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HANDBOOK  
OF  
SOUTH AMERICAN INDIANS

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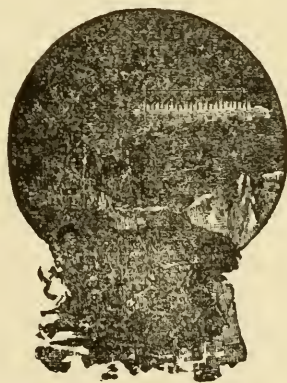
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Volume 4

THE CIRCUM-CARIBBEAN TRIBES

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# THE ARCHEOLOGY OF HONDURAS

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By WM. DUNCAN STRONG

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## INTRODUCTION

The archeology of Honduras (see map 3) is perhaps even less generally known than that of Costa Rica and Nicaragua, since it has never been made the subject of a general monograph such as that of Lothrop (1926 b, vols. 1, 2). On the other hand, northwestern Honduras has in recent years been the scene of several careful stratigraphic excavations. Hence, the all-important factor of relative time and cultural succession is not quite so obscure here as it is in southern Central America. This factor, coupled with the extremely spotty nature of present archeological knowledge concerning Honduras, necessitates a less generalized treatment than was possible in Costa Rica and Nicaragua and permits a somewhat more careful analysis of the nature of certain northern and southern pre-historic cultural thrusts as they intermingled along this very important borderland between predominantly South American and northern cultures and peoples.

For purposes of convenience we shall consider three rather arbitrary regions in Honduras. These are partially geographic and partially cultural in nature, their choice being determined quite as much by the haphazard distribution of available archeological data as by ecological factors. These tentative regions are (1) the northeast coast including the Bay Islands, (2) the Uluá-Yojoa region, and (3) central and southwestern Honduras. Of these, the northeast coast is geographically an extension of the Eastern Coastal Plain in Nicaragua (map 3), and the second region, centering around the Uluá River and Lake Yojoa, comprises most of northwestern Honduras. The third "region," central and southwestern Honduras, while geographically self-explanatory, is obviously neither a natural nor a cultural unit. From present inadequate surveys its southwestern portion would seem to have been predominantly *Maya* and *Pipil*, whereas central Honduras, on the basis of even less satisfactory surveys, seems to have been dominated by the *Lenca*. Of the earlier cultures in central and southwestern Honduras we as yet know nothing. The only detailed archeological reports on this region concern the famous *Maya* city of Copán. Since *Maya* civilization is so obviously of more northerly provenience it is discussed here primarily in regard to the manner in

which it impinges on the other Honduran cultures, historic and prehistoric. In the Ulua-Yojoa region we have considerable and significant evidence in this regard, but so far, little such evidence is available for southwestern or central Honduras. Since treatment of such major manifestations of *Maya* culture, as are represented at Copán and adjacent *Maya* sites, logically do not fall within the scope of a South American handbook, the reader will be referred to other sources in this regard.

Each of the three "regions" of Honduras will first be considered separately in the following discussion and the major sources will be indicated. Then such ethnic correlations as seem justified will be mentioned. Subsequently, the close relationships that exist between all three regions will be outlined and wider comparisons made. Owing to the fact that ceramic styles are better known than other cultural materials and therefore seem historically more significant, they may seem to be unduly stressed. This state of affairs, however, merely indicates the early pioneer stage so far attained concerning the archeology of Honduras.

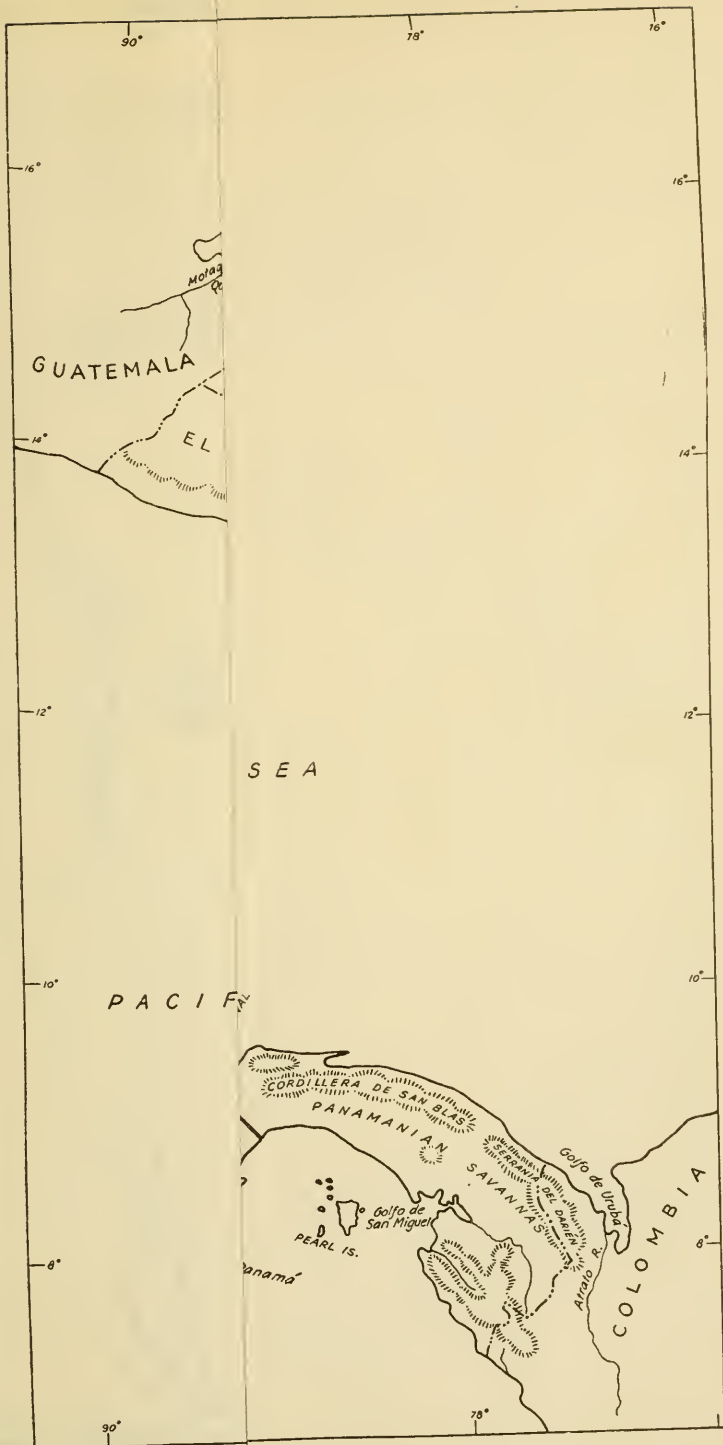
## THE NORTHEAST COAST REGION

### ENVIRONMENT

The northeast coast of Honduras is a swamp, savanna, and mountain area drained by the Aguán, Sico, and Paulaya (which unite to form the Black) and Patuca Rivers. (See map 3.) To assign southern limits to this area on archeological grounds is as yet impossible. For present purposes, however, we shall arbitrarily consider these as being formed by the Cordillera de Pijol in the west, and the northern rim of the valleys of the Guayape and Guampú Rivers (which together form the Patuca) in the east. On the Caribbean this northeast coast region in the same arbitrary manner can be considered as terminating on the west near the mouth of the Ulua River, and to the east at Cape Gracias a Dios on the modern Nicaraguan border. Present archeological knowledge of all this area is largely based upon reports resulting from hurried survey trips rather than on extensive excavations. The major sources on the northeast coast are Spinden (1925), Strong (1935), and Stone (1941).

### SITES AND REMAINS

**Mound groups.**—The larger sites on the northeast coast of Honduras are marked by notable mound assemblages. These may be either irregular or formally laid out around rectangular courts. They consist of earth, rough stone, or both. In some cases earth mounds have outer walls composed of boulders or stone rubble. One large habitation area in the Bay Islands, the "Eighty Acre" site, consists of a large number of low refuse or house mounds, whereas the Plan Grande site on the island of Bonacca



ris Stone.)





MAP 3.—The archeology of Central America. (Prepared with data furnished by W. D. Strong and Doris Stone.)

(For Playa de los Muertos, read Las Flores; for Las Flores, read Playa de las Muertos.)





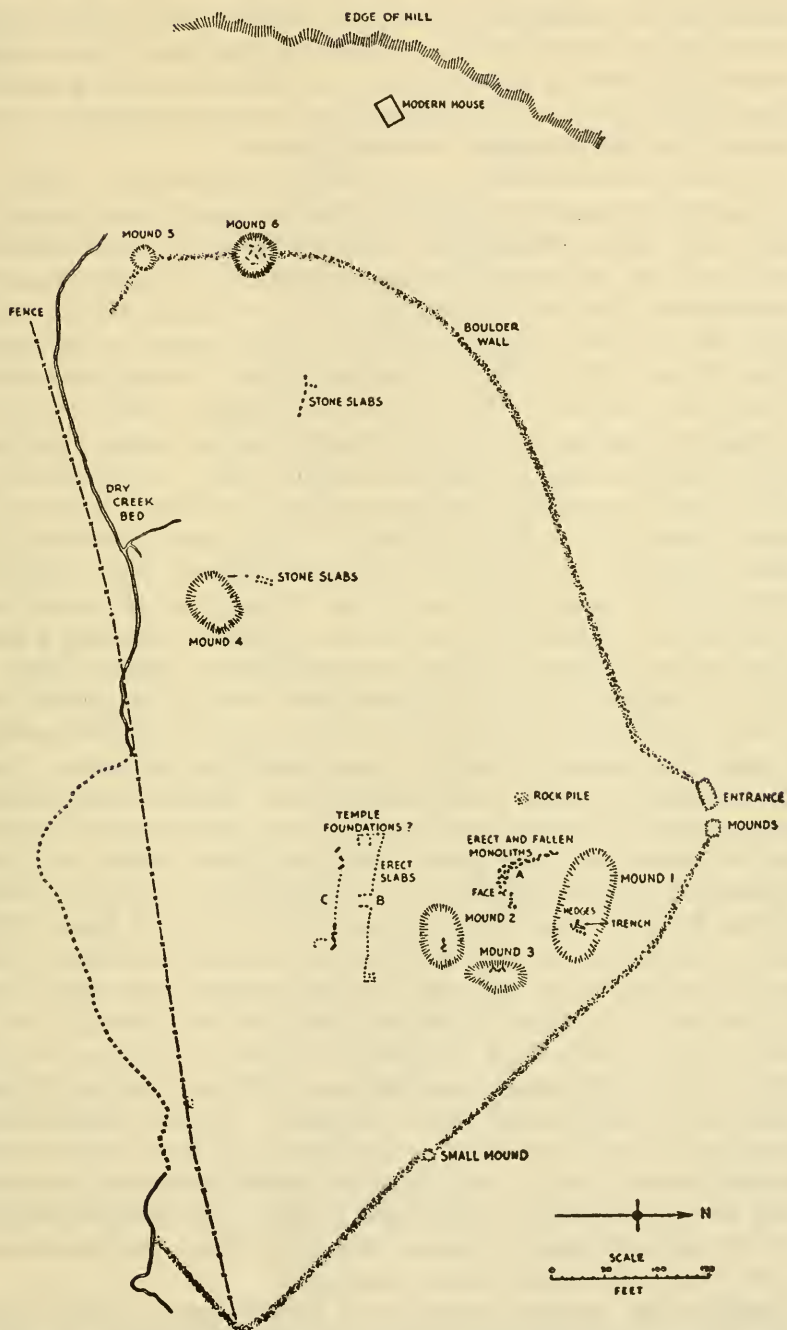


FIGURE 1.—Sketch map of the Plan Grande site, Bonacca, Bay Islands, Honduras. (After Strong, 1935, fig. 35.)



is a vast enclosure bounded by a boulder wall around irregular earth mounds (fig. 1). Inside the wall at Plan Grande are also large rectangular foundations made of low erect stone slabs, and there is also a large irregular alignment of erect and fallen monolithic slabs of great size (Strong, 1935, p. 131). The "Eighty Acre" site was apparently a town, whereas Plan Grande suggests a ceremonial center.

On the adjacent mainland, in the vicinity of Trujillo, Stone (1941, p. 47) mentions an interesting mound complex apparently closely related to certain Bay Island cultural manifestations. These sites are marked by shell heaps, long, flat, habitation mounds, and circular ceremonial mounds. Unfortunately, data on the careful excavations of Junius Bird at one of these sites have not yet been published. To the north, in the Aguán Valley, Stone (1942, p. 380) describes two types of mounds, one of unworked stone, the other of earth with stone facings. Both types occur in irregular groupings and the earth mounds are the larger. This last mound type Stone assigns to the historic *Sula-Jicaque*. To the south, on the Tonjagua River near San Esteban, she describes a large, stone temple-mound ascended by a 7-foot stairway of large stones, surrounded by smaller mounds. This site she assigns to the historic *Paya*. Spinden (1925) reports numerous circular or oval village sites with moats and, at Bonito farm, mentions an oval, boulder enclosure containing a large temple-mound ascended by rough, stone-slab steps. Strong (1935, p. 160) has described a number of similar sites from the pine-forest area between the Olancho Valley and the north coast. These sites are marked by large earth mounds arranged to form rectangular enclosures. Long stone causeways or paved roads often lead from such sites to the nearest stream, and impressive but uncarved monoliths occur at several of them. On the headwaters of the Bonito River is a rather unique ruin with well-made stone walls consisting of three large rooms. The center room contains five large stone altars (Strong, 1935, p. 161; cf. Stone, 1941, p. 52). There are many earth and boulder mounds in the vicinity. The most easterly site so far described from the northeast coast region is at the junction of the Guampú and the Patuca Rivers (Strong, 1934 a; 1935, p. 161). This ruin, at Wanquíbila, consists of a complex arrangement of great earth mounds, some 100 yards (100 m.) long and 30 feet (about 10 m.) high, around a series of plazas. The earth mounds have burned-clay cores. The easterly occurrence of such great earth mounds arranged around plazas is important since similar sites occur in eastern Costa Rica (Costa Rica and Nicaragua, p. 131). The great intervening area between northeastern Honduras and Costa Rica is too little known to tell whether this distribution is continuous.

**Canals.**—The reported occurrence of artificial canals around Guaymoreto Lagoon has been mentioned. A similar canal is reported as separating Helena Island from Roatán in the Bay Islands (Strong, 1935.



FIGURE 2.—Incised design on erect stone at ceremonial site on Claura River northeastern Honduras. (After Spinden, 1925, fig. 4.)

p. 74). In neither case are present data adequate to determine the exact nature or function of such presumably artificial waterways.

**Roads.**—Stone-paved roads on the Bay Islands (Strong, 1935, p. 140) and similar roads connecting mounds and streams at northern mainland sites have also been mentioned.

**Stone monuments.**—Stone monuments are scarce on the northeast coast with the exception of clusters of large, erect monolithic slabs such as those which occur at Plan Grande (fig. 1). These menhir-like monuments (occasionally phallic) seem most characteristic of the area as a whole, although at times attempts at decoration occur. Spinden (1925, p. 539) discovered a plinth of this type on the northern mainland decorated with an elaborate incised design (fig. 2). The design is of particular interest since it depicts the widely distributed, overlapping-fanged monster, the head of which is surmounted by another creature (or headdress) suggesting the "alter ego" motif. A small steatite figure from an offertory spring on Bonacca Island is likewise surmounted by the figure of an animal (fig. 5, *right*). This use of the "alter ego" motif is similar to that employed in Nicaragua.

**Petroglyphs.**—Petroglyphs similar to those in eastern Nicaragua occur at several sites on the northeast coast of Honduras.

**Offertories and burials.**—Hilltop offertories on the Bay Islands consist of masses of broken pottery and contain numerous other specimens (Strong, 1935, pp. 142-143). Probably burials also occur in such sites, but the evidence in this regard is not clear. A Bay Island Polychrome pot (pl. 5, *c*) containing what appears to be a priest's outfit of some 487 carved green stone, shell, and copper ornaments (Strong, 1935, p. 53) occurred in one such site on Roatán Island. On offertory in a mineral spring on Bonacca Island (Strong, 1935, p. 123) and another in a hot spring in the Black River Valley (Stone, 1941, p. 28) seem quite similar. Spinden (1925) has described offertories on the northeast mainland where great stone tables, carved stone bowls, and metates occur (pl. 1, *top*).

On the northeast coast both flexed and extended burials have been reported in shell heaps. Urn and skull burials with some traces of cremation occur in the Bay Islands (pl. 1, *bottom*) and probably on the mainland as well. Burials likewise occur in caves, house mounds, and probably in connection with hilltop and other offertories. Further exploration and careful excavation are needed to define clearly the relative importance and exact nature of all these aboriginal manifestations.

#### CERAMICS

**Introductory note.**—In regard to ceramic styles on the northeast coast, certain of those on the Bay Islands have been described by Strong (1935) and on the mainland by Stone (1941). Monochrome pottery

seems to be the most abundant ware in the region, and the majority of these ceramics can be considered as belonging to what is here designated as the North Coast Appliqué style. Recent comparison of the ceramic groups that I formerly designated as Bay Island Plain and Elaborate Monochrome (Strong, 1935), and Stone (1941) as Bay Island ware or "Paya" pottery, with those Highland Costa Rican types included by Lothrop (1926 b, vol. 2) within his Highland Appliqué Wares (p. 135) convinces me that these are all basically the same. For this reason the term North Coast Appliqué style for the Honduras variant seems fitting, since it points out the basic similarity to Highland Appliqué but allows for slight local differentiations. The designations "style" and "type" are employed in the present section, since this permits the use of the term "ware" for wider categories, such as monochrome versus bichrome, etc., which is not the case in discussing Costa Rica and Nicaragua (p. 126), where Lothrop's terminology is followed.

**North Coast Appliqué style.**—North Coast Appliqué style ceramics can, at present, be divided into three types: (a) Bay Island Monochrome type, so designated since the type was first defined here (Strong, 1935); (b) Ulua Marble Vaselike type (an awkward term but descriptive); and (c) Simple Painted type. Other types will doubtless be distinguished, but for the present these will suffice. North Coast Appliqué style ceramics, as a group, are predominantly monochrome, the surface ranging from rough unslipped to slipped and polished, the color from brown to red, and decoration being achieved by means of both appliqué and incision.

