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The Early Preclassic Barra Phase of Altamira, Chiapas

A Review with New Data

by

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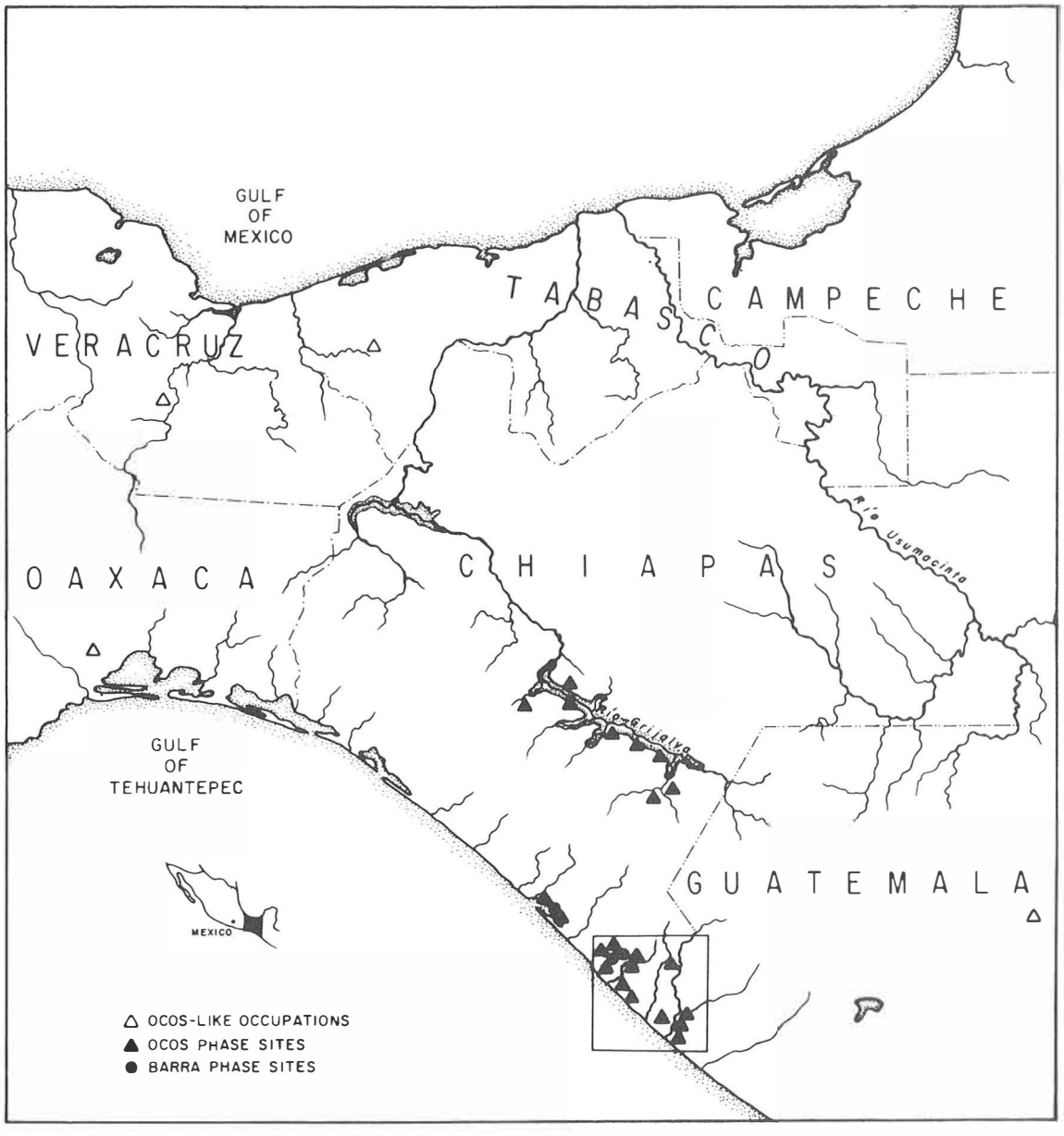

MAP OF THE GREATER ISTHMUS REGION

Showing location of known Barra and Ocós phase sites in southern Chiapas and Guatemala and Ocós-like occupations reported elsewhere. The area within the square is the southern Soconusco district mapped in detail as Figure 1.

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INTRODUCTION

The Barra cultural phase is represented by the oldest ceramic complex known from eastern Mesoamerica, that area of high culture located east and south of the Isthmus of Tehuantepec (Frontispiece). Identified in 1965 at Altamira on the Pacific Coast of Chiapas (Green and Lowe 1967), the Barra phase is known to date to between 1500 and 2000 B.C. Additional research currently underway eventually will enlarge our knowledge of this pioneer pottery-using society of southern Chiapas (Ceja 1974, 1975, and in preparation), but it appears useful to bring together now a resumé of the available information from Altamira and my own opinions about it. I have accordingly summarized below the history of the discovery and definition of the Barra phase, reviewed the Coastal Plain ecological situation, and discussed some problems that have been raised with regard to early subsistence and the possibility of early diffusion. Brief investigations made in 1973 are then described, together with some new details of the Barra ceramic complex as it was better known in that year. The much more satisfactory 1973–74 excavations by Fausto Ceja at additional sites and two radiocarbon dates are also noted and briefly discussed. Some final comments regarding the probabilities of long distance diffusion and some cautionary notes close the report.

This paper is a greatly amplified version of a short presentation in Spanish read before the 13th biennial Mesa Redonda of the Sociedad Mexicana de Antropología held in Jalapa, Veracruz, in September, 1973 (Lowe 1973b).

Investigations

In the winter of 1963 the New World Archaeological Foundation was engaged in its second year of investigation of the ruins of Izapa, located in the Pacific Coast piedmont region of Chiapas near the Guatemala border (Fig. 1). The Izapa ruins are the most important of the Soconusco district, an area famed for its production of cacao (Stirling 1943; Norman 1973; Lowe, Lee, and Martínez 1975). It was already obvious from the potsherds found in early platform construction fill that Izapa's many mounds represented a long series of occupations extending from the Early Preclassic period (Ekholm 1969) through the Early Postclassic period (Lee 1973). Nevertheless, it had been impossible to find pure unmixed refuse for the Early and Middle Preclassic occupations at Izapa, even though such deposits had already been discovered by Michael Coe (1961) in the nearby archaeological zone of La Victoria near Ocós on the Guatemala Pacific Coast (see map, Fig. 1).

In an effort to identify other archaeological sites on the Pacific Coast of Chiapas that could clarify all of the Izapa sequence and at the same time demonstrate its external relationships, the NWAF sponsored Arqueólogo Carlos Navarrete in his task of surveying the entire Soconusco district. He has attempted to locate most of the ancient sites both in Soconusco and in the adjoining Tonala district of the Pacific Coast. By means of surface collections and occasional test pits, it has been possible to identify the principal periods of occupation for each site located and to determine certain cultural relationships between many of the zones; the more important sites have been surveyed and mapped by Eduardo Martínez Espinoza, topographer for the NWAF.

The Navarrete reconnaissance, finished only in 1974 with the much appreciated cooperation of the institution presently sponsoring him, the Universidad Nacional Autónoma de México, is for the most part still not published (Navarrete and Martínez, in preparation), but it has had important results, some of which have been reported briefly by Navarrete (1969, 1971, 1972, 1973, 1974).

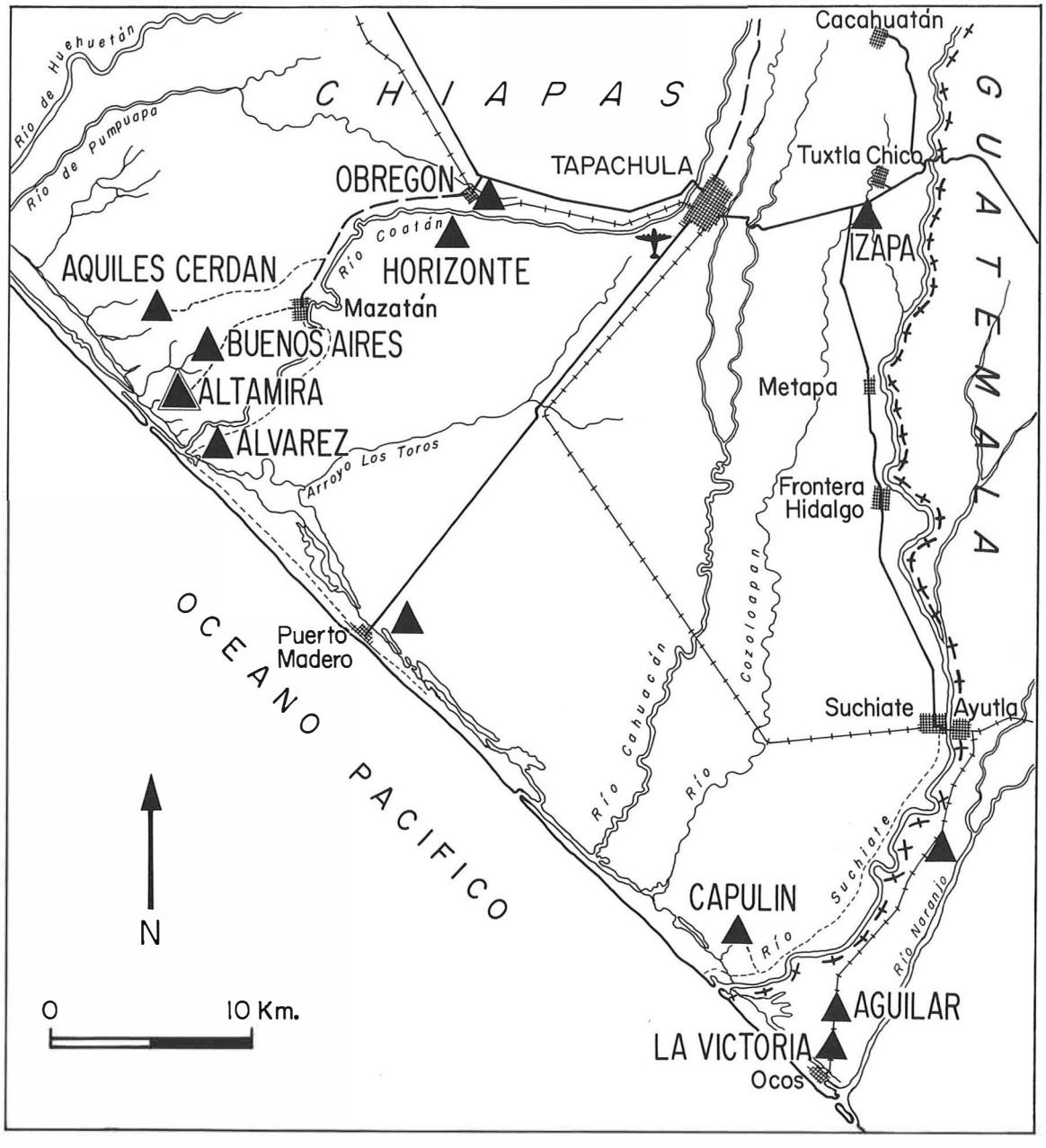

Figure 1. Map of the Southern Soconusco Region

The Coastal and Piedmont area near Tapachula showing Altamira and other archaeological sites with a proven Barra or Ocós phase occupation. For information regarding the Guatemalan sites see Coe (1961) and Coe and Flannery (1967: 85-87). For the Chiapas sites see Green and Lowe (1967), Ekholm (1969: 25-36, 94-95), and Ceja (1974). The Barra ceramic complex has been identified so far only at Altamira and near Buenos Aires (and at Tlacuachero in the Chantuto-Campón lagoon region some 40 km. farther west — see Frontispiece). Some of the Aquiles Serdán Ocós pottery has suspected Barra stylistic affinities (Navarrete, in preparation), but neither stratigraphic differentiation nor the full Barra type inventory has appeared in the limited test excavations made at that site to date (see text for further comment).

