ARTICLES

BEGINNINGS OF VILLAGE LIFE IN EASTERN MESOAMERICA

Rosemary A. Joyce and John S. Henderson

Excavations in northern Honduras have produced evidence of initial village life that is among the earliest cases documented in Mesoamerica. Settlement beginning prior to 1600 B.C., the production of sophisticated pottery by 1600 B.C., and integration in economic exchange networks extending into Guatemala and Mexico by 1100–900 B.C. (calendar ages), are all consistent with patterns recorded in the Gulf Coast, Central Highlands, and Pacific Coast of Mexico. Supported by a suite of 11 radiocarbon dates, these findings overturn traditional models that viewed Honduras as an underdeveloped periphery receiving delayed influences from Mexican centers.

Gracias a las excavaciones que se han realizado en el norte de Honduras se han recuperado evidencias de los orígenes de la vida aldeana en la región, que se cuentan entre los casos más tempranos en Mesoamérica. Los inicios de los asentamientos en fechas anteriores a 1600 a.C., la producción de cerámica elaborada hacia 1600 a.C. y la integración a redes de intercambio económico que llegaban hasta Guatemala y México alrededor de 1110-900 a.C. (años calendáricos), son consistentes con los patrones que se han registrado en la costa del Golfo de México, el altiplano central mexicano y la costa del Pacífico, en particular el Soconusco. Con base en la posición estratigráfica de los artefactos y 11 fechas de radiocarbono, se definen cinco fases tempranas que abarcan desde fines del periodo Arcaico (Sauce), el Formativo Temprano (Barahona, Ocotillo, Chotepe) y principios del Formativo Medio (Playa). Con estos fundamentos, se cuenta con evidencias contrarias a los modelos tradicionales, en los que se conside raba que Honduras era una periferia subdesarrollada de centros ubicados en México desde donde llegaban con retraso influencias culturales.

Excavations in several locations in Mexico have produced significant information about early stages of the development of village life in Mesoamerica. Research at sites on Mexico's Gulf Coast (Coe and Diehl 1980; Grove 1997; Rust and Sharer 1988), Central Highlands (Flannery and Marcus 1994; Niederberger 1976), and Pacific Coast Soconusco region (Blake et al. 1995; Blake and Clark 1993; Clark and Gosser 1995; Lesure 1997, 1998), has produced consistent chronologies that place the transition to settled village life between 3000 and 1800 B.C. In each of these regions, early villages are marked by the construction of perishable houses, the use of pottery vessels, reliance on agriculture for subsistence, and participation in economic exchange networks, especially for the acquisition of obsidian, the volcanic glass that provided the fundamental raw material on which Mesoamerican societies relied for sharp-cutting tools (Voorhies 1996a, 1996b).

In contrast, with the exception of isolated reports of early occupations in sites scattered along the Pacific Coast in Guatemala and El Salvador (Arroyo 1995; Blake et al. 1995), no comparable body of information has been developed for eastern Mesoamerica, the region east of the Isthmus of Tehuantepec where societies of the Classic Maya world later took shape. With the reevaluation of the extremely early dates reported for Cuello, a site located in the Maya lowlands of Belize (Andrews and Hammond 1990), ceramic chronologies for eastern Mesoamerica extend back only to approximately 1200 B.C. (Sharer 1989).

With excavations beginning in 1994 at Puerto Escondido (CR-372), a site near the Caribbean coast of Honduras (Figure 1), we have produced the first documented continuous sequence of early occupation in eastern Mesoamerica. At Puerto Escondido, stratified deposits 3.5 meters deep have now yielded a suite

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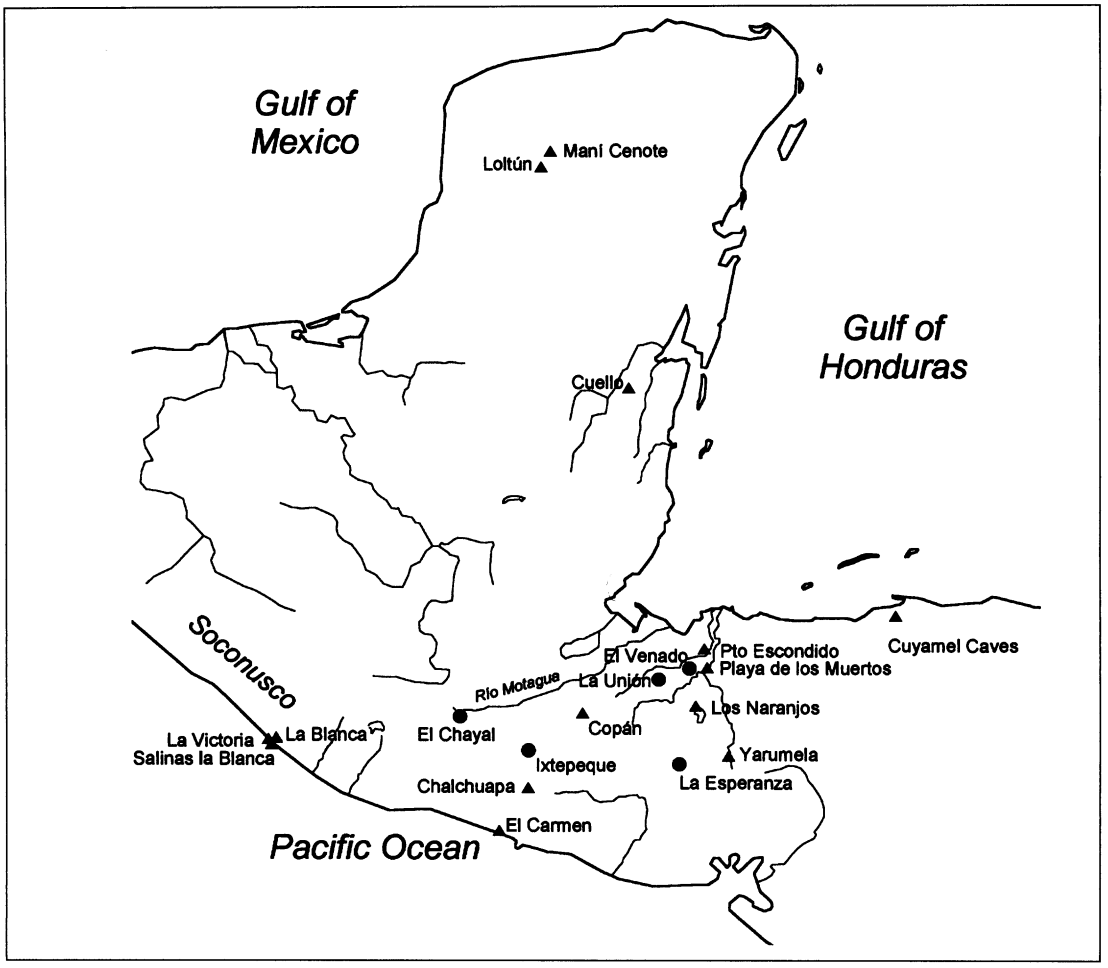

Figure 1. Eastern Mesoamerica.

of 11 radiocarbon determinations that provide a basis for comparison with Mexican Pacific coast sequences beginning before 1600 B.C. (calendar age).

Puerto Escondido

The Puerto Escondido site consisted originally of four extensive, low, earthen mounds located on a tributary of the Chamelecón River, the smaller of two rivers forming the lower Ulúa Valley in Honduras. Excavations at Puerto Escondido began as an effort to document the nature of the site before it was destroyed by a housing development. The sequence of radiocarbon dates reported here comes from one of the two earthen mounds that have been the focus of our excavations since 1994.

Prior to our work, earth moving for construction had removed more than a meter of deposit from the mound. The face of the bulldozer cut through this mound showed that these deposits consisted of a sequence of floors, burials, and pit features, some of which were associated with pottery of types produced during the Late and Terminal Classic periods (ca. A.D. 450–1000). Our initial excavations documented the foundations of a cluster of rectangular buildings, with 20 associated burials placed adjacent to building foundations and in abandoned pits. This residential occupation of the mound can be dated to the earliest part of the Ulúa phase (ca. A.D. 450–650) by associated pottery, particularly the assemblages preserved in filled, abandoned pits.