*Bay Island Monochrome type.*—The Bay Island Monochrome type (pls. 2, 3, a-d, and fig. 3) contains numerous forms, including rounded

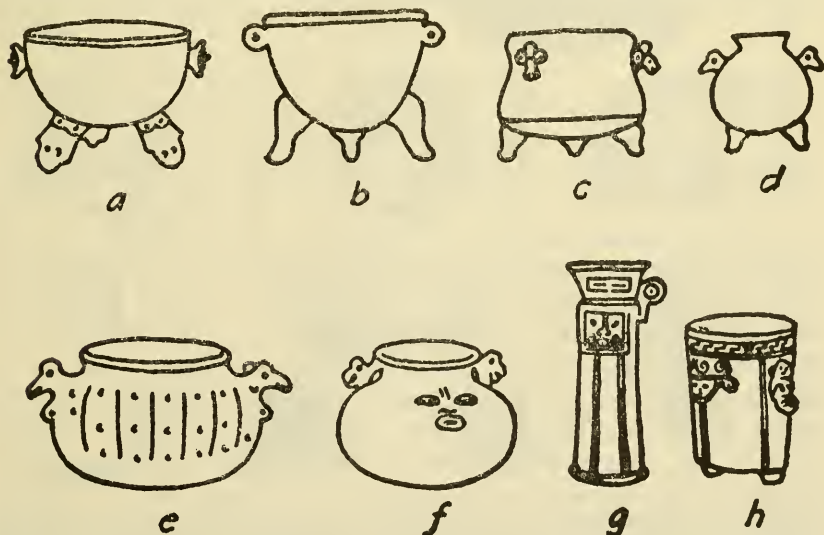


FIGURE 3.—North Coast Appliqué style vessel forms, Bay Islands, Honduras. (After Strong, 1935, fig. 38.)



vessels with necks of varying height, cylindrical vessels with annular and tripod bases, and shoe-shaped, boat-shaped, and effigy vessels. Some vessels lack handles, but a wide variety of handles and modeled lugs occurs. Tripod legs are common, often elaborated in the form of human or animal heads, but legs seem generally shorter than is the case with Costa Rican Tripod Ware. Many small, ornate but crudely made vessels were apparently constructed primarily for ceremonial deposition (Strong, 1935, pls. 7, 8).

*Ulua Marble Vaselike type.*—The second type of vessel (pl. 5, *d, e*), is generally cylindrical, with an annular or flat base. The pots are decorated by incision and some appliqué, including ornate animalistic lugs. Rim and base are often decorated with incised step or scroll designs, and



FIGURE 4.—Bold Geometric style, San Marcos type pottery, Bay Islands, Honduras. (White: red, brown, or orange; hatching: dark brown or dull black). (After Strong, 1935, fig. 11.)

the complex central design centers around a grotesquely conventionalized face surrounded by interlocking scrolls. The resemblance between these pottery vessels and the well-known, and exquisite, marble vases of the Ulua Valley is very striking (pl. 5, compare *d*, *e*, *f*). It is generally believed that pottery vessels of this type were made in imitation of the marble vases, but recently Stone (1941, p. 29) has suggested that the pottery vessels are the original prototype. Since this type of North Coast Appliqué style ceramics occurs in other associations in the Ulua-Yojoa region the problem will be discussed later.

*Simple Painted type.*—While the bulk of North Coast Appliqué pottery is monochrome, at least one limited type has simple painting in addition to basic decoration by appliqué and incision (pl. 3, *e*, *f*). This type seems so close to the Simple Painted Wares of Highland Costa Rica that it has here been similarly designated, the Simple Painted type. The type is less adequately defined even than the above. In all probability it contains pieces that blend with certain polychrome styles. Form, texture, and basic decoration, however, all indicate that the Simple Painted type or types pertain to the larger, North Coast Appliqué style rather than to any of the polychrome styles. In general, North Coast Appliqué style pottery seems to occur in somewhat variant forms throughout the entire northeast coast region as here defined. The exact boundaries of this distribution, and the finer type distinctions, remain to be determined.

**Bay Island Polychrome style.**—The most distinctive northeast coast polychrome style is that here designated as Bay Island Polychrome (formerly called Bay Island Polychrome I by Strong, 1935). The type is as yet poorly defined but appears to center on the Bay Islands and on the adjacent mainland, around and back from Guaymoreto Lagoon. (See map 3, p. 72). It is a thin polychrome ware characterized by an orange slip with complex designs in red and black (for color, see Strong, 1935, pl. 1). A cream-white slip is sometimes employed with black and red designs. The slip and paint appear to be rather easily eroded. Forms (fig. 5) are much the same as in North Coast Appliqué, but a pear-shaped vessel with flat, annular, or tripod base seems to predominate (pl. 5, *c*). Adequate examples are not available for complete design analysis, but these appear to be complex and florid. The main distinguishable design is a plumed deity or monster, perhaps the plumed serpent, with a foreshortened body (pl. 5, *c*). The main body design seems to be repeated in even more conventionalized form on the rim band and, probably, by the modeled lugs. It is a highly conventionalized art and suggests indirect Mexican or *Chorotegan* influence. Not only vessel forms but also modeled lugs are often identical with examples in the North Coast Appliqué style. For this reason, and also because no utilitarian vessels in Bay Island Polychrome style have been noted; it seems probable that the style represents a ceremonial aspect added to the more widespread mono-

chrome Appliqué ceramic tradition. We shall discuss the probable significance of this in a later section.

**Other styles and types.**—The other polychrome styles so far distinguished on the northeast coast seem more representative of the Ulua-Yoja region. One of these is the Ulua Bold Geometric style (formerly called Bay Island Polychrome II, Strong, 1935), which occurs on the Bay Islands and on the mainland. The examples of Bold Geometric style so far noted in the Bay Islands and on the adjacent mainland (fig. 4 and pl. 3, *g, h,*) seem to be of the later or San Marcos type on the Ulua River, which is characterized by the predominance of textile and geometric designs. Another polychrome style represented in casual finds from the Bay Islands (Strong, 1935, pl. 18, *a, c, e*) and the north coast suggests the Ulua-Mayoid style, and most of these seem to belong to the later or Las Flores type (pl. 6, *j-n*). Finally, a few sherds of Plumbate

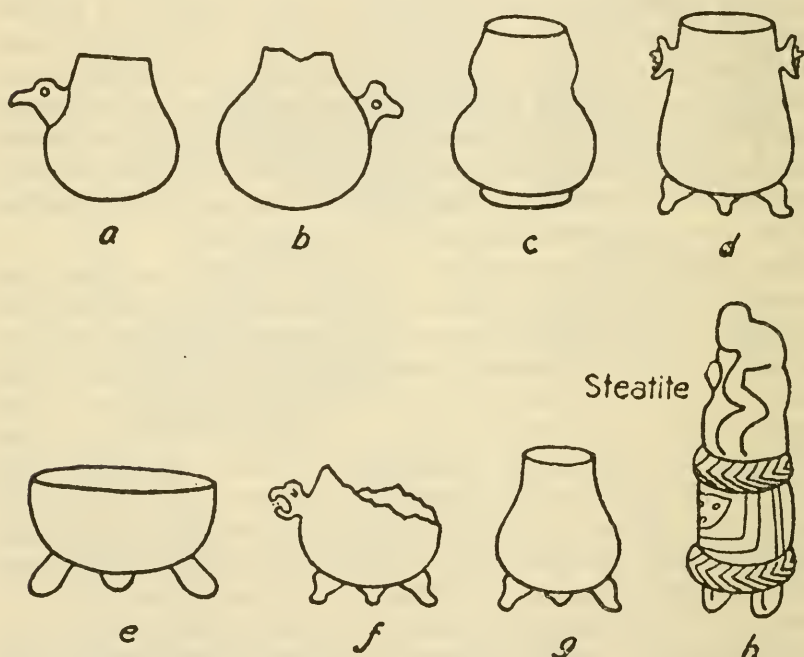


FIGURE 5.—Bay Island Polychrome vessel forms and carved steatite image, Bay Islands, Honduras. (After Strong, 1935, fig. 37.)

ware, in association with Bay Island Polychrome and Appliqué, were found on Barburata Island (Strong, 1935, p. 117). These ceramic styles and types will be discussed in connection with the Ulua-Yoja region. A considerable variety of other pottery objects occur on the northeast coast; these include grotesque appliqué figurines, figurines on stools, crude realistic human faces, modeled whistles, and cylindrical and flat pottery stamps. The majority of these are figured by Strong (1935).



**Ceramic stratigraphy.**—So far no clear stratification of ceramic types has been reported from the northeast coast. Strong (1935, p. 145) pointed out that Bay Island Polychrome I and the more elaborate North Coast Appliqué were related and believed that both overlay the plainer monochrome pottery deposits in at least one Bay Island offertory site. This evidence is entirely observational and is not closely enough controlled to accept without further verification. His incorrect assumption that, stylistically, the Bold Geometric (Bay Island Polychrome II) style represented a degeneration from Bay Island Polychrome I and is therefore presumably later has already been corrected (Strong, Kidder, and Paul, 1938, pp. 119–120). We turn now to a brief consideration of other classes of artifacts in the northeast coast region.

#### NONCERAMIC ARTIFACTS

The nonceramic culture of the Bay Islands, so far as known, has been described in some detail elsewhere (Strong, 1935). For the remainder of the northeast coast region such data are scattered but, in general, indicate a rather close relationship to the Bay Islands.

**Metals.**—Metalwork seems to be rare in this region but does occur. Copper bells, including some cast to represent a feline face (pl. 4, *bottom*), were included in a votive cache within a Bay Island Polychrome vase (pl. 5, *c*) on Roatán Island, and a few other objects of copper including copper celts have been found (Strong, 1935). Gold or other metal objects have not been reported.

**Ground stone.**—Ground-stone objects, so far reported, include many carvings of a green stone (Strong, 1935; Stone, 1941). Though a few of these are of true jadeite the majority are of softer materials such as talc. These include a variety of human heads often elaborately plumed and feline faces (pl. 4, *top*). A large number of these, in association with a votive celt (Strong, 1935, pl. 12), were found in the previously mentioned hilltop offertory on Roatán Island. According to Stone (1941, p. 47, fig. 39), such carvings, including ax-gods (or votive celts) and very large cylindrical beads, are particularly common in sites around Guaymoreto Lagoon on the mainland adjacent to the Bay Islands. As previously noted, both Bay Island Polychrome and Bold Geometric style ceramics occur in this area. Stone (1941, p. 52) points out various resemblances such as the common occurrence of votive celts of greenstone in this small section of Honduras and in the Nicoya Peninsula in Costa Rica. Bay Island Polychrome ceramics are also somewhat reminiscent of the Nicoya Polychrome Ware, and the possibility that the Bay Islands and the adjacent Honduras mainland were, in some manner, more or less directly influenced by the Mexicanized or *Chorotegan* cultures of western Nicaragua and Costa Rica should be carefully considered in future studies. This is of particular interest since, generally, the pre-

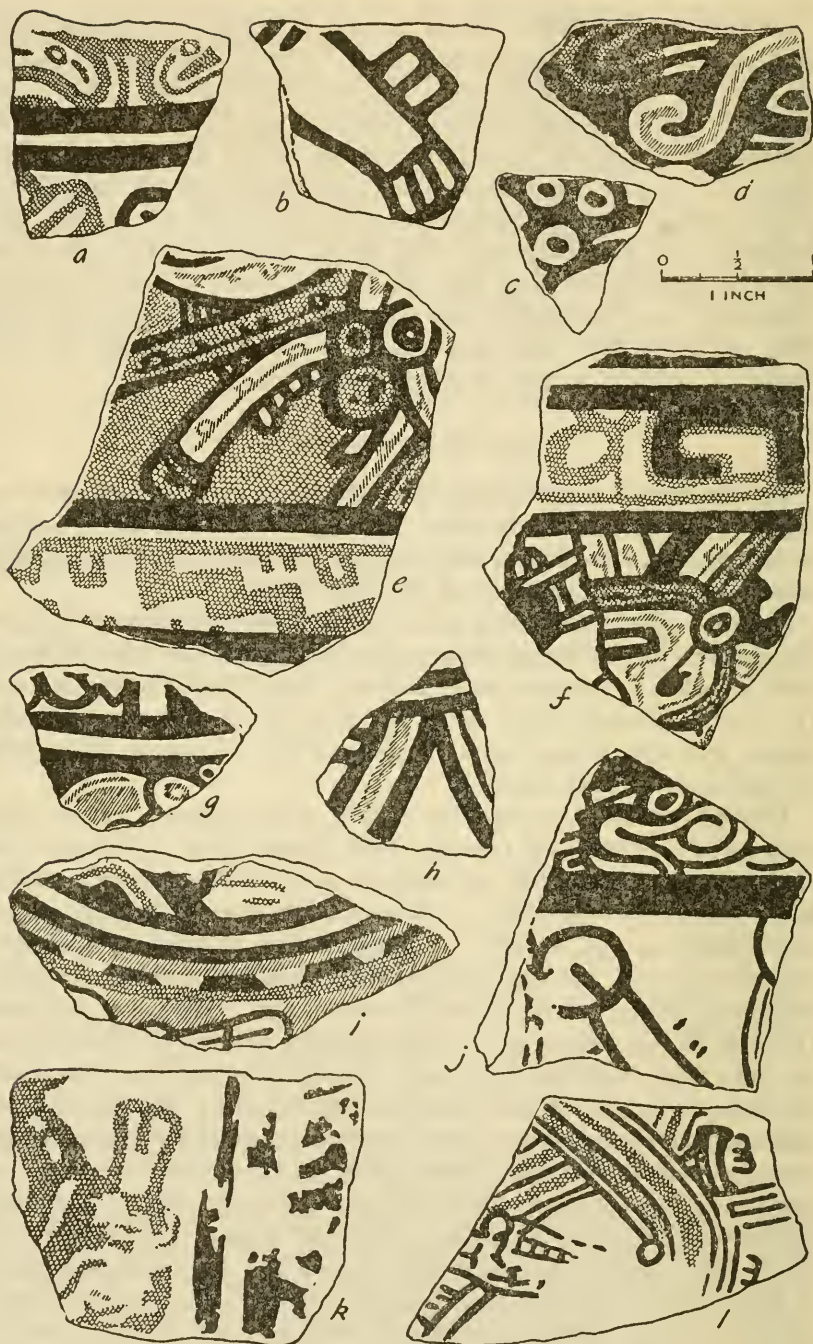


FIGURE 6.—Bay Island Polychrome pottery, Bay Islands, Honduras. (White: orange-red; black: black; hatching: purplish red; cross-hatching: darker red.) (After Strong, 1935, fig. 21.)

historic cultures of the northeast coast of Honduras seem more closely related to the Highland than to the Pacific regions to the south.

To return to a consideration of ground-stone work on the northeast coast, simple marble bowls occur (Strong, 1935, p. 127), but the more elaborate type of Ulua marble vase has not been reported despite the fact that a very similar ceramic type occurs (p. 78 and pl. 5, *d, e*). The most characteristic stone bowl in this region is cylindrical, with or without legs, and with sculptured lugs and decorative bands in relief. These vessels often occur in votive caches (pl. 1, *top*). Such bowls are beautifully made and are often decorated with textile motifs. There is doubtless some cultural connection between this type and the Ulua Marble vases of similar form, as well as with similar stone vase types in Costa Rica. As in Highland Costa Rica, large stone tables occur (pl. 1, *top*), as do three-legged forms suggesting giant metates. A characteristic metate form on the northeast coast has three squared legs and a flat, ungrooved working surface surmounted by a bird, mammal, or conventionalized reptilian head. Legless mealing stones are common. Mullers are usually cylindrical, and a few giant specimens with anthropomorphic carving in relief have been found. As in Highland Costa Rica, stone pot-rests with legs and incised decoration have been reported from the Bay Islands (Strong, 1935, p. 108). Other polished stone artifacts include celts ranging from large to small size (the latter often of greenstone), T-shaped axes (which are sometimes perforated), a variety of mace heads (including star and mammiform types from the Bay Islands which are identical with specimens from Nicoya), grooved bark-beaters of both the cylindrical-handled and ovoid types, and a wide variety of carved and plain pendants and beads (all types illustrated, Strong, 1935).

**Chipped stone.**—Chipped-stone artifacts are not so common or striking as the above but do occur. (See W. and D. Popenoe, 1931, fig. 1.) They have been reported so far mainly from the Bay Islands. The finest specimens are beautifully chipped knives, of honey-colored stone, from the Bay Islands (Strong, 1935, pl. 16). They suggest sacrificial use. Ovoid obsidian points from the same islands may have been used either as knives or for projectile points (Strong, 1935, fig. 15). Small notched arrow points occur at Lancetilla on the mainland (W. and D. Popenoe, 1931, fig. 1). Prismatic flakes of obsidian seem to be a widely distributed and ancient type of knife in prehistoric Honduras. Crudely chipped T-shaped axes are rather abundant also.

**Miscellaneous.**—Other classes of artifacts known from the northeast coast include both shell- and bonework. Perforated conch shells, presumably used as trumpets, occur commonly at coastal sites. In association with the votive cache on Roatán Island, a six-pointed star and other pendants, labrets, danglers (of *Oliva porphyria*) and beads of shell were found (Strong, 1935, pl. 15). Perforated animal teeth, some with decora-



tive carving, and various fragmentary bone implements constitute the only known artifacts of this material. From the above list it is obvious that, while perishable materials are rare in northeast coast sites, the list of nonceramic artifacts is still considerable. As indicated in the next section, this does not seem to be true of most sites in Ulua-Yojoa region.

