THE CERAMICS OF THE TAYASAL - PAXCAMAN ZONE, LAKE PETEN ITZA, GUATEMALA

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ABSTRACT

The cultural diversity that was extant within the Maya heartland during the Classic Period has only recently been The variation in architecture and ceramics that recognized. existed among the sites in the Peten of Guatemala evidence in the Lake Peten area. While much Tayasal-Paxcaman Zone conforms to the general developmental trajectory of other known Maya regions and sites, the ceramic sequence of the zone reflects the changing political economic spheres in which the area participated and combination other throughout its history. In with archaeological and settlement data (A. Chase 1983), the different ceramic configurations found within the vicinity individuality of ofLake Peten emphasize the Tayasal-Paxcaman Zone. When compared to the archaeological Tikal and Uaxactun to the north and Seibal and from data Altar de Sacrificios to the south, the provinciality of the Tayasal-Paxcaman Zone becomes apparent in the non-conformance of its ceramics super-regional to a sequence.

PREFACE

following report has been prepared to satisfy the 1979 agreement made between Dr. William R. Coe and Instituto de Antropologia e Historia de Guatemala concerning the Tayasal sherd materials. The majority of this ceramic collection was excavated in 1971 as a part of The University Museum Tayasal Project. These collections were augmented through surface collection in 1977 as an extension of the original project. The whole vessels recovered in 1971 were analyzed during a return trip to Guatemala in 1979 by myself and Dr. Diane Z. Chase. The remainder of the pottery (exclusive of the whole vessels and censerware) was shipped to the University of Pennsylvania in the late Fall of Analysis has been proceeding on the collection since that time. Archaeologists Rudi Larios V. and Miguel Orrego C. its analysis and illustration in late 1979 and aided in early 1980. Several volunteers (specifically Ms. Sara Ruch, Susan Jaeger, and Mr. Titus Welliver) have helped to process the collections, but the majority of the work, preparation for full publication, was undertaken by the compilers of this report. Dr. Robert H. Dyson, Director of The University Museum, provided funds in the Spring of 1983 that allowed the completion of the Tayasal ceramic analysis. This assistance has also enabled the completion of the present manuscript. While this report has been prepared

primarily to fulfill the terms of the contract for the loan of the Tayasal sherds, it is also intended to present an overview of the Tayasal ceramics. It is largely abstracted from a dissertation on the archaeology of Tayasal (A. Chase 1983) but includes more detailed data than are found there. It supercedes an earlier general statement on the Tayasal-Paxcaman Zone and its ceramics (A. Chase 1979). The final published report on this pottery will contain detailed type descriptions, further illustrations, and interpretive comments concerning the Tayasal - Paxcaman Zone.

INTRODUCTION

Tayasal has long intrigued Mesoamerican archaeologists (Morley 1937-8:III: 425-438). Morley (Kidder believed that excavations at the sites of Tayasal, Chichen-Itza, and Uaxactun would provide Maya archaeologists with a complete sequence for Lowland Maya civilization. legendary capital of the Itza (Morley & Brainerd 1956: 116-127, 148), Tayasal was believed to have been founded by the remnant elite from the fall of Mayapan in Yucatan and to have continued as an idependent enclave in the jungles of the Peten until Ursua overran the town in A.D. 1697 (Means 1917; Thompson 1951). As head of the Carnegie Institution program in Maya archaeology, Morley accordingly set Carl Guthe to investigating the site in 1921 and (1921, 1922) made a preliminary map of the ruins and excavated four structures in the eastern part of the Tayasal Main Group. This program of investigation uncovered primarily Classic Period remains and thus did little to answer the questions of Postclassic chronology which had interested Morley. Even so, Tayasal has remained prominent in discussions of the Postclassic and Protohistoric Peten (Morley & Brainerd 1956: 148; Cowgill 1963; Reina Bullard 1973, Evans 1973; A. Chase 1976, 1982, in press; Jones, Rice, & Rice 1981).

It was the possibility of establishing the Southern Lowland Postclassic chronological sequence and architectural

assemblage that led W. R. Coe of The University Museum to establish a project in the Lake Peten area. Preliminary reconnaissance was undertaken there in 1970 and a four month excavation season was launched in 1971. Work focused on three sites: Cenote, Tayasal, and Nima (see Figure 1). Seven structures were investigated at Cenote while ninety-nine were tested at Tayasal; two were excavated at These excavations produced 950 recovery lots which included 50 burials, 12 caches, and 17 problematical deposits as well as approximately 65,000 sherds. A second season of reconnaissance and analysis was carried out 1977. This resulted in the collection of stratified pottery samples from modern (non-archaeological) building activity on the island of Flores and the gathering of surface collections from elsewhere in the Tayasal - Paxcaman The sherds garnered from the 1977 season totaled approximately 7,000.

Since 1977, the collections made from the Tayasal Paxcaman Zone have been classified by the "type-variety-mode" method of analysis (see Gifford 1976 for detailed discussion). Each of the 972 lots collected in 1971 and 1977 has been examined at least three times. In 1977, each lot was preliminarily counted and roughly sketched by myself and Dr. Diane Z. Chase with the aid of Ms. Julie Benyo, Ms. Karen Miller, and Ms. Elizabeth Marum. In 1979, Munsell color readings were made of the pastes and

slips of all of the whole vessels excavated by the 1971 Tayasal project and subsequently stored at Tikal, Guatemala. Following the arrival of the sherds at the University of Pennsylvania, each lot was thoroughly examined, often more than once, as an aid in dating the various associated architectural stratigrapy. Illustrations of the first begun by Mr. Rudi Larios V. and Mr. Miguel Orrego C., has proceeded as volunteer help was available. As a step in the analysis, some 60% of the lots have been counted formally by their various types and varieties (by A. Chase). A large percentage of the diagnostics in these and the remaining lots have been drawn anđ individually described (by D. Z. Chase). Thus, the detailed information necessary for the full type desriptions has been collected for the final published monograph.

TAYASAL PAXCAMAN ZONE CERAMICS: THE SEQUENCE

The archaeology of the Tayasal-Paxcaman Zone provides a tantalizing view of the development of a region in the central Peten from the Middle Preclassic to the Historic era (see A. Chase 1979, 1983). As presently known, the ceramic sequence can be subdivided into nine distinct temporal periods (complexes), four of which have early and late facets (see Figures 2 and 3, and Appendix I). The recovered stratigraphy from the zone allows for the contextual association of the ceramic subdivisions with the recovered artifactual and architectural materials.

The 1971 excavations at Tayasal, Cenote, and Nima produced only one radiocarbon date (from Cenote Str. C4). Although the charcoal was recovered from a sealed primary deposit, the date proved to be much too early for its stratigraphic associations. Several dated monuments (ranging in date from 9.17.0.0.0. to 10.2.0.0.0.) were noted from the sites of Tayasal and Flores by Morley (1937-38), but none of these were located in a primary context nor could they be securely dated relative to associated constructions and artifacts. Additional undated (plain) monuments were found in 1971 and 1977 excavations and surveys. Although these do not aid in providing absolute dating for the Tayasal - Paxcaman chronological framework. they do indicate that there was erection of monuments in the zone. Based on stratigraphy (specifically at Cenote - Strs. Cl and C2), this occurred as early as the Protoclassic era.

The chronological sequence for the Tayasal - Paxcaman Zone has been primarily derived from internal stratigraphic sequencing and seriation of primary context lots from deposits such as burials, caches, and refuse from the sites of Tayasal, Cenote, and Nima. In most cases, these deposits are stratigraphically related to each other within a single excavation. The wealth of special deposits (burials and caches) recovered at Tayasal and Cenote aided greatly in establishing this chronological sequence; thirty-five burials with associated pottery vessels were recovered from

the zone and could be stratigraphically related to constructed features.

Following determination of the internal sequence based upon recorded excavation notes and drawings, these primary context lots were analyzed and ceramic types established. almost all instances, there is temporal through typological assessment of pottery) (determined amongst deposits between more than one structure, allowing internal seriation of architecture and artifacts. Pottery vessels also accompanied ten caches and ten problematic deposits. Three refuse deposits recovered from Tayasal and Cenote additionally aided in fleshing out temporal sequence; one other refuse deposit was incompletely recovered from Flores.