The sediments into which the foundation walls, burials, and pits of the early Ulúa period occupation were dug proved on excavation to date to the previously identified Middle Formative Playa phase (ca. 900–400 B.C.). These Playa phase deposits capped a long sequence of remains dating to the Early

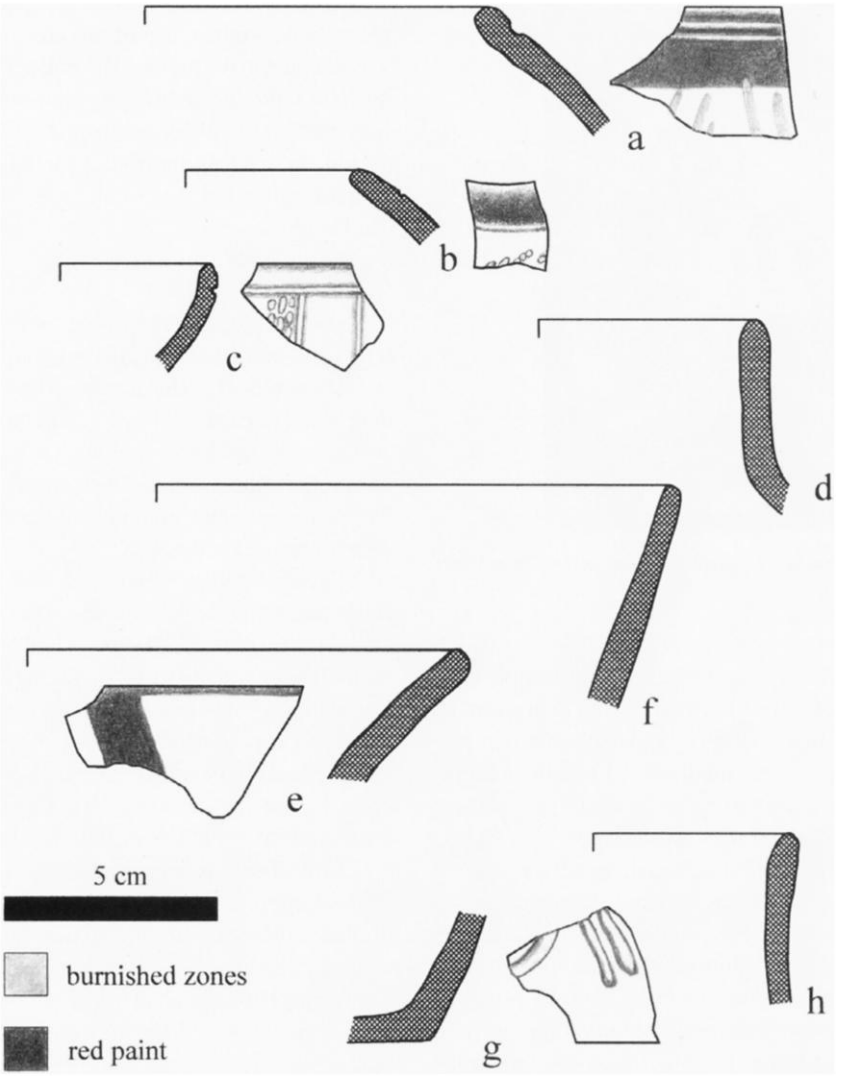

Figure 2. Barahona-phase pottery from Puerto Escondido.

Formative (ca. 1600–900 B.C.), a period previously undocumented in the region. The continuous nature of these Formative period deposits, including the presence at the base of the deposit of a component lacking pottery, makes the radiocarbon dates reported here the first evidence from eastern Mesoamerica that is comparable to Mexican sequences of Archaic to Early Formative period occupations.

Depositional Sequence

Excavation of a 2 m by 2 m unit to sterile soil provided the basis for identifying the depositional sequence for the Formative period. Additional wide-area excavation of selected Formative period features provided information about the use of the area. Pottery recovered from the stratigraphic units was assigned to types based on a combination of original vessel shape, characteristics of the clay mixture, and treatment of the surface of the vessels. Our preliminary ceramic analysis for the Early Formative is based on detailed recording of a stratified sample of more than 7,000 sherds. This compares favorably to the stratified midden used to anchor the authoritative sequence for Early Formative Oaxaca, which contained approximately 5,000 sherds (Flannery and Marcus 1994). Although we have not yet completed

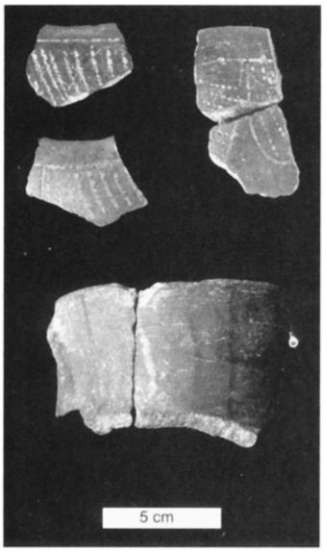

Figure 3. Barahona- and Ocotillo-phase pottery from Puerto Escondido.

tabulation of ceramics from all seasons of work at Puerto Escondido, we project a final sample comparable in size to that used for the full analysis of the Oaxacan ceramic sequence (for which approximately 50,000 sherds were tabulated in detail). Chipped stone was assigned to types based on morphology and the production techniques employed, and the chemical composition of a statistically representative sample was determined using energy dispersive x-ray fluorescence (McCandless 1998). The distribution of pottery and chipped stone through the depositional sequence was used to identify points of change in local practices of production and consumption. Based on the assessment of stratigraphy, pottery, and chipped stone, we identified five episodes in the Formative period sequence of deposits, which we have defined as phases. For clarity, these phases are described from most deeply buried (earliest) to shallowest (latest), rather than in the order they were encountered. They provide the depositional context for the carbon samples that were submitted for analysis.

Sauce Phase

During the Sauce phase, inhabitants of Puerto Escondido excavated a shallow pit into a natural surface. Obsidian flakes and fragments of bone and shell were deposited in the pit and on the surface. Although the absence of pottery from this deposit could be a reflection of relatively small sample size (only one 2 m by 2 m unit reached this level), we suggest that it represents late Archaic use of the area, before pottery was adopted in the region. The majority of the obsidian flakes, produced through percussion, were made from material available from outcrops located within 60 km. A small proportion of the flakes was made from obsidian derived from La Esperanza, in southern Honduras.

Barahona Phase

The Barahona phase is marked by the earliest pottery yet identified at the site. Barahona deposits consist of a series of surfaces covered by thin layers of debris and riverine sediments. Post-holes from construction of perishable buildings were encountered on several of these surfaces. Fragments of bone, shell, chipped stone, and pottery were contained in the debris between surfaces.

The early pottery (Figures 2 and 3) consists of finely made, thin-walled vessels in the shape of small open bowls and closed-mouth bowls (tecomates), with elaborate decoration, including incision, dentate-stamping, and painting in red and black. Barahona-phase pottery closely resembles that of the Barra phase, the earliest ceramic period in Pacific coast Soconusco (Blake 1991; Clark and Gosser 1995; Lesure 1998; Love 1990, 1991).

Local obsidian sources and the La Esperanza source continued to be employed. A small number of blades produced from local obsidian document a change in technology of production. Following the Barahona phase, obsidian from La Esperanza ceased to be used at Puerto Escondido until sometime after A.D. 250.

Ocotillo Phase

Ocotillo-phase deposits continue the sequence of surfaces and thin layers of debris. In addition to post-holes, other remains of perishable constructions from the Ocotillo phase include burned areas, or hearths. Only obsidian from local sources has been identified, in the form of percussion flakes and small blades.

Ocotillo-phase deposits contained pottery (Figures 3 and 4) without the most elaborate decorative techniques, such as dentate-stamping, found on earlier Barahona-phase pottery. Open bowls, tecomates, and red painting continued to be popular. New pottery forms include thick-walled jars decorated by polishing vessel surfaces with a narrow tool