Early in 1963 I was fortunate to accompany Navarrete on one of his field trips to the area of Mazatan, southwest of Tapachula; our hospitable guide for that trip was the late artist Luis Rivera Morfín. Prof. Morfín led us to a new, very large cotton plantation that previously had been covered by the tall tropical forest of the coastal plain and on which the owners had found some clay figurines and other objects. After a brief search in a zone where the cotton had just been harvested, around some small and then-dry lagoons, we found an enormous quantity of surface sherds, all apparently of the Early and Middle Preclassic periods. This unexpectedly favorable situation convinced us of the advisability of making some test pits and stratigraphic cuts in those lands during the same season, before the ancient occupation could suffer more damage from the intensive cultivation and leveling by huge tractors. Because it was impossible for us to carry out these investigations personally, I named a graduate archaeology student, Dee F. Green, to do the work under my general supervision.

The study of the material excavated by Green in 1963 revealed that the majority was of a culture whose pottery was directly related to that found by Coe and Flannery (1967) in 1962 at Salinas La Blanca, Guatemala, and at the same time to similar sherd complexes at Izapa (Ekholm 1969). This culture apparently dated from about 1000 B.C. and showed close relationships with the oldest Olmec pottery (Green and Lowe 1967). In spite of this evidence, the work of Green left some questions in my mind about the purity of the complexes and the separation of phases. I was especially curious about the possibly greater presence somewhere at Altamira of an earlier, pre-Olmec, phase indicated by a few sherds noted by Green in his collections; this material resembled that of the Ocós phase, the earliest occupation identified at not far distant (Fig. 1) La Victoria, Guatemala (Coe 1961), as well as at Izapa (Ekholm 1969).

To free myself of the above doubts, I returned to Altamira in April, 1965, and dug a number of additional test pits and small stratigraphic trenches with the aid of our field foremen, Jorge Acuña and Alejandro Sánchez. In that season we first excavated a large pit in Mound 1 at the edge of a lagoon in the part of Altamira indicated by the research of Green as most likely to produce early pottery. However, the earliest undisturbed deposit there proved to be an apparent ancient water well filled with material dating to the Early Jocotal phase (Green and Lowe 1967: 94–95). Various pits were then excavated in another small and more isolated mound to the north of the main occupation where the owners had just made dozens of small excavations in order to plant avocado and tamarind trees. It was in the latter place, designated Mound 19 (Fig. 2, upper right), that we found not only an Ocós ceramic complex closely related to that of La Victoria and Izapa, but also a smaller but clearly separable complex below that of Ocós. This new pottery complex and associated lithic material I named the Barra phase, and the information on it I included in an appendix to the report of Green (Green and Lowe 1967: 81–106).

We could not date the Barra phase with precision for the publication in 1967, but we calculated a beginning before 1500 B.C. because of its stratigraphic position below Ocós. The pre-1500 B.C. estimate has been sustained by recent radiocarbon dates described below.

During 1973 and 1974 renewed excavations at Altamira and vicinity have provided additional material consolidating and amplifying our knowledge of the Barra society. Some of the pertinent 1973 information from Altamira will be summarized in this report, and the balance of the data will be published in the near future (Ceja 1974 and in preparation), with a few provisional observations made at the end of this paper.

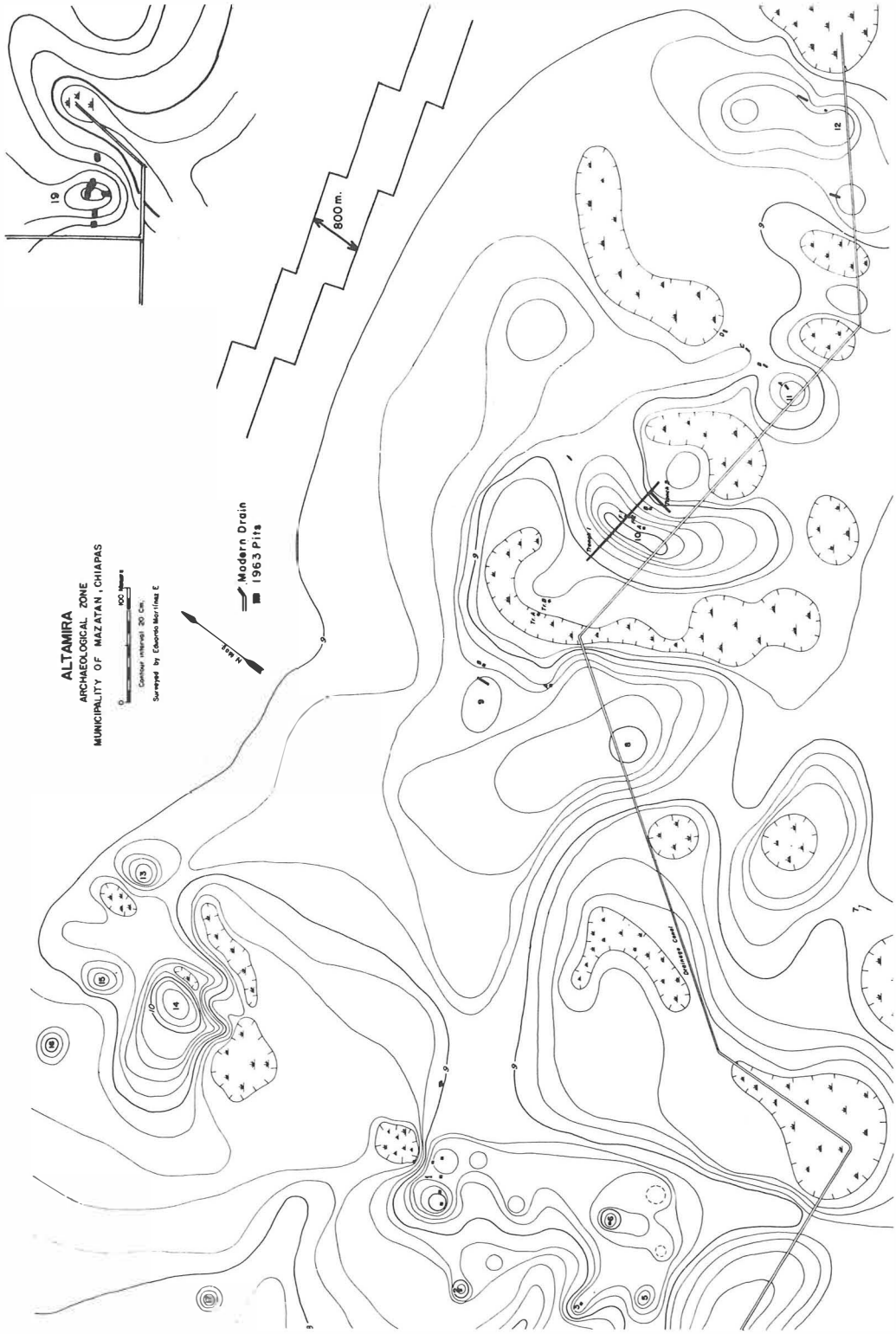

Figure 2. Map of the Altamira Archaeological Zone

The known Barra phase occupation is restricted to the isolated Mound 19, seen at upper right. Mound 19 is separated from the principal low mounds of Altamira by 800 m. of level fields and the also seemingly isolated Mound 20 (see Green and Lowe 1967, Figs. 2 and 68). Mound 19 is presently located on the ranch Canta la Palma, Municipio of Mazatan, but archaeologically it remains identified with the neighboring Altamira lands. Note that the contour interval is only 20 cm.; no "mound" summit is over 2 m. above the lagoon bottoms.

REVIEW OF THE ECOLOGICAL SITUATION

The site of Altamira occupies part of an extensive system of small lagoons that interconnect during the rainy season and are probably the remnants of an ancient river channel, most likely some portion of the Río Coatan, which today flows toward the sea a few kilometers to the east (see below). The total extension of the human occupation surrounding this lagoon system has not yet been determined, but over the general area it is known that clustered remains of the Early Preclassic cultures appear somewhere in almost every zone through which modern canals or drains have been dug. The site map of Altamira (Fig. 2) shows the ditribution of the lagoons in that section. The map also indicates modern canals that serve to empty some of these lagoons, all of which still retained water during rainy seasons until their recent draining.

The climate of the Soconusco coastal plain is hot and semi-humid, with a marked dry season that is more severe as one moves from the Sierra Madre toward the sea; Altamira is less than three kilometers from the ocean and some four or five kilometers from the mouth of the Río Coatan. The long dry season on the coastal strip, regularly from mid-November to June, gives importance to the lagoons as sources of potable water; they permitted a sedentary occupation at some distance from the rivers. I have noted above the discovery of one ancient well dating perhaps to 1000 B. C. within the lagoon at the edge of Mound 1 at Altamira; another of Ocós or Barra date has been found at Paso de la Amada near Colonia Buenos Aires to the north (Ceja 1974 and in preparation). Wells are commonly dug within the lagoons today after they dry out in early winter.

The Río Coatan flows year round, with very severe flooding and undercutting-and-filling common during fall run-off peaks. Its margins, where they are preserved, show remains of heavy human occupation; the Ocós period evidence, however, has been located only in the area of high banks around Colonia Obregón (Fig. 3) and on an estuary bank near the sea at Los Alvarez (Fig. 1). Very probably the erosive pattern and horizontal movement characteristic of this braided stream have destroyed a great many of the more ancient sites once located near its banks (Ceja 1974); the sites lost quite probably included some major centers.

Our knowledge of the Early Preclassic period has come primarily from the sites near the string of lagoons west of the Río Coatan where preservation is somewhat better. One supposes that the early inhabitants not only took advantage of the water of the lagoons, but that they also cultivated the humid soils around them and perhaps even within them during the long dry season. Fish and molluscs, particularly snails, undoubtedly were also harvested from the lagoons and lagoon edges, along with a variety of wild and domesticated fowl.

It should also be noted that the lagoon-edge occupants were populating the highest parts of the coastal plain, on what appear to have been very low natural dunes at first, but which, with the passage of time, grew little by little during the Early Preclassic period (with deliberate additions made to many of them during subsequent periods). According to the local populace, in recent times, and particularly before the large-scale cotton farming drained so many of the lagoons, there were still seasons of heavy flooding during which only the ancient mounds remained above water. The fact that no mound at Altamira is much over two meters high, and Mound 19 not even one meter high, shows a lack of relief typical of the lower coastal plain in the Soconusco District. The soils are sand to sandy clay and generally alluvial, of volcanic origin; in addition to normal abrasion products, they include much recent and ancient

Figure 3. THE COATAN RIVER TERRACE IN THE OJO DE AGUA DISTRICT
View looking east or upstream along the left bank of the Río Coatan across the river from Colonia Obregón (see map, Fig. 1). The ancient river terrace edge seen above is the locale of many Early Preclassic sites including the Ocós occupation at Horizonte from where this photograph was taken (see Fig. 9). Two Olmec sculptures from the Ojo de Agua district have been illustrated and described by Navarrete (1974: 19–21, Figs. 19–23). Photograph taken in June, 1973.

volcanic ash apparently mixed with dust and sand brought from the nearby estuaries, beaches, and river beds by the wind.

Until twenty years ago the *municipio* (or county) of Mazatan was famous for having abundant deer (as its Nahua name indicates) and other animals and birds in its forests. We may assume that this was a circumstance important anciently as well, but the Altamira and related excavations have produced little bone. It is possible that the people or their animals customarily ate the smaller bones, as frequently happens today—the bones of rodents, fish, and waterfowl would most readily suffer such a fate, particularly if they had been softened by steaming, as suggested below. Dogs and/or the elements may have finished off even most of the few larger bones, such as those of deer and tapir. At the same time, Altamira in no way suggests a typical seashore or estuarine gathering and hunting midden where bone and shell characteristically are a main constituent of even the oldest debris despite the usual very humid situations. Shell and bone tools also appear to be quite rare on the Pacific Coast of Chiapas except for those used in decorative techniques.

The lack of shells in the Altamira excavations, in spite of the site's relative proximity to the sea and estuarine lagoons, particularly supports the idea that agriculture rather than gathering or hunting was the main subsistence base. At not far distant Colonia Buenos Aires sites, careful screening recovered small amounts of fragmented shell at some loci and none at others (Ceja 1974 and in preparation). Here one accordingly supposes that shellfish were not consumed in much quantity probably because the people were almost completely dependent upon cultivated crops and small-animal sources for protein. It should be pointed out that most of the Chiapas littoral is composed of canals and lagoons lined with mangrove swamp, a situation that often makes extensive harvesting of shellfish very difficult (Steward and Faron 1959: 183–84). It is nevertheless possible that during certain seasons the coastal plain dwellers customarily went to the nearby sea and estuaries and consumed right there such products as could be handily gathered.