Comparisons to other sites were only made following development of the local zonal sequence (see below) as means of cross dating isolated deposits or in dating the sequence as a whole. Fill sherds were used only as in individual constructions or to dating augment the descriptions of established ceramic types. Due the extensive nature of the above mentioned primary context fill sherds were used only secondarily as double-check on the established Tayasal - Paxcaman sequence. Appendix I presents a distribution of ceramic types varieties for each phase as well as the special deposits in which each type occurred.

The excavated Tayasal - Paxcaman Zone sequence is well-grounded in terms of architectural stratigraphy, especially when viewed in terms of the sequentially related burials, caches, and refuse. These are accompanied by or associated with vessels (133 total whole ceramic pots from and burials), constructions and construction phases, (ca. 70,000), and other artifactual Additional material in the form of reconstructable vessels is added to this sample from the refuse deposits. While the recovered architecture clearly varies through time, it is primarily the ceramics which may be cross-dated to other established sequences.

In spite of the credible stratigraphic sequence the zone, the dearth of absolute dating has made necessary to examine ceramic and architectural comparisons and cross-datings with other parts of the central Peten to provide temporal boundaries for the various phases of Tayasal - Paxcaman sequence. The sites which were utilized to provide these data were Uaxactun (A. Smith 1950; R. Smith Ricketson and Ricketson 1937), Seibal (Sabloff 1975; Willey 1978; Willey et al. 1975; A. Smith 1982), Altar Sacrificios (Adams 1971, A. Smith 1972), Yaxha (P. Rice 1979a, 1979b), and Tikal (W. Coe 1965a&b, 1967; Culbert unpublished report and ceramic plates on file in The University Museum).

Because of the way in which the sites of Nima, Cenote,

and Tayasal were dug (i.e., an emphasis on trenching and test-pitting), ceramics, rather than architectural features, constitute the paramount dating tool for individual excavations on the peninsula. However, it is occasionally possible to use artifact or architectural types or fills as an aid in dating. For instance, Postclassic peoples on the north shore of Tayasal appear to have used dirt fills for constructing substructures and not stone rubble; based on analysis of the overall Tayasal sample, it is likely that low substructures with dirt fills date to the Middle Postclassic, even if the fills are largely lacking in cultural materials.

full presentation of the Tayasal - Paxcaman Zone ceramic types, varieties, groups and complexes, presented preliminarily in Appendix I, will be published in the final University Museum monograph on the Tayasal Project. A brief chronological overview of the types, modes, and major forms which are considered diagnostic for each complex follows. the recovered artifactual and architectural occasionally allow a temporal assessment at odds with recovered ceramics, these classes of data are primarily useful as a supplement to temporal determinations made the basis ceramics and in making interpretations of concerning the function of a particular construction locus: there is at present insufficient evidence delineate separate phases for each of these material classes. Therefore, the nomenclature used for the ceramic complexes has been extended to delimit general temporal phases for the Tayasal - Paxcaman Zone. The relationship of the Tayasal phases to other site sequences in the southern lowlands is shown in Figure 2 while the distribution of various type-classes and major groups by ceramic complex is graphically illustrated in Figure 3.

Chunzalam Ceramic Complex: Mamom Ceramic Sphere

The occupational sequence for the Tayasal - Paxcaman Zone of the Central Peten of Guatemala can be projected back to at least 900 B. C. from the present, assuming an acceptance of an 11.16.0.0.0. correlation.

The earliest remains from the vicinity of Lake Peten, denoted by pottery, were recovered in the Cerro Moo area of Tayasal (Str. T288) and on the Candelaria Peninsula. Cowgill (1963:17) had previously pointed out the existence of Mamon equivalent material from Flores. general, the remains representative of the earliest period in the Tayasal - Paxcaman Zone may be dated at least early as 900 B. C. based on comparasions with ceramics from other central Peten sites (Uaxactun - Smith 1955; Yaxha - P. Rice 1979a) and extended to ca. 200 B. C. The Chunzalam ceramic materials appear to be fully developed when first occur in the central Peten: this non-incipient development has been noted for other sites with Middle Preclassic Period occupation (Ball 1977:151 for Becan; Adams 1971:153 - 155 for Altar de Sacrificios; Pring 1976: 48-58 for Cuello, 1977a). Ceramically, the recovered potsherds were very well made and well fired; they reveal a much harder paste and a glossier slip than the wares which followed as well as a greater decorative repetoire.

Only occasionally do Chunzalam sherds appear in fills from excavations in the Tayasal - Paxcaman Zone; the only primary deposit relating to this complex was obtained from a looter's excavation on the Candelaria Peninsula. presently understood, the occurrence of this complex within zone could be taken to indicate that the zone was probably not extensively occupied during the Middle Preclassic. However, it is also possible that the general lack of Chunzalam materials in the zone may be ascribed the excavation strategy followed at Cenote and Tayasal. This strategy dictated the priority of finding later deposits - not earlier ones; consequently, many excavations were not fully excavated to bedrock - especially if Postclassic materials were recognized within the upper matrices.

The earliest recognized part of the Tayasal - Paxcaman Zone ceramic sequence is part of the Mamon Ceramic Sphere (Willey, Culbert and Adams 1967). The Achiotes Ceramic Group is represented by an olla form with a direct outcurved rim and a dark granular paste (Figure 4a). Examination of the Tikal Type Collection indicates that there is an

identity between the Achiotes Ceramic Group in the Lake Peten region and that at Tikal. One other unslipped group occurs in the Chunzalem Ceramic Complex. This is Temchay Ceramic Group, which is characterized by burnished surfaces (Figure 4b). Although the Temchay material was clearly not slipped, burnt Joventud Red, when it has its slip flake off, reveals an undersurface which resembles Temchay Burnished. All the known forms from the Temchay Ceramic Group are composite form finewares; it is likely that zoned slipping would be found in a larger sample. The Temchay Ceramic Group does not appear to recognized at Uaxactun, Seibal, or Altar, but does occur in the lacustrine areas east of Lake Peten (P. Rice, personal comunication 1981). A few scattered sherds of Palma Daub are also present in the collections.

The Chunzalam Ceramic Complex has an abundance of slipped wares. The slipped sample of Chunzalam, however, especially the Joventud and Chunhinta Ceramic Groups, display a very waxy finish. Joventud Red is generally found in everted lip dishes with slightly flaring sides; some of these are grooved and bolstered. Red-slipped Guitara Incised (Figure 5a) occurs in both the dish and jar forms. The Joventud Ceramic Group is characterized by a hard grainy red paste. Chunhinta Black is characterized by a dark grainy paste and occurs in shallow bowls (Figure 5b) and small jars with everted rims. Similar forms are found in

the black-slipped Deprecio Incised (Figure 5c) while Centenario Fluted also contains a vase form. While Pital Cream (with a friable white slip; Figure 5e) and Muxanal Red-on-Cream do occur in the sample in bowl forms, much of the early Tayasal - Paxcaman Zone pottery has more variable surface color and so has been assigned to the Vexcanxan Ceramic Group (Figure 5d). The surfaces of sherds placed in the cream-based Vecanxan Ceramic Group exhibit a range in slip color from black to grey to brown to red to cream. Vexcanxan pottery has either a grainy red or a grainy dark paste. As with the Pital Group, the Vecanxan Group is generally restricted to a bowl form.

Grooving, horizontal fluting, and incision occur as decorative techniques in the sample. The Joventud Group is characterized by pre-fire incision while the Chunhinta Group is distinguished by crude post-fire incision. There is Fluting in the Vexcanxan Group (Cortales Fluted). Forms which occur in the Chunzalam Mamom complex include: dishes with near vertical walls, often with incurved bases; vertical walled vases; jars with outflared necks; tecomates; and inverted rim ollas.

The ceramic material assigned to the Chunzalam complex resembles other known central Peten Mamom complexes. As noted, the paste is generally quite hard, much harder and better fired than the succeeding Kax Chicanel complex. Certain groups and types (Achiotes Unslipped) are identical

with types elsewhere in the Peten, while others (Temchay Ceramic Group) appears to have a distribution limited to the central and eastern Peten lakes. Some Mars Orange Ware, considered to be a Mamom horizon marker (Smith and Gifford 1966: 162, 167; Willey et al. 1965: 325-331; Willey, Culbert, and Adams 1967), occurs in the sample, but it is rare.