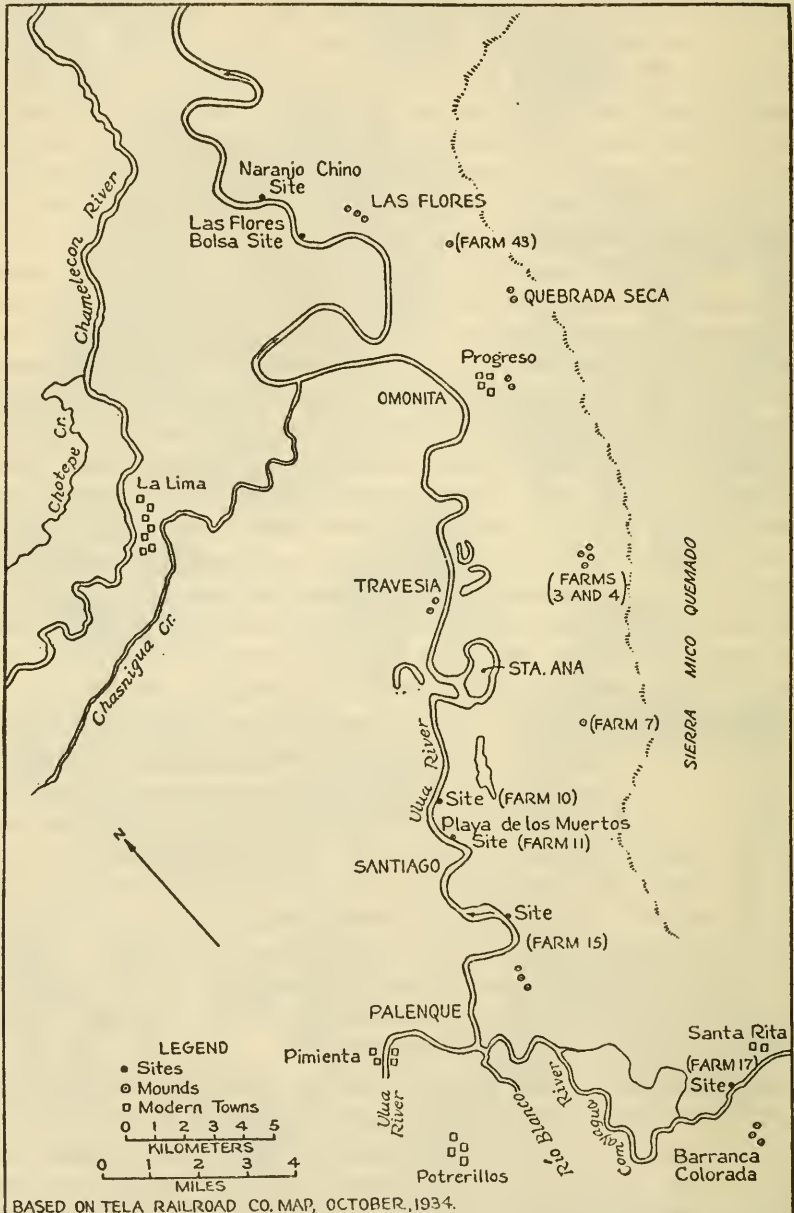


FIGURE 7.—Sketch map of the lower Ulua and Chamelecón Rivers, Honduras. (After Strong, Kidder, and Paul, 1938, fig. 5.)

## THE ULUA-YOJOA REGION

## SUMMARY OF RESEARCH

As discussed here this region can be regarded as representing a sampling of northwestern Honduras. Intensive archeological work, however, has so far been accomplished at only a few sites on the lower Ulua, Chamelecón, and Comayagua Rivers and around the northern end of Lake Yojoa. Surveys around the southern and western borders of this northwestern district (Yde, 1938) indicate that the majority of larger sites there are predominantly *Mayoid*. Such sites are not considered here. However, it must be remembered that, to date, the northwestern region of Honduras as a whole has been barely sampled by scientific archeologists, although it has long been and continues to be a collector's paradise. For this reason the following outline must be regarded as exploratory rather than definitive in outlining apparent culture sequences in an obviously rich and complex area. The region was first called to scientific attention by the work of Gordon (1898). The early Playa de los Muertos culture was isolated and defined by Popenoe (1934), and her work was followed up by the stratigraphic excavations of the Smithsonian Institution-Harvard University Expedition of 1936. (See Strong, Kidder, and Paul, 1938.) Stone (1941) has excavated at Travesia and has surveyed much of the area. Yde (1938) has also surveyed the region, and his report includes a good bibliographic and site index up to 1937. Culture-sequence data are to be derived primarily from Popenoe (1934) and Strong, Kidder, and Paul (1938).

## SITES AND REMAINS

**Mound groups and associated features.**—The prehistoric structures of the Ulua-Yojoa area are similar to those of the northeast coast but in many cases are larger and more elaborate. In the Ulua Valley are a number of mound sites most of which are more or less formally arranged around plazas (Gordon, 1898, fig. 3). The mounds are usually of earth, often with burned-clay cores and sometimes capped or surrounded by rough stones. Some stone stairs, causeways, and encircling walls occur. Cut stonework and carving seems to be rather rare except at sites of probably *Mayoid* affiliations (Yde, 1938). No definitive work in mound sites has been accomplished except at Travesia (Stone, 1941), where stuccoed terraces, steps, altars, and courts have been uncovered. One of these terraces, believed to be a temple, was marked by the occurrence of crudely carved anthropomorphic designs on rock slabs (Stone, 1941, p. 61). Outlying "cache" mounds near the site contained masses of pottery of mixed styles and types. A somewhat similar site on the Chamelecón at Naco also has stucco-covered small pyramids and long earth mounds arranged around courts (Strong, Kidder, and Paul, 1938).

A ball court and stuccoed-house floors of various colors are also of interest at Naco, which is an historic *Nahuatl* site. Earlier sites on the Ulua and its immediate tributaries are refuse heaps, or burial grounds exposed by the cutting of the river and locally called Playas de los Muertos, by the cutting of the river and locally called Playas de los Muertos,

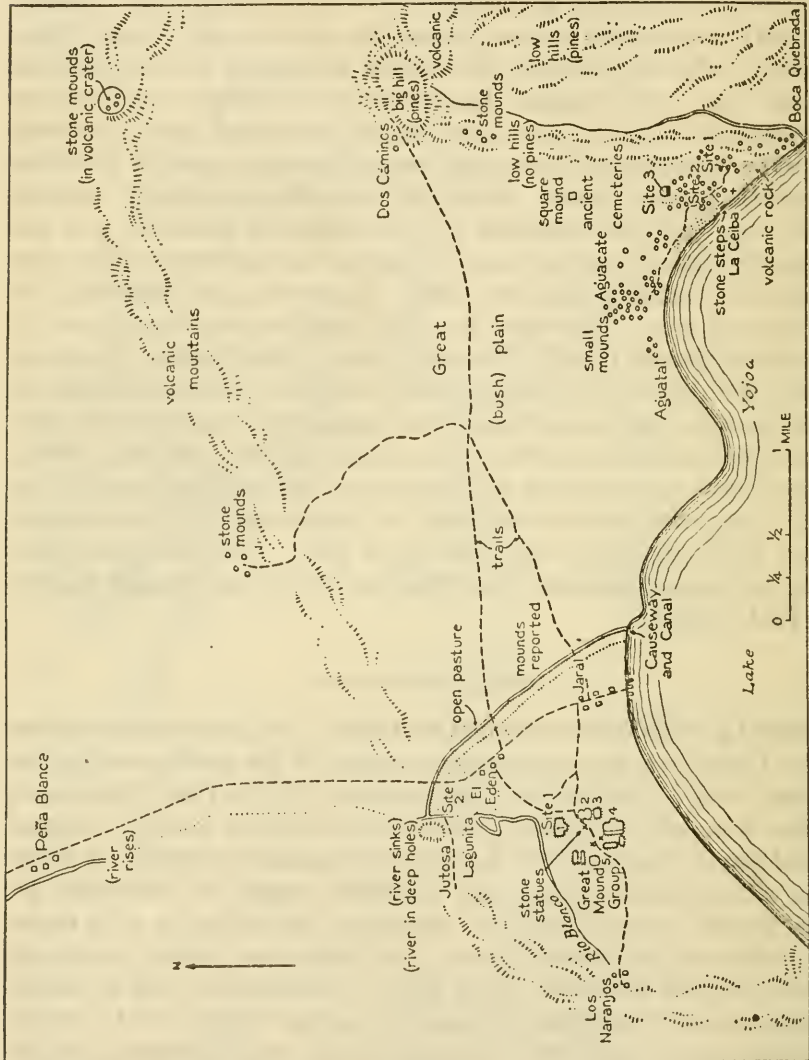


FIGURE 8.—Sketch map showing archeological sites around north end of Lake Yojoa, Honduras. (After Strong, Kidder, and Paul, 1938, fig. 20.)

“Beaches of the Dead.” Gordon (1898), Popenoe (1934), and Strong, Kidder, and Paul (1938) all worked in these deeply sedimented sites. Adjacent to Lake Yojoa one large, formally arranged mound group is located at Los Naranjos (Yde, 1938; Strong, Kidder, and Paul, 1938), and many groups of low burial and habitation mounds occur in groups

around the lake. The burial mounds, prior to the extensive looting of recent years, were rich in beautiful polychrome pottery. A canal, or earth causeway, 5 kilometers long, leading from the Río Blanco to the Lake, is an unusual and interesting feature here (fig. 8, and Strong, Kidder, and Paul, 1938).

**Stone monuments.**—Large stone sculpture is not abundant in the Ulua-Yojoa region. Gordon figures a crude anthropomorphic statue from near the Ulua (fig. 12, *c*), and several sculptures have been described from near Los Naranjos on Lake Yojoa (Yde, 1938; Strong, Kidder, and Paul, 1938, pl. 16). The most striking of these include a conventionalized serpent head of *Mayoid* type, a crudely realistic human torso with folded arms, a large apelike head which may belong to the body, and a cylindrical statue suggesting a giant roller pestle with a crude human figure in low relief and a columnar base. The last three statues are not *Mayoid* in style and suggest Nicaraguan or Costa Rican affiliations.

**Burial places.**—Along the Ulua, Chamellicón, and Comayagua Rivers the occurrence of both ancient and more recent prehistoric burial grounds, originally covered by sedimentation and later exposed by river erosion, has been mentioned. The earliest of these cemeteries so far excavated (Popenoe, 1934) pertains to the Playa de los Muertos culture and contained both flexed and unflexed burials. Later burial grounds of the polychrome pottery period excavated at Las Flores, the upper stratum at the Playa de los Muertos site, and Santa Rita, on the Ulua and lower Comayagua Rivers, contained badly preserved extended and some bundle burials. The burial mounds of the polychrome pottery period at Lake Yojoa are composed of black humous soil, and no skeletal parts were recovered except a few fragments of dental enamel. Earlier records of burials uncovered in this general region (Strong, 1935, p. 151) are interesting but lack scientific detail or later confirmation. Much more specific information on ancient methods of disposing of the dead, as well as concerning the physical types represented at various periods, can be obtained in the Ulua-Yojoa area, but the present published record is too inadequate for any generalizations to be drawn.

#### CERAMICS

**Introductory note.**—In regard to the complex ceramics of the Ulua-Yojoa region, the present discussion will be largely limited to those pottery styles and types which have been more or less stratigraphically placed. It is unfortunate that the final report on the 1936 Smithsonian Institution-Harvard University expedition incorporating the materials secured by Gordon (1898), Popenoe, et al., is not available. However, the major stratigraphic groupings have been outlined in a preliminary report (Strong, Kidder, and Paul, 1938), and an attempt will here be made



to define and illustrate, briefly, but perhaps more specifically, the ceramic styles and types so far defined in the region under discussion.

**Naco style.**—On the Contact, or early historic, level the ceramic complex revealed at Naco is very distinctive. Both historic documentation and direct association with European materials indicate that aboriginal material from this site pertains to a late *Nahuatl* occupation. For present purposes we can designate this entire ceramic complex as the Naco style, since the present sample is inadequate for final subdivision into types. The most striking Naco ware has a white slip with painted geometric and curvilinear decorations on both surfaces in black and red (pl. 6, *a-g*). Plumed figures are apparently represented in some cases. Tripod bowls with a unique, four-pointed foot are characteristic. A small proportion of unpainted and a few painted sherds have either heavily incised or raised geometric designs on the inner surface (Strong, Kidder, and Paul, 1938, pl. 4). Textile-marked sherds also occur. These will probably form the basis for quite distinctive types. As is true at all other sites in Honduras, plain, utilitarian ware is far more abundant than decorated ware at Naco.

**Ulua-Comayagua polychrome sequences.**—Concerning the sequence and association of the rich polychrome pottery styles of the Ulua-Comayagua Valleys we have the pioneer work of Gordon (1898), the careful stratigraphic excavations of the Smithsonian Institution-Harvard University expedition of 1936 (Strong, Kidder, and Paul, 1938), and the later work of Stone (1941) at Travesia. The preliminary establishment of styles and types in a sequential series rests mainly on two sites, Las Flores on the Ulua River and Santa Rita on the lower Comayagua River. The details of stratification and methods employed are given elsewhere (Strong, Kidder, and Paul, 1938), but it may be stated that a 5.4-meter (about 18 feet) refuse deposit at Las Flores yielded prehistoric but relatively late polychrome ceramic types, whereas a similar deposit at Santa Rita revealed materials similar to Las Flores in the upper level but also had several continuous lower levels marked by somewhat earlier but closely related ceramic types. A still lower, discontinuous cultural level at Santa Rita yielded a quite different and earlier ceramic style, Ulua Bichrome, which will be discussed later. Considering the Las Flores-Santa Rita excavations as one overlapping unit, we can say that two major ceramic strains or decorative styles persist throughout the entire period represented by the 33- to 39-foot (10 to 12 m.) refuse accumulation. One of these major styles has been designated as Ulua Mayoid (pl. 8) and, as the name indicates, is obviously of *Mayan* and northern inspiration. The other major style has been designated as Ulua-Bold Geometric (pl. 7) and probably finds its closest analogues to the south and east in northern and central Honduras. Each of these styles can be more or less arbitrarily split into at least two types: the

Ulua-Mayoid into the Las Flores type (upper and later) and the Santa Rita type (lower and earlier); the Ulua-Bold Geometric into the San Marcos type (upper and later) and the Comayagua type (lower and earlier).

In the following description only the most salient characteristics of each style and selected type can be mentioned. It must be remembered that, since both styles occur intermingled throughout the same deposits, they were in all probability made by one, apparently culturally and ethnically composite, population. Under such circumstances a blending of ceramic traditions in numerous individual pieces is expectable and occurs. However, objective classification of these rich materials into the styles and types, representing the poles around which likenesses appear to cluster, reveals a remarkable stylistic dichotomy which undoubtedly has ethnological significance.

**Ulua-Mayoid style.**—The Ulua-Mayoid style as a single unit is rich and complex. Exclusive of the plain, utilitarian types, which are abundant but cannot be discussed here, the Ulua-Mayoid style is characterized by polychrome painting, rich design, modeling, use of molds, and engraving or incising. The most characteristic decorated form is a straight-walled, cylindrical vase with elaborate, polychrome designs.

*Las Flores type.*—The Las Flores, or later, type of the Ulua-Mayoid style (pl. 6, *j-n*) is characterized by red, black, white, or purple designs on a buff, orange, or red slip. These designs are complex, conventional, and at times rather crude. The over-all occurrence and flamboyancy of design in this type create a somewhat florid impression. The designs often seem to represent monstrous masks (pl. 6, *j*) or reptilian forms, and rim bands with skeuomorphic glyphs occur. The Las Flores type of straight-walled vase is relatively thick and usually has hollow cylindrical or rectangular tripod feet and two projecting monkey-head lugs (Strong, Kidder, and Paul, 1938, pl. 5, *f, g*.) Designs are sometimes outlined with incisions as well as painting, and both incised and well-carved designs occur (pl. 6, *m*, and Strong, Kidder, and Paul, 1938, pl. 5, *b, d, k, n*). In addition to the cylindrical vases there is a considerable variety of forms including small bowls and low jars. These latter forms often include single pieces decorated with various degrees of blending between the Mayoid and the Bold Geometric decorative traditions.

*Santa Rita type.*—The earlier or Santa Rita type, of the Ulua-Mayoid style is similar to the above but is finer in composition and decoration (pl. 8). Designs in red, black, white, purple, and (rarely) blue occur on white, black, and orange backgrounds. Though certain of these are very complex (pl. 8, *e*) the majority are more realistic (pl. 8, *a, b, d*) than in the Las Flores type. Seated or standing priestly and "dancing" figures (pl. 8, *a, b*) are of common occurrence. Some are definitely of the "processional" *Maya* type. The Santa Rita type vertical-walled vase

is usually of thinner and of harder ware than the Las Flores type. It commonly has a flat bottom with no lugs (pl. 8, *a, b, d*). Flat plates on high tripod legs (pl. 8, *e, f*), elaborate modeled forms (pl. 8, *c*), and a considerable range of smaller jar and vase forms also occur in the Santa Rita type.

*Mayoid carved pottery.*—Mayoid sculptured and incised pottery (pl. 6, *m*) occurs in the lowest levels at Las Flores and in the upper levels at Santa Rita, and at both sites this carved subtype is in direct association with the Ulua Marble Vaselike ceramic type previously described (p. 78) as occurring in the northeast coast region. (Compare pl. 5, *d, e*, with Strong, Kidder, and Paul, 1938, pl. 6, *d-f*.) This association of Mayoid carved wares with Ulua Marble Vaselike vessels and sherds is significant and offers some objective basis to Stone's belief (p. 101) that *Maya* workmanship, as well as local artistic inspiration, was involved in the creation of the Ulua Marble Vase style. At present our ceramic classification is too broad to place exactly the Ulua Marble Vaselike ceramic type other than to say that it seems to form a link or cross tie between the upper (Las Flores) and lower (Santa Rita) levels (and ceramic types) of both the Ulua-Mayoid and Ulua-Bold Geometric styles in the Ulua district. (Cf. Strong, Kidder, and Paul, 1938, p. 51.)