It is important to note that one of the three known Barra sites on the Pacific Coast is Tlacuachero, a shell midden island in the mangrove swamps and lagoons near Campon and Chantuto below Escuintla (some 40 kilometers northwest of Altamira; see Frontispiece), but the present Barra sample from there is only a half dozen sherds mixed with the lower levels of a heavy but superficial Protoclassic and Early Classic deposit overlying four meters of aceramic shell deposit (Barbara Voorhies, personal communication, 1974). The Campon and Tlacuachero middens are composed of millions of a single variety of clam shell (*Agaronia propatula*) not considered fit to eat today though in fact edible; no evidences of high culture or even of skilled stone working appear in the middens (Voorhies 1974).

Shrimp may have been both a more important food commodity and a trade item for the coastal people anciently, as today, though one famously subject to the vagaries of changing sand bars and waterways (fresh water kills the shrimp), but they unfortunately leave little record in the archaeology (soil analyses may produce such evidence). Shrimp, fish, and alligator probably were dried or baked and smoked for trade at certain times and regions. Salt also must have been an important coastal product from earliest times.

Use of the coastal inland canal system for long distance transport between Guatemala and the Isthmus of Tehuantepec may have begun as early as the Early Preclassic period (Navarrete 1973), but there is no real evidence for this.

The resources of the adjacent Sierra Madre de Chiapas mountains and piedmont surely were taken advantage of by inhabitants of the Pacific Coast during all periods. Stone of various sorts is the most obvious such resource; finds at Altamira were restricted to the igneous rocks dacite and quartz latite plus some non-igneous quartzite (Green and Lowe 1967: 27). Such rock was probably brought by man onto the stoneless alluvial plain from streambeds at the base of the mountains. Obsidian is discussed below.

Cacao production was of major importance in the piedmont region historically (Medina 1973, Lowe 1974a), but it may also have been

grown anciently on the coastal plain at Mazatan and up and down the Río Coatan where it is an important crop today right to the estuary edges. Because cacao beans are a high value lowland crop that can be stored and kept for long periods as well as transported easily (and at times used as a medium of exchange or money), it is possible that its harvests, cultivated or wild, were already of importance in Early Preclassic times, as Grove (1974) and others have postulated. It is worth emphasizing that the Chiapas Ocós sites in Figure 1 stretching from Izapa on the northeast to the Río Coatan sector as far as the sea on the west are all important cacao producing regions today.

PROBLEMS RAISED BY THE 1963-65 SEASONS

EVIDENCE FOR EARLY LONG-DISTANCE DIFFUSION

A thought-provoking characteristic of the Barra ceramic complex defined after the 1963 and 1965 seasons at Altamira was the closest if rather vague similarity of its form and decorative norms to those of some approximately contemporaneous pottery of northern South America and southern Central America. A few other similarities were noted with traits found in the oldest pottery of Florida and Georgia in the southeastern United States (Green and Lowe 1967: 60–63, 98–100, 102). In brief, the more outstanding Barra resemblances to southern pottery include the popularity of incurving-rim bowls or *tecomates* (kettle gourd or calabash skewomorphs) and of broad-line multiple-grooved diagonal and scroll motifs and zoned punctation as in some early northern South American complexes (notably Barlovento in Colombia); there is also a minute presence of Barra-like fluting or squash-like segmented parallel grooving in a rare type at late Valdivia and Machalilla sites in coastal Ecuador, and some Barra-like multiple-incised cross or X designs and basal dimples at Machalilla; other similarities in minor traits are discussed further below. Resemblances of Barra pottery to North American pottery were limited to general multiple-line incision and zoned punctation and the favoring of flat-bottom vessels in the roughly contemporaneous Tick Island and Orange phases of Florida and Georgia (see section on review of external relationships below).

A possible relationship between the long smudged-black tradition of the Pacific and Gulf Coasts of southern Mexico and the Monagrillo Incised pottery of Panama also was suggested, with the lower or earlier date of the latter indicating possible northward diffusion (Green and Lowe 1967: 108). A more direct Barra parallel with the apparently post-Monagrillo (before ca. 1500 B.C.) Sarigua complex of Panama (Willey and McGimsey 1954, Fig. 48) has been noted (Ceja 1975) and is discussed below.

In general, the earliest Chiapas pottery complexes (Barra and Ocós), lacking ollas or necked jars, fail to find parallels in Mexico north of the Isthmus of Tehuantepec, where the necked jar appears in all of the earliest ceramic complexes and occurs commonly thereafter. If taken at face value, the Barra evidence does seem to indicate long range contact of some sort at an early date around or along an arc extending from northern South America to or through the greater Isthmus region of Southern Mexico. This interaction must have been relatively and perhaps chronologically distinct from the other diffusion routes that may have extended from Peru and/or Ecuador to Western and Central Mexico. Other equally early and earlier diffusion routes have been suggested along the Atlantic Coast (see, for example, Ford 1969: 185–88).

Regardless of one's opinions about the evidence for long range diffusion between one point or another in the Americas, the inescapable fact of the sudden appearance of the Barra ceramic complex on the Pacific Coast of Chiapas remains with us. As the present report will make even more apparent, the Barra complex seems too well developed and too distinctive to be explained by direct diffusion from any other known pottery complex in the New World. This problem is compounded seriously by the almost immediate appearance of the Ocós horizon complexes; although presumably developing directly out of the Barra base-culture, Ocós pottery has a variety of large and small vessel supports, rocker stamping, cord marking, effigy forms, and so forth for some of which very early South American, North American, or Asian sources may be proposed; such sources, to my knowledge, do not seem plausible for Barra trait origins, however.

Figure 4. THE PREPARATION AND USE OF BITTER MANIOC

a, b: Artist's version of the grating of manioc root on an obsidian chip grater board such as might have been made from the abundant chips found at Altamira, and the sifting of the fibrous pulp or dried flour after removal of the juice. *c*: Kraho hunters of Brazil prepare a baked "manioc pie": first they add water to the dry flour spread on leaves, at center they tie up the pie bundle for baking in the coals, and below they extract the baked pie and broiled meat to take on their journey (after Schultz 1959: 352). *d*: Gift basket of manioc bread of Brazil's Kuikuro tribe (after Villas Boas and Villa Boas 1968: 442). *e*: Eating cassava bread and pepper pot at a British Guiana Wai Wai camp (after Evans and Meggers 1960: Pl. 6b). *f*: Wai Wai Indian driving stone chips into a spongy board to make a cassava grater for trading to other tribes; after completion, the board will be coated with a milky latex to keep the chips from falling out (after Evans and Meggers 1955: 345). *g*: Final wringing of grated cassava in a basketry or wicker press or strainer (*tipití*) by a Kraho Indian of Brazil after removing the log weight used to extract most of the juice from the bitter manioc pulp; ordinarily the juice would be caught and added to the stew in the pepper pot seen in *e* (after Schultz 1959: 362).

These ethnographic examples are from living and very nearly "stone age" tribes in lowland northern South America where manioc flour usage is almost universal, and their application to the early Altamira, Chiapas, situation is completely hypothetical (see Green and Lowe 1967: 58–60). The sophisticated and much-varied Barra and Ocós ceramic vessel inventories certainly suggest a more advanced or complex way of life for the ancient Guatemalan and Chiapas communities (see text).

ing-wall vessel seems to be ideal for such steaming purposes (well described by Coe and Flannery 1967: 81, 102).

The earliest use of corn or maize as a staple food very likely was modeled after that described above for manioc or other root crops. Corn may be boiled and eaten whole, on the cob or in soups, or the grain may be pounded in wooden mortars without the use of stone, particularly if it is a soft variety. For the Caribbean Taino (Puerto Rico, Hispaniola, and eastern Cuba) Rouse (1948a: 523) says of the use of corn that

> To produce the cake of the common people the women wet the grain and left it overnight. Then they ground it between two stones, or possibly in wooden mortars hollowed out of tree trunks, mixed it with water to form loaves, wrapped the loaves in leaves which had previously been moistened, and baked them in the fire. In making bread for the chiefs, the process began in the same way, but the meal was washed, the husks removed, and the meal reground into flour before being baked into cakes, on clay griddles over the fire.

Inasmuch as for Barra and Ocós (and in fact for most time periods in pre-Hispanic Chiapas) we have no clay griddles or comales, the eating of corn in loaf form (either baked or steamed) rather than as tortillas may have been the common method. The apparently widespread pre-Hispanic Maya preference for corn dough balls or *tamales* has been discussed at some length by Coe and Flannery (1967: 80–81).

There may, therefore, have been little outward difference at meal time whether the staple foodstuff was a grain or a root if it was being eaten as a dough ball. For storage and transport, however, the necessary production of a dry flour or dry cakes (or dried corn kernels) may have quickly led to the demonstrated superiority of corn over roots once improved varieties of maize had developed for the lowlands of the relatively dry Mexican tropics. This would explain the postulated early demise of intensive use of grated manioc as suggested by the abrupt disappearance of obsidian chips after Ocós times, with the establishment of the Olmec horizon and tradition (only three obsidian chips were found in the immediately post-Ocós corn-utilizing Cuadros phase at Salinas La Blanca; Coe and Flannery 1967, Table 13).

A rather vehement opposition to the idea of any important role for manioc or other roots in early Mesoamerica has been voiced by Flannery (1973: 273), based on the lack of preserved remains. However, considering that "manioc tissue is 1000 times less likely to yield preservable fragments than either maize or the avocado," Lathrap (1973c: 47–48) believes the opposition of Flannery to be unwarranted, and cites the statement of Bennet Bronson (1966: 263) that the term for manioc "is one of the ten words designating plants that can be reconstructed for ProtoMaya.... five more of these plant terms refer to items noted in our discussion of the house garden: ceiba, avocado, chile, cacao, sweet potato" (Lathrap 1973c: 48). Two charred seeds of *Manihot* sp. have recently been identified in Late Preclassic refuse pits on the Upper Grijalva River (Lauro González, personal communication 1975), but earlier identifications have not been made in Chiapas.

Lathrap has developed an argument for the full and intense utilization of bitter manioc by about 3000 B.C. in northern South America, not merely as part of a subsistence agriculture, but as "bread and flour production" indicative of "an intensified agricultural economy in which appreciable amounts of the food produced are being fed into extended trade networks" (Lathrap 1973c: 44). For the full details of Lathrap's arguments, including his belief that bitter manioc and pottery making moved together to Mesoamerica from the tropical lowlands of Columbia and Venezuela, along with basic religious beliefs, the reader is referred to his several publications (Lathrap 1970, 1973a, 1973b, 1973c, 1974a, 1974b).

The sweet varieties of manioc or *yuca* are grown and used today in most parts of Mesoamerica, apparently continuing a pre-Conquest pattern, as Lathrap reiterates above for the Maya. It may be a mistake to suppose that this crop has always served only as a starchy vegetable in this area.

Sweet manioc appears to be equally suitable for making flour and bread, though it is said to yield less well and it definitely keeps less well than the bitter varieties. The bitter and sweet classes are, in fact, very difficult to distinguish botanically (both are *Manihot esculenta*), and both roots and plant are indistinguishable to the uninitiated as to toxicity. Anyone interested in the manioc problem should read Fred Olson's rather delightful chapter, "The Story of Manioc — the Bitter from the Sweet," together with his preceding and following remarks tracing present-day use of manioc bread from the Antilles into Surinam and Venezuela (Olson 1974: 31–73 and *notes*). He usefully points out that even the sweet varieties of manioc must be grated, drained or squeeze-dried, and screened, in order to produce the proper consistency of the starch crumbs for baking or other preparation (Olson 1974: 72–73). An argument for evidence of manioc grating, in other words, is not necessarily an equally impelling argument for all the possibilities of bitter manioc utilization — long term storage, long distance shipping, trade implications, etc. Grated sweet manioc would be for local consumption, whether as baked bread, boiled gruel, dried powder (*mandioca*), or as golden crumbs of the starch toasted in open pans (Olson 1974: 73, 85, 327–28).