Kax Ceramic Complex: Chicanel Ceramic Sphere

The Kax period may be tentatively placed as spanning B. C. 200 to A. D. 300 with the late facet defined for the Tayasal - Paxcaman Zone around A. D. 150. In general, this complex is equivalent with Late Preclassic Chicanel developments elsewhere (Uaxactun - Ricketson and Ricketson 1937, A. L. Smith 1950; Tikal - W. R. Coe 1962, 1965a, 1965b).

In the Tayasal - Paxcaman Zone, the Kax Ceramic Complex may be subdivided into two facets. These facets are best seen ceramically with the early facet of Kax evincing the harder paste ceramics while the later facet of Kax is characterized by an ashy paste which easily disintegrates. Lots containing only late facet Kax materials were recovered in several investigations (especially Strs. T121, T327, T343); the associated stratigraphy confirms the noted temporal division. The vessel forms and types present in the two facets also vary.

The Kax Chicanel complex is apparently representative

of a distinct upsurge of Maya occupation of the Tayasal - Paxcaman Zone. Only one primary deposit may be assigned to this complex (Bu. T27R-1); Kax Chicanel constructions were also excavated. Based on the omnipresence of Kax Chicanel sherds in most fills (both pure and mixed) of the Tayasal and Cenote area, this era must have been characterized by a sizeable population and much more construction than was encountered during the 1971 investigations. As with Chunzalam, 1971 excavation strategy may have precluded any extensive recovery of associated architectural remains.

The Paila Ceramic Group dominates the unslipped wares of both facets of the Kax Ceramic Complex. Paila Unslipped is characterized by a grainy light paste and by thick everted rim ollas with short rims and rounded lips (Figures 6a and 6b). The only other unslipped ware which occurs is Sapote Striated which has the same paste as Paila Unslipped. Sapote Striated, however, is not common and it is unknown whether it exists in olla or jar form. However, it is suspected (based on the distribution of this limited sample) that Sapote Striated may be restricted to the late facet of Kax whereas Paila Unslipped extends through both facets.

The early facet of the Kax Ceramic complex is clearly derived from Chunzalam materials. It is characterized by harder pastes and everted rim dishes with circumferential grooving. Two paste varieties of Sierra Red may be assigned to the early facet: a hard bonded red paste (Figures 6c and

6d), and a very brittle, but also hard, reddish paste. Early Polvero Black pottery (Figures 7a and 7b) also exhibits this same hard red paste. Flor Cream (Figures 7c and 7d), with its hard yellow paste, is also assignable to the early facet of Kax. There is much mixing in surface treatment between Sierra Red, Polvero Black, and Flor Cream giving rise to the following types which continue through late facet (but with a different paste and distinct forms): Repasto Black-on-Red (Figure 8a), Mateo Red-on-Cream (Figure 8b), Coxu Black-on-Cream (Figure 8c), and Bocut Multicolor (Figure 8d). Pottery with a darker mixed red and black surface treatment is also present (Xex Red) in low frequencies in the early facet, but is more common in late facet. A similar surface treatment has also been noted for Edzna in Campeche (Sierra Red: Chon Variety; Forsyth 1979: 188). Ahcab Red-on-Buff and Anil Orange, present in small amounts in the Tayasal - Paxcaman Zone sample, also part of the early facet of Kax.

Incision is a rare decorative mode, found on early Sierra Red (Laguna Verde Incised - both post and pre-fire), Polvero Black (Lechugal Incised), and Flor Cream (Accordian Incised - dishes and lids). Some punctate decoration also exists in the Flor Group (Pochitocus Punctated).

The late facet of Kax is marked by the appearance of an ash paste in Sierra Red (Figures 9a and 9b) dishes, flanged bowls, and jars. The most common vessel form of this facet

is a medially flanged bowl. The previously reddish Polvero Paste becomes a yellowish grainy paste and the jar form of Polvero Black proliferates. A new black slipped ware, Paybono Black (Figure 9c), may be introduced in the late facet of Kax, replacing the dish/bowl form of Polvero. Iguana Creek White (Figure 9d) vessels generally supplant Flor Cream dishes and bowls. An orange slip (Figure 9e) is also present on jar forms with grainy paste (Topol Orange early). Non-resist, wavy-line bichrome decoration, reminiscent of the Usulutan style, makes its appearance during the late facet. The design consists of parallel red lines on a cream background (Escobal Red-on-Buff; Figure 9f) or parallel black lines on a reddish-orange slipped surface (Sacluc Black-on-Orange).

The Kax Ceramic Complex is for the most part dominated by the Sierra and Paila Groups with the additional subsidiary presence of the Polvero Group. decoration (both resist and non-resist) also seems to make appearance in this complex. Aside its from the rare presence of bichromes, the only other decoration, pervasive among the Sierra Group, is the precense broad-line pre-fire incision and grooving. Temporally, the earlier pastes are characterized by their hardness while later ones are characterized by their crumbliness. slip which distinguishes this complex is usually highly polished while the black slip is crackly in appearance.

While the cream slip (Flor Group) is polished, it often retains the variablity seen in the preceding Vecanxan Group. Forms are monotonous in their non-variablity, generally being either jars with outcurved necks or everted rim dishes.

Yaxcheel Ceramic Complex:

Peripheral Floral Park Cera ic Sphere

The Yaxcheel Complex follows immediately after the late facet of Kax. It is dated from approximately A. D. A. D. 400 and is equivalent in style and content to what is termed "Protoclassic" elsewhere in the Maya Lowlands (see 1977b). The designation of a "Protoclassic" Pring 1977a, complex in the Tayasal-Paxcaman Zone is based primarily on architectural stratigraphy and associated deposits at Cenote (specifically Str. C1; A. Chase 1983) and is secondarily confirmed by the existence of constructionally sealed fills of redeposited refuse at Tayasal (specifically Str. T121; A. Chase 1983) containing only Yaxcheel complex material. Based on stratigraphic construction data, the transition from Kax to Yaxcheel, although sharply reflected in content, was apparently a relatively smooth one in the Tayasal -Zone. This contrasts with the data from central Belize (specifically Barton Ramie and Baking Pot) where intrusive population was originally proposed based primarily on new ceramic forms, decorative techniques, and wares (Willey et al. 1965; Sharer and Gifford 1970; Willey 1973:

96); more recent data from Belize has been interpreted as possibly representing an in situ development for these characteristics (see Pring 1977a, 1977b and Robertson 1980). Unlike former ascriptions of Protoclassic complexes to the terminal part of the Preclassic Period (Adams 1971; Gifford 1965), however, the Yaxcheel Ceramic Complex is dated to the early part of the Early Classic Period based both on the recovered stratigraphy in the zone and on its typological associations (see Appendix I); this agrees to some extent with Sharer's (1978) placement of similar materials at Chalchuapa.

Ceramically, the period isrepresented by the occurrence of tetrapod (mammiform and other) vessels (Ca. TlF-1 and Ca. TlC-3) and by a grooved-hook rim which occurs on both plainwares and slipped vessels (Ca. TlE-1; excv. 24D). Antecedents for Yaxcheel ceramics are clearly present preceding late facet of Kax, indicating in the possibility of an in situ development for this Protoclassic complex; similarly, it is possible to see the smooth development of the Hoxchunchan ceramic complex out of Yaxcheel.

While the Yaxcheel Ceramic Complex clearly has its foundation in the late facet of Kax, it is significantly distinct as well. The forms within the Yaxcheel Complex have counterparts in the Cimi Complex at Tikal. The rare Black-on-Orange decoration of the preceeding period

proliferates (Sacluc Black-on-Orange; Figure 10a) does the ash paste. However, new forms, not present before also Topol Orange (Figures 10b to 10e) is common in both groove-hook lip bowl and jar form and in mamiform tetrapod direct rim vessels; it maintains an ash paste. Topol Orange related to Happy Home Orange from Barton Ramie (Gifford 1976: 92-93). Limited bichrome and polychrome decoration is present within the Topal Group. A black slipped group, Paybono, also makes its appearance in special deposits at Cenote and is technologically transitional to the later Balanza Group. Paybono Black exists in bowls with either direct or groove-hook lips; vessels may have ring bases and nubbin supports. It has a dark gray-brown paste is most often thicker walled than the earlier Polvero Black. Aguacate (Figures 11a and 11b) and Aguila Groups (Figures 11c to 11e) are both present in the Yaxcheel complex; it is sometimes difficult, in fact, to distinguish between the pottery of these two groups. Aguila Orange originates in a cake-pan, cache-bowl form which has a grainy friable paste; the slip on these vessels is sometimes quite red thus indicating that Aguila Orange may have derived from the Sierra Red Tradition as Adams (1971: 143) has suggested. Aguila Orange also has a finer grained paste in its thinner walled pots. The major differences between Aquila Aguacate fine paste vessels appears to be that mammiform tetrapods and groove-hooked lips occur in Aguacate Orange.