**Ulua-Bold Geometric style.**—The Ulua-Bold Geometric style, as a whole, is quite distinctive from the Ulua-Mayoid style. The two styles, however, occur associated in the same sites, and various writers have erroneously attempted to arrange them in an evolutionary sequence. (See Strong, Kidder, and Paul, 1938, pp. 119–120.) Just as the vertical-walled vase best typifies the Ulua-Mayoid style, so a large-mouthed swollen-bodied olla with two vertical handles having monkey-head lugs (pl. 7, *a, b, d, e*) is the most characteristic Ulua-Bold Geometric style form. In regard to colors, a clear yellow to orange-red slip decorated with interlocking textile, geometric, and conventionalized animal designs in red and black is most common. Handled bottles (pl. 3, *g*), tripod (pl. 7, *c, f*) and open bowls, as well as other forms also occur.

*San Marcos type.*—The later, or San Marcos type, of the Ulua Bold Geometric style is named after a site in the Olancho District where the type was early segregated as an isolated unit (pl. 7, *a*, and Strong, 1934 *b*, fig. 54). At Las Flores and Santa Rita, the San Marcos type of Ulua-Bold Geometric occurs in the upper levels, intermingled, and sometimes blended, with Las Flores type ceramics of Ulua-Mayoid tradition. The typical San Marcos type monkey-handled vessel (pl. 7, *a, b*) is large and is often characterized by a broad band of interlocking textile design below the rim (pls. 6, *i*; 7, *a*). Body designs are usually geometric in red and black. Samples of San Marcos type pottery from Olancho and the northeast coast seem somewhat brighter in color than those from the Ulua-Yojoa region. (Cf. pls. 7, *a*, with 7, *b, c*.)



*Comayagua type*.—The earlier, or Comayagua, type of Ulua-Bold Geometric occurs in the lower levels at Santa Rita. It is very similar in form to the San Marcos type, but the characteristic monkey-handled and other vessels are somewhat smaller, thinner, and harder in composition. Geometric and textile designs occur on bowls, low vases, and large-handled vessels, but the most characteristic design on the Comayagua type consists of distinctive conventionalized birds, bats, and other animals (pl. 7, *d*, *e*). These unusual elongated designs often occur on both the body and the neck band of the vessel (pl. 7, *d*). Colors in the Comayagua type consist of bright yellow to orange backgrounds with striking black and red designs. In the lower levels at Santa Rita the Comayagua type of Ulua-Bold Geometric occurs in close association, and occasionally blends, with Santa Rita type ceramics of the Ulua-Mayoid style or tradition. Such, briefly, is the somewhat complex but sociologically significant association of polychrome ceramic wares as at present known in the Ulua region.

**Ulua-Yojoa polychrome comparison.**—The picture sketched in above regarding the association of polychrome ceramic styles on the Ulua is apparently repeated in equally interesting but somewhat condensed form for the Lake Yojoa district. Lake Yojoa sites are shallower but may be as old as or older than those on the Ulua. The beautiful ceramic collections so far collected from Lake Yojoa are in even greater need of thorough classification than are those from the Ulua. However, sufficient associational data are now available (Strong, Kidder, and Paul, 1938) to indicate that Lake Yojoa polychrome wares, like those of the Ulua, are grouped around at least two major stylistic poles and that these styles are associated together in time and place and occasionally blend on individual pieces. For all that, the two major styles are strikingly distinctive in cultural and artistic inspiration. These major styles are here termed the Yojoa-Mayoid (pl. 9, *c-f*) and the Yojoa Bold Animalistic (pl. 10, *a-d*). They occur together in rather shallow refuse deposits (Strong, Kidder, and Paul, 1938, p. 76, et seq.) and also in individual burial offerings in low mounds (pl. 9, *e-h*). So far they have not been split into earlier and later types. Yojoa-Mayoid style pottery is very similar, and often identical, with the Ulua-Mayoid, although the ware itself seems technically inferior. It is obviously of *Maya* inspiration. However, the decision whether the Ulua- and Yojoa-Mayoid styles should be grouped together must await adequate classification. The second style, Yojoa-Bold Animalistic, is characterized by the use of elaborate, conventionalized zoomorphic and geometric designs. The Yojoa-Bold Animalistic is seemingly quite distinctive from the Ulua-Bold Geometric style but would seem to have been derived from a related artistic tradition. This common stylistic basis is particularly striking in comparing conventionalized Yojoa bird and zoomorphic designs with those on Coma-

yagua type vessels from the Ulua (pls. 7, *d, e*; 10, *a-d*). The Yojoa-Bold Animalistic style blends more closely with the Mayoid style than on the Ulua, but the origin of the animalistic style itself would seem to be non-Mayoid. Bold Animalistic designs often occur on, or in, open bowls, but monkey-handled ollas as well as tripod vessels with conventionalized designs similar to Ulua-Bold Geometric vessels also occur in the mixed Lake Yojoa polychrome deposits (pl. 10, *e, f*). The intermingling, in time and place, that occurs between the two major styles, Mayoid and Bold Animalistic, is strikingly illustrated (pl. 9, *e-h*, and Strong, 1937, figs. 75, 77) in the contents of one Lake Yojoa grave that contains one fine Mayoid processional vessel (pl. 9, *f*), one Bold Animalistic vessel with geometric neck designs (pl. 9, *g*), and a third style (pl. 9, *h*), closely related to the last, designated as Naranjos I by Stone (1941, fig. 75).

Thus, segregation of styles according to burial contents at Lake Yojoa confirms the stylistic associations also specifically established in the refuse deposits. Space is lacking to amplify this necessarily complex discussion, but it seems clearly indicated that during the period characterized by ornate polychrome pottery in both the Ulua and Yojoa regions two quite distinctive ceramic decorative styles were contemporaneously in vogue among the same populations. Both styles persisted together, intermingling in part but still distinctive, over a considerable period of time. One of these traditions was definitely northern and Mayoid. In regard to the other we can only say at present that it was not Mayoid, may well have been local, and perhaps had southern affiliations.

A still further parallel in ceramic and stylistic associations between the Yojoa polychrome deposits and those of the Ulua is the common occurrence in both of Ulua Marble Vaselike vessels in association with Mayoid carved or sculptured vessels (pl. 10, *g, h*). Much careful distributional and stratigraphic as well as grave segregation work remains to be accomplished before we can delimit these complex and frequently hybridized styles in space and time and objectively subdivide them into an adequate number of types. Stone's work (1941) at Travesia indicates that Yojoa Bold Animalistic type vessels occur at Ulua sites, apparently in direct association with Mayoid and Bold Geometric style pottery. However, the excavation data presented, demonstrating the association between various structures at Travesia and between these and the wide range of ceramic styles and types encountered, leave much to be desired. Very early ceramic types (Stone, 1941, p. 57, fig. 85, *b, e, j*), quite possibly included in the fill of later mounds, are discussed as if they were actually contemporary with polychrome wares demonstrably later at other sites. As subsequent discussion (p. 117) points out, this seems highly improbable.

**Various pottery objects.**—A wide variety of modeled human and animal figures, modeled whistles, molds, handled incensarios, candelarios, and both flat and roller stamps, all made from pottery, occur in refuse deposits and graves characterized by the Ulua and Yojoa polychrome pottery styles (Gordon, 1898; Strong, Kidder, and Paul, 1938, fig. 7; Stone, 1941). The majority of these are of monochrome pottery, but there is no doubt as to their association with the polychrome horizons. Earlier forms than these do occur (pls. 11, *n*, *r*; 12, *j*, *k*), and, while some of these are fairly distinctive, even they have not yet been analyzed carefully enough to be safely classified unless their exact provenience is known. As for the riot of modeled and molded figurines and similar objects associated with the polychrome wares, not even a preliminary classification has yet been attempted. For this reason attention is called to their occurrence and the promising problems they present. A condensed discussion here of such complex and as yet unclassified materials, however, would have little value.

**Early horizons.**—Turning now to the ceramic complexes or styles which can be objectively demonstrated as preceding the polychrome wares of the Ulua-Yojoa region in time, we have three which belong to what Thompson (1943) has termed the Formative Period in Middle American prehistory. None of these ceramic styles is fully known and none has as yet been carefully classified. However, their major characteristics and relative age are quite clear, and these may be briefly outlined.

*Ulua Bichrome.*—The first of these has been tentatively designated as Ulua Bichrome (Strong, Kidder, and Paul, 1938, pp. 61–62, fig. 6 and pl. 9). The provenience of this material is clear; it lay below and was separated by a sterile sand layer from the lowest polychrome levels (Strong, Kidder, and Paul, 1938, fig. 6). Two Ulua Mayoid sherds of the finest Santa Rita type which occurred above the sterile sand layer capping the Ulua Bichrome deposits have been illustrated elsewhere (Strong, Kidder, and Paul, 1938, pl. 9, *t*). However, owing to the depth of this excavation and its flooding by the rising river, the available sample of Ulua Bichrome pottery is small. All sherds from this deep horizon are monochrome or bichrome, and polychrome sherds are totally lacking. Aside from the coarse utilitarian ware, which has not yet been analyzed, the Ulua Bichrome ceramic materials are highly distinctive. One type, having an orange slip decorated with faded red or black linear designs (pl. 11, *g*), is apparently Usulután Ware. The decoration on this type closely resembles negative painting because of the brighter slip and dull, faded designs. Some of the pieces may prove to be negative-painted when carefully studied. One coarse sherd from a flat tripod vessel has crisscross red lines on a dull white slip. The majority of the thin, orange and red, slipped sherds seem to come from small flat-bottomed vessels having small, solid, tripod or tetrapod feet. The occurrence of rocker-



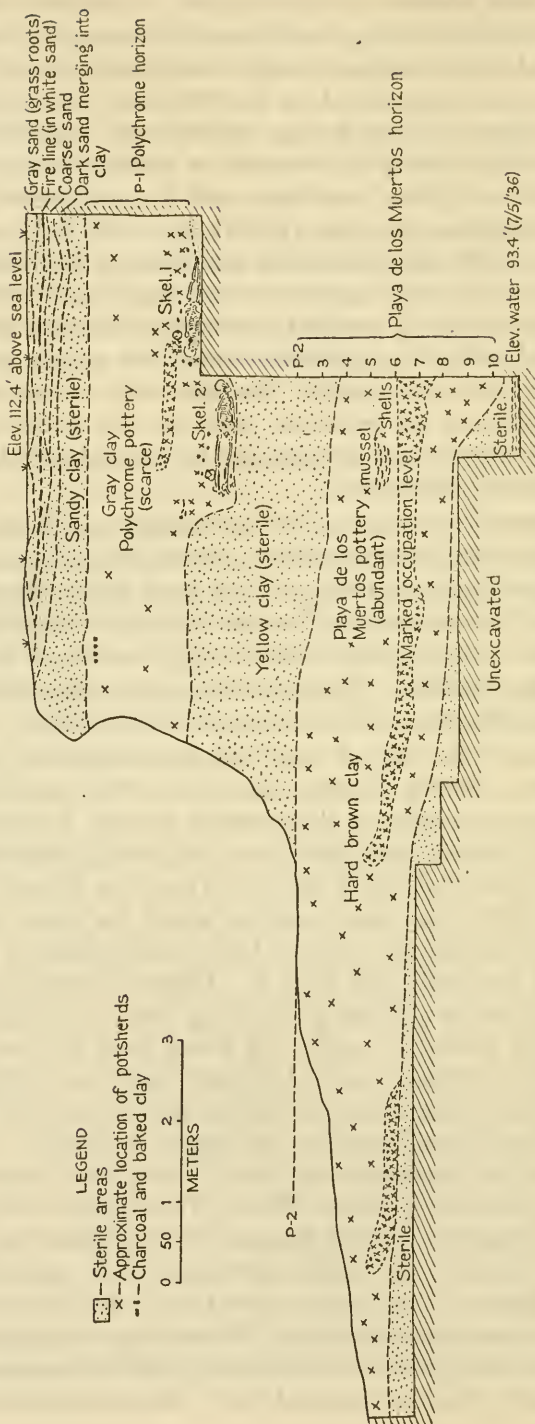


Figure 9.—Stratification at Playa de los Muertos, Honduras. The north wall of excavation 1, at Farm 11 site. (After Strong, Kidder, and Paul, 1938, fig. 16.)



stamp decoration is of interest (pl. 11, *b*). Everted lips with broad incisions on the upper surface (pl. 11, *d, n*), swollen, comma-shaped lips, and a few simple painted designs are among the specific characteristics which link the present small sampling of Uluá Bichrome with the Playa de los Muertos ceramic style. Aside from pottery, the only other clay artifact type from the Uluá Bichrome horizon was a vertical stamp with geometric design (pl. 11, *i*).

*Playa de los Muertos style*.—As previously stated, the Playa de los Muertos horizon in Honduras was first isolated in a series of deep burials

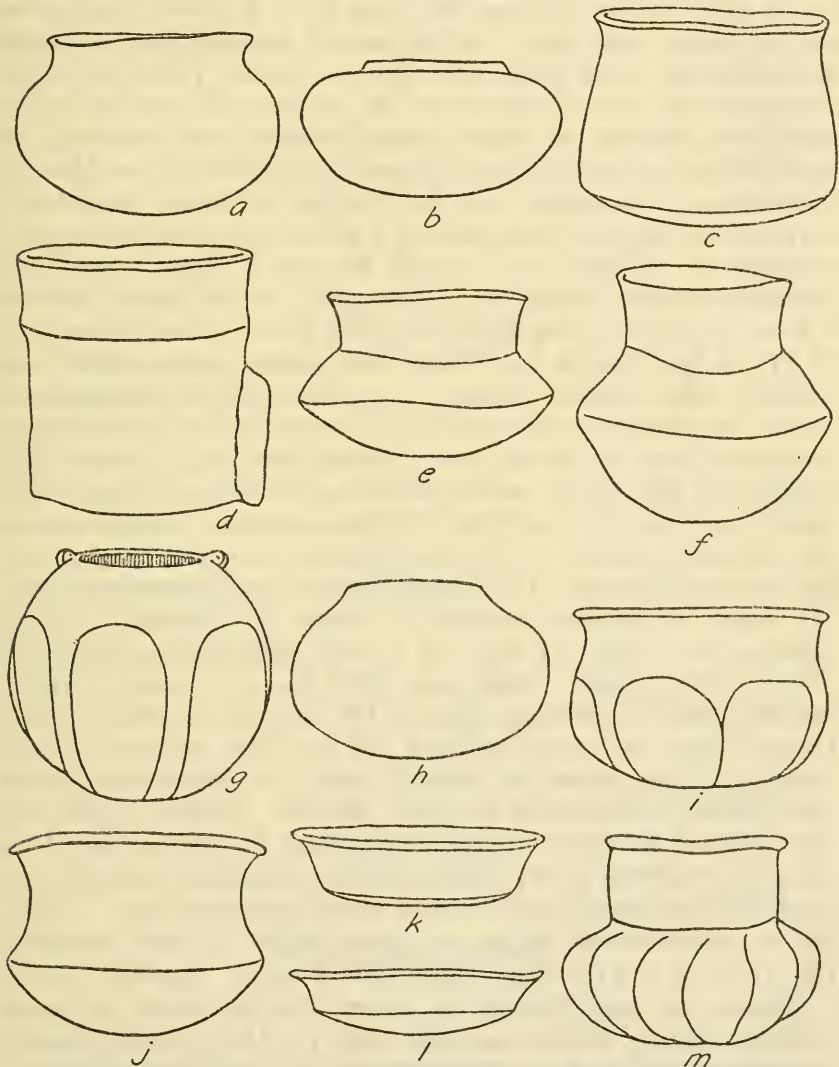


FIGURE 10.—Vessel forms of the Playa de los Muertos style, Uluá River, Honduras. (After Popenoe, 1934, and Strong, Kidder, and Paul, 1938, fig. 17.)

by Dorothy H. Popenoe (1934). Gordon's mixed collections secured near the same site include a considerable number of complete Playa de los Muertos pottery vessels (Gordon, 1898, pl. 7, *n-u*, and possibly *a-c*, *d*, *e*, *h*, *i*), indicating that his deepest excavation had reached this burial horizon. These include the majority of unbroken vessels he figures. However, a detailed analysis of Gordon's materials has not yet been attempted. In 1936 the Smithsonian Institution-Harvard University expedition's excavation at Farm 11 (Playa de los Muertos, fig. 7) revealed a strikingly clear, discontinuous stratification, with Ulua Polychrome Period refuse and burials above, and Playa de los Muertos culture refuse and occupation levels below, the two cultural horizons being separated by 2 meters of sterile yellow clay (fig. 9). Stone (1941, pp. 56-57) obscures a very clear situation when she confuses this clean-cut major stratification between two distinct cultural horizons with Popenoe's remarks concerning possible slight differences in the Playa de los Muertos burials alone. The ceramics from the Playa de los Muertos living levels and burials are rather complex, and only a bare outline of their major characteristics can be given here. As was the case in regard to the Ulua Bichrome horizon at Santa Rita, the deep Playa de los Muertos horizon at Farm 11 did not yield a single polychrome sherd. Vessel forms (figs. 10, 11) in the Playa de los Muertos style include straight-walled, but irregular, vases with flat bottoms; lower, open bowls of composite silhouette; round-bottomed pots with constricted orifices and necks ranging from direct lips to tall, flaring spouts (Strong, 1937, fig. 76, *upper left*); similar pots with single spouts (including human and animal effigy vessels), and open bowls with thick lips, comma-shaped in cross section. The great bulk of the ware is of monochrome type, and five subtypes have been distinguished: (1) Unslipped, rough, bricky-red to sooty gray, (2) slipped and polished orange-red to brown, (3) dark gray to black, highly polished ware, (4) slate-gray to buff, highly polished ware, and (5) ware with a chalky, white wash. The second, or painted, type is rare but forms a definite ingredient of the Playa de los Muertos style. Irregular areas are painted with red, red and black, and red and buff colors, sometimes outlined by incisions, while a few sherds have blotchy white designs on both inner and outer surfaces. Opposed to this rare and haphazard decoration with paint, decoration by polishing, broad incising, and modeling is very common and is competently executed. Incision with broad lines occurs on necks, bodies, and everted lips. Modeling on vessels includes human and animal effigies of some complexity (fig. 11, *b*; pl. 5, *a*) and the human hand in relief. Paneling, the use of flanges, and some filleting also occur. Further details are given elsewhere (Strong, Kidder, and Paul, 1938, pp. 73-75), but a complete and distinctive study of all available Playa de los Muertos materials has not yet been made. It is obviously an important and early style, char-



FIGURE 11.—Vessel forms of the Playa de los Muertos style, Ulua River, Honduras.  
(After Popenoe, 1934, and Strong, Kidder, and Paul, 1938, fig. 18.)

acterized by competent polished and incised decoration, as well as a little rather amateurish and, apparently, experimental work in simple painting.