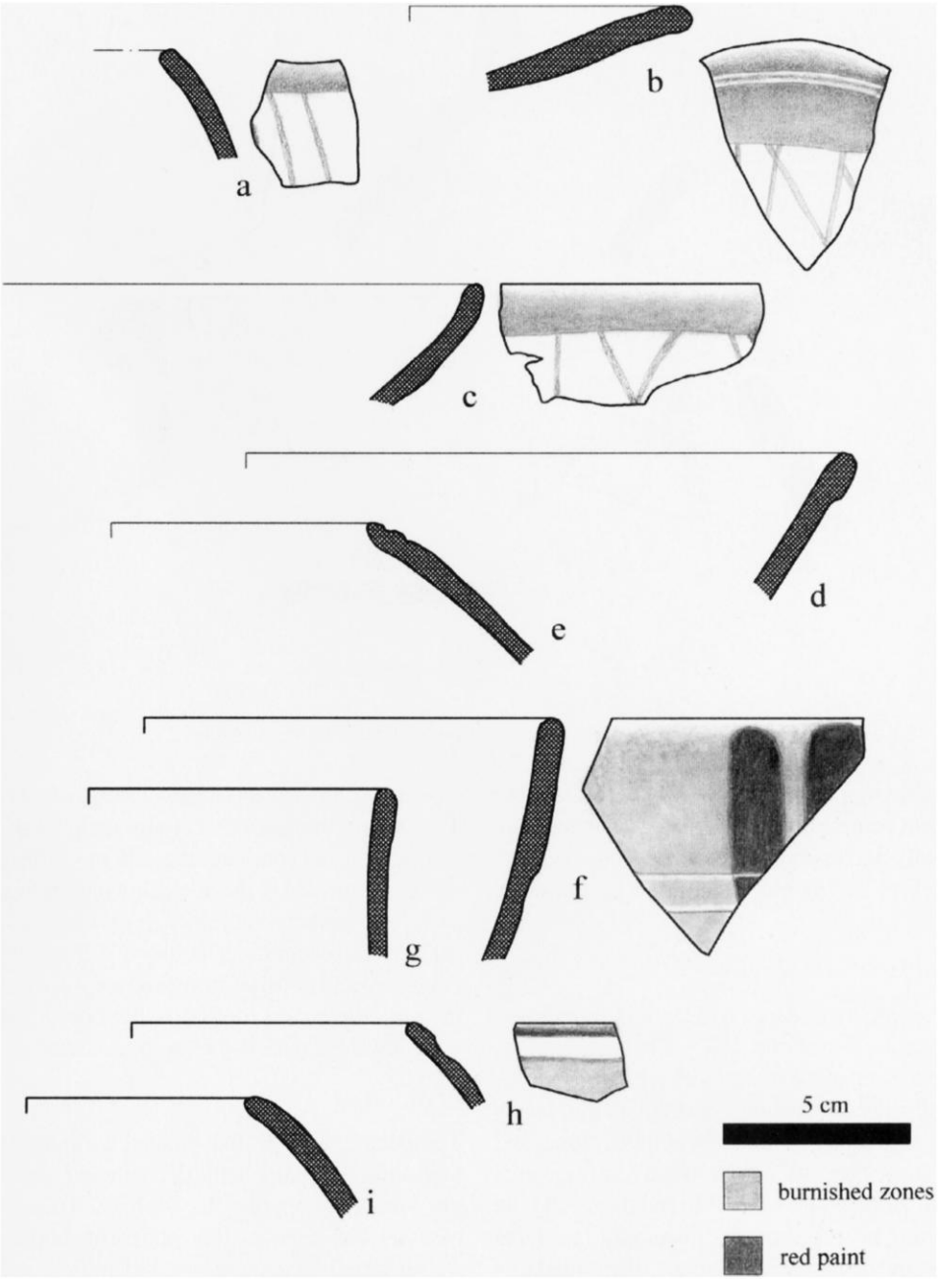

Figure 4. Ocotillo-phase pottery from Puerto Escondido.

in zones and in linear patterns. Relationships with Locona- and Ocós-phase pottery from Soconusco (Blake 1991; Coe 1961; Coe and Flannery 1967; Demarest 1987; Lesure 1998; Love 1990, 1991) are still strong. Farther east, the Metalío Group of the Bostan phase (1450–1200 B.C.) at the El Carmen site in coastal El Salvador employs pattern-burnishing in ways nearly indistinguishable from its use at Puerto Escondido (Arroyo 1995:202). Early pottery from Yarumela in the Comayagua valley (Joesink-Mandeville 1993) includes forms and decorative modes comparable to Ocotillo. Chilcal pattern-burnished duplicates the surface treatment and motifs of the Puerto Escondido material, and pat-

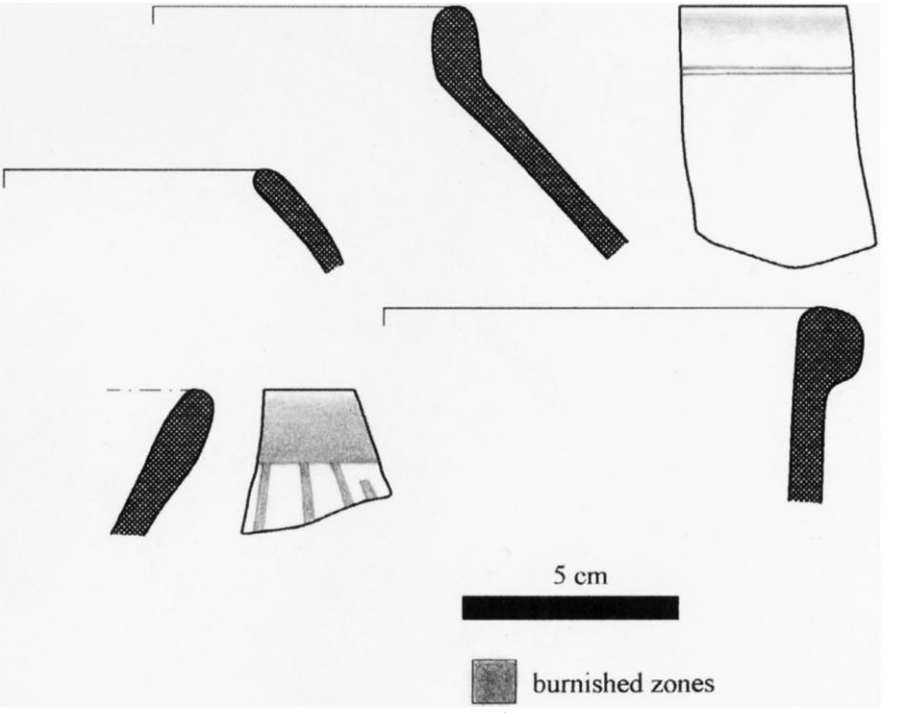

Figure 5. Chotepe-phase Rubí Red pottery from Puerto Escondido.

tern-burnishing occurs in other types as well, but the precise complex assignments of these taxa are not yet fully documented. Rayo-phase pottery from Copán (Viel 1993) also has some comparable modes.

Chotepe Phase

Chotepe-phase deposits were more broadly exposed in wide-area excavations. Early Chotepe deposits continue the sequence of surfaces with pits indicating perishable constructions, covered by thin layers of debris containing bone, shell, chipped stone, and pottery. These deposits also contain a few fragments of ground-stone bowls of marble and diorite. At the end of the Chotepe sequence, standing buildings were destroyed and the area around them filled to a depth of approximately 45 cm, forming a large, stepped earthen platform. This final Chotepe fill contained debris from the destroyed buildings mixed with larger fragments of pottery vessels, chipped-stone artifacts, and other cultural materials. Obsidian prismatic blades from Ixtepeque and El Chayal, sources in Guatemala, were added to the repertoire of percussion flakes and small blades made of local obsidian. External relationships of pottery from Chotepe-phase deposits are discussed in detail below. The pottery complex essentially includes a coarse paste group that continues the pattern-burnished tradition established in the preceding phase (Figure 5), and a fine-paste group in which new modes of vessel form and decoration, including differential firing (Figure 6) and polished black and gray surfaces with incised and carved motifs on flat-bottom, flaring-wall bowls (Figures 7–11), were executed.

Playa Phase

The construction of the stepped earthen platform marks the beginning in the depositional sequence of the Middle Formative Playa phase. Traces of the plastered surface of this platform, and footing trenches for two terraces, were identified. Set in the terraces of the platform were at least two human burials with traces of pigment; at least four complete pottery vessels, one containing jade costume ornaments; and two ground-stone objects. Additional Playa-phase deposits covering the surface of this stepped terrace were disturbed by construction of pits, burials, and wall foundations in the early Ulúa phase, and were cut in places by modern bulldozing operations.