The similarity, if not identity, between Aguila and Aguacate ceramics has also been noted for the site of Pozito in northern Belize (Case 1982). When slip remains, Aguacate evinces a dark red-maroon surface color in contrast to the orange slip on thin Aguila vessels. Both groups contain vessels with slight basal flanges. Guacamallo Red-on-Orange is present but rare.

Continuities with the late facet of Kax are evident in the duration of the yellow paste Polvero jar into Yaxcheel. This continuity is also evinced in plainwares where there appears to have been a smooth transition from Paila Unslipped and Sapote Striated to Quintal Unslipped and Triunfo Striated. In the Tayasal - Paxcaman sample, Quintal Unslipped (Figure 12a and 12b) is distinguished from Paila Unslipped primarily through its dark paste and squared or groove-hook lip (early) and sometimes by a rectangular rim profile. Decorated bosses (Figure 12c), similar to those illustrated for Monkey Falls Striated at Barton Ramie (Gifford 1976: Fig. 74), occurs on Triunfo Striated (Figure 12d). Everted lip dishes with blackened interiors are also fairly common in Quintal Unslipped (Figure 12e) in the Yaxcheel Ceramic Complex.

The basal flanged dishes, so common at Uaxactun (Smith 1955: 79, 139-141), are rare at Tayasal. Both Z-angled Bonefela Black-on-Orange and Actuncan Polychrome, however, are present in the Yaxcheel Complex in small quantities.

Polychrome decoration is apparently introduced to the zone during this era and the late facet Kax wavy-line decoration continues, but becomes more standardized and less fluid in technique. Other decorative techniques, such as incision, are generally not found.

Hoxchunchan Ceramic Complex: Peripheral Tzakol Ceramic Sphere

The Hoxchunchan, or Early Classic, era of the Tayasal - Paxcaman Zone was stratigraphically (at least in terms of architectural construction) a smooth outgrowth from the Yaxcheel era and presages the later developments of the Pakoc era. Hoxchunchan is tentatively dated from about A. D. 400 to A. D. 600.

Investigations into Early Classic remains at the sites Tayasal and Cenote is particularly interesting for the insights to the overall manifestation of this relatively little known time period in the southern lowlands. The extensive deposits at Cenote (Strs. C2, C4, and C5; A. Chase 1983) and Tayasal T110, T126, T32; A. Chase 1983) (Strs. indicate that Aguila Orange (Figures 13a and 13b) continued Yaxcheel to Pakoc, but with some form changes. Model-carving of blackwares appears in many of the recovered Hoxchunchan deposits as do "Teotihuacan" tripod cylinders (Figure 13c; Bu. T12B-1 and Bu. TlG-2, A. Chase 1983). Interestingly, the polychromes found in such abundance at Uaxactun (Dos Arroyos) are exceedingly rare on the

Peninsula. As previously noted (A. Chase 1979:93), the fact that these are not present at Tayasal and Cenote does not imply abandonment, but more likely spatial or social differences.

The Hoxchunchan Peripheral Tzakol complex has some continuities with the preceeding Yaxcheel complex, looses the Protoclassic traits which characterize Aguila Orange continues; however, it is represented by forms not found in the preceeding complex. Blackware (Balanza Group; Figure 13d) becomes much more prominent in the archaeological record, especially in special deposits dating to the Hoxchunchan complex. While special deposits representing Hoxchunchan are quite numerous. fills containing material representative of this complex are not; whether this is due to a sampling problem in the Tayasal and Cenote data is not clear. It is possible that this apparent lack may be due to the structures of this period being buried under subsequent constructions, which were in general not deeply probed in 1971.

Aguila Orange, Triunfo Striated, and Quintal Unslipped remained in use though the Hoxchunchan Ceramic Complex. During Hoxchunchan, Quintal Unslipped generally has a rectangular rim profile with an exteriorly thickened central area and an occassional bolstered lip (Figures 12f and 12g) although a dish form is also introduced (Figure 12h). Modeled and spiked pot stand censers (Candelario Appliqued -

Figure 12i - and Yochalek Modeled) are also present at this time in the Tayasal - Paxcaman Zone sequence. Although the rim form of Triunfo is uncertain, no striation occurs on the neck or rim; cross pattern striation is common on jars. Aguila Orange has a gritty paste and commonly occurs in smaller, almost vertical walled, cache bowls and in flanged plates or dishes with ring bases. Feet are rare on Aguila Orange vessels. The flanged Aguila Orange dishes clearly presage the later Saxche Orange ones. At least three varieties of Aguila Orange are present (Aguila, Oxpayac, and Variety Unspecified).

Dos Hermanos Red (Figure 13e) has a gritty paste and red slip primarily in dishes or plates, but also in jars. Pucte Brown and Fama Buff are rarely present in the collection; when they do occur it is only in jar form. Balanza Black, not overly common in fills, is a major component of mortuary contexts. The most common forms are bowls and tripod cylinders. Incision (Lucha Incised) and gouge-incision (Urita) occurs as well as fluting (Paradero Fluted), impressing (Maroma Impressed; Figure 13f), and modeling (Positas Modeled; Figure 13c).

Dos Arroyos Polychrome and Caldero Buff Polychrome are present, but rare in the Tayasal - Paxcaman Zone. When they do occur, the design elements are similar to those on Actuncan Polychrome.

Ceramics of the Hoxchunchan complex are characterized

by glossy surfaces. Decorative technique is primarily composed of complicated gouge-incision on blackwares. elaborate polychromy that characterizes the equivalent Tzakol Phase at Uaxactun (Smith 1955) is not found in the Tayasal - Paxcaman Zone. "Teotihuacan" - influenced pottery (cylinder tripods with slab feet) is present in special deposits, but is not generally represented in fills. While lack of such at Seibal led Sabloff (1975: 14-15) to the postulate a marked population reduction at that site, not the case at Cenote where it is clear from the stratigraphic excavations and associated special deposits that the sequence is continuous from Yaxcheel to Pakoc.

Forms characteristic of Hoxchunchan include: dishes with basal flanges; round sided bowls; cylinder tripods; and spouted jars. An important attribute introduced in the Hoxchunchan complex is a ring base, which may be found either on bowls or dishes.

Pakoc Ceramic Complex: Tepeu Ceramic Sphere

The early part of the Late Classic Period is well represented at Tayasal and Cenote. This Pakoc era is seen as being largely equivalent to Tepeu 1 at Uaxactun (Smith 1955:24 - 25) and Ik at Tikal (Culbert 1973, n.d.) and as dating from roughly A. D. 600 to A. D. 700. Ceramically, Pakoc vessels and sherds were well represented at Cenote (Strs. Cl. C4, C25), Tayasal (Strs. T103, T118, T115, T297, T337, and T145), Paxcaman, and Punta Nima.

Tepeu pottery is quite prevalent in the fills of the Tayasal Peninsula and is represented in seven special deposits. The pottery of the Pakoc Ceramic Complex is characterized by a glossy finish and a preponderance of polychromy; in fills, much of this finish is not present on the recovered sherds. There does in fact seem dichotomy within this complex between sherds with well bonded slips and those whose slips are not well bonded. an examination of the materials from Tikal (type Based on collection) and on the large number of sherds with poorly bonded slips in the Tayasal - Paxcaman collections, it would appear that the pottery with a better bonded slip correlates with a non-ash paste and was not local to the Tayasal area while pottery with a loosely bonded slip correlates with an ash paste and may have been a local product. The hard slipped, non-ash paste wares usually are represented in the special deposits while the more common ash paste wares are not.

The Cambio Ceramic Group encompasses the smoothed unslipped wares for the Late Classic Period. Aside from the large ollas with out-flaring rims (Cambio Unslipped; Figures 14a and 14b), two other vessel forms are found in the Cambio Group. These are miniature ollas (Cambio Unslipped; Figure 14c) or specially made miniature olla-shaped cache vessels with lids (Ucum Unslipped; Figure 14d) and large flaring plates (Chilonche Unslipped; Figure 14e). The plates are

reminiscent of the earlier Aguila Orange: Unslipped Variety and may be related to the Flamboyan Variety of Aguila found at Becan (Ball 1977: 41-42).

