cultural features.

In spite of the absence of scientific excavation records for nearly all of the tomb figures, there exists considerable description of the tombs from which they came (*15*); some detailed catalogs of the pottery figures provide a corpus of information on their style and the wide variety of persons, animals, and objects portrayed (*16*). Since the figures represent many kinds of persons, tools, ornaments, weapons, and activities, they provide a kind of picture gallery from which much cultural information is potentially available. However, the interpretations made so far are largely speculative (*16, 17*), since there is no real information about how the figures are arranged and grouped in the tombs and interpretations based on the customs and beliefs of recent Indians require projection of such habits to a remote past. Such use of ethnographic analogy is not at all impossible, but it remains tenuous in the absence of any demonstrated historical continuity from the time of the ancient shaft tombs to that of recent Indians in the area. An important task for archeologists is determining whether any recent Indian group can be considered direct descendants of the peoples of 2000 years ago; demonstration of such a continuity would greatly strengthen the use of ethnographic analogy and the search for survivals of ancient beliefs.

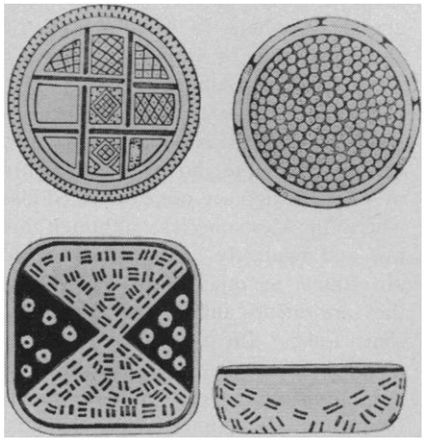

Fig. 5. Painted pottery vessels associated with figurines like those in Fig. 4 [from Long (*14*)]. Actual diameter is 15 to 20 centimeters. The lower drawing of a pottery box with square lid is a skeuomorph of a twilled basketry container.

It is clear that the tomb figures are of several styles and vary considerably, depending on their age and geographical origin. Three general styles, designated Colima, Nayarit, and Jalisco, were recognized early on and named for the Mexican states in which they are believed to have originated. While still valid in a very general way, such a classification has recently been shown to be oversimplified and not literally correct as far as geographic origin is concerned. Several additional styles and substyles are now recognized.

Along with variability in the figures, the tombs themselves are very diverse, ranging from a single side-chamber off a small shaft to multiroomed chambers connected to the surface by shafts up to 15 meters deep. Finally, several sites have simple graves but no associated shaft tombs, so the relationship of the tombs to the residential areas of the same people is unclear.

Apparently, most of the described and published tomb figures fall in the period between 200 B.C. and A.D. 200, although there are certainly some later ones as well. Except in relict areas, however, this particular manifestation probably disappeared by about

Fig. 6. Change in style of small solid figurines from West Mexico. Left figures are from Colima, 100 to 300 B.C.; right figure is from Nayarit, about A.D. 1300. Many other styles of figurines, with both regional and temporal variability, are known.

Fig. 7. Classic period vessel from Colima (A.D. 300 to 500).

A.D. 500, when the whole area came into the orbit of the flourishing and powerful civilization of Central Mexico.

Several sites and assemblages contemporaneous with the shaft tombs and their associated features have been noted in Nayarit, Jalisco, Colima, and Sinaloa. They include Early Ixtlan, Ortices and Early Tuxcacuesco, Gavilan, Tierra del Padre, and Early Morett (*18*). The site of El Opeño must also be related, since it has shaft tombs of a distinctive type. Most of the named assemblages, however, are not associated with shaft tombs, even though they are contemporaneous.

From these finds, it is clear that a widespread and distinctive ancient culture existed in West Mexico, a culture largely unconnected with those elsewhere in Mesoamerica at the same time. The West Mexican evidence indicates that there was a series of independent states or little nations. These states lacked the characteristic Mesoamerican pattern of constructed mounds arranged around a central plaza, stone architecture, and the erection of pyramids and temples. Instead, the people lived in relatively small farming communities and centered their religious activity on a mortuary cult that involved construction of tombs provided with effigies. Some of the tombs may have been family vaults used for a long time and related to ancestor worship. The larger tombs clearly required group effort to construct. The fact that not everyone was accorded such mortuary treatment, however, indicates a stratified society, with lower classes disposed of in ordinary graves with little or nothing in the way of mortuary offerings.