Aside from pottery, the clay figurines known actually to have come from deposits of the Playa de los Muertos cultures are particularly interesting (pl. 12, *j*, *k*; fig. 11, *i*). All these are hand-modeled, but both a solid, naturalistic, and unslipped form (pl. 12, *k*) and a hollow, conventionalized, slipped and polished form (pl. 12, *j*) were recovered from the refuse deposits. Popenoe's burials yielded both an elaborate naturalistic (fig. 11, *f*) and a cruder conventionalized form (fig. 11, *i*). Gordon (1898, pl. 10, *d*, *f*, *g*) figures three of the solid, seated, and naturalistic forms, as well as others which may belong to the Playa de los Muertos horizon. It is obvious that a variety of figurine types is represented in the Playa de los Muertos cultural horizon, as is even more true of the later, more complex Ulua-Yojoa polychrome horizons. Since the figurine forms are so complex in both horizons and those of neither group have been either carefully studied or classified, it is extremely hazardous to speak of a "Playa de los Muertos type" of figurine heads of unstated provenience as Stone does (1941, fig. 45). Likewise, the theory that this ancient culture, or integral units of it, survived "until quite late" times in the Ulua Valley (Stone, 1941, p. 57) must be based on more closely controlled evidence than has yet appeared to support it.

The Playa de los Muertos culture awaits adequate definition and description based upon further study and skilled excavation, but there can be no doubt that it is one of the very early and formative ceramic cultures of Middle America.

*Yojoa "Monochrome" style.*—The third early culture revealed in Honduras was discovered at Los Naranjos near Lake Yojoa (Strong, Kidder, and Paul, 1938, pp. 111–125, figs. 31, 32). Two excavations carried through the upper layers containing Yojoa polychrome cultural materials penetrated through a meter of sterile yellow clay and gravel into a deeper and hitherto unknown cultural horizon. This horizon has been barely tested, since time was then lacking to explore it thoroughly. The pottery sample from this early level has been tentatively designated as the Yojoa "Monochrome" style, since the bulk of the material is of this type. However, a very few two-color sherds are present, and this tentative name for the style should probably be changed when this cultural horizon has been more thoroughly explored. The Yojoa "Monochrome" ware is seemingly very crude and simple (pl. 11, *n-t*) and is crumbly in texture, and some of the sherds appear to be waterworn. Rim sherds show a majority of low, slightly flaring lips. Some of these are swollen, and both vertical and slightly flaring rims are present. The majority of basal sherds are from small, flat-bottomed vessels. No spouts, handles, lugs, or feet are present in the available collection (about 700 sherds). Only 12 sherds show traces of slip or paint. The others range in color from dull buff,



through dull red, to a grayish black. Despite the obvious erosion on many sherds, the majority do not appear to have been slipped or painted. The painted sherds include eight that have faded red or pinkish slip (pl. 11, *q*), two with a dull white slip or wash, and two that have definite areas painted a dull red and black on the inner surface. Three figurine fragments (pl. 11, *n-r*) are of solid, unslipped clay and are apparently hand-modeled. These bear some resemblance to the cruder Playa de los Muertos type of figurine. If the present sample is at all adequate, this, the oldest known Lake Yojoa pottery style, appears to be the most primitive ceramic type yet encountered in Honduras, and possibly in all Central America. Technically, since a few sherds are painted, we should designate this ware as Yojoa Bichrome. However, the great majority of sherds are unpainted, and all of them are definitely inferior in texture and finish to either the Playa de los Muertos style or the Santa Rita Bichrome style. For this reason it has been tentatively designated as Yojoa "Monochrome" subject to change when an adequate sample is at hand for classification.

No very obvious relationship, other than the prevalence of monochrome, small, flat-bottomed vessels, exists between Yojoa "Monochrome" ceramics and the Ulua Bichrome style and even less between the former and the Playa de los Muertos style. This is very puzzling, since local people have dug up typical, spouted, incised and painted, Playa de los Muertos vessels (pl. 5, *a, b*) at this same site. The occurrence of these two obviously early styles, as well as the rich Yojoa polychrome styles in the upper levels, at Los Naranjos makes this site one of very great promise in regard to the possibility of determining the nature and sequence of a number of prehistoric cultures in Honduras. This promise is enhanced by the fact that, unlike the deeply sedimented archeological horizons on the northern river banks, these similar early horizons at Lake Yojoa seem to be relatively quite shallow.

#### NONCERAMIC ARTIFACTS

Concerning nonceramic artifacts from the Ulua-Yojoa region the outstanding fact is the paucity of the record. This can be partially accounted for on the grounds that the majority of pieces reaching our museums have been collector's items, such selection being in vogue even among scientific archeologists until rather recent times. However, the results of recent excavations where every artifact has been preserved are not strikingly different. In this regard the work of the Smithsonian Institution-Harvard University expedition in 1936 revealed very little nonceramic material from sites on the Ulua and Comayagua but relatively more from sites near Lake Yojoa. The reasons for such local differences are not clear. There follows a synoptic discussion of such materials mentioned in the literature. This could undoubtedly be amplified were it possible to include a study of all museum collections from this region.

**Metal.**—Metalworking seems to have been uncommon in the Ulua-Yojoa region, and the few pieces on record seem to be mainly the result of trade in late periods. At Las Flores, one barbless, copper fishhook was the only metal object encountered in the entire season's work on the Ulua and at Lake Yojoa (Strong, Kidder, and Paul, 1938, p. 41). A report that gold objects had been found in burial mounds at Lake Yojoa (Stone, 1934 a) seems to have no foundation in fact. Blackiston (1910) reported a great cache of copper bells (similar to those from the Bay Islands, pl. 9) from a cave near the Chamelicón River. According to Spinden these probably formed part of a *Toltec* trader's outfit. Steinmayer (1932) gives an analysis of one copper celt from the Ulua. Spinden states also (1925, p. 54) that one of two Ulua marble vases uncovered near Santa Ana contained a Costa Rican gold amulet of the type traded in to Chichen Itzá in a late period. From the sporadic nature of the record there seems to be little doubt that trade in metallic objects in the Ulua-Yojoa region was late and relatively unimportant. As regards metalworking the evidence is equally meager. Las Casas (see Strong, 1935, pl. 11) speaks of the native traders encountered by Columbus in the Bay Islands as having "small copper hatchets to cut wood and bells and some medals, [as well as] crucibles to melt the copper." Gordon (1898, fig. 34) illustrates "crucible-like objects of clay," but there is no evidence that they were thus employed. The occurrence of one copper fishhook with a burial at Las Flores indicates that copper was used in the later polychrome period. However, until contradictory evidence is at hand, metalworking, or even extensive trade in metals, does not seem to have been characteristic of the Ulua-Yojoa region.

**Ground stone.**—*Marble vases.*—In ground stone the carved marble vases of the Ulua are justly outstanding (pl. 5, f). The art style represented on such vases has been analyzed by Gordon (1898) and Stone (1938) and need not be discussed in detail here. The finding of several of these vases has been reported by archeologists (Spinden, 1925; Steinmayer, 1932; Stone, 1938, p. 39), but in each case the data concerning the exact provenience and association of such discoveries are tantalizingly vague. Spinden's statement that a Costa Rican gold amulet of late type occurred in one of these vessels has previously been mentioned. Every effort was made by the Smithsonian Institution-Harvard University expedition in 1936 to secure even a fragment of such a vase in situ so that the type could be positively correlated with the ceramic sequence, but none were encountered.

Lacking adequate data on the marble vases themselves, one is forced to fall back upon known occurrences of the Ulua Marble Vaselike ceramic type (pp. 78-79), which is indubitably closely related to the Ulua marble vase in style (pl. 5, d-f). The possible range in time represented by this interesting ceramic type is indicated in figure 15 (p. 113). This ceramic

type on the Ulua occurs overlapping the Las Flores and the Santa Rita polychrome periods, but its earliest and latest extensions in time are uncertain. Throughout its known occurrence on the Ulua it seems to be closely associated with Mayoid sculptured and carved pottery. As previously stated, this does suggest that the fullblown Ulua Marble vase style was the result of a fusion of two art styles, the one Mayoid, and the other the one that was responsible for the Bold Geometric tradition in Ulua ceramics.

Since the great majority of Ulua Marble Vaselike vessels are so standardized, they suggest cheaper copies of rare objects rather than originals, or prototypes, as Stone (1941, p. 29) has recently suggested. Spinden (1925, p. 540) derives the two-handled, cylindrical, and decorated stone bowls, characteristic of northeastern Honduras (pl. 1, *top*), from the *Maya* pottery vase of this type, whereas Stone (1938, p. 10) believes that the pottery form may well have been derived from the more southerly stone vessels. The pottery sequence at Las Flores and Santa Rita tends to support Stone's view, since two-handled, tripod vases of Mayoid type are late here and associated with the Ulua Marble Vaselike type, whereas the early Mayoid cylindrical vases at Santa Rita are flat-bottomed and without lugs, as is also true in early periods in the great *Maya* cities. Unfortunately, the northeastern Honduras and Costa Rican type of double-banded stone bowl has not yet received any careful study, but it seems probable that it is a southerly form of which the delicate, annular-based Ulua marble vase is merely a highly specialized and very important type. The fact that it was so often copied in pottery, which is distributed beyond the range of the marble vases themselves, bears this out.

Until further evidence comes to hand the Ulua Marble vase seems best explained as representing a localized, and relatively late, artistic climax in the Ulua region. It would seem to have been derived from an older, southern, stone bowl-working tradition, locally combined on the Ulua with a delicacy of execution which may well have been borrowed from associated artists of *Mayan* extraction. That its form and design remained relatively static over a considerable period, as demonstrated by the known time range of its pottery imitations, suggests that this vase form and its elaborated feline and scroll motifs had the very highest ceremonial importance in all northern Honduras.

*Metates, manos, pestles.*—The flat, undecorated, three-legged metate seems to have been the characteristic form in the Ulua-Yojoa region. At Lake Yojoa, sites of the polychrome pottery period had three-legged metates, the majority of which had a broad grinding groove. Flat, ovoid lapstones were common there. Manos are usually cylindrical or rectangular. A conical stone pestle was found at Las Flores. Three shallow bed-rock mortars at Los Naranjos on Lake Yojoa seem unique. In the



older "Monochrome" horizon at Lake Yojoa rectangular manos with battered ends and fragments of sandstone grinders occurred.

*Miscellaneous objects of ground stone.*—The recorded range of other polished artifact types in the region is not large. From Ulua sites of the polychrome pottery period it includes rectangular bark beaters, large and small celts (including those of greenstone), and a square, flat, polished knife (Santa Rita). From Lake Yojoa sites of the same period came double-ended hammerstones; large and small celts (including those of jadeite and other greenstone); cylindrical and ovoid bark-beaters; an ovoid wedge, or chisel, of greenstone; small round stone balls; and jadeite and brown stone beads. Jadeite and greenstone carved faces and plaques have been collected on the Ulua and at Lake Yojoa, apparently from the polychrome horizon, but there are no good records for such discoveries. (See W. and D. Popenoe, 1931, fig. 6.) In the Old Playa de los Muertos refuse deposits polishing stones and jadeite beads were recovered, and Popenoe (1934) found celts, a rough stone knife, and jadeite amulets, pendants, and beads with burials of this culture. These have not yet been described in any detail. This lack of detailed information on work in jadeite and allied materials, from either the polychrome or the Playa de los Muertos deposits, is extremely unfortunate since it prevents any comparison of earlier and later forms.

**Chipped stone.**—Work in chipped, or flaked, stone in the Ulua-Yojoa region is even more scantily represented than are ground-stone forms. The prismatic flake knife of obsidian occurs in historic Naco and practically all other earlier sites. A cache of these knives with needle-sharp points occurred with a burial at Las Flores, as did T-shaped obsidian drills and very crudely retouched stone flakes. In the Lake Yojoa polychrome deposits were obsidian and quartzite side scrapers, prismatic obsidian knives, and one planoconvex, obsidian dart point with a tapering stem. The Playa de los Muertos horizon yielded prismatic obsidian knives and retouched obsidian flakes, while the "Monochrome" horizon at Lake Yojoa contained obsidian flakes and one flint side-scraper.

**Miscellaneous.**—Work in other materials was even less abundant; perforated conch shells occur at Ulua sites, a perforated bone at Las Flores, ground-down animal ribs at Santa Rita, and necklaces of shell beads with Playa de los Muertos burials (Popenoe, 1934).

Even though the above summary includes only a small proportion of the nonceramic materials so far recovered, but not recorded, from the Ulua-Yojoa region, the list is still strikingly limited. On the Bay Islands, and adjacent mainland, offertory caches seem to have yielded the largest range of artifact types, but if such occur in the Ulua-Yojoa region they have not yet been reported. It is undoubtedly significant that rich refuse deposits such as those at Las Flores, Santa Rita, Playa de los Muertos, and the Yojoa burial and habitation mounds yield abundant ceramic but

very few other artifact types. Conditions of preservation in this humid jungle country are notably bad, and stone materials are rather scarce; hence, the most probable explanation is that outside of pottery and a few stone artifacts, the material culture of these advanced peoples was largely based on the use of wood, fiber, bone, and shell, of which all but the smallest traces have disappeared. The textile-marked pottery at Naco, like the abundant spindle whorls occurring there and, more rarely, in polychrome period sites, all bears out the record of history that this was an advanced center for the textile arts. Further evidence of this sort must be carefully sought for if the full record of a series of very important Middle American cultures is to become clear.

## CENTRAL AND SOUTHWESTERN HONDURAS

### SUMMARY OF RESEARCH

Concerning the archeology of this large and important region it is impossible at the present time to write any systematic account. With the exception of the great *Maya* city of Copán, with which we are only indirectly concerned in this summary, there has not been one piece of systematic excavation work in the entire area. The few archeological surveys so far attempted have covered only a small portion of the area. For this reason a brief synopsis of certain observations and a consideration of certain major problems in the region must suffice. For present purposes we will subdivide the region into the following subareas: (*a*) Copán and the upper Chamellicón River Valley; (*b*) the Comayagua Valley; (*c*) the Tegucigalpa area; (*d*) the Olancho Valley; and (*e*) the Pacific or Fonesca Bay area.

**Copán and the upper Chamellicón River Valley.**—A number of sites on the upper and lower Chamellicón River have been described by Yde (1938), Strong, Kidder, and Paul (1938), and others. Those on the lower river, around and above Naco, appear to be *Mayan*, and the majority of stone carvings from sites on the upper Chamellicón, such as La Florida and El Puente, are undoubtedly *Mayan* (Yde, 1938). The same is true in regard to Paraiso, on an affluent of the Motagua River, as well as a considerable number of sites on the upper Copán River. (See map, fig. 24, *a*; Yde, 1938, p. 49.) Aside from one distinctive stone carving from La Florida (fig. 12, *b*) no non-*Mayan* remains have so far been encountered in the very limited archeological surveys so far attempted in this rich area.

*Non-Mayan stone sculpture.*—Whether the *Mayan* occupation of the site of Copán itself was preceded by that of another and earlier culture seems to be a disputed question. The vast majority of the stone carving and construction work at this great site is undoubtedly *Mayan*, but certain stone carvings and ceramic types encountered in the older horizons of the city may pertain to an earlier occupation. Since these and similar evidence

of cultural interpenetration have a direct bearing on the problem of culture sequence in Honduras, they must be briefly considered, although any detailed discussion of Copán or other *Mayan* sites is beyond the scope of the present summary.

Among the numerous stone statues in southwestern Honduras that are definitely *Mayan* in inspiration there are several which seem to have other cultural affiliations (fig. 12). Two of these, thought by Lothrop to be non-Mayoid, were found built into the foundations of stelae (5 and 4) at Copán and presumably antedate the *Mayan* occupation at that site (fig. 12, *d*; Lothrop, 1921, fig. 70, *d*, *e*). Lothrop believes that these two statues, one of which has since disappeared, are stylistically related to both Nicaraguan and Guatemalan Highland statues of non-*Mayan* origin. The same is thought to be true regarding an "alter ego" statue at La Florida (fig. 12, *b*) and the crude anthropomorph from the Ulua (fig. 12, *c*) figured by Gordon. A feline figure or a tall pedestal from Octopeque Province in southwestern Honduras (fig. 12, *a*) is also similar to "peg-based" statues from Nicaragua, Costa Rica, and the Guatemalan Highlands. Richardson (1940, p. 410) doubts the suggested relationship between the substelae statues at Copán with the Nicaragua-La Florida type of sculptures for the following reasons: (1) There is no "alter ego" motif in the Copán statues; (2) they are not on a pedestal, column, or pillar; (3) they have necklaces, clothing, and feather ornaments, which are more characteristic of *Mayan* than Nicaraguan sculpture; (4) the neck appendage on one Copán statue differs from such appendages found in Nicaragua; (5) they are merely delineated on a boulder and not entirely sculptured out; and (6) the figure from stela 4 is of local Copán stone. He believes, however, that the two statues in question are far removed from the traditional *Mayan* style at Copán and may well be related to the "crude group" at Kaminaljuyú; and he suggests that they might belong to an early non-*Mayan* horizon represented by the early occurrence of Usulután ware at Copán. This opens interesting possibilities, since at Kaminaljuyú, in the Guatemalan Highland, rather similar "crude" statues, are said to be associated with what has been termed "Archaic" pottery (Richardson, 1940, p. 399).