The Encanto Striated Group comprises the striated wares of the Late Classic Period. Both olla and jar forms occur in this type. Encanto Striated can be easily distinguished by the tall jar neck with everted folded lip.

The slipped wares include the Tasital, Tinaja, Molino, Saxche Groups. Diagnostic Saxche Orange Polychrome and tripod plates (Figure 15a) are common in whole form in burials and in partial form in structural fills. Monochrome Molino Black (Figure 15c) and Tasital Red do occur, but are much less common. The Tasital Ceramic Group consists of jars and flanged plates with red slip and a soft buff paste incorporating large inclusions. The Tinaja Group comprised of two red slipped types: Chaquiste Impressed (Figure 15e) and Subin Red (Figure 15f). Both types consist of basin forms and have characteristically hard sandy paste; the former with impressed designs, while the latter with a medial ridge. The Molino Ceramic Group contains black slipped vessels in flanged plate, vase (Figure 15c), narrow mouthed jar forms. The Saxche Ceramic Group is well represented in the zone. The decorated wares in this group occur in vase, flanged plate (Figure 14a), and bowl -cuenca-(Figure 14b) forms. While Saxche Orange Polychrome sherds were found in most securely dated Pakoc matrices, the rarer

decorated types (Uacho, Desquite - Figure 15d, Bejucal - Figure 16, Jama, Juleki and Sibal) occur only in Tayasal mortuary contexts. In a developmental sense, it is possible to see the Saxche plates deriving from Aguila forms while the simpler polychrome decoration of Uacho and Desquite occur at the onset of the Pakoc Ceramic Complex.

common in this period include jars with vertical necks (often black slipped), tripod flanged dishes (oven feet), figure-painted cylinders (later part of shaped Pakoc), and deep, rounded-based, incurved-rim vases (early part of Pakoc). The Pakoc complex is characterized by a decrease in the amount of blackwares that are present and a noticeable increase in polychromy. Redwares without decoration are rare. The Saxche Orange Ceramic Group is the dominant fineware group. Black-painted designs are common. While the zone apparently fully participated in the Ceramic Sphere at the beginning of the period, divergence from it begins with the onset of Hobo times.

Hobo Ceramic Complex: Tepeu Ceramic Sphere

Either Pakoc related ceramics continued longer than has normally been accepted for other sites in the Central Peten or there was a decrease in population during the early part of the Hobo era based on the relative lack of true Tepeu 2 (R. E. Smith 1955) ceramics in the zone (A. Chase 1979:94). While Tepeu 2 equivalent ceramics do occur in interments (Bu. T5B-1, Bu. T108-1, P.D. T3000-1, and P.D. T34B-1; A.

Chase 1983) at Tayasal and Cenote, there is also a marked regional distinction from the pottery tradition of Tikal and Uaxactun within this peninsular area by the later facet of Hobo. Hobo may be viewed as being temporally equivalent to Tepeu 2 and 3 at Uaxactun (Smith 1955:24 - 25), Spanish Lookout at Barton Ramie (Gifford 1976:225 - 288), and Tepejilote (transition) - Bayal at Seibal (Sabloff 1975:153 - 228). Two facets may be assigned to this Late - Terminal Classic phase; the whole of Hobo is dated from approximately A. D. 700 to after A. D. 900 with the late facet estimated to begin around A. D. 800.

While early facet Hobo ceramics are clearly within the Tepeu Ceramic Sphere, the late facet ceramics exhibit ashy paste and some resemblances to the Spanish Lookout ceramics of Barton Ramie (Gifford 1976) and San Jose IV - $_{
m V}$ (Thompson 1939) ceramics (specifically Deposit 1C-1, P.D. T30PP-1, and Nima surface collections; A. Chase 1983). Unlike the late Spanish Lookout ceramics which replace the earlier ash paste temper with calcite temper (Willey 1973: ash paste temper continues in the central Peten. large incurving basins (Figures 17a to 17c) seen at (Sabloff 1975:160-173, 179-181) and Altar de Sacrificios (Adams 1971:22-23, 44, 47-48) and the shoulder impressed jars (Figure 17d) from same sites (Sabloff these 1975:164-168) are abundant in the Tayasal Peninsula Late Classic collections. The fineware ceramics from late facet

Hobo times (for example Str. T104 burials and Deposit 1C-1) are a mixed bag of items, some of which were undoubtedly imported into the Tayasal area (A. Chase 1984), but other of which were locally made (Simaron Group; A. Chase 1979:95 -Although black slipped wares outside of burial contexts are very rare and those which do occur are usually Achote Black (as defined for Uaxactun; D. Chase 1982b: 75), black and gray slipped vessels do occur burials (Figure 18a). The use of specular hemitite paint on finewares is a characteristic of late facet Hobo burial vessels (Chumeru Polychrome; Figure 18b). Fine paste wares, so common at Seibal and Altar de Sacrificios, are non-existent in the Tayasal collections; only 1 true Sacaba sherd is noted from Tayasal. Large thickware flanged plates and thickware bowls also occur within a regional "fineware" tradition (Simaron Group; Figure 18c). In general, appears as if there is an amalgamation of a series of ceramic spheres in the Tayasal - Paxcaman Zone during the Late Classic.

Much of the polychrome decoration which is prevalent in the Pakoc complex is replaced by monochrome decoration on all but the elaborately decorated mortuary and cache pieces. "Multistroke" decoration (Figure 19a; Smith 1955: 65) is representative of the early facet of Hobo. This term is used to describe parallel vertical, somtimes wavy, stripes in contrasting orange and red tones, usually on the interior of Hobo vessels, particularly flaring-sided bowls. Although this decorative technique continues into the late facet, it apparently declined in popularity and appears to be restricted to special deposits during this time. Fineware line-painting, using a red hematite base, is typical of the late facet. Pattern stamping is present on the shoulder of jar necks as well as on the rims of large incurving basins. Model-carving also occurs, but is not a frequent decorative mode.

The Hobo ceramic complex is easily recognized by the variety of forms which occur within it. Tripod, new flat-bottomed plates (Figure 19b), vertical or slightly flaring-sided bowls (Figure 19c), and thick, incurved rim basins (Figures 17a to 17c) are the more prevalent forms of this complex. Grater bowls are introduced in the late facet, but do not form a major component. While painted cylinder vases (Figure 18b) occur throughout Hobo, tripod cylinder vases are also first present during the general, the cylinder vases are later facet. In characterized by incurving rims. Also new on the level are very thick, heavy, and shallow tripod plates with notched flanges (Figure 18c); these are reminiscent of Spanish Lookout material of the same date.

Both Cambio Unslipped (Figures 20a and 20b) and Encanto Striated (Figures 20c and 20d), first introduced in the Pakoc Ceramic Complex, continue through the Hobo Ceramic

Complex. In the late facet of Hobo, however, a new variety the Cambio Group appears. Cambio Unslipped: Xux Variety is cruder its overall form, but has much in smoother exterior surfaces than the Cambio Variety. In some ways. later variety is quite similar to the earlier Blanquillo Unslipped found at Becan to the north (Ball 1977: 9-10). Decorated censerware (Miseria Appliqued and Pedregal not Modeled) is common in the excavated contexts in the zone, but the flanged cylinder forms do occur at Punta Nima; flanges are decorated with both incision and with applique. These types may have existed in the preceding Pakoc complex as well; they appear to be more similar to the Sacrificios material (Miseria Appliqued: Altar de Pao 55) than to the Seibal censerware Variety, Adams 1971: (Miseria Appliqued: Variety Unspecified, Sabloff 174-177). Some of the illustrated Seibal Miseria Appliqued (Sabloff 1975: Fig. 336) resembles Postclassic forms found on the Tayasal Peninsula.

Two red slipped groups occur in the Hobo ceramic Complex. The Nanzal Ceramic Group is limited to the early facet of Hobo. It contains jar (Figure 21a) and plate forms and was probably derived from the earlier Tasital Group. The Tinaja Ceramic Group (Figure 21b) is plentiflul in both facets of the Hobo Ceramic Complex; as compared to the Tinaja Group pottery of the Pakoc Complex in the Tayasal - Paxcaman Zone, it is usually comprised of an ashy paste.