Viewing the failure of the clay manioc griddle to appear or persist in Mesoamerica, I am led to conclude that grated manioc products other than baked bread may have played a role in the early populating of southeastern Mesoamerica, but that they were unable to compete successfully in the long run with constantly improving maize varieties or other factors of culture change in this environment. I do not know positively what this means in terms of ethnic units or their movements, but, as indicated above, there is at least the suggestion that people with an earlier known history of maize domestication in South-central and southern Mexico (west and north of the Isthmus) became also the cultural innovators and possibly culturally dominant with the gradual "Olmecan" amalgamation of Ocós and other (presumably ancestral Mixe-Zoquean) pre-Olmec societies in the Gulf Coast Olmec "heartland" region some time following 1400 B.C.; this advanced or modified society then asserted itself over the Pacific Coast (see fuller arguments in Green and Lowe 1967 and especially Lowe 1971, 1974b).

PRELIMINARY RESULTS OF THE 1973 SEASON

With the preceding facts and fancies and some of their implications before us, it was obvious that we needed other and more ample investigations of the Barra phase occupation on the Pacific Coast of Chiapas. We began to fill this need with a short season at Altamira and environs in May and June of 1973. In the fall of 1973 and through mid-1974 Ceja continued numerous small-scale excavations at additional sites around Mazatan. This work uncovered several important new Ocós and Cuadros deposits and fortunately discovered another and much superior Barra phase occupation near Buenos Aires, north of Altamira (Ceja 1974, 1975, and in preparation). The present report is concerned only with the May and June, 1973, excavations at Altamira and vicinity.

In May, 1973, we returned briefly to Mound 19 at Altamira (now part of the lands of the small avocado and tamarind ranch called Canta la Palma). Under my direction graduate student Jorge Fausto Ceja of the Universidad Veracruzana in Jalapa dug new stratigraphic trenches and test pits over the available surface of Mound 19 (Fig. 5). We found the small elevation now more populated, with three houses of palm (Fig. 6). It was necessary to lay out large trenches, K and L, on the west side of the mound at some distance from the old Trench H that had produced the best results in 1963 (Green and Lowe 1967: 91–93, Fig. 70, Tables 13, 14). However, the 1973 trenches and test pits yielded data in complete agreement with those obtained previously.

The exposed face of Trench L (Fig. 7) shows the very simple soil profile previously noted in 1965. Due to this situation we excavated by narrow artificial levels in an effort to catch cultural changes not reflected necessarily in changing soil types. In Trench K we removed eighteen levels of 10 cm., whereas Trench L, because of the beginning of the rains, was excavated more quickly in eight layers of 20 cm. All trenches and pits had a very low yield of sherds per cubic meter.

The material recovered during the 1973 season is still subject to more detailed study, but Ceja has prepared the provisional typological distribution charts, including that for Trench L (Fig. 8, upper table). This table is based on ceramic types already established (Green and Lowe 1967: 85–86), combining late types and body sherds under Miscellaneous, post-Ocós neckless jar types under Thick Tecomates, and adding one new Barra type, Tepa Red-and-white, that was previously included within the type Tusta Red. Another Barra type, Bayo Plain-polished, was isolated from Tuxta Red and Monte Incised after the preparation of the Figure 8 table (see Fig. 17 drawings and subcaption). Both trenches reflect a relative absence of the immediately post-Ocós Cuadros phase due to primary deposition of material of that phase on the mound's periphery rather than its surface (Green and Lowe 1967, Appendix).

Comparing the Trench L table with that for Trench H excavated in 1965 (Fig. 8, lower table), it can be seen that the two concur perfectly in demonstrating the lower position of the pottery types that constitute the Barra complex. In the lowermost three and five levels respectively of the two trenches, only these types appear (with the exception of two apparently intrusive Amatillo White sherds in Level 13 of Trench H). In both trenches, the pottery characteristic of the Ocós phase appears only until the fifth and ninth levels from surface respectively. The types below form a very different complex, that of the Barra phase.

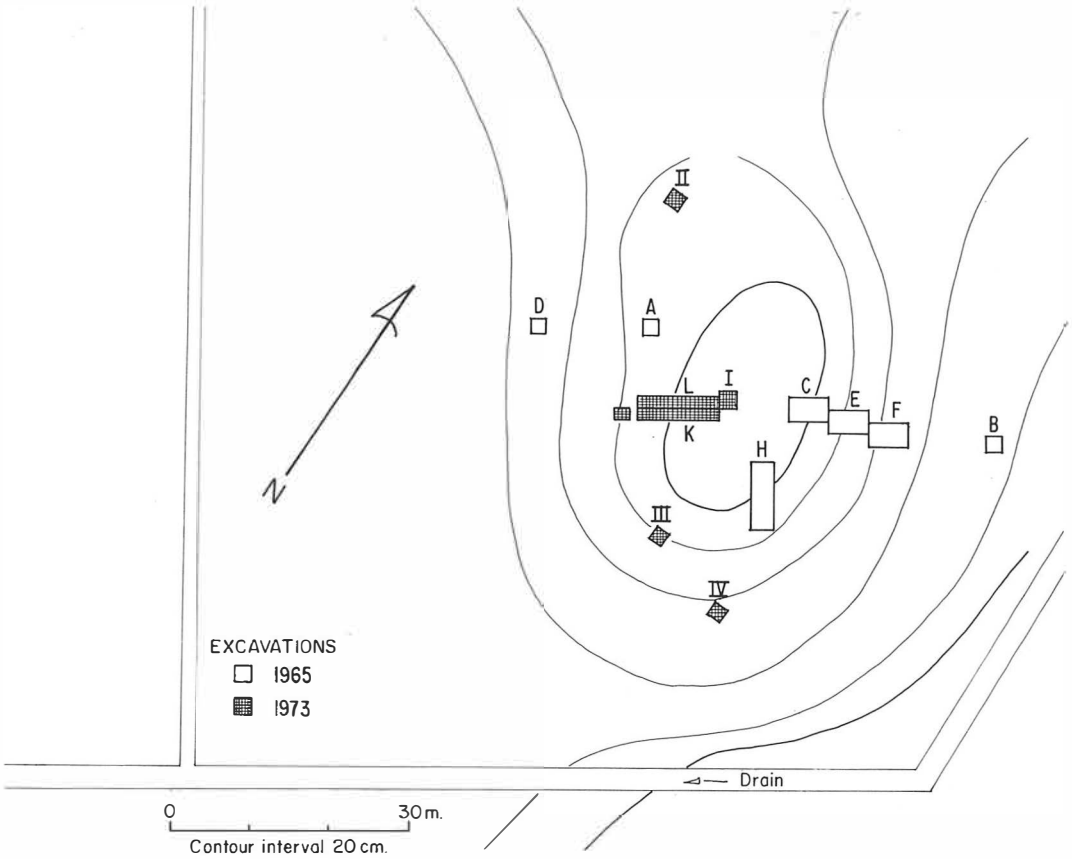

Figure 5. Plan of Excavations in Mound 19, Altamira
Trenches K and L and Pits I to IV were excavated in 1973 (Ceja, in preparation); the others were dug in 1965 (Lowe, in Green and Lowe 1967, Appendix). The Barra phase evidence was most abundant in Trenches H, K, and L but was also present, though scarce, in all other trenches and pits with the exception of Trench B, which yielded a pure Jocotal phase deposit. Drain is modern (cf. Fig. 2). Map of mound contours is approximate.

To prove the distinctive nature of the Ocós ceramic complex in contrast with that of Barra, Ceja excavated under my supervision one additional pit during 1973, in a small newly discovered archaeological zone called Horizonte that was revealed in a road cut on the left bank of the Coatan River (Fig. 9). Horizonte is on the outskirts of Colonia Obregón (actually across the river from the community) near the Interamerican Railway and Highway (see map, Fig. 1). In the rather shallow 120 cm. depth of the 4 x 4 m. Horizonte trench we were fortunate enough to find an occupation almost totally of the Ocós phase (Ceja, in preparation). Although the material is badly fragmented and eroded, it was found that the ceramic types of the Horizonte site are completely like the pottery encountered immediately above the lower levels of Mound 19 at Altamira, while the examples of the characteristic Barra types at Horizonte are limited to some very few sherds among hundreds of the common Ocós types.

Another much superior and more sophisticated occupation of the Ocós horizon was located and extensively tested by Ceja (1974) at Paso de la Amada near Colonia Buenos Aires west of Mazatan. The Ocós deposits

Figure 6. Beginning 1973 Excavations in Mound 19, Altamira
Clearing dooryards for the start of Trench K in May, 1973; view looking northeast (see position in Fig. 5). Trench L was subsequently dug parallel to Trench K; neither trench encountered construction features of any epoch (see Fig. 7 section drawing). The Barra phase occupation was found from 80 to 160 cm. below the surface (see upper table in Fig. 8).

here are disposed in community fashion; they are near to, and occasionally overlie, the best Barra phase deposits known to date (see closing section below).

I want to emphasize that neither Altamira, Horizonte, nor even Paso de la Amada have proven to have the same fantastic variety of forms nor quite the elegance of some decorative motifs and forms that are found among Ocós period pottery excavated by Navarrete (in preparation) in a half-dozen test pits at the site of Aquiles Serdán a few kilometers northwest of Colonia Buenos Aires and the Paso de la Amada site (see map, Fig. 1). For what were certainly both socio-economic and ecological reasons, it is probable that Aquiles Serdán was a center of exceptional importance on the coast (it rests on a long low hill, and therefore is a situation with improved drainage). Mound 19 at Altamira, on the other hand, must be but one of many very small pre-Ocós and Ocós farmsites, and Paso de la Amada one of several small though quite formal villages during the Barra and Ocós occupation of the

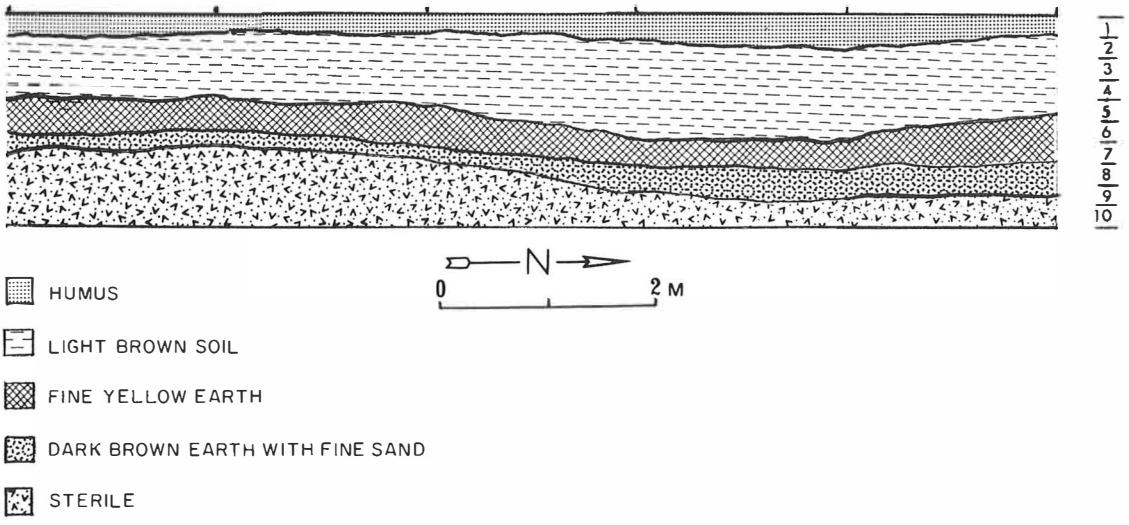

Figure 7. Section Drawing of Trench L in Mound 19
Drawing prepared by Fausto Ceja of the northwest face of Trench 19-L. Levels 6, 7, and 8 were exclusively of the Barra phase (see Fig. 8). Levels 9 and 10 were sterile yellowish sandy clay subsoil. Trench 19-L was 10 m. long and 1.5 m. wide.