Shaft tombs and the features associated with them are generally absent elsewhere in Mesoamerica but are paralleled by similar remains in northern South America (*15*).

Comparisons with the pottery figurines of West Mexico are more confusing. The large, hollow tomb figures of West Mexico are not duplicated elsewhere in Mesoamerica; although hollow and relatively large pottery figures are found in other parts of Mexico, they are rarities and not associated with shaft tombs. On the other hand, the making of small, solid figurines has been almost universal in Mesoamerica from the earliest times. While the small figures from West Mexico have distinctive stylistic details, they tend to duplicate the general trend from detailed figures in the early periods to relatively simple figures in the late periods (Fig. 6).

Classic (A.D. 0 to 500)

Overlapping in part with the shaft-tomb cultures are influences from Central Mexico, where the major city of Teotihuacan must have dominated not only the Valley of Mexico, but surrounding areas for hundreds of miles in the first centuries A.D. The nature of the connection with West Mexico is not clear; there is no evidence of political or military domination, and it may be that no more than a copying of great urban centers by provincial peoples was involved.

The development in West Mexico of a Classic horizon paralleling that of Central Mexico has been little recognized, and there is still no field excavation describing the major Classic sites of the west coast. Indeed, it was thought until recently that most of the typical Mesoamerican features found in West Mexico did not appear there until the Postclassic and the spread of Mixteca-Puebla influences. However, it is now known that the Classic period, arriving on the west coast with real force some time in the 6th century A.D., brought about major changes in the cultural pattern that had existed earlier. Appearing on the west coast at this time are many standard features of the Classic horizon of Central Mexico: the mound and plaza type of settlement (carefully oriented to compass directions); limited stone architecture and temple mounds; and many items clearly copied from Central Mexican models, including figurines, ear spools, spindle whorls, and a wide-

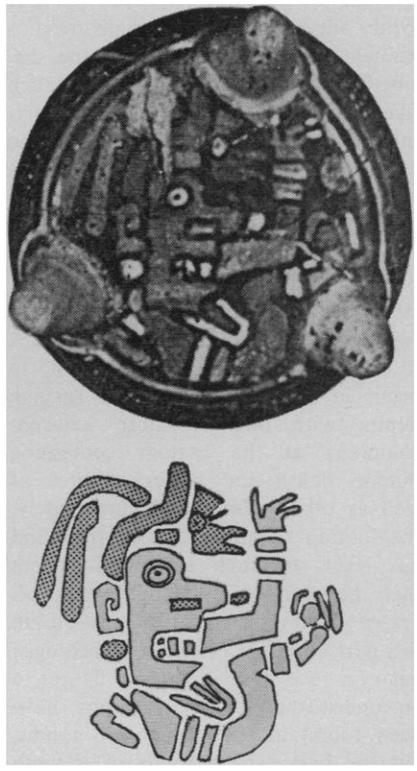

Fig. 8. Postclassic vessel with painted figure on bottom, from Amapa, Nayarit. Actual size is 6.5 centimeters in diameter; date about A.D. 1000.

spread tradition of brown pottery decorated in red paint (Fig. 7). Sites include Ixtepete and several other large settlements of highland Jalisco, Amapa and several sites in Nayarit, and Chametla in Sinaloa. Although locally developed artifacts and styles continued on the west coast, the predominant West Mexican culture from the 6th century on was merely a variant of the strong Central Mexican tradition, and West Mexico was a participant in the cultural sphere dominated by Teotihuacan and its successors. The older, independent, and distinctive culture of the shaft tombs may have continued in isolated areas, but civilization had arrived to stay by A.D. 600.

There have been few detailed excavations of sites in the period from A.D. 500 to 1000—information is much fuller for remains that are earlier or later than this time. The scarcity of information is not due to lack of sites belonging to the Classic period, but simply to lack of field investigations directed toward this period. Also, the Classic period sites that have been studied are, for the most part, not the major ones (which require a huge commitment of time and funds to excavate), but small sites with rela-

Fig. 9. Decorated stone slab; same site, style, and period as Fig. 8.

tively small excavation samples. An example is the first well-described Classic assemblage, the site of Chametla (*19*) in the far north of West Mexico, where the characteristic features of Classic Central Mexico have been much diluted and altered. The much larger site of Amapa, in coastal Nayarit, reveals a more typical Classic period site.