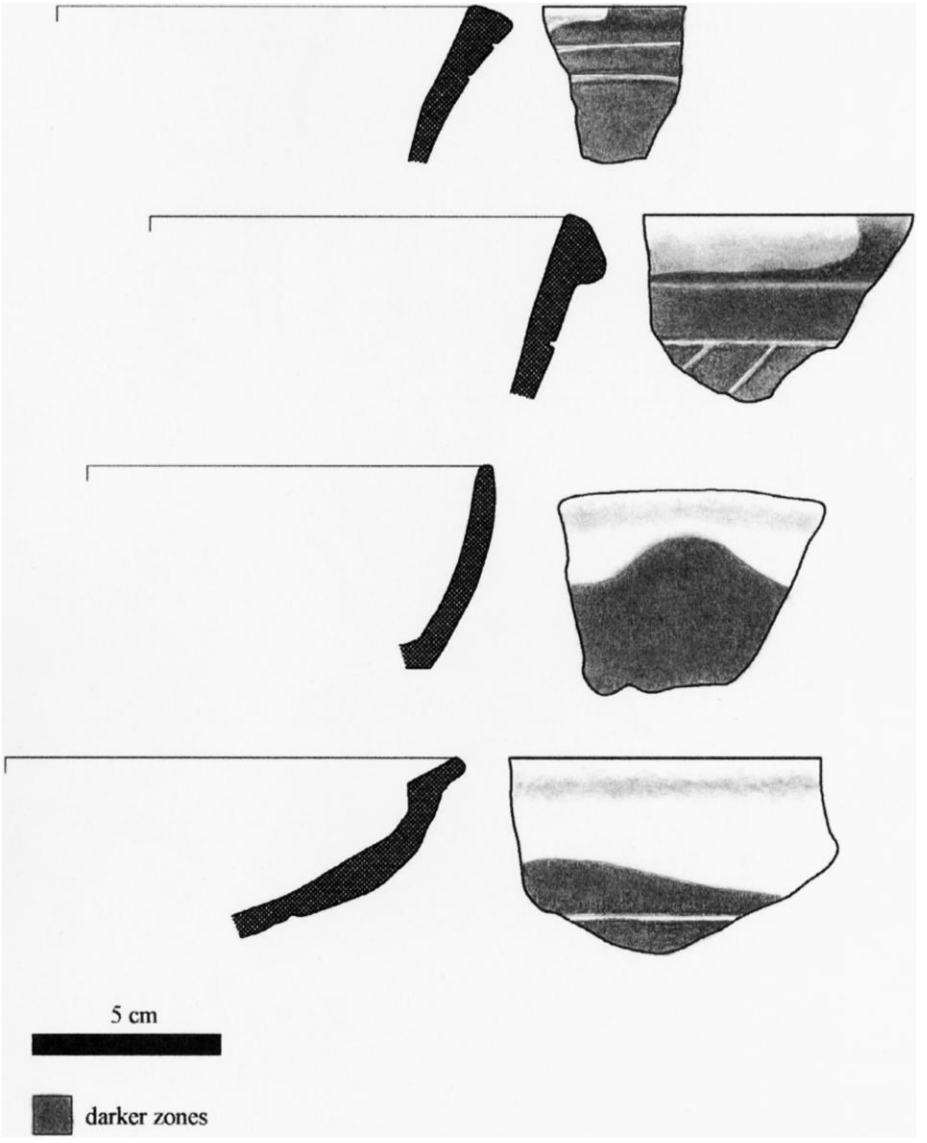

Figure 6. Chotepe-phase Sukah Differentially Fired pottery from Puerto Escondido.

Radiocarbon Dates

Eleven samples of wood charcoal from this depositional sequence were submitted to Beta Analytic for radiometric dating (Table 1). All but one were analyzed using direct atomic counting by accelerator mass spectrometry (AMS). One small sample (Beta-129130) was analyzed by standard radiometric methods with extended counting time.

The order of the conventional radiocarbon ages is consistent with the stratigraphic position of the carbon samples on which they are based, with one exception. Beta-129130 was collected from a Middle Formative mixed fill but produced a much earlier than expected date. Since the depositional sequence was marked by repeated reconstruction of perishable structures, including ancient excavations of holes for perishable posts, such upward mixing of carbon is not unexpected. The date derived correlates with that of Beta-129129, and we suggest that the carbon sampled for Beta-129130 was moved upward through ancient excavation from the more deeply buried levels that yielded Beta-129129.

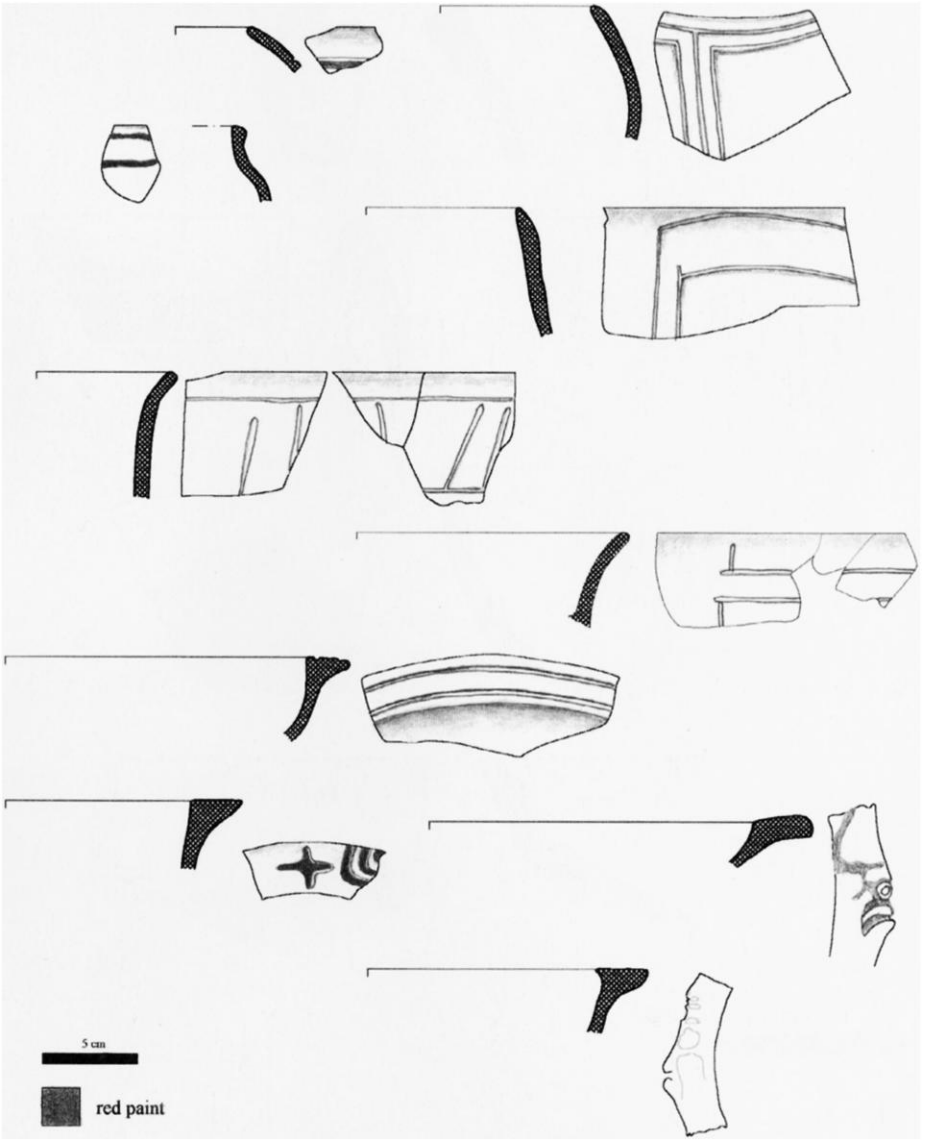

Figure 7. Chotepe-phase Boliche Black pottery from Puerto Escondido.

The calibrated dates (Figure 12) establish that the depositional sequence at Puerto Escondido is parallel to, and approximately contemporary with, the earliest evidence for settled village life in Mesoamerica (Figure 13). The initial Barahona phase (1600–1400 B.C.; radiocarbon samples Beta-129129, Beta-129130) can be compared to the Barra phase of Soconusco, which also saw the production and use of thin-walled, elaborately decorated bowls and tecomates (Blake et al. 1995; Blake and Clark 1993; Clark and Gosser 1995; Lesure 1998). The Ocotillo phase (1400–1100 B.C.; Beta-129128, Beta-129132), like the Ocós phase of Soconusco, continued the development of early decorated pottery and added larger, coarser vessels. In the Chotepe phase (1100–900 B.C.; Beta-129127, Beta-129131, Beta-129133, Beta-129134, Beta-129135), there is a sharp increase in evidence of participation in external relations of exchange. This is most evident in the presence of blades made from obsidian from the Ixtepeque and El Chayal sources. El Chayal obsidian has been identified as a monopoly of communities along the Pacific Coast and in the Gulf Coast of Mexico. Links in the same direction are evident in

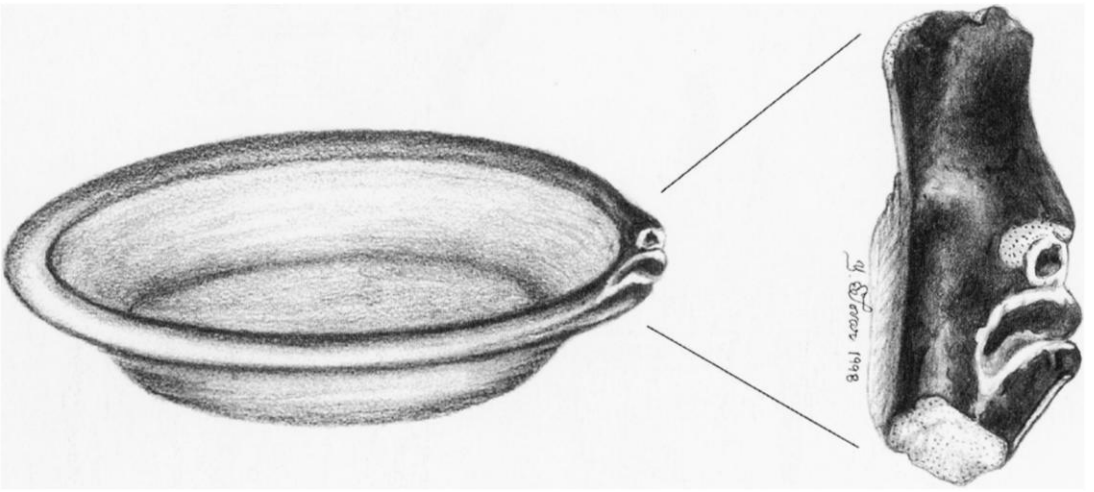

Figure 8. Chotepe-phase Boliche Black bowl from Puerto Escondido.

the adoption of new modes of vessel form and surface treatment during Chotepe phase, discussed further in the following section of this paper. We stress that all evidence indicates that this pottery was manufactured locally in Honduras. Local conformity to standards of vessel shape and decoration indicates knowledge of other, distant, settlements and engagement with them in common social relations. It does not constitute evidence of centralized control by inhabitants of the large Olmec centers of the Gulf Coast (Flannery and Marcus 2000).