While some plates and jars do occur in the Tinaja Red Type, most jars are of the Pantano Impressed Type (Figure 17d). Basins are found in Subin Red, Chaquiste Impressed, and Cameron Incised Types (Figures 17a to 17c). The basin is the most commonly found form of the Tinaja Group in the collections. In the late facet of Hobo, there appears to be a preponderance of Cameron Incised basins and Chaquiste Impressed basin-tecomates.

Monochrome blackwares are extremely rare in the Hobo Ceramic Complex. When they do occur, the are usually bowl forms. The earlier facet of Hobo is characterized by the Meditacion Ceramic Group while in the late facet there is the rare occurrance of Achote Black. One fragment of a thin slate drum is present in the late facet collections.

Decorated wares also evince a facet division although some overlap exists. The Palmar Ceramic Group (Figure denotes the early facet while the thicker Simaron Ceramic Group (Figure 18c) distinguishes the late The rarer Asote, Maquina, and Danta Ceramic Groups are all represented in the morturary collections from Tayasal generally assigned to the late facet of Hobo. In fact, Lombriz Orange Polychrome (Figure 21c), defined Bayal Complexes at Seibal (Sabloff 1975: 187-189) is so common in deposits in the Zone as to indicate its possible origin in the Lake Peten region. A specular hematite painted polychrome, Chumeru Polychrome Type (Figure

has also been noted in the late facet pottery.

Like the Pakoc ceramic complex, the Hobo ceramic complex is marked by a dichotomy between ash-paste, soft-slip and calcite-paste, hard-slip; again the ash-paste, soft-slipped pottery is typical of both facets of the complex except in special deposits. As with the Pakoc Complex, there is also a sharp division between the wares found in burials and those found in other contexts.

The Hobo ceramic complex encompasses the Tepeu Tepeu 3 complexes defined for Uaxactun and is analogous in its continuity over this timespan to the Spanish Lookout complex of Barton Ramie (Gifford 1976: 225-227). While the early facet of Hobo exhibits close similarities to Tepeu 2 -Imix materials noted elsewhere, the late facet of Hobo continues in the Tepeu 2 tradition while incorporating a few characteristics of both the Tepeu 3 - Eznab complexes to the north and from the Spanish Lookout complex to the Unlike Seibal and Altar de Sacrificios, little Fine Orange Ware (Figure 21d) is found during the late Model-carved pottery, another hallmark of the Classic Period, is also virtually absent from the although a related Kik Red Type (D. Chase 1982b: 75, 77) was recovered by Carl Guthe from an early facet Hobo Burial Str. T1Ø8 (Figure 21e). Whereas Р. Rice (personal communication) sees a profusion of black slipped pottery in the Terminal Classic complexes of the eastern Peten lakes,

this is not the case in Lake Peten.

Chilcob Ceramic Complex: New Town Ceramic Sphere

The Postclassic Period in the Tayasal area is marked by the advent of the Augustine Ceramic Group. It is that this introduction overlapped with the use of late facet Hobo ceramics, but as recognizably new pottery (specifically Augustine Red) and other artifactual material (such as notched sherds, pottery pestles, and a new figurine style) are also apparent in association with the Chilcob Ceramic Complex, it may be representative of a new population group that entered the central Peten at the end of Hobo times. Although striking differences are apparent between Hobo Chilcob pottery, the archaeological evidence (specifically architecture - Strs. Tl00 and T206 - and pottery vessel forms) suggests that there was a gradual replacement of Hobo by Chilcob and not a sudden one; spatial dynamics (i.e. distribution of late facet Hobo and early facet Chilcob pottery and constructions) may be especially important the evidence of the transition from interpreting Terminal Classic to Early Postclassic Periods the resultant patterns may indicate substantial temporal overlap (A. Chase in press b). Early (Strs. Nl, N2, T100, T33 T27, T26, T22, T380, T205, and T206) and late (Strs. T10, T391, T380, and T2) facets are present for the Postclassic. The Chilcob Ceramic Complex can be dated from approximately A. D. 900 to A. D. 1200.

The exact relationships between the various classes of material culture in early facet Chilcob times are difficult ascertain. Augustine Red (Figures 22a to 22c) Maskall Unslipped (Figure 23a), formally defined at Barton Ramie (Sharer and Chase 1976:304 -3Ø5), are found spatially isolated associations and contexts for a brief timespan during the transition from Classic to Postclassic. The earlier date of Augustine versus Paxcaman Red ceramics is indicated by stratified deposits at Nima and Tayasal. Pure Augustine fill ceramics are overlain by later Paxcaman fills at Punta Nima in both excavated structures, along the Tayasal lakeshore in a variety of locations, in the fill of the floor which underlies Str. T100 (A. Chase 1983). A primary deposit datable to the early facet of Chilcob occurs in Str. T206.

The early facet of the Chilcob Ceramic Complex represents the introduction of a new ceramic tradition into the Tayasal - Paxcaman Zone and the Central Peten. The origins of this tradition are unknown, but it was recognized by Bullard who termed it "The Central Peten Postclassic Tradition" (Bullard 1973). In the Tayasal - Paxcaman Zone, the early facet of Chilcob is marked by very fine (thin) walled Augustine Red tripod plates (Figure 22a), collared bowls (Figure 22b), and jars (Figure 22c) with buff-cream fire clouds resembling slateware; these plates usually have effigy head scroll supports (Figure 22d). Gouged-incised

Augustine Group finewares with black-slipped design areas are also evident in the early facet. A crude small black paste olla form called Maskall Unslipped (Figure 23a) co-occurs with the early Augustine materials. Maskall Unslipped is known from the site of Barton Ramie where it is contemporaneous with Rio Juan Unslipped and Daylight Orange (Sharer and Chase 1976). These latter two types occur only rarely in the Tayasal - Paxcaman Zone.

Shortly after the introduction of the Augustine Group to the Central Peten, another creamware ceramic group made appearance. This Trapeche Pink Group (Figures 24a to 24c) has been characterized as possibly representative of an experimental ceramic phase and as the local imitation of the northern slatewares (A. Chase 1979). Many of the (with the exception of conical feet and grater bowls; Figure 24a) present in the Trapeche Pink Group presage the forms although there is also variation in the form Paxcaman of grater bowls and jars. The unslipped ceramics which accompany the Trapeche Pink Group are reminiscent of late varieties of Cambio Unslipped found at Tikal and Seibal (Sabloff 1975:153 - 160; Puleston 1965). Whether Trapeche Group is representative of a second group of people coming into the central Peten or whether it is an indication of an amalgamation of and/or experimentation by local people into a new tradition due to stimulous diffusion is not known.

A red-slipped Tanche Ceramic Group (Figure 24d) occurs late facet of Chilcob (Str. in T38Ø). It, Trapeche, may be an experimental group with its ashy paste and different forms; it is also possible that Tanche is a late manifestation replacing Trapeche for the creamware tradition disappears following the end of Chilcob times. The appearance of the Trapeche and Tanche Ceramic Groups, however, foreshadows development the of the Middle Postclassic Paxcaman Ceramic Group. While both Chilcob groups resemble each other in having tripod plates (usually with scroll supports), collared bowls, and jars, they are quite different in form and surface treatment. Trapeche exhibits a pink to red slip with several sherds showing a clear overslipping of cream over red. A dish-like grater form has conical supports, unlike others in Postclassic. The Tanche Ceramic Group is characterized by a flaky red slip and ashy paste. The collared bowl of this has a bolstered rim and a red painted design on the interior of the rim. Large bolstered rim platters supported by three feet also occur toward the end of the Chilcob Complex.

The late facet of the Chilcob Ceramic Complex also witnesses changes in the Augustine Group and the introduction of a new unslipped group (Nohpek). The short direct rim olla form (Figures 23b and 23c) diagnostic of the Central Peten Postclassic unslipped tradition first appears

large numbers at this time. Augustine Red has become thicker walled and the effigy scroll supports are replaced by simpler scroll supports. Trumpet feet are present on Pek Polychrome plates (Augustine Group; Figure 25b). The light fire-clouds in the Augustine material from the early facet begins to become greenish in cast (Nima collections; 43G). Resist decoration also occurs within the late facet causing a lighter buff colored band between the usual red on the interior rim of Augustine Red collared bowls (Chacocote Resist). At the end of the late facet Chilcob, the incurved bowl form of Ixpop Polychrome begins to appear (Deposit 33H-1).