Pacific plains. It seems very probable that in some part of Aquiles Serdán there is a Barra occupation much smaller than that represented by the very dense Ocós deposits; it is also possible that Aquiles Serdán is a relatively late consolidation of several such villages as Paso de la Amada — the extraordinary density of the overlying Early Olmec horizon refuse at Aquiles Serdan (primarily Cuadros phase) indicates the continuing Early Preclassic preference for this locality.

TRENCH L
1973

TYPE	20 cm. LEVELS: 1	2	3	4	5	6	7	8	TOTALS
Miscellaneous	700	370	63	30	30	17	4	6	1220
Thick Tecomates	39	37	6						82
Arenera Red-on-buff	28	9	1						38
Siltepec White	19	38	9						66
Pampas Black-and-white	39	30	6	4	1				80
Ocós Specular Red	15	16	7	15	2				55
Tepa Red-and-white		2	6		8	5	6	6	33
Tusta Red			10	11	6	9	3	2	41
Monte Incised	8	5	3	14	12	6	11	6	65
Petacalapa Black	2	1		4	4	2		1	14
Catán Grooved Red	4	10	2	14	14	5	3	5	57
	854	518	113	92	77	44	27	26	1753

Barra
Ocós
Jacatal
Hiatus

TRENCH H
1965

TYPE	10 cm. LEVELS: 1	2	3	4	5	6	7	8	9	10	11	12	13	14	TOTALS
Early Classic Incised	6	5													11
Tacaná Incised White	1	2	5	1											9
Guamuchal Brushed	1	2	2	1											6
Méndez Red Rim				1	2	1									4
Tilapa Red-on-white			1			1									2
Xquic Red			1				1								2
Mapache Red Rim	1							1							2
Michis Thin Tecamate		2	3	7	7	2	6	2							29
Arenera Red-on-buff	2	5	7	14	16	9	3	7							63
Pampas Black-and-white				6	6	4	5	1							22
Culebra Gray				1		3	4	2							10
Ocós Specular Red	1	5	7	6	3	4	9	8	4						47
Suchiate Brushed	12	6	9	15	12	11	7	3	2						77
Siltepec White	21	54	34	39	28	23	20	7	4						230
Petacalapa Black								3	6	1	4				14
Monte Incised		2	4	8	5	9	15	36	14	15	7	5			120
Amatillo White					1	4	1	1	1				2		10
Catán Grooved Red		1	3	5	1	5	18	17	19	11	12	4	1	1	98
Tusta Red							6	2	4	6	2	2	4	1	27
	45	84	76	104	81	76	95	90	54	33	25	11	7	2	783

Barra
Ocós
Early Jacatal
Late Jacatal
Early Classic
Hiatus
Hiatus

Figure 8. SHERD COUNT TABLES FOR TRENCHES 19-L AND 19-H
The lower table is from Green and Lowe (1967, Table 13). The upper table has been prepared by Fausto Ceja and combines the post-Ocós neckless jar types as "Thick Tecomates." "Miscellaneous" in the upper table includes undecorated body sherds, a category not tabulated for Trench 19-H. See text and subcaptions to Figures 15 and 17 for comments regarding the 1973 subdivisions of the type Tusta Red included herein as Tepa Red-and-white (tabulated in upper table only) and Bayo Plain-polished (not tabulated but illustrated in Figure 17).

Figure 9. View of Coatan River Ford at Horizonte, Obregón
The small Ocós phase site of Horizonte is located at upper right, just beyond the parked vehicle and hedgerow (see Fig. 3). Photograph taken in early June, 1973, at beginning of the rainy season.

THE BARRA PHASE POTTERY OF ALTAMIRA

The principal forms and designs of the pottery of the Barra complex now known at Altamira are summarized in Figures 10 through 17, amplifying the data presented by Green and Lowe (1967: 97–104, Figs. 72–76). Of the forms, there is a predominance of tecomates or "neckless ollas," usually rather squat and calabash-like, but with a wide variety of proportions and basal shapes (Figs. 10–13). Also well represented are jars with only slightly reduced orifices and flat bases (Figs. 12, 15), and various classes of open bowls and vases with near-vertical or outsloping walls (Figs. 13–16). Some bases are exteriorly dimpled or recurved (Figs. 10, 13, 17). Incisions are often made with a multiple-pointed instrument and they frequently criss-cross or form X's (Figs. 10–12). Grooves may be either very light and shallow (Figs. 12; 13, lower) or wide and deep and at times modelled on the exterior only (Fig. 13, upper rows). Zoned punctate decoration is almost restricted to the infrequent smudged black pottery (Fig. 16). There is a preference for red-slipped rims (Figs. 10, 12) or entire exterior or interior surfaces lightly slipped with specular or non-specular hematite (Fig. 13) or iron oxides (Fig. 14). Red-and-white is a minor slipped type with two or more stylistic variants (Fig. 15). A well polished pottery without slip is of light brown clay (Fig. 17).

The complete Barra ceramic inventory, now greatly enlarged by the Paso de la Amada excavations, is being described in detail by Ceja (1974; in preparation).

REVIEW OF POSSIBLE EXTERNAL RELATIONSHIPS

Previously I pointed out (above and in Green and Lowe 1967: 98–102) a few similarities between pottery of the Barra phase and certain very early types reported from Florida, Central America, and northern South America for some of which long-distance diffusion has been postulated by James Ford (1969) in his major work devoted to that subject (Figs. 18, 19B; see also Ford 1969, Figs. 8–13, 25–28). Several specific stylistic comparisons with late Valdivia and Machalilla types of Ecuador were also noted (Fig. 20; see especially Meggers, Evans, and Estrada 1965, Pls. 144, *c*, *g*, *i–p*, *r*, *s*, and 157, *b*). Other more speculative comparisons could be made with the earliest pottery of Ometepe Island in Nicaragua (Fig. 19A, from Haberland 1966). Some commentary on these comparisons is included in the subcaptions to Figures 18–20. More recently, Ceja (1975) has called attention to certain shape similarities between some Barra forms and the early Sarigua coastal midden pottery in the general Monagrillo (Parita Bay) area of Panama (Willey and McGimsey 1954, Fig. 48).

Weak as they are, the above noted similarities probably are indications of style sharing or common origins of traditions. They support the idea of diffusion of some sort in either direction across Central America or possibly by sea, as discussed above under Problems. None of the compared cultures, however, can be supposed to have been the direct source for the remarkable Barra phase appearance (intrusion?) on the Pacific Coast of Chiapas.

The recent identification of a few unmistakable Barra sherds in earliest ceramic contexts over the Tlacuachero shell midden noted above (Voorhies, personal communication, 1974) at once verifies the well developed, and even stereotyped, nature of the Barra horizon ceramic complex and vouches for its rather wide distribution across the Soconusco district in southern Chiapas.

In the Tehuacan Valley a few Early Ajalpan sherds have been assigned Barra relationships (MacNeish, Peterson, and Flannery 1970: 28, 35, 39, Fig. 26) but this seems less certain. Elsewhere, nevertheless, I have remarked upon a probable functional or genetic

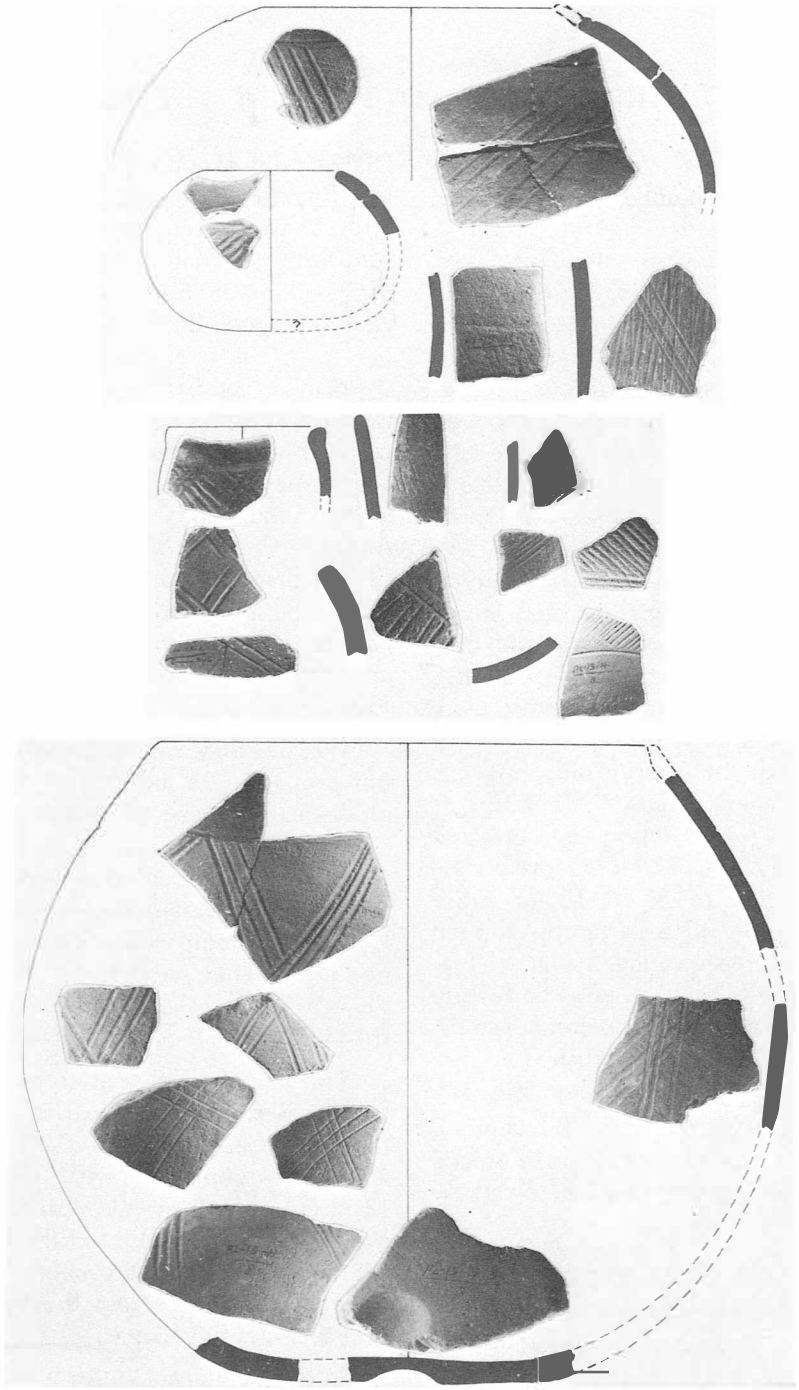

Figure 10. MONTE INCISED POTTERY FROM MOUND 19, ALTAMIRA
Monte Incised is the most distinctive and most abundant pottery type in the Barra phase (for description see Green and Lowe 1967: 102, Fig. 75). This and the following illustrations include sherds recovered from Mound 19, Altamira, in both 1965 and 1973. Note multiple grooved or excised (often "X") designs and "dimpled" bases. Rim zones where present are painted red; bodies are mainly unslipped, scraped or poorly polished, and a dirty cream color (contrast this and following two figures with Figure 17, wherein are included plain polished sherds separated from the 1965 Monte Incised type).
(ca. ⅓ natural size)