The conversion of Chotepe-phase buildings into a single, monumental-scale earthen platform at the beginning of the Middle Formative period (ca. 900 B.C.; Beta-129126) is accompanied by the first evidence of the importation of jade to the site, presumably from sources in the Motagua River valley of Guatemala. Debris from working jade formed part of the mixed Middle Formative deposits that buried this structure, indicating that the inhabitants of Puerto Escondido were obtaining raw material, not simply finished products. The most likely trading partner in this exchange was the contemporary early village buried below the Classic Maya city of Copán, in western Honduras (Fash 1985; Garber et al. 1993; Longyear 1969; Rue et al. 1989; Viel and Cheek 1983).

The vessels placed as cached deposits in the Middle Formative platform at Puerto Escondido are formally identical to vessels recovered in burials at Playa de los Muertos, a previously identified village on the Ulúa River (Joyce 1992; Kennedy 1986; Popenoe 1934). Figurines from the two sites are also indistinguishable (Joyce 1992; Pope 1987; Popenoe 1934). The early monumental architecture at Puerto Escondido, comparable to examples in other areas of Mesoamerica (Lesure 1997; Lowe 1981; Sharer 1978, 1989) considered more advanced, was obscured in this active riverine environment by landscape remodeling (Pope 1985) and by later building activity dating to the early Ulúa phase (ca. A.D. 400–650; Beta-129125).

Chotepe-Phase Ceramics and Interaction with Other Regions of Mesoamerica

Although the entire sequence of deposits from Puerto Escondido is of significance, the Chotepe-phase

Figure 9. Chotepe-phase Boliche Black pottery from Puerto Escondido.

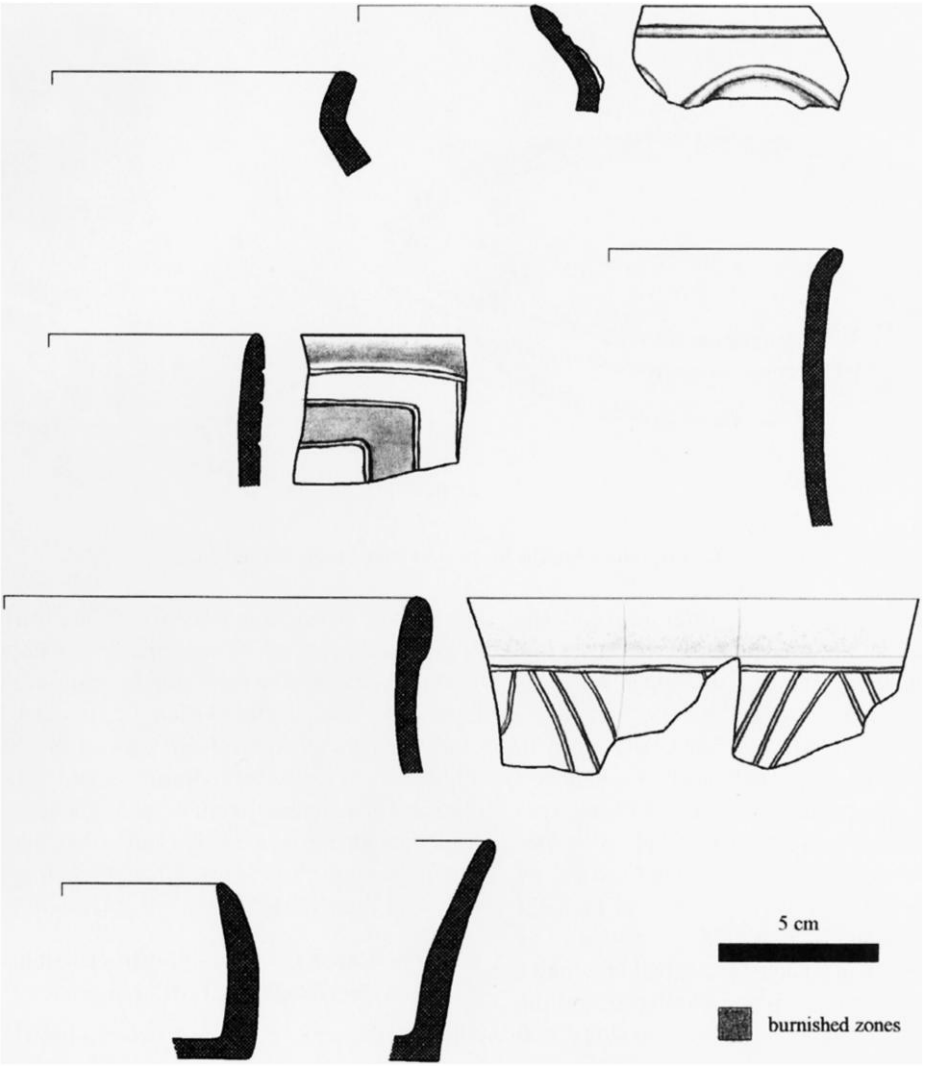

Figure 10. Chotepe-phase Bonilla Yellow-Brown pottery from Puerto Escondido.

ceramics provide the largest body of material for a reevaluation of assumptions concerning the participation of northwestern Honduras, and of eastern Mesoamerica in general, in developments that characterized much of Mesoamerica during the period between 1100 and 900 B.C. Early materials from sites such as Playa de los Muertos, the Cuyamel Caves, Yarumela, and Copán have long been considered of potential significance in understanding the relations of Honduras to the development of early stratified societies on the Mexican Gulf Coast and in the Mexican Highlands (Canby 1951; Healy 1974; Kennedy 1986; Longyear 1969; Porter 1953; Sharer 1989; Vaillant 1934; Willey 1969). In the absence of well-documented sequences of chronometric dates for early deposits from the Honduran sites, a relatively conservative perspective gradually came to dominate interpretation, in which Honduras was a backwater that received delayed "influences" from other regions of Mesoamerica during the Formative period. Our results from Puerto Escondido establish the contemporaneity of developments there with those elsewhere in Mesoamerica. This interpretation is both more consistent with data from Honduras and elsewhere, and could account for some anomalies in data noted at other sites.