Postclassic (A.D. 900 to 1500)

Cultures of the West Mexican Postclassic are well known from many sites with elaborate, multicolored pottery bearing Mixteca-Puebla stylistic elements clearly related to the belief systems represented throughout Postclassic Mesoamerica (Figs. 8 and 9). From about A.D. 900, there was a tremendous spread of influence—part military, part religious, and part mercantile—from the center of Mexico in all directions. While no true empire in the political sense can be discerned, the cultural power was clearly in Central Mexico, and this is revealed in the west coast sites of the time. Not only the characteristic community pattern, but also the ceramics, the iconography, and most of the manufactured objects reveal the cultural dominance of Central Mexico. Even the constructed ball court characteristic of Mesoamerica appears in Postclassic sites on the west coast.

Among the first and most important site excavations to reveal strong Postclassic influence was that of Guasave (*20*), at the extreme northern edge of Sinaloa. In 1942, when the site report was published, the site had no apparent connections in time or space with anything but Postclassic Central Mexico, more than 1000 kilometers to the southeast. Since then, work in intervening regions has shown Guasave to be merely the northernmost outpost of a more or less continuous Postclassic manifestation along the west coast; and furthermore, it did not arrive suddenly, but was built upon a Classic tradition present throughout the west coast for several hundred years prior to the Guasave community. Other important Postclassic sites are reported at Culiacan, Sinaloa; several sites in Jalisco (*21*); and several sites in Nayarit (*22*). The largest Postclassic collection from the west coast is from Amapa, Nayarit (*23*). This collection has produced many items and much information not reported from any other location.

The outermost ripples of Postclassic Mexican expansion reached not only northern Mexico, but the United States as well. The Hohokam culture of southern Arizona has many Mesoamerican features; in the southeastern United States, Mesoamerican traits feature strongly in connection with the so-called Southern Cult, dating from about A.D. 1200 to 1300. The extent and meaning, and even the path of diffusion, of these Mexican influences on some of the prehistoric cultures of the United States, are still being investigated, but there can be no doubt that strong contacts of some kind occurred over a long period of time. Archeology in West Mexico has revealed that both Classic and Postclassic sites of standard Mesoamerican pattern occurred much closer to the present U.S. border than had been thought previously, so that the similarities between the two regions are no longer as surprising as they were when first noted.

A significant feature of the Postclassic in West Mexico is metallurgy, which occurs abundantly from at least A.D. 900 and may well go back into the end of the Classic in this area (*4*). Metal objects are both utilitarian (awls, needles, and fishhooks) and ornamental (including bells and rings) (Fig. 10). Both pottery and stone vessels were decorated with polychrome paintings and occasionally with gold leaf. While most metal objects are copper, there are also silver, gold, tin, and even bronze artifacts. This metallurgy is earlier and more extensive than elsewhere in Mesoamerica, where extensive use of metals seems to date from just a couple of centuries before the Spanish Conquest.

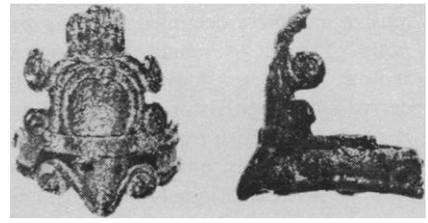

Fig. 10. Copper finger ring, Postclassic, from Nayarit (about A.D. 1200).

Since metallurgy appears suddenly and is at its most complex even when it first appears, it is hard to explain as anything other than an introduction from peoples who were knowledgeable about it. Such an introduction was probably from South America, where extensive metallurgy is far older than it is anywhere in Mesoamerica. Present evidence indicates that knowledge of metallurgy came to Mesoamerica through West Mexico, and that it came to West Mexico from South America by the 10th century A.D., or perhaps somewhat earlier.

Although West Mexico was the leader of the time in such technological features as metallurgy, in other respects it did not compare with central and southern Mexico. West Mexico had very limited stone architecture or sculpture, and there are no ancient cities of the size or magnificence to be seen in the Maya area. Indeed, the most impressive West Mexican sites have little to show today except for earth mounds that are at most about 10 meters high—insignificant compared to the constructions in other parts of Mesoamerica. However, West Mexican constructed mounds are standard in their spatial arrangement and generally served as foundations for buildings made either of adobe brick or poles with a thatched roof. The larger mounds, as elsewhere in Mesoamerica, generally served as foundations for temples (Fig. 11).