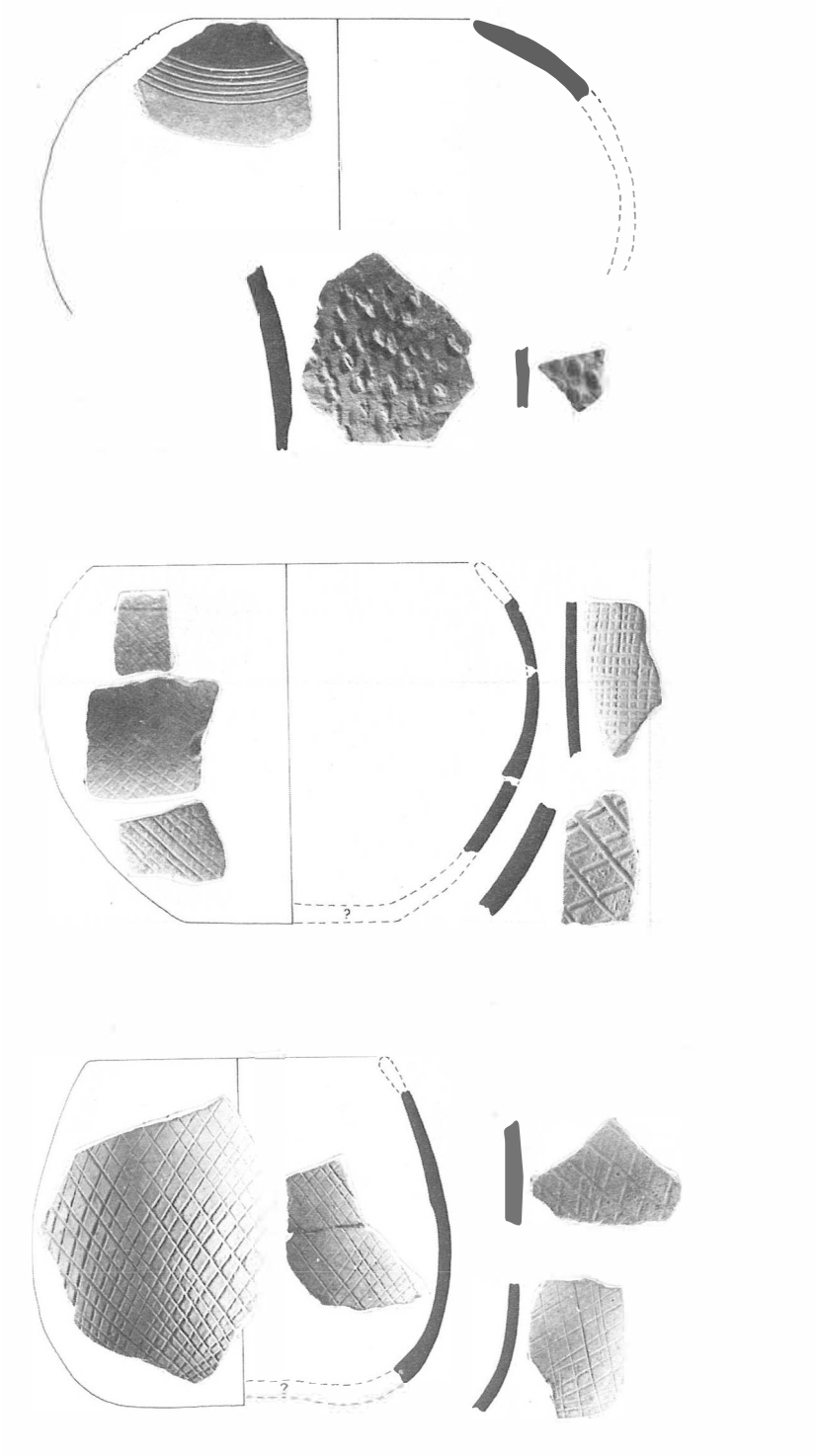

Figure 11. Monte Incised Pottery
Punctate and multiple crossed lines incised decoration apparently covering all or nearly all of the vessel surface is a more rare but distinctive trait in this type.
(⅓ natural size)

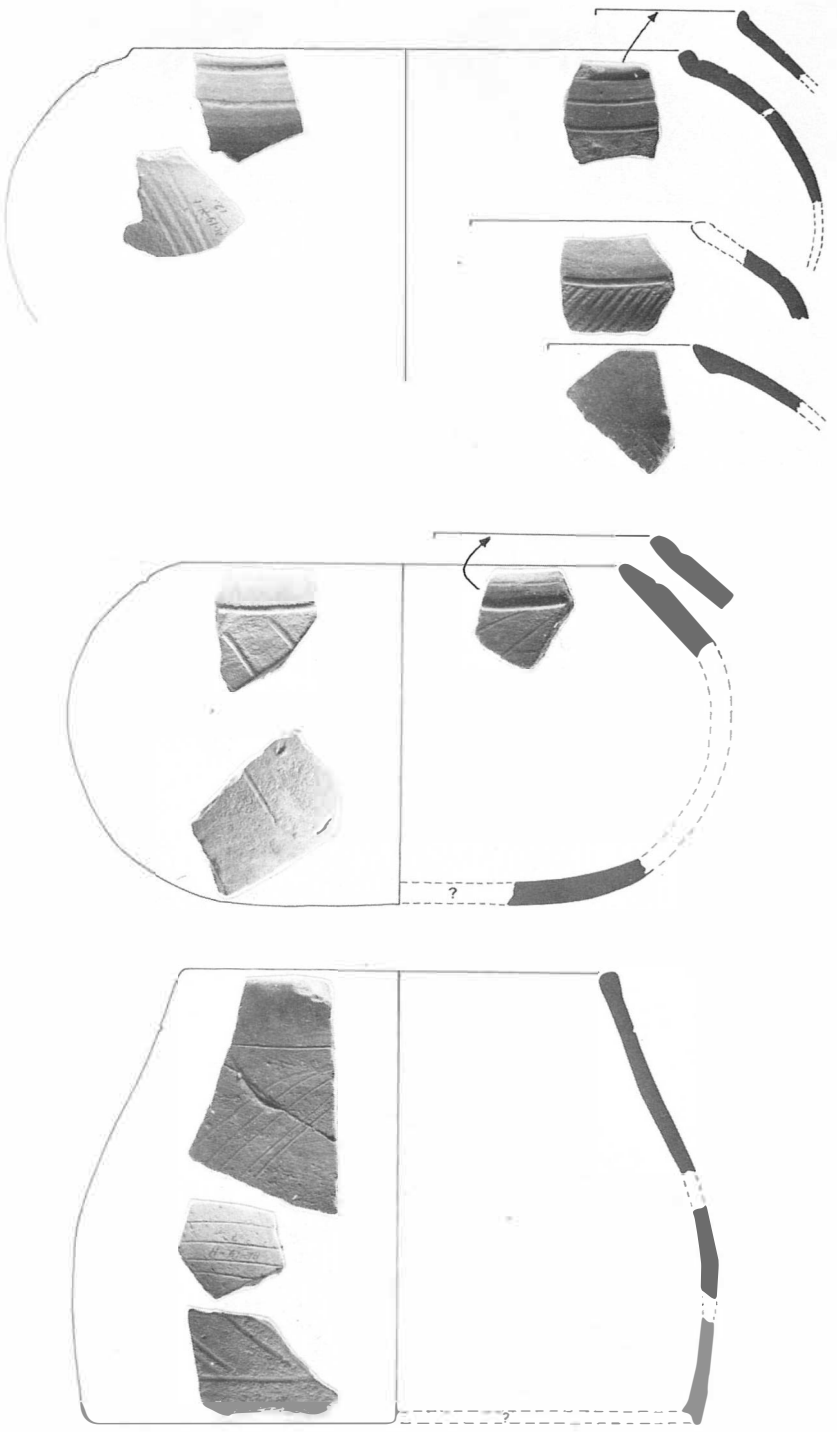

Figure 12. Monte Incised Pottery
Variant with incised parallel diagonal lines which appear rarely to have crossed. The "incising" is a light grooving (cf. Fig. 10) similar to some examples of the Cotan Grooved Red type (Fig. 13, lower row), but the polished red body surface is lacking; only the rims of the above sherds have a red finish (except the lowermost example, which is plain).
(⅓ natural size)

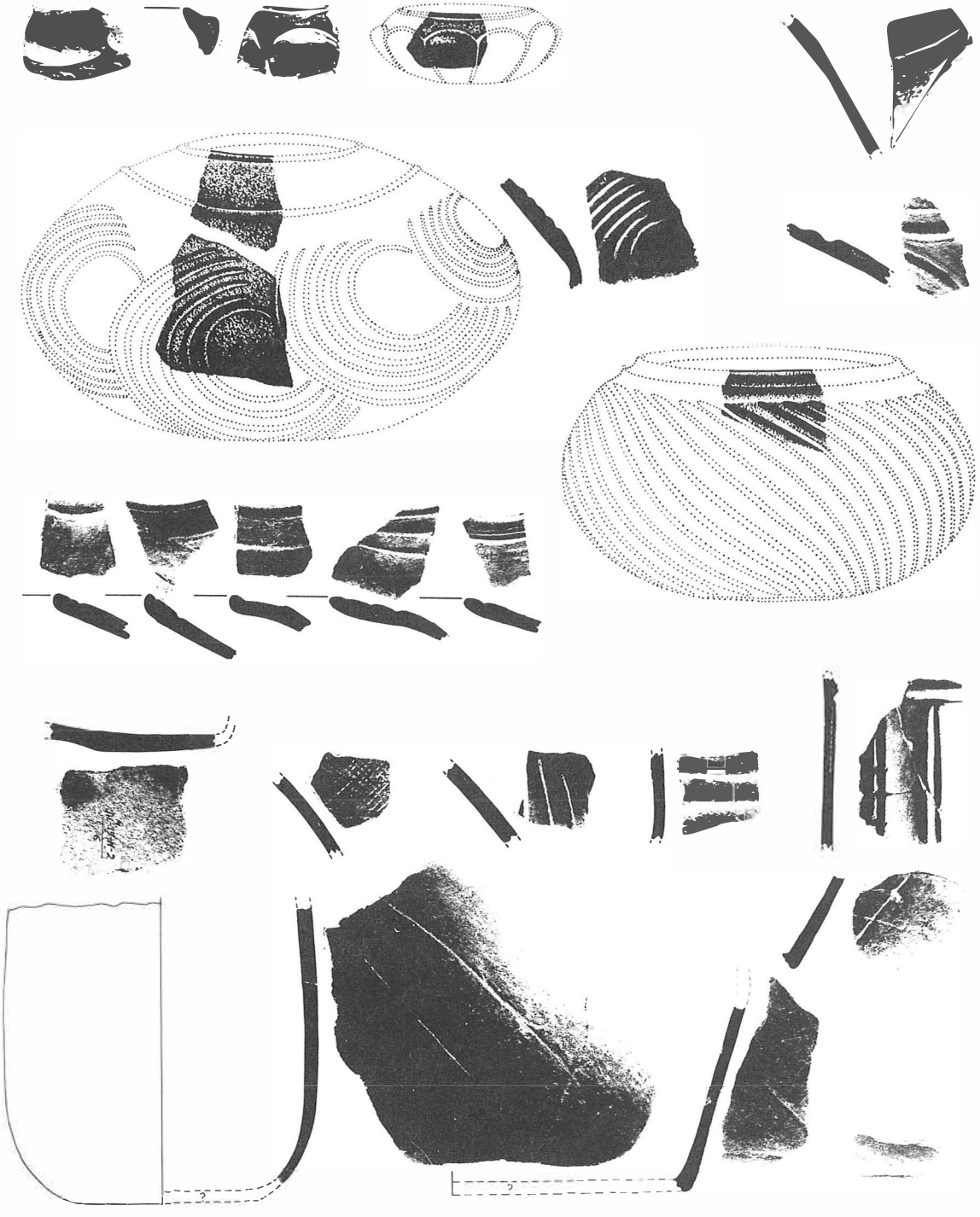

Figure 13. Cotan Grooved Red Pottery
The second most abundant Barra phase pottery type, Cotan Grooved Red is a clear antecedent of the Ocós phase type Ocós Specular Red. Cotan Grooved Red forms are generally distinctive, however, and the tecomates typically have diagonal grooves, flutes, or channels that clearly distinguish them from the later and more common Ocós squash-like forms which characteristically have vertical fluting or lobes; see Green and Lowe (1967: 97–100, Figs. 72, 73).
(⅓ natural size)