*Ceramic correlations with Formative Maya.*—Unfortunately, the published data concerning the sequence of ceramic styles at Copán and southern *Maya* sites are as yet far from adequate. Vaillant's earlier correlation (1927) of ceramic styles and dated stelae is not adequately illustrated and should be brought up to date. Various interesting suggestions made by Longyear (1940, 1942) are based on first-hand study of both older and recent ceramic collections from Copán and other *Mayan* sites, but his published articles are very brief and generalized. However, the following suggested pottery correlations between Petén and *Southern Maya* seem plausible and have a direct bearing on the sequence and probable dating of



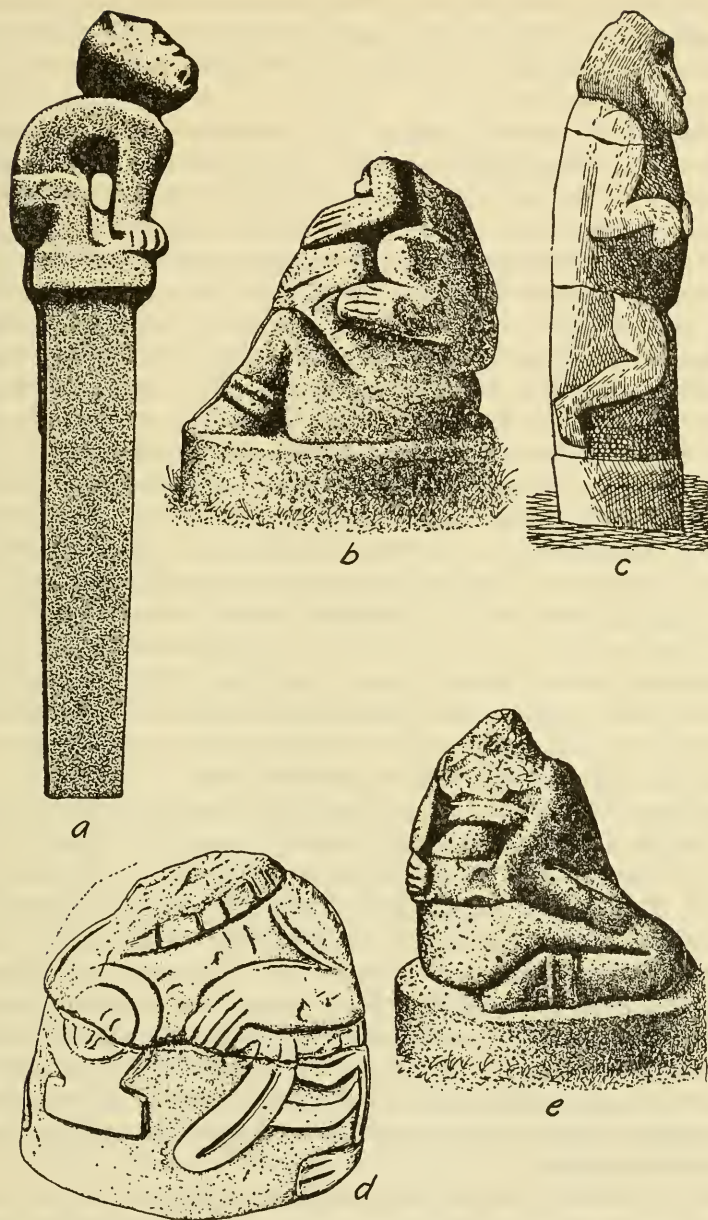


FIGURE 12.—Honduras stone sculptures. *a*, Jaguar on pillar, Department of Ocotepeque (height 4 ft. 2 in. (1.28 m.)). *b*, Human figure, La Florida, Department of Copán (height 2 ft. 8 in. (0.80 m.)). *c*, Stone statue, Ulua River. *d*, Human figure, Copán site, from foundations of stela 4 (height, approximately 4 ft. (1.22 m.)). *e*, Other side of *b*. (After Richardson, 1940, figs. 35-37; *c*, after Gordon, 1898, fig. 4.)



prehistoric cultures in Honduras. These will become more applicable to the Honduras area when the full sequence of cultures in Highland Guatemala has appeared in print. However, the Petén data are more accessible at the moment.

According to Longyear (1942, p. 391), the most primitive-appearing ceramics in the southern *Maya* area are the Yojoa "Monochrome" deposits. (See p. 98.) This, as yet little known, ceramic type does not exactly correspond with any of the Petén-*Maya* prepolychrome styles. The presence of crude, hand-molded figurines and the discovery of other traits may eventually link it with the Mamom phase in the north and the Playa de los Muertos in the south, or it may prove to be earlier than either. The Playa de los Muertos style, with its broad, incised designs, single-color painting, and solid figurines, apparently links up with the Mamom phase to the north (Smith, 1940, p. 249). There are some general resemblances between Playa de los Muertos monochrome vessels and the incised, fluted or plain, bottle-necked vessels associated with cremations found in caverns about 4 miles from Copán (Gordon, 1896, 1898). This last type of pottery has not been reported from the main Copán ruins. It is apparently early, but it is too little known at present to be safely classified.

The Ulua Bichrome style (including Usulután ware) is stylistically linked with deep deposits at Cerro Zapote in El Salvador (Lothrop, 1927 a) which also contain Usulután ware. Longyear (1942) suggests that the batik process employed on ceramics of the second or Chicanel phase in the Petén at Uaxactún may also be temporally and stylistically related to the Cerro Zapote and Ulua Bichrome ceramic styles.

Thus, these two prepolychrome phases in western Honduras, the Playa de los Muertos and the Ulua Bichrome, are apparently related to two similar *Maya* (or proto-*Maya*) phases in the Petén, the Mamom, and Chicanel. As Longyear states (1942, p. 393), "Any dating for these early levels is necessarily tentative, but since 9.0.0.0. or A. D. 435 in the Goodman-Martinez-Thompson correlation, is given for the upper limit of the Chicanel [Thompson, 1939, p. 240] we can take this date at present as signifying the close of the prepolychrome horizon in the south also." More recently Thompson (1943) has given A. D. 300 as the closing date for the Formative or Mamom-Chicanel phases in the Petén. In any event, actual dates as applied to this borderland area are to be considered as approximations at best.

*Ceramic correlations with Classic Maya.*—In regard to the later polychrome styles in western Honduras, apparent correlations with Petén-*Maya* sequence exist, but there are bad gaps in the present record. Tzakol-phase ceramic characteristics are said to be rare, but they do occur at Copán (Longyear, 1942, p. 393), whereas both Santa Rita and Las Flores type Ulua-Mayoid style characteristics are apparently lacking in such horizons at Copán. The Tepeu phase in the Petén finds representa-

tive forms both at Copán and apparently in the Ulua-Mayoid Santa Rita type pottery. A characteristic Tepeu form is a flat-based, thin-walled, cylindrical vase decorated with human figures and glyph bands, and without thickened lips, tripod feet, or lugs. As previously indicated (p. 89), this type of vase is characteristic of the earlier Santa Rita type ceramics in the Ulua-Mayoid series. As Longyear (1942, p. 393) suggests, the temporal positions of the (earlier) thin-walled and (later) thick-walled vases actually overlap in western Honduras, but the former occurs only in the early Santa Rita ceramic type of the Ulua-Mayoid style. According to Longyear (1942, pp. 393-394), the Tepeu phase, in the Petén, lasts from 9.10.0.0.0 (A. D. 633) until 10.8.0.0.0 (A. D. 987), and this span of time may well include the Tepeu forms at Copán and the Santa Rita ceramic type on the Ulua River. Another occurrence, recently reported from Copán (Longyear, 1940, pp. 269-270), is the discovery of Teotihuacan (II-IV) types of pottery in association with "fairly early Copán horizons." These are apparently trade wares from Kaminaljuyú in the Guatemala Highlands. In time, this intrusion apparently more or less coincides with the Tzakol-Tepeu phases, tentatively dated above. Thompson (1943, p. 122) dates these Mexican influences in Kaminaljuyú as circa A. D. 350-650. Heretofore, Mexican influence in Honduras and El Salvador was believed to have begun with the *Toltec*, who, traditionally, migrated southward from the 10th to the 12th centuries, following the breakup of the *Toltec* Empire. The fact that Teotihuacan-Mexican influences were present in Copán at least several centuries prior to these traditional dates must be borne in mind when the complex problems involving various Mexican versus *Mayan* influences in contemporary and later Honduras cultures are considered. As Longyear (1942, p. 395) also points out, a known terminal point in the Mexican occupation of Honduras is marked by the Naco style pottery at that site (p. 88), which is dated as just subsequent to A. D. 1500 by its demonstrated association with Spanish Colonial pottery.

*Summary of ceramic correlations.*—To summarize this important but necessarily complex and incomplete treatment of the known relationship between Honduras and northern, i.e., *Mayan* and Mexican, ceramic styles, the following outline seems tenable: The two prepolychrome horizons, Playa de los Muertos and Ulua Bichrome (Usulután) in western Honduras, correspond in certain general characteristics to two similar early horizons, Mamom and Chicanel, in the Petén. The earliest date for these horizons is speculative, but the latest appears to be from about A. D. 300 to 435. Between these and the later polychrome horizons in western Honduras there is at present a complete break, which is not the case in the Petén. This is due to the fact that the Tzakol phase in the Petén (A. D. 435 to 633) is almost entirely unaccounted for in western Honduras, either at Copán or on the Ulua. The next, or Tepeu phase, in the Petén (A. D. 633 to 987) is apparently represented at Copán (Longyear,

1942, p. 393), and possibly on the Ulua, by the Santa Rita type of the Ulua-Mayoid style. However, the fact that Ulua-Mayoid style pottery generally seems to be rare or lacking at Copán and that Copán style ceramics are generally lacking on the Ulua—but that both styles occur together in El Salvador (Longyear, 1940, p. 270)—presents a puzzling problem which more adequate data regarding Copán and stratigraphic excavations in El Salvador seem most likely to solve. Nevertheless, despite the present inadequacy of the record at Copán, and in the remainder of northwestern Honduras, wide cultural correlations of considerable depth are already clearly apparent. These important matters will be discussed further in the conclusion of this section, but here we must return to a brief survey of prehistoric central and southwestern Honduras.

**Comayagua Valley.**—In the Comayagua Valley, or more technically, the Humuya River Basin, only the site of Tenampua on a hill crest southeast of the town of Comayagua has been at all carefully explored. Despite the surveys of Squier (1853 b, 1869), Lothrop (1927 b), Popenoe (1928, 1936), and Yde (1938), there is still considerable disagreement as to the exact plan of the site. Popenoe, who gives the most complete map (fig. 13), shows 99 structures, whereas Squier counted over 400 mounds (Yde, 1938, p. 22). Tenampua was apparently a hilltop fortress and, possibly, a religious shrine. Despite a limited water supply, Popenoe notes three artificial reservoirs or water holes; the abundance of worn-out metates suggests occupation during considerable periods of time. The site is strongly fortified by stone walls, as well as by nature (fig. 13), and the surface of the mountain top is covered with numerous terraces and rough mounds. The latter fall into three main groups, which are formalized in arrangement. Yde (1938, p. 22) on the basis of Popenoe's map (fig. 13) believes that the site was erected during at least two periods of construction. The mounds are of earth paved with stones, or of rough rocks paved with slabs. Crude stone stairways ascend the terraces and certain mounds. Two long mounds with slanting inner walls faced with stone slabs  $3\frac{1}{4}$  feet (1 m.) in height form a ball court. According to Yde (1938, pp. 19–21), this has a stucco floor. Certain rocks at the site are inscribed with simple geometric patterns. Strange to say, the ceramic complex from this important site has never been described. Squier (1869) figures a remarkable painted vessel from here, with handles and legs suggesting twisted cords. It contained chalcedony beads and a pottery whistle. A few sherds of polychrome ware collected by Squier are now in the American Museum of Natural History. They do not conform to any Honduran ceramic type with which the author is familiar. Popenoe figures another tripod vessel (fig. 14) whose polychrome bird design somewhat suggests the Yojoa Bold Animalistic style previously described (p. 91). Other elaborately painted, tripod bowls, as well as incised pottery, are mentioned by Squier (1869). He also noted much broken pottery and burned human





PLATE 1.—Ceremonial cache and urn and skull burials, Honduras. *Top:* Ceremonial deposits of stone bowls, metates, and tables near Plantain River, northeastern Honduras. (After Spinden, 1925, fig. 1.) *Bottom:* Urn and skull burials, Bay Islands, Honduras. (After Strong, 1935, pl. 2.)





*a*



*b*



*c*



*d*



*e*



*f*

PLATE 2.—North Coast Appliqué style vessels, northeastern Honduras. (After Stone, 1941, figs. 13-15.)



PLATE 3.—Northeast Coast Honduras pottery types. *a-d*, North Coast Appliqué style; *e-f*, North Coast Appliqué style, Simple Painted type; *g-h*, Bold Geometric style, probably San Marcos type. (After Stone, 1941, figs. 16 and 11.)



PLATE 4.—Stone and metalwork, Bay Islands, Honduras. *Top*: Small green stone anthropomorphic carvings. (Scale: Upper left specimen  $1\frac{1}{4}$  in. (3 cm) wide.) *Bottom*: Modeled copper bells. (Scale: Lower left specimen  $1\frac{1}{2}$  in. (2.7 cm.) high.) (After Strong, 1935, pls. 11 and 10.)



PLATE 5.—Honduras ceramic and marble vessels. *a, b*, Playa de los Muertos style, Bichrome type vessels from Lake Yojoa. *c*, Bay Island Polychrome style vase. (In orange, dark red, and black.) *d, e*, Ulua Marble Vaselike type vessels, Bay Islands. *f*, Ulua Marble vase (University of Pennsylvania Museum. Note similarity with *e*). (After Strong, Kidder, and Paul, 1938, pl. 15; Strong, 1935, pls. 1 and 24; and Stone, 1938, fig. 6.)



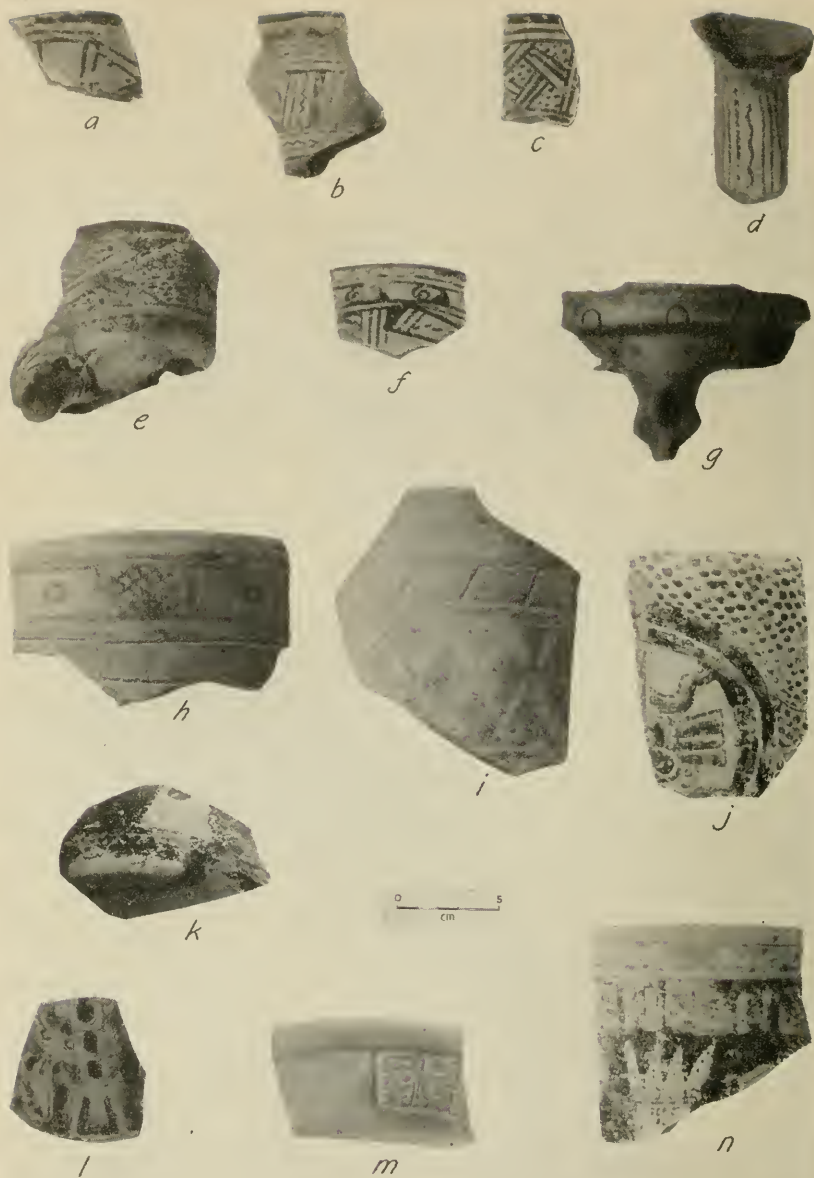
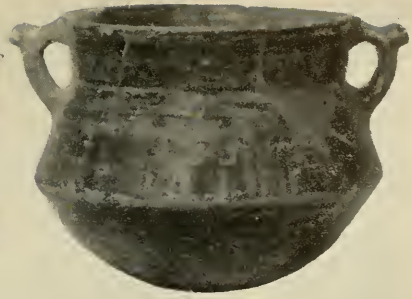


PLATE 6.—Honduras pottery styles and types. *a-g*, Naco style; *h, i*, Bold Geometric style, San Marcos type; *j-n*, Uluá Mayoid style, Las Flores type; *m*, Mayoid carved subtype. (After Strong, Kidder, and Paul, 1938, pls. 3 and 5.)



*a*



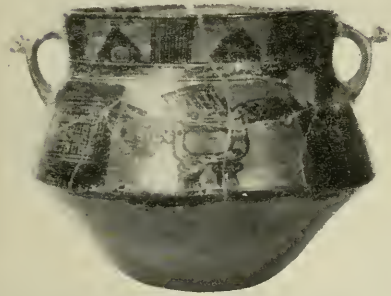
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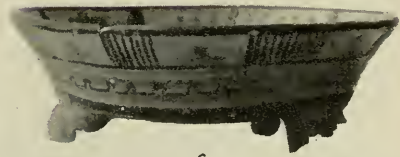
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*f*

PLATE 7.—Bold Geometric style pottery. *a*, San Marcos type (San Marcos, central Honduras); *b*, *c*, probably San Marcos type; *d*, *e*, *f*, Santa Rita type. (From Santa Rita, Ulua River, Honduras.)