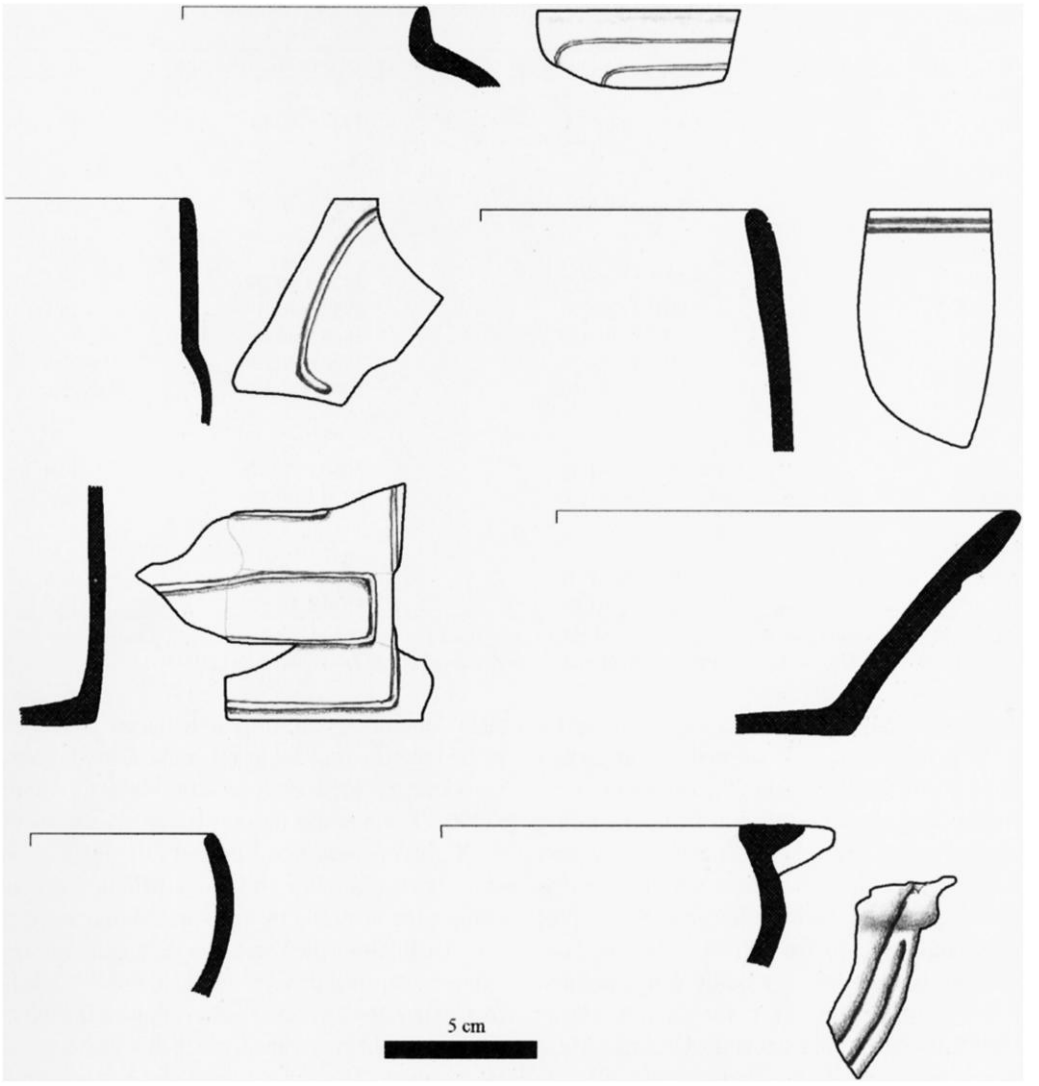

Figure 11. Chotepe-phase Fía Metallic Gray pottery from Puerto Escondido.

Pattern-burnishing in the Early Formative

Pottery from Chotepe deposits included a group with brown paste and temper derived from crushed rock; bowls and jars in this group often have red slip and/or pattern-burnished decoration (Figure 5). Although never numerically common, pattern-burnishing has well-defined chronological placement at Salinas La Blanca. It is described as "virtually restricted to the Cuadros phase, and a good horizon marker" (Coe and Flannery 1967:26). Pattern-burnishing continues in low frequencies in early Conchas at Salinas La Blanca and La Victoria (Coe 1961:61–62, 64, 71; Coe and Flannery 1967:55).

Pattern-burnishing does not appear to be present farther west than the Pacific Coast of Guatemala. All early reports noted its presence in presumed Early Formative context at the Maní Cenote in Yucatan (Yotolin pattern-burnished; Brainerd 1958). This comparison gained additional force with the publication of the Swasey ceramic complex from Cuello, Belize, originally dated to 2000–1500 B.C. There, Duncan Pring (1977) identified an unspecified variety of Yotolin pattern-burnished based on 26 body sherds. Laura Kosakowsky (1987:14–15) later renamed the Swasey complex type Patchchacan pattern-burnished because of the presumed gap of 1,000 years between the two samples. Her description was

Table 1. Radiocarbon samples from Puerto Escondido, Honduras

Beta Analytic sample number	Calibrated date(2 sigma range)	Conventional radiocarbon age	$\delta^{13}C$
Ulúa Phase			
Beta-129125	cal AD 430-625	1530 ± 40 BP	–23.9
Playa Phase			
Beta-129126	cal BC 940-810	2730 ± 40 BP	–26.9
Chotepe Phase			
Beta-129134	cal BC 1105-895	2830 ± 40 BP	–26.1
Beta-129135	cal BC 1120-910	2850 ± 40 BP	–25.5
Beta-129131	cal BC 1140-920	2870 ± 40 BP	–23.3
Beta-129133	cal BC 1215-975	2900 ± 40 BP	–27.9
Beta-129127	cal BC 1260-930	2900 ± 50 BP	–25.6
Ocotillo Phase			
Beta-129128	cal BC 1410-1120	3030 ± 50 BP	–30.9
Beta-129132	cal BC 1410-1205	3050 ± 40 BP	–25.4
Barahona Phase			
Beta-129129	cal BC 1695-1510	3320 ± 40 BP	–24.8
Beta-129130	cal BC 1745-1305	3250 ± 100 BP	–24.8

Note: All samples are wood charcoal. Beta Analytic calendar calibrations calculated with calibration data published in *Radiocarbon*, Vol. 40 (1998), using the cubic spline fit mathematics published by Talma and Vogel (1993).

based on eight body sherds and a single rim sherd. While Patchchacan pattern-burnished was rare, it was also quite distinctive, with smoothed surfaces decorated with thin pattern-burnished lines, including diagonal cross-hatched fields. The narrow (0.2 cm) width of the burnished lines matches the fine-line tool size characteristic both of the Yarumela samples and of the larger assemblage from Puerto Escondido. The sole rim is described as a bottle with a pointed lip formed by folding the clay to the exterior, a technique also found at Puerto Escondido. Decoration was confined to the body. Body sherds are described as exhibiting the curvature and thickness of jar or bottle forms. The Patchchacan type was limited to the early part of the Swasey depositional sequence, and was not noted in the later Bladen complex.

Kosakowsky (1987:14–15) noted, as one of the bases for renaming the type, that E. Wyllys Andrews V did not believe the Swasey materials were actually comparable to the Yotolin type from northern Yucatan. Andrews made his observations as part of a reassessment of early Maya Lowlands pottery complexes, which led him to successfully challenge the proposed early dating of Swasey (Andrews 1990; Andrews and Hammond 1990). Despite their agreement that Swasey did not date as early as originally proposed, Andrews and Hammond differ on the correct dating of Swasey, with Hammond suggesting the early materials—including all the Patchchacan pattern-burnished sherds—belong to a terminal Early Formative component placed between 1200-900 B.C. Andrews (1990:19) argued that the only contextual associations for Yotolin pattern-burnished, at Loltun Cave, were entirely conformable to known Middle Formative complexes in northern Yucatan. Although he preferred to interpret the Yotolin and Patchchacan sherds as equivalent, and therefore indicative of Middle Formative age for Swasey, he also allowed for the possibility that the two were distinct, though his grounds (a presumed lack of evidence for bottle forms at Cuello) are unacceptable in light of Kosakowsky's description of the type sample.

Pattern-burnished sherds are not sufficiently common at Cuello, Mani, or Loltun to suggest they were a typical product of local manufacture. Kosakowsky's (1987:14–15) general description of the ceramic body of Patchchacan differs from every other type described for Swasey and for the later Bladen. She notes the presence of crushed mica in some of these sherds. Mica is generally present, apparently as a naturally occurring inclusion, in clays of the lower Ulúa valley, and is present in the Early Formative ceramics from Puerto Escondido. The rare pattern-burnished sherds found in Swasey complex at Cuello, at the Mani Cenote, and in Loltun Cave may represent products of exchange with north coastal Honduras.

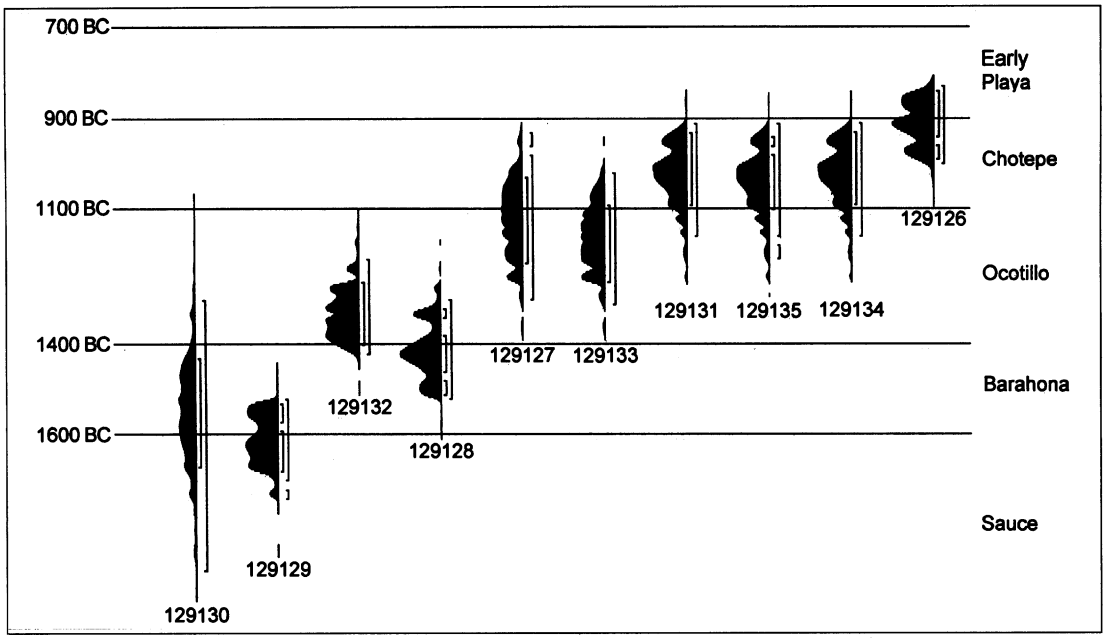

Figure 12. Probability distributions of calibrated calendar dates for radiocarbon samples. Labels are Beta Analytic sample numbers. Inner brackets indicate 68.2% confidence ranges; outer brackets indicate 95.4% confidence ranges. Original plot produced with OxCal v2.18 (Stuiver and Kra 1986).