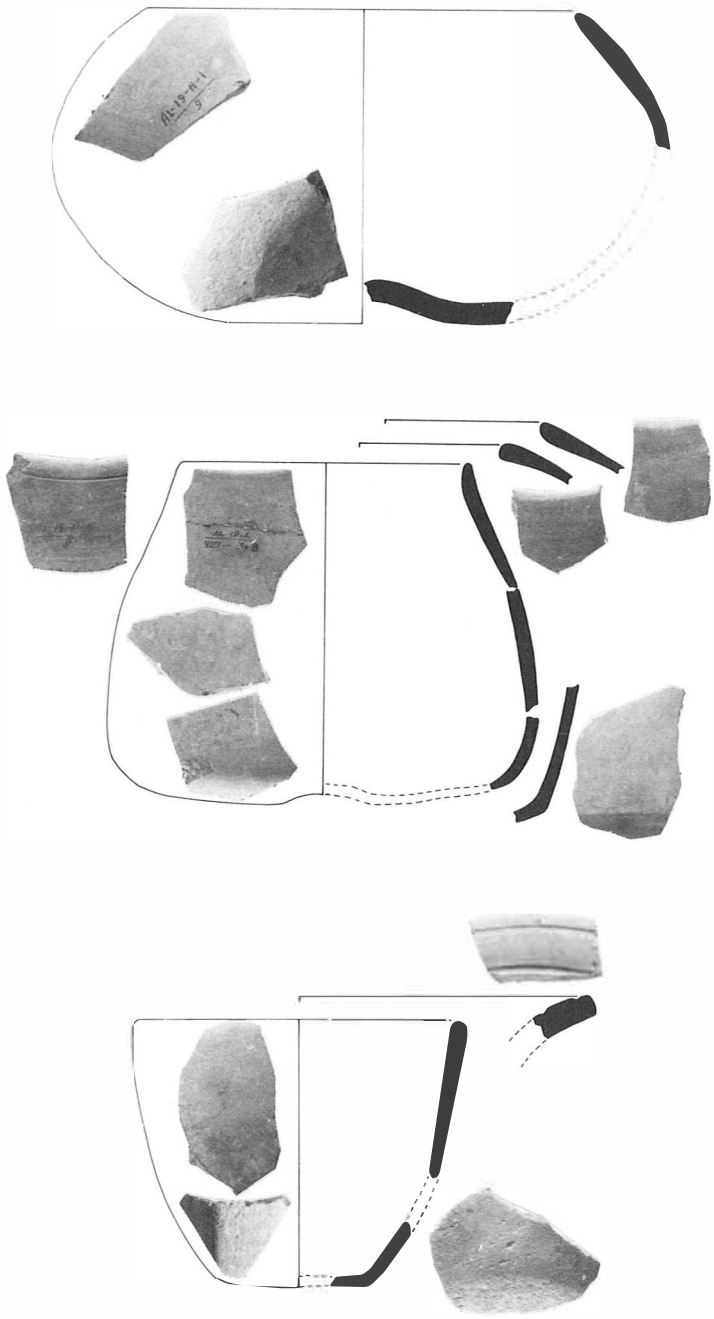

Figure 17. Bayo Plain-polished Pottery
A Barra phase type recently defined on the basis of new material excavated in 1973 combined with some isolated from former Tusta Red (plain rims) and Monte Incised (plain base sherds) types, Bayo Plain-polished is an attractive well-polished buff or light brown pottery lacking surface decoration other than occasional horizontal grooved rim lines (Ceja, in preparation). This type was not distinguished in the Figure 8 tables.
(⅓ natural size)

relationship between the flat-bottom bowls of Barra and early Tehuacan (Purron and Ajalpan phases), and the flat pans, often squarish and very large, that are typical of some contemporaneous ceramic complexes in Florida (Lowe 1971; cf. Figs. 14, 16 and 19B this paper, and see especially Ford 1969: 98–101 for a broad discussion of this problem). The fact that the Orange ware in Florida is fiber tempered (a technique never identified in Chiapas) and has a wider variety of design and lip forms (cf. Bullen and Bullen 1961), indicates that it has a separate history from the Monte Incised type of the Barra phase, but roughly contemporaneous dating continues to allow speculation with respect to shared origins (see below).

The appearance of a few Ocós trade sherds at Tehuacan, Puebla (MacNeish, Peterson, and Flannery 1970, Fig. 27), in central Oaxaca (Flannery et al. 1969), the Ocós-like Ojochi phase at San Lorenzo (Coe 1970), and the known presence of certain Ocós types identifiable at central Veracruz sites (J. Ford, personal communication; García Payón 1966: 109–16, see Ekholm 1969: 32) would make eventual discovery of examples of the preceding Barra horizon types in any of these northwestern peripheral areas not surprising.

Chronology and Direction of Movements

In a recent article, Paulsen and McDougle (1974: 12) questioned the early (pre-1600 B.C.) dating proposed for the Barra pottery: "If Cotán Grooved Red reflects any contact, direct or indirect, with Machalilla, it cannot date much before the 14th century before Christ, and it may be as late as the 11th century." Without being able to examine the set of materials and data upon which this statement is based, I will not query the dating arrived at by these authors for Machalilla. I will, however, re-emphasize that the Machalilla Incised type published in an illustration by Meggers, Evans, and Estrada (1965, Pl. 144, *a–v*) and copied and reprinted in this paper (Fig. 20), is indicated by those authors (1965, Fig. 93) and cited by me (Green and Lowe 1967: 98) to have a chronological distribution beginning in Period C of the *Valdivia* phase. Paulsen and McDougle (1974: 5) apparently believe the Valdivia occurrence to be the result of undetected slope admixture.

Regardless of the true facts of the above situation, the referred-to Machalilla Incised decorative and shape modes (Fig. 20) are so rare (to my knowledge) at either Valdivia *or* Machalilla sites that their recognition as intrusive may be well accepted. The type very plausibly might also represent the late arrival of a style from a cultural tradition long established somewhere else. We may be certain that work presently underway in Ecuador and elsewhere will soon provide additional dates, enlarged samples, and further enlightenment regarding these and other ceramic complexes in northern South America, so that further comparative discussion with reference to the Barra phase is deferred to that time.

Fortunately for the Chiapas situation, satisfactory samples of charcoal were collected in 1974 from a series of Barra phase living floors at Paso de la Amada near Colonia Buenos Aires (site and associated material described provisionally by Ceja [1974]). Radiocarbon dates on two of these samples have been received (Teledyne-Isotopes letter of November 5, 1974); the determinations are:

Sample	Age B. P.	Date
I-8162	3300 ± 160	1350 B.C. ± 160
I-8161	3360 ± 225	1410 B.C. ± 225

Determination of these dates utilized the old Libby 5,568-year half-life figure, and did not take into consideration the present-day atmospheric contamination. Using the now-recommended 5,730-year half life (multiplying the age determinations by 1.03) gives dates of 1449 and 1510 B.C. respectively. Adding the 200 years for atmospheric deviations recommended by Ralph (1971, Table 1.5) gives the final determinations of 1649 ± 160 and 1710 ± 225 B.C. Additionally, the Paso de la Amada carbon samples are from a situation with a fully developed society; they are associated with clay floors and ample Barra complex sherds, and one was overlain by extensive Ocós deposits. We may thus assume the samples to represent a relatively late facet of

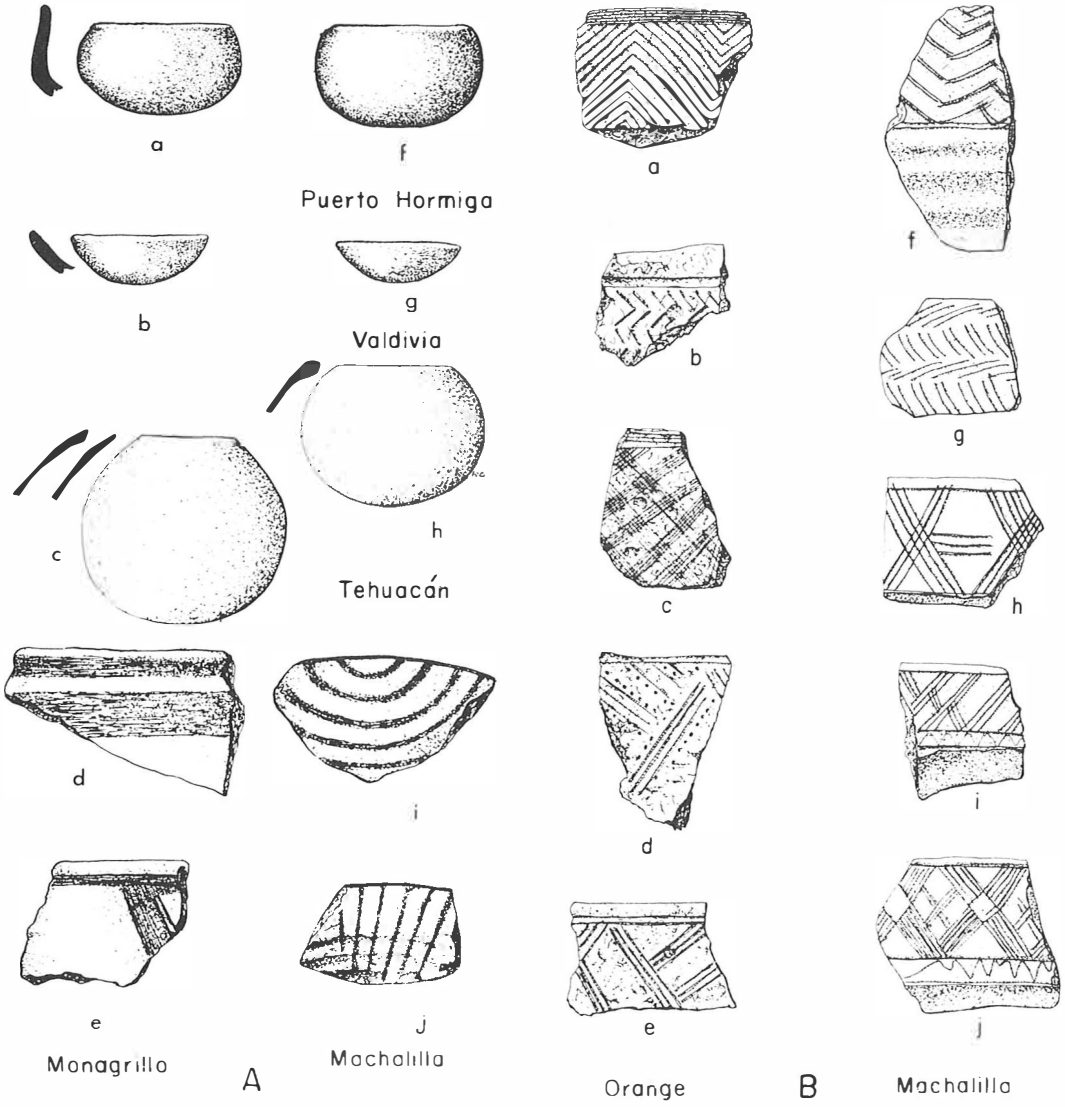

Figure 18. Some Contemporaneous New World Pottery Complexes Possibly Related to Barra Phase Ceramics

Adapted from James A. Ford, *A Comparison of Formative Cultures in the Americas* (1969, Figs. 10, 26). Some compared vessel shapes (*A*, *a–h*), red banding (*A*, *d–e*, *i–j*), and multiple-incising and "X"-ing (*B*), together with Figures 19, *B*, and 20 provide parallels with most of the common Barra complex forms and decorative techniques (Figs. 10–17), but many other more significant characteristics of the respective sites are not shared. What seems to be indicated is some selective horizon style sharing or trait-unit diffusion. Monagrillo is located in Panama, Puerto Hormiga in northern Colombia, Tehuacan in Puebla, Mexico, and Valdivia and Machalilla in the Guayas coastal region of Ecuador (see text).