PLATE 8.—Uluva Polychrome vessels, Mayoid style, Santa Rita type, Santa Rita, Honduras.) (After Strong, Kidder, and Paul, 1938, pl. 8.)





PLATE 9.—Yojoa Polychrome vessels, Lake Yojoa, Honduras. *a-d*, Mayoid style; *e-h*, group of vessels from a single grave at La Ceiba, Lake Yojoa, Polychrome Period; *e*, uncertain style; *f*, Mayoid style; *g*, Bold Animalistic style; *h*, Bold Animalistic style, Naranjos I type. (*e-h* on different scale than others.) (After Strong, Kidder, and Paul, 1938, pl. 12; and Strong, 1937, fig. 75.)





*a*



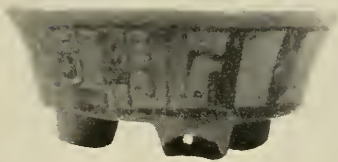
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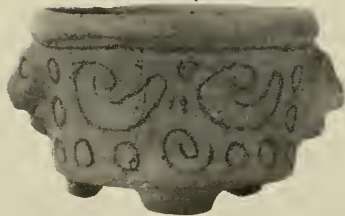
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*e*



*f*



*g*



*h*

PLATE 10.—Yojoa Polychrome and other vessels, Lake Yojoa, Honduras. *a-d*, Bold Animalistic style; *e-f*, Bold Geometric style; *g*, Crude Ulua Marble Vaselike type; *h*, Mayoid carved subtype. (After Strong, Kidder, and Paul, 1938, pls. 13 and 14.)

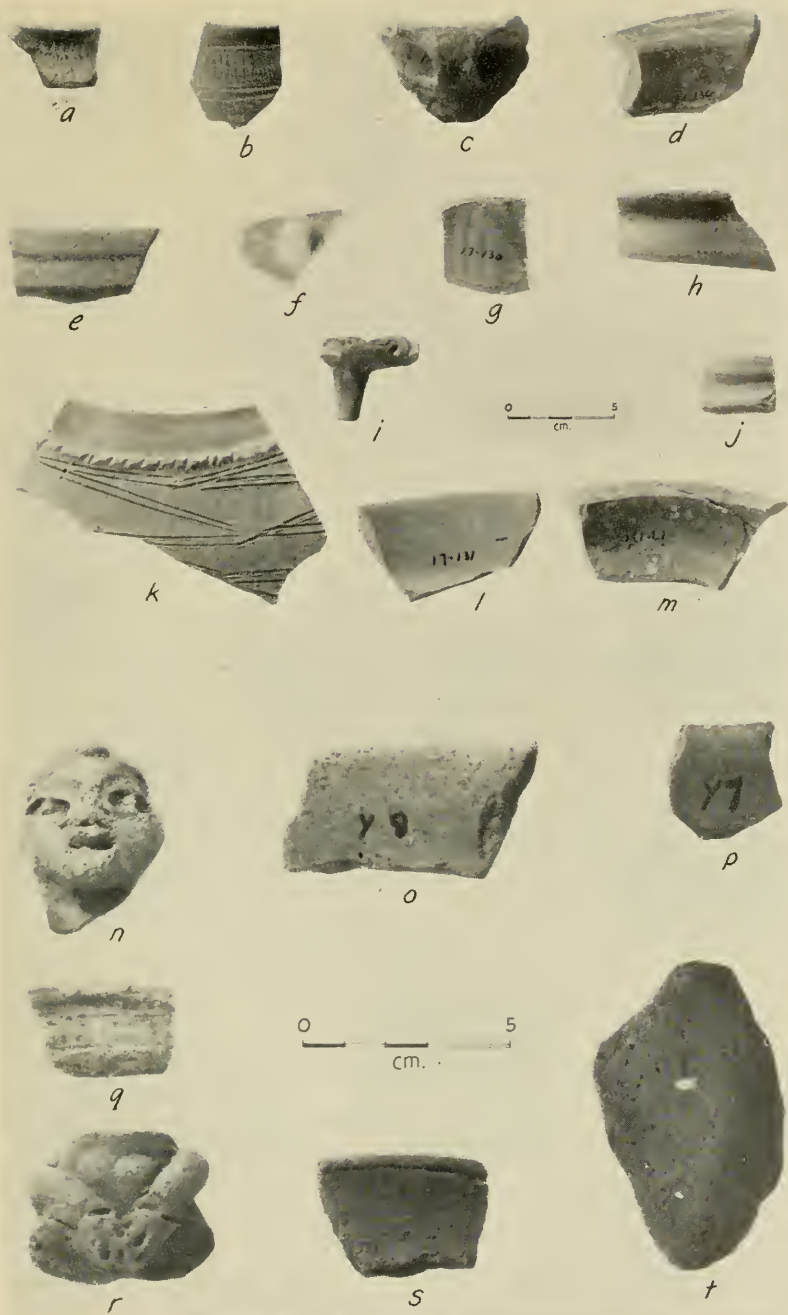


PLATE 11.—Early ceramic types, Honduras. *a-m*, Uluá Bichrome from deepest level, Santa Rita; *n-t*, Yojoa Monochrome, Los Naranjos. (After Strong, Kidder, and Paul, 1938, pls. 9 and 15.)

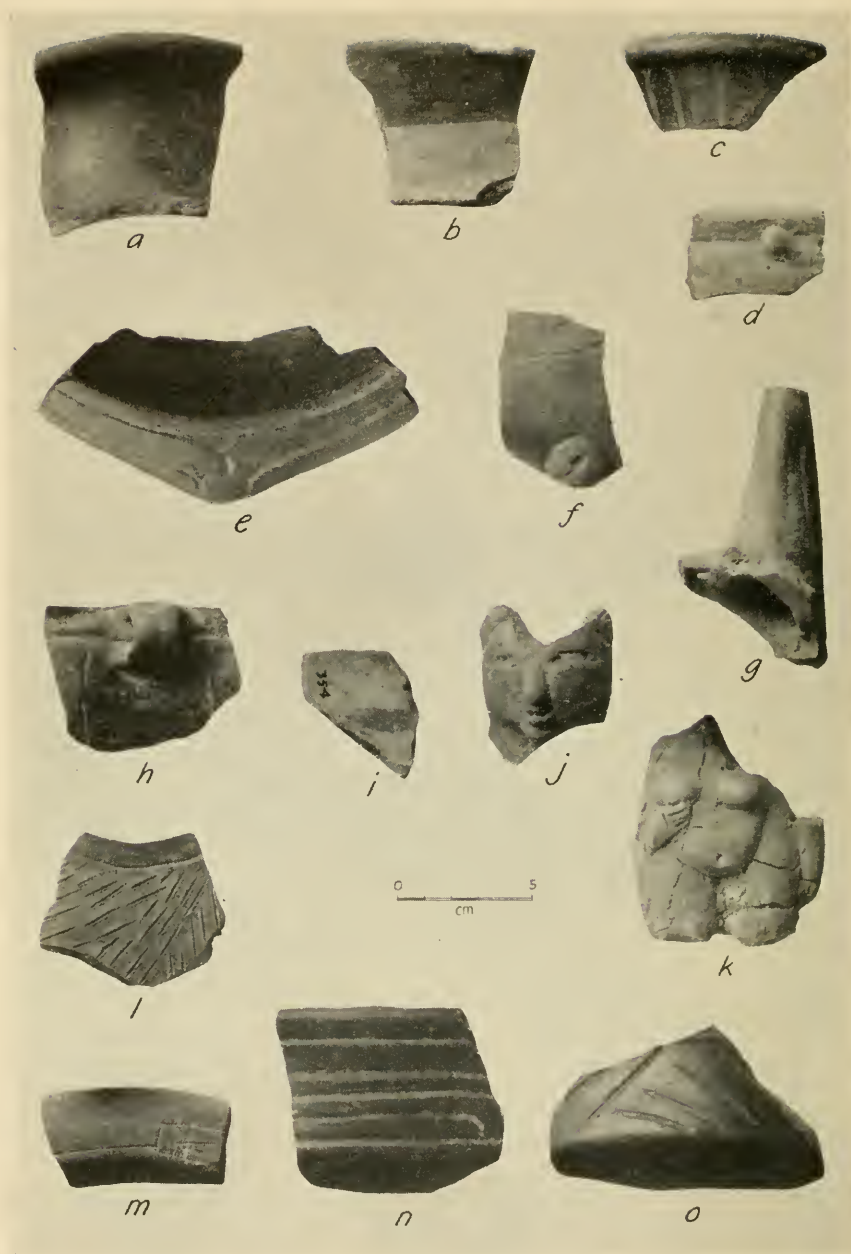


PLATE 12.—Playa de los Muertos style sherds and figurines, Honduras. (After Strong, Kidder, and Paul, 1938, pls. 10 and 11.)

and animal bones at the site. A comprehensive and objective description of Tenampua ceramics is very badly needed. Plain stone metates, with and without legs, and broken ovoid mullers are abundant at the site.



FIGURE 13.—Plan of Tenampua, Honduras. (After Popenoe, 1936, fig. 1.)

Popenoe uncovered an elaborately carved stone metate of openwork Nicoyan or Costa Rican type. Small stone balls and obsidian lance points complete the reported artifact inventory from this important site. Popenoe (1936, pp. 560, 571) suggests that Tenampua may be identified with the *Lenca* fortress of Guaxeregin destroyed by Montejo, but Yde (1938, p. 21) denies this possibility on geographic grounds. No post-Contact materials have been reported from the site. Both Popenoe and Yde agree that the main structures and artifact types at Tenampua do not appear to be *Mayan*



or Mexican in character but rather show strong Nicaraguan and Costa Rican influences. However, the true significance of this superficially well-known site will not become clear until it has been the scene of more inten-

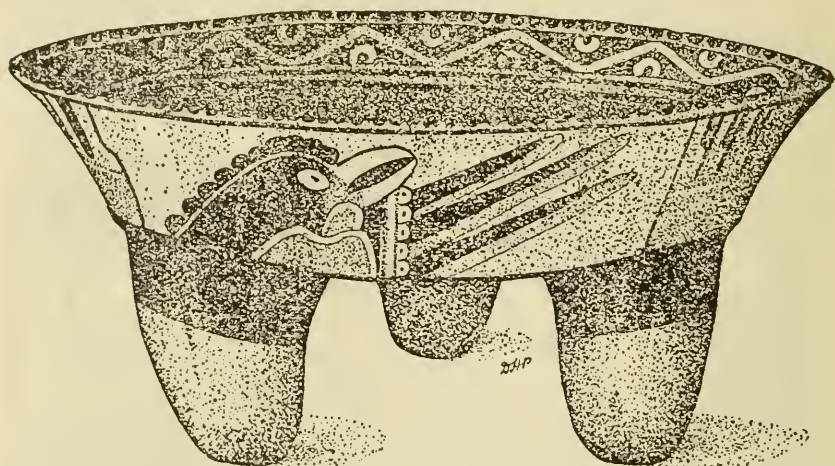


FIGURE 14.—Pottery vessel from Tenampua, Honduras. Decoration in cream, brick red, and dark brown. (After Popenoe, 1936, fig. 2.)

sive excavations, accompanied by adequate ceramic and other artifact type analyses.

Concerning the various mound groups and similar sites, as well as a few artifacts all briefly mentioned as occurring in or near the town of Comayagua, at Yarumela, at the north and south ends of the Comayagua Valley, and around the town of Siguatepeque, the reader is referred to Yde (1938, pp. 11-27). Long ago Squier (1859) pointed out that the local Indians, presumably *Lenca*, still made annual pilgrimages to their immediately pre-Conquest village sites in the vicinity of the historic town of Comayagua, and mentions at least five such ruins within a league (about 3.5 km.) of the town. None of the important Contact sites have yet been identified nor described. Pottery from such sites would presumably be *Lenca*. Here is a promising lead to the historic approach in Honduras archeology which remains to be developed. Until more exploration and scientific excavation have been accomplished in this part of central Honduras the nature of prehistoric southern and northern cultural interpenetrations, now becoming obvious slightly to the north, will remain obscure so far as concerns one of the most immediate sources of southern elements.

**Tegucigalpa area.**—In the valley of the upper Choluteca River, in that part called Río Grande, is located the city of Tegucigalpa, the modern capital of the Republic of Honduras. Unlike the Comayagua Valley, that of Tegucigalpa is surrounded by high mountains on all sides, and

apparently it was thinly occupied in pre-Columbian times. It is at present a center for mining activities, but apparently the native peoples of the region, like those of northwestern Honduras, were little interested in gold and silver. In any event, no ruins or mound sites have yet been reported<sup>1</sup> from this pleasant and fertile valley, and the few artifacts described in print as coming from here offer little tangible information (Yde, 1938, pp. 8-10). Passing toward the Olancho Valley, Wells (1857, p. 244) describes and figures some sort of natural or artificial structure made of blocks of stone on a hilltop 1 league north beyond the crossing of the Guampú River on the Talanga road. Neither the drawing nor the description conveys a clear picture of what was actually encountered. Recent investigations in this vicinity have not verified Wells's account. No vestiges of such a structure now exist, nor does it appear likely that there was a building (personal communication from Doris Z. Stone.).

**Olancho Valley.**—The Olancho Valley, another gold-producing region, was early the scene of conflicts between the followers of Cortez in the north and Pedrarias in the south. Unfortunately, we know little of the archeology of this important central area except that there are a number of large mound groups in the valley (Strong, 1934 b, p. 47; 1935, pp. 159-160). There are several mound sites on the Olancho and Guayape Rivers, in the vicinity of Juticalpa. One of these, called Dos Quebradas, consists of a great number of earth and stone mounds covering an enormous area. The majority of these are small, suggesting house mounds, but some are large, ranging from 30 to 40 feet (10 to 13 m.) in height. One of them is covered with large granite slabs, many of which formerly stood erect. The largest, about 12 feet (4 m.) high, had recently (before 1933) been knocked down by lightning. Broken pottery is abundant at the site. The most striking pottery is of Bold Geometric style. Both monkey-handled ollas and large tripod vessels of composite silhouette occur. The latter have hollow feet, modeled to represent alligator or other reptile heads, which contain rattles. Colors consist of a dull yellow or a brighter orange slip with red and black designs, which are either geometric, textilelike, or, occasionally, symbolic and vaguely suggesting aberrant Mayoid, Mexican, or *Chorotegan* motifs. In addition, North Coast Appliqué pottery of the less elaborate forms occurs at the site. A pottery earplug, a small celt of greenstone, and the obsidian flake knives were also found.

At San Marcos, on the Guayape River, are large earth mounds with the same ceramic types. The Bold Geometric Ware available from San Marcos forms one stylistic unit that has here been designated as the San Marcos type of Ulua Bold Geometric (p. 90 and pl. 7, *a*). North Coast Appliqué pottery of simple form also occurs at San Marcos and is the

<sup>1</sup> Stone has conducted recent investigations in this region, locating numerous ruins. A report of this work will eventually be published by Peabody Museum, Harvard University.

only style present at other earth-mound groups noted in Olancho. Other types of artifacts are rare on the surface of these sites. Excavation at San Marcos, or elsewhere in the Olancho region, was very superficial, but it is obviously a promising and important area.

The apparent absence in Olancho Valley sites of Mayoid forms, and the predominance of the Bold Geometric style, throw a faint but promising gleam of light on the probable source of this Bold Geometric element in the Ulua-Yojoa mixed deposits. Careful excavations in this promising central region should give vitally needed information concerning the cultural relationships that existed in prehistoric times between northwestern Nicaragua, the northeast coast regions of Honduras, and the *Maya* borderlands along the Ulua River, Lake Yojoa, and the El Salvador-Guatemala frontiers.

**Pacific or Fonseca Bay area.**—It seems anticlimactic to close our discussion of central and southwestern Honduras with only a brief quoted paragraph on the Pacific or Fonseca Bay area, which should, by reason of its geographic position, be the key to the prehistoric interrelationship between Honduras, El Salvador, and Nicaragua. However, as the work of Rivas is unavailable at the time of writing, we can quote only the following: "A young German photographer, Fritz Wellerman, living in Tegucigalpa, has collected a number of small stone figures from Zacate Grande Island in Fonseca Bay, and Prof. Pedro Rivas of Tegucigalpa observed large idols, pottery, and mounds on the same island; in his 'Monografía . . . . . de la Isla Tigre y Puerto de Amapala' [Rivas, 1934, p. 26] he describes a 4 km. long and 2 km. wide zone where these artifacts occur" (Yde, 1938, pp. 18-19). Thus we conclude our incomplete survey of the very incompletely known, but highly important, archeological region of central and southwestern Honduras.

## ETHNIC CORRELATIONS IN HONDURAS

### THE POTTERY TIME CHART

As was the case in Costa Rica and Nicaragua, ceramic wares or styles prove to be the most effective links between the historic and the prehistoric periods in Honduras. Other traits of material culture may later prove to have equal or even greater value, but at present inadequate excavation prevents detailed structural comparisons, and the remaining inventory of comparable artifact types does not approach pottery decoration as a sensitive index of cultural change and ethnic affiliation. For this reason a diagrammatic chart has been prepared of known Honduran ceramic styles and types, with a tentative estimate of their probable duration (fig. 15).