Historic (after Spanish Contact in the 16th Century)

Evidence of the very latest periods in West Mexico, those bridging the gap between pre-Historic and Historic Indian communities, is surprisingly limited. Although some known 16th century centers have been excavated (Tzintzun-

zan, for example), such sites are extensive and were occupied for long periods of time. A small archeological sample, therefore, does not necessarily derive from the Historic period. What is needed are Historic artifacts such as coins, glass beads, and iron objects associated with aboriginal materials, but only a few such finds, all of questionable association, have been recorded. Therefore, while it is possible to recognize very late archeological assemblages (Fig. 2), it is not yet certain that these assemblages are as late as the 16th century and that they are representative of the native objects in use at the time of the Spanish Conquest. Recent archeological chronologies for West Mexico tend to end at A.D. 1350 to 1400, leaving more than a century before the Spanish entry unaccounted for. This means simply that not much is known about what was happening in West Mexico at the time of Aztec domination in the central areas.

While the population was large, the few centuries before the arrival of the Spanish show a marked decline in quality and variety of native manufactures. Architecture, ceramics, and figurines—all become simpler and more crudely done than before. Of the late Postclassic period cultural changes, some were no doubt in the native culture, while others must be attributed to disruption by the Spanish Conquest of Mexico. The linkage of the archeological record to the historical record is thus essential to any understanding of the terminal period of Indian history.

Problems and Perspective

The archeological history of West Mexico is one of two quite distinct cultural traditions and their interaction (or lack of it). On the one hand is the basic Mesoamerican tradition, with its long history and continuity of the most important features of human life, including art, religion, iconography, and general world view. On the other hand is the tradition that has come to be considered West Mexican, exemplified by the shaft-tomb cultures but including in general all of the Preclassic remains. For the region north of Guerrero, Willey (*24*) and several others have pointed out that West Mexico lies outside the basic Mesoamerican cultural tradition. This statement, however, is more true for some periods than for others and applies with full force *only* to the shaft-tomb tradition, which for the most part ended early in the Christian era. For the 1000 years before the coming of the Spanish, West Mexico was only a regional variant of the Mesoamerican tradition. By the Postclassic, West Mexico was not only in the mainstream of this tradition, it was the source of its leadership, since both Aztecs and Toltecs originated northwest of the Valley of Mexico and the legendary home of the Aztecs was precisely in the West Mexican coastal area. In West Mexico, therefore, two cultural spheres of quite different origins existed side by side over millennia, with varying degrees of interaction. The roots of Mesoamerican civilization are attributed most often to the Olmecs of southern Mexico (*23*). The roots of the West Mexican tradition are not known, but they are certainly non-Olmec and may well have been related more to northern South America than to any other region.

The discrete nature of the two traditions should not be overemphasized, however, as has been done to some extent by focusing most attention on the shaft-tomb cultures and their distinctive features. It is only about 650 kilometers by air from Nayarit to the Valley of Mexico, and the entire distance is transected by the main drainage of the Santiago-Lerma river system. The earliest known West Mexican culture, Capacha, is not totally distinct from what is known of that in the Valley of Mexico; rather, it shows significant parallels in the limited amount of material culture so far reported. Hence, both contact and isolation are relative terms, and neither absolute isolation nor total submergence is to be expected at any time in the history of the two regions.

Many contemporary archeologists have grown increasingly impatient with descriptive accounts of cultural history and the attention paid to seemingly trivial details of pottery types and field excavations. They have urged their colleagues to get on with the business of explaining cultural-historical processes. Such urging has certainly made all archeologists aware of the limited results they can present, but, in the case of the West Mexican region, the limitations are primarily in lack of information on which conclusions can be based. An example is the entire state of Sinaloa, for which there are only three excavation reports of any consequence, the most recent of which was published in 1945. To explain the ancient cultures of Sinaloa on the basis of these three reports is to indulge in a great deal of speculation supported by a few scraps of information, with ex-