Since pattern-burnishing continues in the Playa de los Muertos ceramic complexes (Kennedy 1980:132) in the same designs as defined at Puerto Escondido (Joyce, personal observation of Playa de los Muertos components at the Peabody Museum, Harvard, and from Yoro, Honduras, excavated by Joyce), the Ulúa valley could have provided a source of these infrequent vessels during either time period.

Pattern-burnishing is present in Cuadros, Bostan, and Yarumela Early Formative complexes (but not, as Kosakowsky mistakenly suggests, in San Lorenzo complex on the Gulf Coast), and the occurrence of the technique in the Swasey complex is thus consistent with an Early Formative dating. Other evidence supports a placement before 900 B.C. for each of these complexes. The Puerto Escondido assemblage shares the pattern-burnished technique and precedes the development of Playa de los Muertos types. The radiocarbon dates discussed below confirm the Early Formative date of pattern-burnishing (as well as the complex iconographic motifs of pan-Mesoamerican distribution) at Puerto Escondido. Hendon and Joyce (1993) have obtained radiocarbon dates supporting assignment of Playa de los Muertos ceramics to the initial Middle Formative, ca. 850-650 B.C., consistent with the external comparisons to Cuadros complex made by Coe (1961).

Chronology of Olmec-style Ceramic Features in Honduras

Another Chotepe-phase pottery group included distinctive new forms and surface treatment techniques, and a new clay mixture that produced a compact paste with abundant small temper particles probably derived from volcanic ash. Vessel surfaces, polished but unslipped, are commonly black, grey, brown (Figures 7–11), or have contrasting colors resulting from differential firing (Figure 6). The predominant flat-based, flaring, or cylindrical wall bowls with deeply carved designs, sometimes with additional red pigment—including the St. Andrews cross, a star or diamond, a variant of the "hand-paw-wing," and faces modeled on rims—closely resemble vessels usually identified as Olmec in style (Clark 1994; Coe and Diehl 1980; Flannery and Marcus 1994, 2000; Grove 1997; Longyear 1969; Sharer 1989).

At Chalchuapa, Tok-phase pottery (ca. 1200–900 B.C.) provides comparisons for several modes from Puerto Escondido, including geometric motifs constructed from nested rectangles and differentially fired bowls, a minority with incised designs. Dissimilarities are even more evident, however, with the important pattern-burnished technique apparently unrepresented at Chalchuapa. More puzzling is the

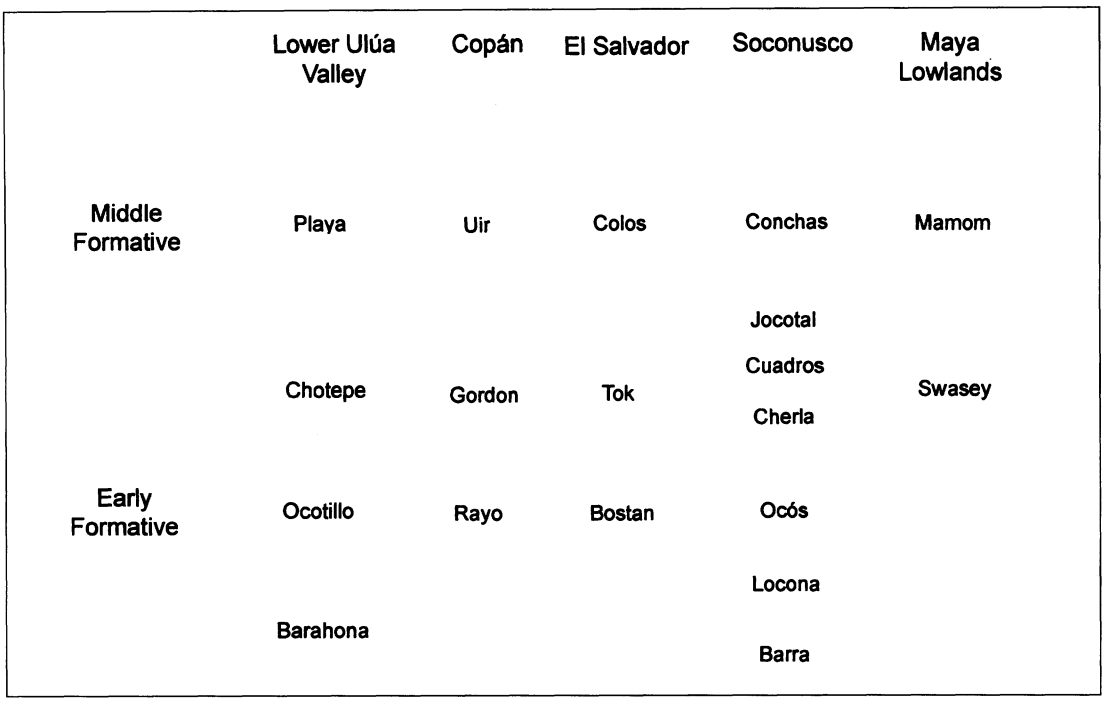

Figure 13. Early sequences in eastern Mesoamerica.

absence at Chalchuapa, despite its later low-relief boulder carvings in pan-Mesoamerican style, of any of the incised motifs that suggest participation in wider Olmec networks of interaction.

In Honduras, such motifs have been reported from the Cuyamel Caves (Healy 1974) and from the Gordon subcomplex of Copán, to which Viel (1993:33–41, 132–133) assigns an initial Middle Formative date. The Gordon complex is represented by 27 complete vessels from burials in a cemetery and in the caverns of the Copán Valley, along with 23 sherds, seven of them diagnostic. Viel aptly reviews the difficulties involved in placing these vessels in comparative context, in the absence of a larger component stemming from refuse deposits. He adopts a conservative position conditioned by the association of these vessels with jade in the Gordon cemetery, although he notes in passing the opinion of David Grove that jade could be found earlier in a region as close to the Motagua source as is Copán (see Bishop and Lange 1993 for evidence that Formative period jades from Mesoamerica originated in the Motagua River valley).

The strongest argument for assigning a later date to these materials in Honduras than in other regions was the "peripheral" location of Copán: "Generally, it is considered that the Olmec expansion took place, at least towards Central America, *beginning* at 900 B.C. In Guatemala, the presence of Olmec traits is diagnostic of the Middle Preclassic" (Viel 1993:133; Joyce's translation, emphasis added). Viel makes the argument more explicit by using the dates proposed for the Jaral complex of Los Naranjos—at that point the only major focus of Formative Period interaction with Mesoamerica in Honduras—for comparison with Gordon complex. Comparison to Kennedy's proposed dates for Playa de los Muertos, used as additional support for the argument for delayed adoption of these traits, is considered below, and arguments for rejecting her late dating for Playa de los Muertos are offered.

The relevant question is whether sites in Guatemala and Honduras with "Olmec" traits in Middle Formative ceramic complexes are the best or only potential sources of comparison for either the relatively isolated Gordon vessels, for the Cuyamel Caves vessels to which Viel convincingly relates the Gordon materials, or for the newly documented ceramics from Puerto Escondido. Viel (1993:39–41), in support of the Middle Formative placement of the Gordon vessels, draws specific comparisons to types at Salinas La Blanca on the Guatemalan Pacific

Coast. A consideration of the chronology of these types at Salinas La Blanca and related sites helps to contextualize the Chotepe-phase assemblage from Puerto Escondido.

In his original definition of Ocós and Conchas ceramic complexes, based on excavations at La Victoria on the Pacific Coast, Michael Coe compared several types he identified for the Conchas complex (then dated 1000–300 B.C.) with material from Playa de los Muertos (Coe 1961:55, 66, 69, 72–73, 76–78). Since Coe had the advantage of direct comparison with the Playa de los Muertos type material at the Peabody Museum, Harvard University, his comments should be given considerable weight. They closely approximate the observations that Joyce has made, based on examination of these and other Formative Honduran ceramics stored at the Peabody, including the original Yarumela collection, the original "Yojoa Monochrome" collection, and the vessels from the Copán caves. Coe (1961:127) writes that "Conchas and Playa de los Muertos are clearly contemporaneous and they share a host of traits . . . [although t]his does not imply a complete identity."