This chart includes the northeast coast and Ulua-Yojoa regions. It does not include the Copán (*Mayan*) sequence, since full data are not



now available, nor does it cover central and southwestern Honduras, since no adequate scientific data are available from these regions. Sequence of styles and types in figure 15 rests primarily on demonstrable, stratigraphic sequences in the Ulua-Yojoa region (Strong, Kidder, and Paul,

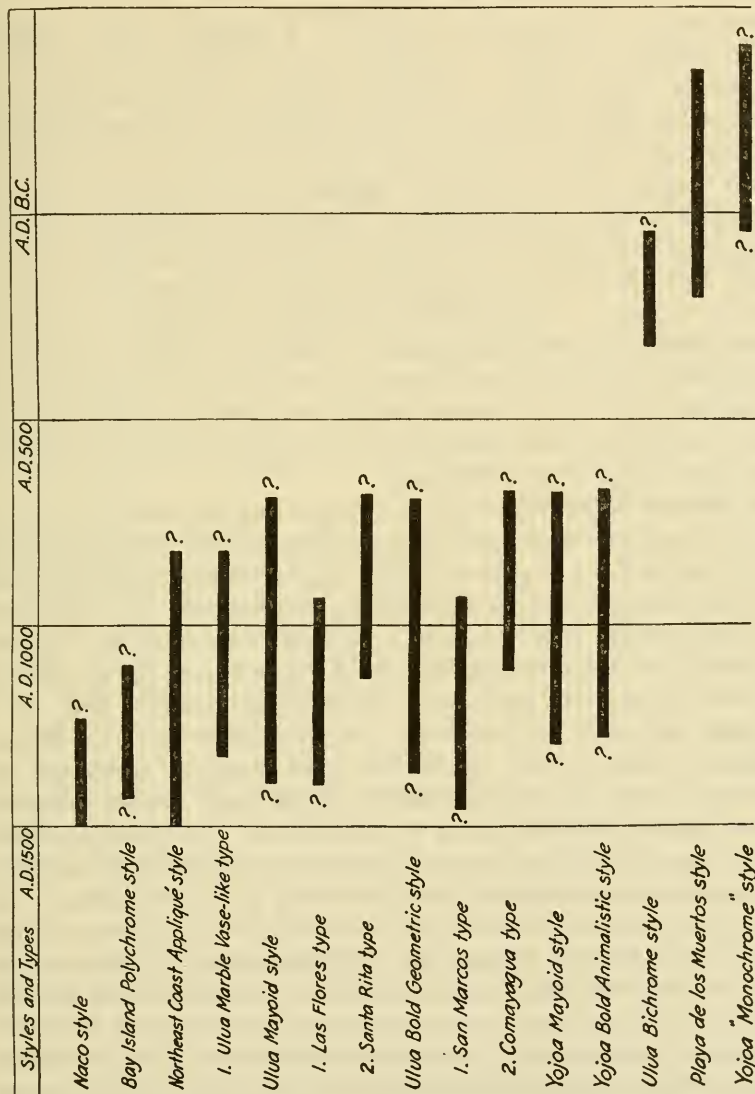


FIGURE 15.—Temporal relationship of ceramic styles and types, Northeast Coast and Ulua-Yojoa regions, Honduras. (Tentative and diagrammatic.)

1938), and the basis for actual dating is derived from probable correlations between undated Honduras and dated *Mayan* styles previously discussed in regard to Copán and the Petén (p. 106). In the present sections we are primarily concerned with those ceramic styles and types



which directly, or indirectly, lead up to historic tribes or ethnic groups. The earlier, discontinuous, ceramic horizons dated prior to A. D. 500 will be mentioned again in the final section.

#### A CONSIDERATION OF CERAMIC STYLES

**Naco style.**—The Naco style (fig. 15) is definitely historic and of Mexican origin. It occurs at a documented site in direct association with European porcelain sherds. The style seems to be late prehistoric in México and evidently pertains to the latest Mexican or *Nahuatl* intrusion into Honduras. Whether this occupation should be called *Aztec*, *Pipil*, or *Nahuatl* remains to be determined. Similar Mexican groups are known to have been located near Trujillo, in Olancho, near Comayagua, and in Chapagua and Papayeca on the northeast coast (Stone, 1941, pp. 15–16). None of these sites, nor the ceramics associated with them, have yet been located or described. The problem of Mexican intrusions into southern Central America is extremely complex. Thompson (1943, p. 122) points out that there may have been three rather than two main periods of Mexican migration. In any event, Naco style ceramics and the associated cultural complex at Naco clearly mark a terminal point in the last intrusion since it has a post-1500 date.

**Bay Island Polychrome style.**—Considering the ceramic styles in order, one can say little concerning the Bay Island Polychrome style (fig. 15) except that it is apparently late. The extremely conventionalized and florid decoration accords more closely with the later Las Flores type of the Ulua Mayoid than it does with the earlier Santa Rita type. However, Bay Island Polychrome is a distinctive style despite the fact that its vessel forms blend with those of the North Coast Appliqué style. It is also rather unusual in being associated with Plumbate ware. In México, Thompson (1943, p. 128) states that three centuries intervened between the disappearance of the Plumbate export trade and the Conquest. Whether this was so in Honduras we do not know. No Contact material has been found with Bay Island Polychrome, although it is associated with metalwork which appears to be late in this part of Honduras. This fact, and the apparent relationship between Bay Island Polychrome and North Coast Appliqué, suggest that the basic ethnic affiliations of the former will eventually prove to be similar if not identical with those of the latter. The particular cultural intrusion, however, that led to the development of this localized polychrome style remains to be determined.

**North Coast Appliqué style.**—North Coast Appliqué style ceramics have been extended into the historic period on somewhat shaky grounds (fig. 15). Stone (1941, p. 20) has attempted to demonstrate that the Northeast Coast Appliqué style pottery occurs in historic *Paya* sites. Near the old town of San Esteban Toyazua, established as a *Paya* mission in 1807, 284 years after the Conquest, Stone found abundant pottery

of this style. No Contact materials, however, are reported, and the case for historic identification still rests on the fact that North Coast Appliqué ceramics occur in most parts of the recorded territory of the *Paya*. It is highly probable that the *Paya* did make pottery of this style, but this cannot be regarded as indisputably demonstrated as yet. However, in the case of the neighboring *Jicaque*, at Cangelica and Subirana, Stone (1942, p. 380, fig. 43) did find ceramics, including some of a generalized North Coast Appliqué style, in reputedly *Jicaque* sites associated with glass beads. It is on this slender but tangible bit of evidence that I have here extended the North Coast Appliqué style into the historic period (fig. 15). The style, as represented in these protohistoric finds, had apparently degenerated from its earlier prehistoric elaboration in the *Paya* country (Stone, 1941) and on the Bay Islands (Strong, 1935), but enough incision, appliqué work, and modeling on monochrome ware remain to link safely these various manifestations.

We have previously mentioned the close relationship that exists between Highland Appliqué in Costa Rica and Nicaragua, and the North Coast Appliqué style in Honduras. In both north and south the appliqué style occurs in territories occupied almost exclusively by *Chibchan*, or probably *Chibchan*-speaking peoples, and there is a high probability that the style pertained to the *Guetar* in the south and the *Paya*, *Jicaque*, and related peoples in the north. As to the age of this ceramic style in the north, as in the south, we have as yet no direct evidences. It has been assigned a terminal date here (fig. 15) owing to the fact that the North Coast Appliqué style contains the Ulua Marble Vaselike ceramic type which, on the Ulua River, stratigraphically overlaps the two Ulua-Mayoid style types, Las Flores and Santa Rita (fig. 15). How much earlier this or other types of the North Coast Appliqué style may have been made in Honduras remains to be determined. This is an important problem, since it involves the probable time of a major *Chibchan*, or a related southern Central American thrust from the south into the north.

**Ulua-Mayoid style.**—In regard to the Ulua-Mayoid style (fig. 15; pls. 6, *j-n*; 7) there is a distinct possibility that the latest Las Flores type persisted into early historic times, but we have as yet no tangible proof of this. The ethnic linkage of the style with the *Maya* rests on its clear relationship to known *Mayan* styles in the north rather than on any direct historic evidence, although *Mayan*-speaking peoples are known to have occupied this northwestern region in historic times. (See linguistic map, p. 50.) The sequence and characteristics of the two types included in this style, Las Flores and Santa Rita, and their apparent tenuous connections at Copán, have already been discussed. Perhaps the outstanding thing about this definitely *Mayan* style on the Ulua, and again in the Lake Yojoa district, is the fact that it does not occur by itself, as is the case in most *Maya* sites to the north, but is often found in direct associa-

tion with other styles, Bold Geometric and Bold Animalistic (fig. 15 and pls. 7, 9), which do not seem to be at all *Mayan* in inspiration. This, coupled with the fact that neither type of the Ulua-Mayoid style occurs at Copán during its earlier "great period" of the dated stelae, leads one to conclude that the Ulua River and Lake Yojoa populations that made the Ulua and Yojoa Mayoid pottery, as well as that of Bold Geometric and Bold Animalistic styles, were mixed, part *Maya* and part alien. This leads to a consideration of the latter styles as well as the probable ethnic composition of this alien, or non-Mayoid, element at such mixed Ulua-Yojoa sites.

**Non-Mayan styles of the Ulua-Yojoa region.**—The non-*Mayan* ceramic elements in these interesting composite sites on the Ulua River, and at Lake Yojoa, are as follows: The Bold Geometric style (including the earlier Comayagua and the later San Marcos types), the Bold Animalistic style, and the Ulua Marble Vaselike type of the North Coast Appliqué style. The Bold Geometric style does not occur, so far as known, in predominantly *Mayan* territory, but it does occur, either isolated or associated with North Coast Appliqué style ceramics, in the Olancho district of central Honduras (see p. 111), on the Bay Islands, and on the adjacent mainland. The Olancho region is in the heart of historic *Lenca* country, the Bay Islands were probably *Paya* territory, and the adjacent mainland is *Paya* and *Jicaque* country. (See linguistic map, p. 50.) In protohistoric sites in the Yoro district, presumably *Jicaque*, typical Bold Geometric style handles with raised, monkey-head lugs (Stone, 1941, figs. 42, *l*; 43, *k'*) occur in association with North Coast Appliqué style ceramics. The Ulua Marble Vaselike pottery type to pertain to the *Lenca*, *Jicaque*, *Paya*, and related peoples east of the occurs on the Bay Islands and the adjacent mainland, in historic *Paya* territory. Thus, this general northeastern ceramic complex including Bold Geometric and North Coast Appliqué styles and types would appear Ulua. The exact affiliations of the Yojoa Bold Animalistic style are not so clear, since the style occurs in El Salvador under as yet unknown circumstances, but in Honduras it centers in *Lenca* territory and is apparently related to the Bold Geometric style, which again occurs isolated in *Lenca* territory. Thus, the non-Mayoid ceramic element in the mixed Ulua-Yojoa polychrome sites would, therefore, appear to be predominantly *Lenca* and *Jicaque*, with possibly some *Paya* ingredients (Ulua Marble Vaselike type ceramics). This is the general southern or easterly ceramic complex which met, occasionally blended with, but also for a considerable period existed side by side with, the *Mayan* ceramic tradition along its southern borders in the Ulua-Yojoa region.

The sociological basis for this state of affairs can only be surmised. It seems logical, however, to postulate that *Mayan* and *Lencan*, as well as *Jicaque* groups, had intermarried and formed numerous composite



communities along the Uluá and at Lake Yojoa. In such communities the two schools of pottery-makers had in each case largely maintained their group artistic traditions over a considerable period despite parallel changes in both traditions through time and some blending in the less typical ceramic forms. The record in the ground fully justifies such an interpretation, but much more extensive work in structures, as well as in refuse heaps and burial deposits, is needed before full light can be thrown on this extremely interesting case of peaceful cultural interaction between peoples of apparently quite differently derived cultural traditions. It is tempting to visualize a period after the "fall" of the "Old *Maya* Empire" at Copán when the scattering *Maya*, abandoning their great stoneworking tradition and stela cult, pushed in small groups to the north and east, accepting extended hospitality from the various alien peoples of their southern borderland. That something of this sort occurred seems quite possible, but since neither the exact nature of the "fall of Copán" nor the full details of this interesting cultural amalgamation to the north are as yet clear, such speculations are premature. In any event, it is obvious that cultural interrelationships along this border area were not only complex but also extremely interesting from both the historical and the sociological viewpoint.

**Discussion.**—In regard to the attempt to establish definite historic correlations between sites, ceramic complexes, and historic tribes, the efforts of Stone (1941, 1942) are highly praiseworthy. However, the extremely complex cultural interactions in aboriginal northwestern Honduras, as well as the many obscurities of early post-Conquest history, make this a very difficult and meticulous task. Thus, the postulated correlations between the historic *Paya* and the North Coast Appliqué ceramic style (Stone, 1941), while highly probable in a general sense, is still not historically established. Furthermore, it is misleading to attempt to limit the identification of such a widespread ceramic style to only one of the many linguistic groups, or subgroups, such as the *Paya*, which appear to have been associated with it. Similarly, in regard to the *Jicaque*, where the historic correlation (like that at Naco) is based on an actual association with Contact materials, the limited ceramic sample seems to contain at least two definite styles, the North Coast Appliqué and the Bold Geometric.

In the case of the *Lenca* linguistic groups the situation promises to be even more complex. While no absolute historic *Lenca* ceramic correlations have yet been established, there is a high probability that the Bold Geometric ceramic style, the Bold Animalistic style, possibly the North Coast Appliqué style (in the north), and certain of the ceramic styles encountered at Tenampua are all *Lenca*. Such linguistic designations, particularly in regions of high culture, apply to a wide variety of cultural



groups which have specialized in certain areas and also developed over a long period of time.

From the archeological standpoint each historic datum point which can be established with reasonable certainty, such as that at Naco for the late *Nahuatl* and at Cangelica and Subirana for the obscure *Jicaque*, is a very definite gain. Such correlations must, however, be carefully interpreted in terms of the larger cultural wholes and realities of which they are a part. Above all, they must be considered in terms of scientifically demonstrated temporal relationship. An example of such disregard is the obviously erroneous statement that certain Ulua Bichrome incised and rocker-stamped sherds should be classified as historic "*Sula-Jicaque*" (Stone, 1942, p. 379, fig. 31), despite the fact that while simple incision occurs in practically all horizons, rocker-stamping (pl. 11, *b*, and Strong, Kidder, and Paul, 1938, pl. 9, *e*) and Usulután ware are strictly limited to this one early horizon in Honduras and do not occur at all in the "*Sula-Jicaque*" sample. Similarly, the point already raised regarding the assertion that the Playa de los Muertos ceramic type persisted until "quite late during the Indian occupation of the Sula-Ulua" (Stone, 1941, p. 57) is based on uncontrolled evidence which, if accepted, would refute the findings of two carefully controlled stratigraphic excavations (Popenoe, 1934; Strong, Kidder, and Paul, 1938). However, in dealing with these earliest known Ulua Bichrome and Playa de los Muertos horizons in Honduras (see fig. 15), or with the possibly earlier Yojoa "Monochrome" horizon, we have reached a point where the nonconformity of the temporal sequence in Honduras (between circa A. D. 600 and 300, see fig. 15) indicates that further attempts at any direct historic correlations are as yet unjustified.

#### GENERAL CONSIDERATIONS

The earlier statement that the western boundary region of modern Honduras seemed to mark a meeting point between northern and southern prehistoric cultures seems justified in the light of present-day archeological knowledge. Such knowledge is at present inadequate in both space and time coverage, but what objective data we have reveal a fascinating interplay of cultural forces in this area. Along the Ulua River at Lake Yojoa, and in all probability south through El Salvador, *Maya* cultures of the later polychrome pottery periods are seen to meet and intermingle with those from the south. These southern cultural elements were apparently carried by such native groups as the *Lenca*, *Jicaque*, and *Paya*, although the *Paya* seem more closely identified with an appliqué monochrome pottery tradition which is apparently derived from, or basic to, the Highland region in Costa Rica.

The sources of the polychrome pottery styles associated with this southern or Honduras cultural element, i.e., Bay Island, Polychrome, Bold

Geometric, and Bold Animalistic, are as yet uncertain. They occur by themselves and isolated from *Mayan* or Mexican styles in northern and central Honduras, but they may originally have been derived from *Chorotegan* or Mexican culture centers in western Nicaragua and Costa Rica. Until we have objective excavation data from the great archeological blank now formed by south-central Honduras, El Salvador, and practically all Nicaragua, the answers to such questions can only be guessed at. A similar unanswered question involves the exact relationship that existed between the various *Mayan* ceramic styles on the Ulua, at Lake Yojoa, at Copán, and in El Salvador, as well as their respective relationship to the earlier or Formative Period. The answer to these questions may be found in El Salvador, but further excavation and publication are vitally needed in the other regions as well. Concerning the various Mexican intrusions into Honduras and southern Central America our only objective data at present are a few such terminal points as Naco. Until more is known about the relative time and nature of such Mexican invasions we cannot hope to understand the role played by the Meso-American cultures in Central America either in the western Nicaraguan and Costa Rican culture centers, nor in its wider peripheral manifestations.

With the possible exception of Copán, there is at present in Honduras a complete break in continuity between the polychrome pottery horizons and what may be termed the Formative cultures of northern Middle America. In Honduras these include the Ulua Bichrome, the Playa de los Muertos, and, probably, the Yojoa "Monochrome" horizons. The last, contrary to an earlier estimate (compare fig. 15 with Relative Chronological Chart, Strong, 1943, p. 42), may be the oldest of the three, but it is too little known at present to even suggest wider correlations. There are, however, already clear indications of relationship between the Ulua Bichrome and the Playa de los Muertos horizons on the one hand and the Mamom-Chicanel (*Maya* or proto-*Maya*) phase in the Petén area on the other. When more information is available concerning the comparable early periods in the intervening Guatemala Highland area, the nature and direction of these relationships should be clearer. However, to the south of Honduras no evidences of any comparable early culture horizon are yet known until one reaches the Coast of northern and central Perú. Here the Early Ancón-Supe, or Chavinoid, cultures seem quite similar in cultural content and probable age to the Playa de los Muertos horizon in Honduras. (See Strong, 1943, pp. 31-33 and Relative Chronological Chart.) How significant such spatially distant cultural correlations may prove to be it is too early to say. It seems obvious, however, that careful and deep excavations in strategic sites in the intervening regions of southern Central America and northern South America should go far toward solving this and other important problems which no amount of speculation or specimen-collecting can hope to touch.

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