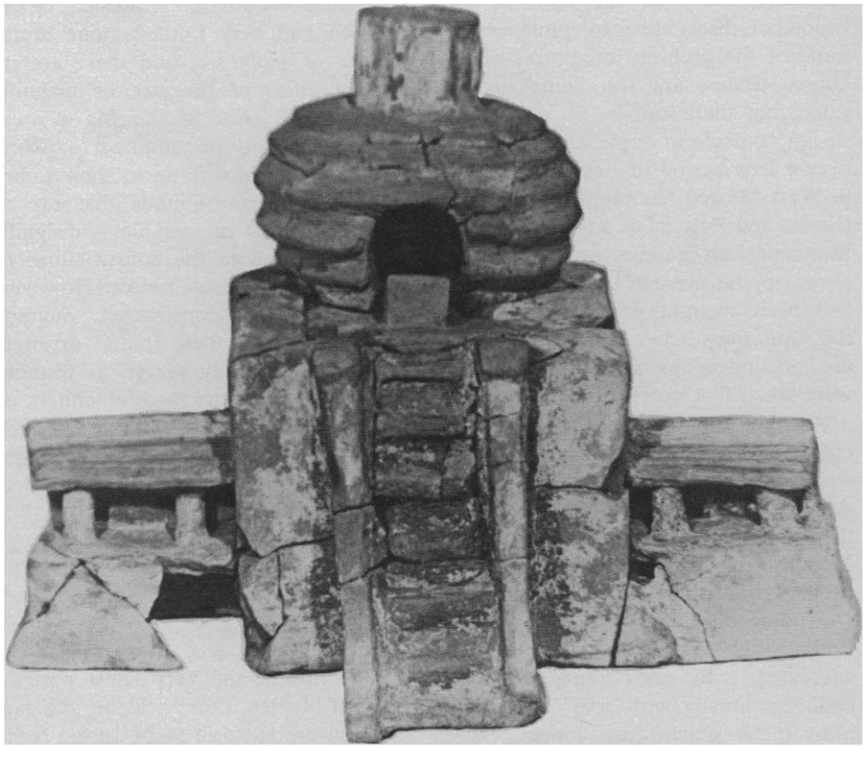

Fig. 11. Pottery model of a temple, Postclassic, from Amapa, Nayarit. Actual height is 23 centimeters. Hydration dating of associated obsidian indicates the age to be 13th century A.D.

tensive areas and time periods totally unknown. One can get a general picture of the main historical trends from these reports, and, on the basis of this, can formulate questions that may be answered by future field excavations.

Some significant questions that must be answered before attention can be paid to "explanations" are included in the problems of origins (How did the West Mexican tradition develop?), mechanisms (What supported and maintained the observed cultures?), and interactions (What were the effects of external peoples on local developments?). There is also an important "decline and fall" question about the Historic period, the entry of the Spanish, and the effects of this entry on native civilization. Without field excavation data to provide reasonably clear understanding of such basic questions, more abstract studies on laws of human development must remain speculative.

Summary

Limited archeological studies along the west coast of Mexico show that two basic native civilizations existed in the prehistoric past. One is the Mesoamerican tradition, dating back to the Olmecs; this tradition dominates West Mexico after about A.D. 500. Before that time, there existed an indigenous tradition of quite different and unknown origin, characterized by a religion centering on a death cult involving large shaft tombs and mortuary offerings of pottery figures. The earliest periods, before about 1000 B.C., are just becoming known from current excavation programs.

References and Notes

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NEWS AND COMMENT

20 June Tape: Critics Fault Logic of Experts' Final Report

The panel of experts on the White House tapes last week produced the data to support its conclusion of 15 January, that the renowned 18½-minute buzz on the tape of 20 June 1972 was caused by at least five separate hand operations of the tape recorder's keyboard controls.

The panel's verdict was corroborated by Michael H. L. Hecker, an expert hired by the President's lawyer James St. Clair. Hecker, of the Stanford Research Institute, said last week that he was "in general agreement" with the panel's conclusion, except that it was "somewhat unreasonable" of the panel to reject all hypotheses involving a faulty machine; in his view the Uher 5000 tape recorder used by the President's secretary was electronically faulty at the time the erasure was made, and faults of this nature might account for some, but not all, of the marks taken by the panel as proof of manual operation.

With the two rival groups of experts in substantial agreement, the matter might seem to be all wrapped up, and certainly it has generally been reported that way. In the eyes of the panel's chief critic, however, the issue is very far from closed. According to Allan D. Bell, president of Dektor Counterintelligence and Security Inc. of Springfield, Virginia, the data in the panel's report do not support, and in fact invalidate, the panel's conclusions. "My inference," says Bell, "is that the panel's final report is not so much an impartial display of the evidence as an attempt to justify the precipitous conclusion they announced in January."

The significance of the 20 June tape is that it contained a conversation between President Nixon and H. R. Haldeman that occurred three days after the Watergate break-in. If the panel's theory is correct, it would follow that the 18½-minute gap is a deliberate erasure. If on the other hand the marks on the tape were caused by a malfunction in the machine, as Bell suggests, it is more possible that the erasure was caused accidentally.