(not to scale)

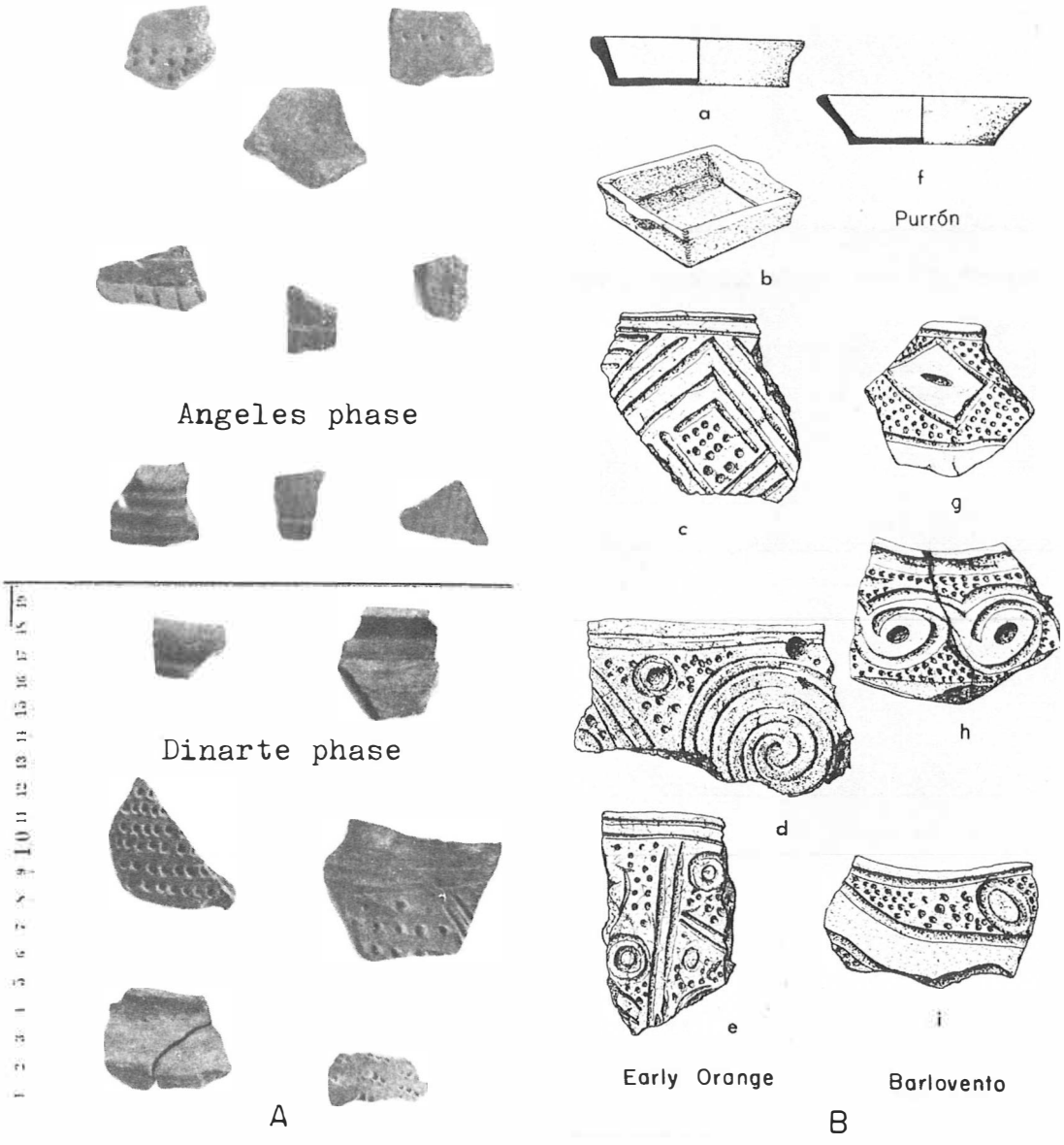

Figure 19. Other New World Pottery Complexes Possibly Contemporaneous with the Barra Phase

A: Sherds from the deepest pottery deposits on Ometepe Island, Nicaragua (after Haberland 1966, Figs. 2, 5); these few undated sherds may represent later horizons, but the red and cream punctate and grooved Angeles phase sherds seem close enough to the Barra types Tepa Red-and-white (Fig. 15), Petacalapa Black (Fig. 16), and Cotan Grooved Red (Fig. 13) as well as to the later Formative "Zoned Bichrome" tradition of Central America as to suggest some common genesis. The red-on-gray and punctate Dinarte complex may be intermediate in this development. *B*: Early forms and designs from the Gulf of Mexico and Atlantic spheres of influence (from Ford 1969, Fig. 25) that suggest some stylistic development parallel to the contemporaneous Barra phase ceramic complex (compare Figs. 13–16). Early Orange pertains to the Orange phase of the south Atlantic Coast of North America, the Purron phase includes the earliest ceramics found at Tehuacan, Puebla, and Barlovento is a midden site on the north coast of Colombia. See Green and Lowe 1967: 97–100 and text for further comment.
(not to scale)

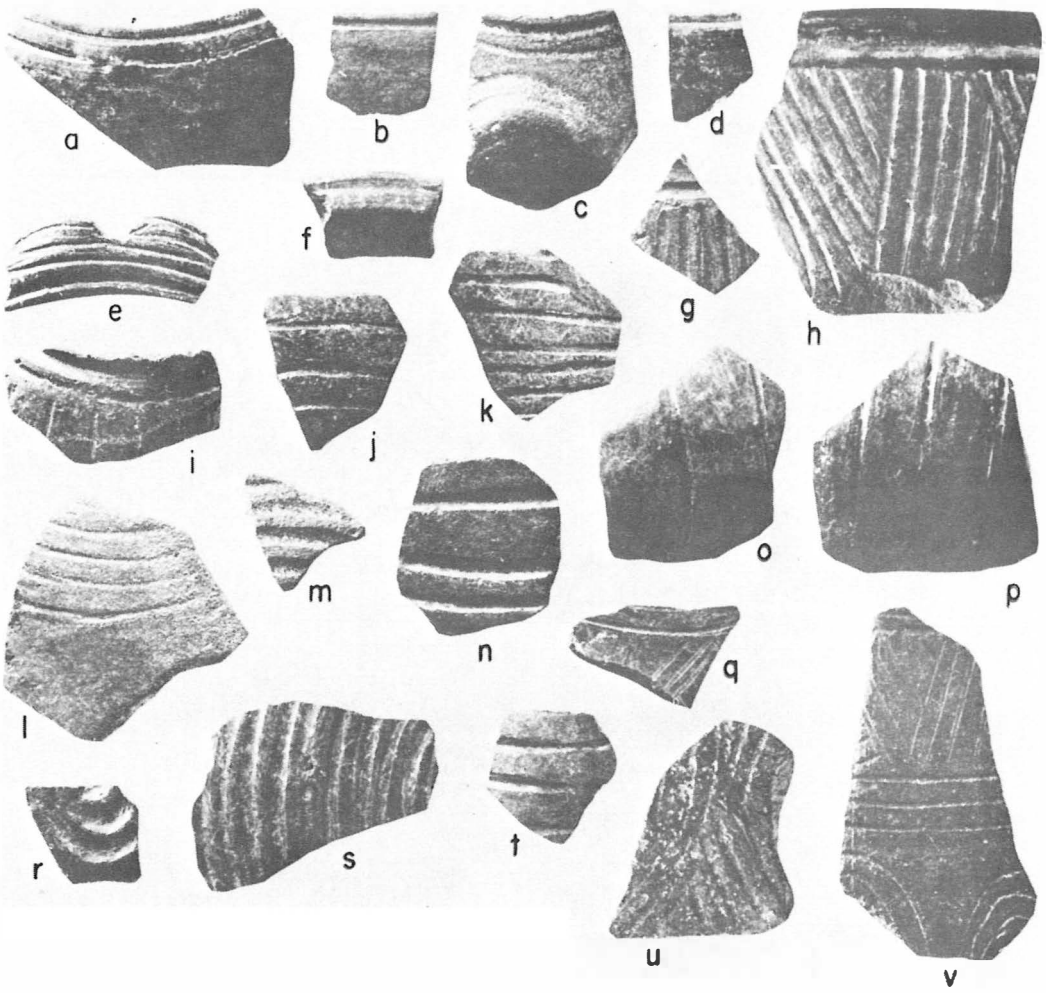

Figure 20. MACHALILLA INCISED SHERDS, COAST OF ECUADOR
From Plate 144 of Meggers, Evans, and Estrada, *Early Formative Period of Coastal Ecuador: The Valdivia and Machalilla Phases* (1965). A resemblance between some restricted orifice forms and similar grooved decoration plus apparent contemporaneity leads to a comparison of the very rare Machalilla Incised type with the common Barra phase Cotan Grooved Red type (Figs. 8, 13; see Green and Lowe 1967: 98). No assumption has been made that either type is a direct contributor to the other, but some trait-unit diffusion via intermediate sites seems plausible (see text); the near dominance of the style in the Barra complex as compared to its very minimal role in Ecuador, however, suggests that the Altamira vicinity is closest (geographically or culturally) to the center of this particular trait diffusion, to say the very least. (Scale approximately ⅔)

the Barra developmental history. A dating of the Barra phase to before 1600 B.C., therefore, now seems a conservative position.

Dating of the Monagrillo and Sarigua phases of Panama to approximately 2100 and 1500 B.C., respectively (in the opinion of Ford 1969: 155, 157), and of the Barlovento phase on the north coast of Colombia to between 1900 and 1500 B.C. (Ford 1969: 156) seems satisfactorily to bracket the general time period of those ceramic complexes on the south for which we have suggested some probable horizon-like sharing of decorative and form traits with Barra via hypothetical intermediate cultures (Green and Lowe 1967: 97–104).

On the north, some confirmatory support for the Barra dating is provided by Ripley Bullen in a personal communication (1975): "Certainly your C-14 dates are fine for connections with Louisiana, the northern Gulf Coast, and Florida. Circa 1350 B.C. represents the peak of fiber-tempered decoration with maximum variation during the Orange period. . . . We do *not* get the shapes and decoration shown at the top of Fig. 13 [Cotan Grooved Red tecomates]. Otherwise, shapes and decoration are permissive of similarities." It is interesting to note that it is precisely some of the Cotan Grooved Red forms (compared above to Colombian and Ecuadorean pottery) which show some continuity and evolution from the Barra phase into the much more common Ocós phase; on the other hand the straight-line incised types, most comparable to the northern Gulf of Mexico and Atlantic Coast Florida, tend to disappear in the Ocos phase. This suggests to me that there may have been some slight Atlantic-to-Isthmian Mexico diffusion in earliest ceramic times, with the immediate development of strong local Mexican complexes ending further stylistic interaction.

More light on dating and directions of movement, providing that there ever was long range diffusion, may be shed by the completed analysis of the Paso de la Amada and related collections. Ceja (1974, Fig. 6) has already demonstrated the abundant occurrence of clay napkin-ring earspools in the Ocós deposits at Paso de la Amada (much earlier than the Conchas phase position identified at La Victoria by Coe in 1961); this fully justifies the convictions of Evans and Meggers (1957: 240; 1966) that this trait could have arrived in the Chorrera phase in Ecuador from a Mesoamerican source (see also Green and Lowe 1967: 126 for a Barra phase occurrence of this artifact). The implications of this and other peculiar trait distribution patterns, particularly of vessel supports (apparently absent in Barra but abundant in Ocós complexes) will be better assessed after the full publication of the earliest Chiapas and northern South American complexes.

CONCLUSIONS

It is our tentative present conclusion that the still small Barra ceramic and lithic inventory must represent a well developed cultural horizon in southern Chiapas that quite probably has other as yet unidentified participants in southern Mexico and Central America. Closest counterparts in coastal Guatemala, Veracruz, and Tabasco are perhaps to be expected, considering the similarity of environment, access to sea lanes, and the related nature of both the Ocós-like and Early Olmec ceramic traditions already identified there. An extensive dependency upon grated manioc products still seems a plausible interpretation of the growing sample of occurrences of sites with prolific obsidian chips on the Barra and Ocós horizons. Serious efforts to relate the Barra phase with other and distant cultures must await full publication and first-hand comparative studies of pertinent collections.

The Barra phase is represented by a variety of pottery types, forms, and decorations that constitutes a cultural unit very different from any other discovered pre-Ocós ceramic complex, to my knowledge. It is at the same time true that exhaustive explorations, sufficiently thorough to detect and identify the earliest ceramic horizons, have been made in few regions of the tropical Americas. It is further true, and lamentably so, that first-hand comparative studies of materials from the few very early complexes across the continents have rarely been made. Certainly they have not for the Barra material nor for the Ocós material, particularly that excavated since 1958 (cf. Coe 1960). This is a program of interaction that demands scheduling when the new materials from Altamira, Colonia Buenos Aires sites, and Aquiles Serdán achieve publication. It is hoped that this can be done within a year or two of the time of this writing.

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