The censers of the Chilcob Ceramic Complex appear to have been made from bolstered rim platters and plates, sometimes with a raised ring base forming a chalice (Figure 25c). The modeling of the Classic Period and later Postclassic is rare, if it occurs at all.

Some trade pieces make an appearance in the Tayasal sequence during the early facet of Chilcob. These include a very rare presence (1 sherd in the fill of Str. T380) of Daylight Orange (Sharer and Chase 1976:300 - 301) in the San Miguel area and the appearance of Tohil Plumbate (2 vessels; 14 sherds in six widely scattered test excavations) in the western part of Tayasal, specifically as an axial cache in Str. T120 (Figure 25a). The relative abundance of plumbate at Tayasal, when compared with the amount of Fine Orange and

Fine Gray recovered from the zone (no whole vessels; ca. sherds; more might have been expected based on excavations to the south where Fine Orange and Fine Gray formed major Terminal Classic types at Altar and Seibal), may be significant in a consideration of the Maya Collapse for suggests a different network of trade between peoples in the Central Peten than in the Usumacinta area (A. Chase 1979). Flores investigations additionally produced a few pieces of trickle ware (which are probably of Yucatec origin and not appear elsewhere in the Tayasal region) and incised and model-carved Augustine Group finewares. This indicative that Yucatec related Maya groups were influential in the central Peten during this time period (cf. D. and A. Chase 1982; A. Chase in press a, n.d.).

In summary, the Chilcob Ceramic complex has both an early and late facet. The early facet is defined by the appearance of the Augustine (Figures 22a to 22c) and Maskall (Figure 23d) Groups in the Central Peten while the late facet is characterized by what appears to be a large amount of ceramic experimentation. The late facet also sees the common use of both scroll and bell-shaped or "trumpet" feet; trumpet feet, if they do appear, are extremely rare and do not characterize the early facet of Chilcob. The early facet of Chilcob may be coeval with the late facet of Hobo, but as the two complexes were distributed in spatially distinct parts of the site of Tayasal, it is difficult to

state this definitively. However, most telling is the fact that the late variety of Cambio Unslipped is found in association with Trapeche Pink of the late facet of Chilcob; this argues strongly for the overlap of the early facet of Chilcob with the terminal part of Hobo.

Cocahmut Ceramic Complex: New Town Ceramic Sphere

The Middle Postclassic Period in the Tayasal - Paxcaman Zone is characterized by the widespread appearance of Paxcaman Red ceramics and snail paste wares. The diversity in extant ceramic groups (see Appendix I) evident in preceding Chilcob times is lost during the Cocahmut era. Cocahmut may be dated from approximately A. D. 1200 to A. D. 1450, assuming an 11.16.0.0.0.0. correlation.

Most characteristic of the Cocahmut Ceramic complex is the Paxcaman Ceramic Group (Figures 26a to 26d) with its diagnostic snail shell inclusions in the paste. The its roots in the preceding Chilcob Paxcaman Group has Complex and its late facet Trapeche and Tanche Groups. surface color of the monochrome slipped ceramics changes in the Cocahmut Ceramic complex from the orange, pink, light red colors characteristic of slipped Chilcob pottery to a deep red color, which is either dull or glossy depending on preservation.

Paxcaman Red ceramic forms include tripod plates (Figure 26a) with either scroll or trumpet supports, platters (Figure 26d), collared bowls (Figure 26b), and

handled high neck jars (Figure 26c). The earlier paxcaman Red collared bowls have longer and more outflared rims than do the later examples of this form. Ceramically, there is a trend over time to the production of smaller sized Paxcaman tripod vessels (especially in refuse in excv. 31G).

Decoration in the Cocahmut Ceramic complex consists of occasional mold-formed effigy feet, polychromy, and incised Scroll and smaller bell-shaped feet are common. designs. Incising (Picu Incised; Figures 27a to 27c) appears to be dominant decorative mode during the early part of the Cocahmut, usually occurring on the inside of collared necks the interior of plates; this is often a mat or stylized serpent on the interior rim. Exterior incision, usually in the form of solar eyes and god heads, occurs on tecomate and bowl forms in Cocahmut special deposits. Two other incised forms occur; grater bowls (Figure 27b) with pattern incised interior bases and drums with parallel incision on (Picu Incised: Thub Variety; Figure 27c). exterior rim the end of Cocahmut, however, incised decoration longer common.

There are also polychrome types within the Paxcaman group. As with incision, the polychrome decoration on the incurved bowls appears to be different and more complex than that which occurs on the plates and jars. Black-on-paste decoration is present on the interior rim of tripod plates or on the exterior shoulders of jars in combination with red

sliped areas (Ixpop Polychrome; Figures 27d and 27e); sometimes maroon line work is also added to the decoration (Saca Polychrome; Figure 27f). This latter decoration usually occurs in horizontal panels on the exterior of tecomates or jars. There are also rare examples of modeled and cut-out work within the Paxcaman Group (Chaman Modeled).

The unslipped wares of the Cocahmut Ceramic Complex fall within the Nohpek Ceramic Group. While these forms are generally ollas, an unslipped miniature jar of this ware was found in Bu. T9H-1 (Figure 28a). Nohpek unslipped of the Cocahmut Ceramic Complex can be partially distinguished from the preceding Chilcob Ceramic Complex on the basis of a sharper neck-rim juncture and by the introduction of slight decoration (notching, bolstering, grooving) to the rim (Figures 28b and 28c). Significantly, the censerware of the Cocahmut Ceramic Complex appears to have changed from the earlier platter to an hourglass form with decorative bosses and fillets on the exterior walls (Puxteal Modeled; Figure 28d).

A single "Mixtec" handled incensario (Chaman Modeled; Figure 28e), with open work design, was also recorded from Flores and likely dates to the early part of the Cocahmut era based on comparisons elsewhere (Ball 1980) and on its probable affiliation with the Paxcaman Ceramic Group. Some non-effigy plumbate is also present, as represented by a specimen recovered in Bu. T9F-1 from Str. T203, which is

probably dateable to the early part of the complex. Hourglass and human effigy censers occur in the Tayasal and Flores areas during Cocahmut, but both forms are extremely rare as compared to the plentiful existence of such censer types at Northern Lowland sites such as Mayapan (Smith 1971) and Santa Rita (D. Chase 1982a).

It is likely that human effigy figure censers are introduced into the Tayasal - Paxcaman Zone during the timespan of the Cocahmut Ceramic complex. The occurrence of these, however, is rare in contrast to the large numbers which occur in the Northern Yucatec ceramic tradition as represented at Mayapan (Smith 1971) and Santa Rita (D. Chase 1982a).

Kauil Ceramic Complex: Undesignated Ceramic Sphere

The latest time period recognized in the Tayasal - Paxcaman zone, Kauil, extends from the Late Postclassic/ Protohistoric through Historic Period and may be subdivided into two facets. The dating of Kauil is suggested as from A. D. 1450 to A. D. 1750. The late facet of Kauil probably began around A. D. 1600.

The full extent of late facet Kauil occupation is still not known although it does appear at Strs. T15 and T200 as well as in the vicinity of Str. T390. A single axial cache (P.D. T13A-1; Figure 29a) from Str. T111 (Xuchichini Unslipped) may be assigned to the Kauil late facet and indicates a continuity of earlier patterns; another possible

(PD. T9A-1), dating from the same cache period, recovered near the Str. T200 steps. Refuse collected vicinity of Str. T15 also contains many unslipped wares dated to this late facet. No statements can be made as burial patterns extant during this era as only Bu. T31FF-1, a flexed burial, can be tentatively assigned to the facet of Kauil. The few Historic Period artifacts, majolica pottery or metal, that were recovered came from western eastern San Miguel and had an equivalent Tayasal ordistribution to the Kauil materials and occupation, probably indicating continuity of occupation in these areas into the recognizable Historic era (late facet Kauil).

is difficult to make a secure division at this time between the end of the Cocahmut Ceramic Complex and beginning of the Kauil Ceramic Complex. The early facet of Kauil is similar in content to that of Cocahmut with several exceptions. The red-brown paste that characterized Cocahmut Paxcaman Group Ceramics is largely replaced with a grey paste in Kauil. Importantly, Topoxte Red (Figure 30a) and its polychrome type, Chompoxte Red-on-Cream are introduced into the Tayasal Paxcaman Zone in trace amounts, specifically at Nima and in Str. T19 at Tayasal. Red-on-paste decoration also occurs on Paxcaman plate forms (Macanche Red-on-Cream; Figure 30b). It is suspected that institution of this decorative mode correlates in some way with the existence of a Yucatec type settlement pattern in the lakes to the east of Lake Peten (A. Chase 1982). This settlement pattern, characterized by a Mayapan style temple assemblage (Proskouriakoff 1962, Rice and Rice 1981; Johnson in press) does not occur in the Lake Peten basin.