Subsequent excavations at Salinas La Blanca in the same region (Coe and Flannery 1967) led to revision of the proposed sequence and new dates for Conchas. Newly defined Cuadros and Jocotal complexes were placed before Conchas, and assigned dates between 1000 and 850 B.C., in the terminal Early Formative. The types identified by Coe (1961) as comparable to Playa de los Muertos remained in the Conchas complexes, dated after 800 B.C.

The major types identified by Viel (1993) as comparable to Copán's Gordon complex (Tilapa Red on White, Pampas Black and White, and Morena Black) present a somewhat different picture, both typologically and chronologically. All three types begin with Cuadros complex, and while Morena Black and Pampas Black and White continue into Conchas, they are characterized by new forms, especially composite silhouette bowls. Tilapa Red on White was rapidly replaced in early Conchas by zoned Conchas Red and White ceramics, again with distinct vessel forms. Although the Guatemalan types Viel compares to Gordon pottery do continue into the Middle Formative Conchas complex, the closest similarities in vessel form are with the Cuadros and Jocotal complexes. The only major discontinuity with Cuadros/Jocotal is the absence at Salinas La Blanca of the complex motifs that distinguish both Gordon vessels and the pottery of Puerto Escondido. But these motifs are equally lacking in the Middle Formative Conchas-phase ceramics from Salinas La Blanca.

More recent considerations of the archaeology of the Pacific Coast of Guatemala and Chiapas have refined our understanding of the Early to Middle Formative ceramic sequence and inter-regional variation, and they have resulted in new proposed dates for relevant complexes (Blake et al. 1995). For the Mazatan region of Chiapas, John Clark (Blake et al. 1995; Clark 1994) defined the Mokaya tradition, a localized sequence of developments including the use of pottery typologically identifiable with the Cuadros and Jocotal complexes (now dated 1000–900 and 900–850 B.C.; Blake et al. 1995:175–179), as well as earlier Ocós and Barra complex pottery. Included in the suite of vessels typical of Mazatan-region Cuadros are a range of flat-based, flaring-wall bowls with white slipped, differentially fired, and black surfaces incised on the exterior wall or wedge-shaped rim with geometric designs, some of which are schematic versions of widespread Olmec motifs, including the profile "dragon" and St. Andrews cross. Cuadros ceramics identified in the Mazatan region form the geographically closest documented body of material parallel to the Chotepe-phase ceramic complex from Puerto Escondido. At the same time, the two complexes differ in some significant regards. Although a similar range of neckless and necked jar forms with red slip is found in the two areas, the Mazatan complexes emphasize punctation, appliqué, and red linear painted designs not known at Puerto Escondido.

Clark (1994:196–199) contrasts Mazatan Cuadros with the preceding Cherla complex (1100–1000 BC; Blake et al. 1995:173–175) with which it significantly overlaps in basic ceramic inventory. Although differentially fired ceramics are part of the Cherla assemblage, Clark notes the absence of the complex symbolic motifs introduced in abundance in succeeding Cuadros. It is precisely these motifs that are generally absent from Cuadros as originally defined at Salinas La Blanca. Demarest (1987:336) had earlier raised concerns about the apparent absence of "Olmecoid" traits in the Cuadros/Jocotal assemblages from the Pacific Coast of Guatemala, associating their appearance after ca. 900 B.C. with the first development of monumental architecture and the appearance of carved-stone monuments at sites such as Chalchuapa. Michael Love's (1990, 1991) pioneer-

ing regional examination of the Río Naranjo drainage extending inland from the sites of La Victoria and Salinas La Blanca confirmed the general absence of such motifs in ceramics until the Conchas-phase (850–650 B.C.) development of La Blanca, a regional center, with monumental architecture, sculpture, and incised white and black ceramics carrying motifs of cleft-headed profile faces (850–650 BC; Blake et al. 1995:179–181). His excavations at La Blanca and regional-scale analysis demonstrated that these elements were restricted to La Blanca itself, and differentially distributed within it.

Clark's (1994:197–200) analysis of the Mazatan region reached the same general conclusion, although here the local centers develop slightly earlier and thus have ceramic assemblages identifiable with Early Formative Cuadros rather than Middle Formative Conchas. Where Cherla complex ceramics are widely distributed in the region, and may be associated with multiple centers, Cuadros pottery with its iconographically complex motifs is limited to a single regional center.

Uneven distributions of "Olmec" motifs are in fact typical in all regions that have been thoroughly investigated. For Oaxaca, Flannery and Marcus (1994:329–339) documented differential distribution of motifs that they argued stems from three kinds of differences in patterns of ceramic consumption: status distinctions within communities; within-site symbolic differentiation that may reflect social groupings; and intra-regional differences between neighboring, but independent, communities. As was true of La Blanca, at San Jose Mogote they found evidence that larger amounts of exotic materials such as jade, shell, iron ore, and mica are associated with the iconographically complex pottery vessels. Flannery and Marcus concluded that chronological distinction is only one of the possible explanations that should be considered for differences in the distribution of symbolically significant ceramic decoration.

The Gordon complex vessels from Copán are precisely the kind of material that, elsewhere in Mesoamerica, is found only in association with particular kinds of sociopolitical involvements. The absence of such explicit symbolism from contemporary assemblages at neighboring sites, even those that are well-studied, is not by itself sufficient reason to conclude that the introduction of these motifs was delayed. A similar explanation may account for the absence of complex motifs from Chalchuapa's Tok ceramic complex. Sharer (1978:209) argues that Chalchuapa may have played a less central role in the region than an uninvestigated site near Ahuachapan, located in a pass 25 km to the west, to which "Olmec"-style portable objects are attributed.

Most of the external comparisons drawn by Viel for Gordon-phase vessels are to terminal Early Formative complexes. "Olmec" motifs found in some Guatemalan sites in slightly later contexts, for example at La Blanca, are on vessels with diagnostic Middle Formative complex-silhouette forms. The Gordon vessels, in contrast, are entirely comparable in form, surface treatment, and decoration to Early Formative complexes, as recently emphasized by Flannery and Marcus (1994:135, 382, 390), and noted previously by many others (Fash 1985, 1991; Healy 1974; Joyce 1992; Longyear 1969; Porter 1953). Chotepe-phase sherd samples from Puerto Escondido likewise find their closest analogues in Early Formative, rather than Middle Formative, complexes, and the radiocarbon dates discussed above confirm their Early Formative date.

Conclusions

Rather than an isolated, backward rural village on the edge of the Mesoamerican world, the Middle Formative society of which Playa de los Muertos was part had a continuous history going back as early as any sedentary society yet documented in Mesoamerica. Like other precocious Mesoamerican societies, the people of the Chotepe-phase Ulúa valley participated in long-distance networks of exchange through which obsidian from Guatemala moved as far west as the Gulf Coast Olmec centers. Honduras' Chotepe-phase societies participated directly in the social relations that spread preferences for flat-based open bowls in shades of black and white that often carried complex carved motifs related to ideological and religious concerns. The participation of villages in far eastern Mesoamerica in these networks demands reevaluation of core-periphery models of the development of Mesoamerican complex societies during the centuries from 1100 to 900 B.C.

The deep stratigraphic sequence at Puerto Escondido also requires a new evaluation of the emergence of sedentary societies dependent on agriculture from predecessors of the late Archaic period engaged in diversified collecting strategies (Voorhies 1996a, 1996b). The stratigraphy, features, and dates for Barahona deposits at Puerto Escondido support argu-

ments based on pollen samples from Lake Yojoa, located only 65 km away, for relatively early intensification of maize cultivation in northwest Honduras (Rue 1989). Prior to the identification of early occupation at Puerto Escondido, the proposed dates for maize pollen at Lake Yojoa were inconsistent with the lack of evidence for early settlement in the region.

At present, models of the Archaic to Formative-period transition in Mesoamerica are based on a few sites in which conditions of preservation were unusually favorable. These sites may not be typical of what were probably highly varied routes toward greater sedentism and increased reliance on cultivation of a narrower range of plant foods. The role of fertile lowland riverine environments is especially difficult to investigate, due to the frequency with which sites have been reworked and buried by deposition (Pope 1985; Voorhies and Kennett 1995). It is highly unlikely that Puerto Escondido is unique, and much more likely that the agricultural potential of lowland river valleys in Mesoamerica would have made them some of the most favorable locations—along with swamps and lacustrine environments—for early transitions to increased reliance on agriculture and to sedentism (Hester et al. 1996; Jacob 1995; Jacob and Hallmark 1996; Jones 1994; Pohl 1990; Pohl et al. 1996). It seems certain that other equally early villages exist elsewhere in eastern Mesoamerica. The identification of early settlements in areas of active river deposition may be difficult, but it is crucial to arriving at more accurate understandings of the early history of human occupation in Central America.

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