Other ceramic types are also present in small during the early facet of Kauil. Fine Orange, possibly Matillas, also makes its rare appearance in the area, perhaps indicative of the larger changes that took place in the area during the Protohistoric Period. Cowgill 112-115) suggested that Tachis Red may have been extremely As the type is scarse in the Tayasal - Paxcaman collections, this cannot be adequately assessed. However, incision as a decorative mode does not characterize Late Postclassic Ceramics in the Zone. Tachis, if it does exist in the Tayasal collections, may date to the Kauil facet; however, nothing that closely approximates Cowgill's (1963) materials has been noted with the exception of single sherd (Lot T33HH/1) from the Punta Trapeche area. The Tachis Red-on-Paste decoration may, however. attributed to the Late Postclassic. Both the distinctive design motifs and the associated vessel forms support this assessment.

The late facet of Kauil is defined by crude replications of Paxcaman forms (Figures 30c and 30d), often with red line decoration; these are not frequent, however.

Two late varieties of the Paxcaman Ceramic Group are also

found in the collections; neither is common. Sandy paste has replaced the snail shell gray paste in one variety; the associated vesels are uneven and have crudely made scroll and trumpet supports; no other forms are known. The second variety of Paxcaman that may be identified as being late is associated with a dark gray paste; as few examples were recovered, the full extent of the associated forms cannot be defined.

late facet of Kauil also incorporates changes in The the unslipped wares. Nohpek unslipped is replaced in the late facet of Kauil by Xuxchichini Unslipped and Chilo Unslipped. Xuxchichini Unslipped ceramics (Figures 29a and 29b) are generally represented by jars, neckless ollas, tecomates, and by deep comals. The exterior of Xuxchichini ceramics are roughly smoothed. Jar necks do not evince sharp breaks, but are most often curvilinear in profile. Chilo Unslipped (Figures 29c and 29d) has a grittier red paste. The overall vessel surfaces are uneven. Both necked ollas and handled jars are present in the Tayasal sample; the profiles of these vessels are also curvilinear. In general, Chilo is thinner walled than Xuxchichini and is similar in shape to examples from modern San Jose (Reina and Hill 1978:41).

Late facet Kauil ceramics are believed to represent the latest locally made pottery in the Lake Peten region. It should be noted, however, that this pottery is poorly

represented in the Tayasal collections. All of it comes from the peninsular mainland; none has been located on any of the islands in Lake Peten.

The Historic Period is often difficult to isolate from the Postclassic. Majolica pottery and iron nails do, however, occur infrequently in the collections and allow for the definition of a deposit as being Historic by their presence; in the absence of these two diagnostics, however, it is difficult to distinguish between Historic and Postclassic deposits.

SUMMARY

Tayasal-Paxcaman Zone Ceramic Complexes offer some diversity from temporally equivalent complexes elsewhere the Peten; this is particularly evident in the Early Classic and Terminal Classic - Early Postclassic portions of As with other ceramic complexes, sequence. there marked division following the Preclassic Period between pottery that occurs within the mortuary and cache subcomplexes and that which occurs within structural fills and use-related matrices.

Certain forms may be considered temporally representative and be used in assessments of dating. Unslipped pottery does not change as much as slipped pottery throughout the sequence. Striated wares are usually associated with a jar form while unslipped, plain sherds are usually associated with an olla form. Slight differences in

paste, rim form, and neck treatment and height may be used to subdivide the unslipped wares.

Unlike the unslipped pottery, the forms which occur within the slipped wares are more temporally diagnostic. a general level, the initial introduction of a slipped type usually takes place in the form of the jar; jars also appear to be the longest persisting forms of specific types. smaller dishes and bowls, however, reflect more variation. The Middle and Late Preclassic characteristic slipped form is a large everted-lip dish or flanged-lip dish. During the Terminal Preclassic Period, this flange is medially applied In the early Early Classic, heavy, to the dish. slightly flared, "cake-pan" cache bowls and hemispherical tetrapod (either nubbin or mammiform) bowls with a direct or, commonly, a groove-hook lip predominate. These are replaced late part of the Early Classic the Period with Teotihuacanoid cylinder tripods and flanged dishes with ring By the early part of the Late Classic, these flanged dishes have become common in the archaeological record, but are polychrome and footed (without ring bases). Polychrome cylinder vases and incurved bowls have also become abundant. A footed, flat-base plate replaces the footed, flanged in the latter part of the Late Classic; the small, slightly flared walled, sharply angled bowl also predominates in sequence replacing its former curvilinear counterpart. The tripod plate is also the dominant Postclassic form, but is

complemented by a collared bowl and a footed platter. The footed plate is not present in Historic matials. No slipping is evident on the upper end of the sequence.

Besides form. surface slipping also reveals distinct trends over time. Black-slipped wares are Preclassic contexts and do occur in early Early Classic matrices as well. However, a black slip appears to have been largely restricted to mortuary contexts during the Middle and Late Classic Periods. Black slipping extremely rare during the Early Postclassic, but is present on some red-slipped finewares, where it was used zonally in combination with gouged-incised decoration. Red slipping is the most usual surface treatment of the Preclassic Period. During the Early and Middle Classic Periods, however, it is used on a par with orange surface slip, first introduced during the Terminal Classic Period. Neither an orange or red slip by itself is common on Late Classic finewares, may be found in combination with polychromy. A red slip, however, is used extensively on Late Classic service wares (basins and jars). The majority of the Postclassic pottery is slipped red with only a trace of orange slips being present during the early part of the Postclassic Period. true polychromy is found in Preclassic ceramics, although some bichromes do occur. Both bichromes and polychromes are very rare in the Early Classic Peirod in the Tayasal -Paxcaman zone. Polychromy is the dominant slipping mode,

however, of the Late Classic Period with bichrome decoration occurring less frequently. Some polychromy (bichromy) is also present throughout the Postclassic Period, but nowhere in the quantities of the Late Classic Period. Other forms of decoration, such as incision, are found in traces from the Preclassic through Middle Postclassic, but it is never a common decorative mode. Gouge-Incision is prevalent only in the blackwares of the Early Classic Period and in combination with black-slipped specials of the Postclassic Augustine Group.

On a broader level, the Tayasal - Paxcaman Zone Ceramic Sphere affiliations reveal that the Lake Peten region synthesizes the many surrounding complexes. The Xe Ceramic Sphere (Willey, Culbert, and Adams 1967:-307-308) has not been recognized thus far in the collections.

Willey, Culbert, and Adams (1967: 308) pointed out the possible existence of two groupings within the Mamon Ceramic Sphere. One of these consisted of common daub ware (Barton Ramie and Uaxactun) in the eastern Southern Lowlands while the other centered on the importance of red-on-buff resist painting (Altar de Sacrificios and Tikal) in the central Southern Lowlands. As Tayasal evinces hardly any daub or red-on-buff resist wares, it was probably not a member of either grouping; the Chunzalam Ceramic Complex, however, is viewed as a member of the generalized Mamon Ceramic Sphere.

The Tayasal - Paxcaman Zone is also a full participant

in the Chicanel Ceramic Sphere. The Terminal Facet of the Kax Ceramic Complex, however, shows closer affinities with Altar de Sacrificios than with Tikal or Uaxactun. aspects the Terminal Preclassic Kax Ceramic Complex is representative of a "cultural isolation" of the region, such seen in Barton Ramie's Mount Hope Ceramic Complex (Ball 1976: 326). Just as the Tayasal - Paxcaman Zone shows affinities with Barton Ramie and Altar de Sacrificios at the end of the Late Preclassic Period, it also peripherally participates in the Floral Park Ceramic Sphere and follows Altar's affinities with Barton Ramie. Whereas Willey et al. (1967: 309, Figure 6) placed the Floral Park Ceramic Sphere on an equal temporal level with the later part of Chicanel Ceramic Sphere, it is suspected, following Adams (1971: 155-156) that the Floral Park Ceramic Sphere actually overlaps with the early part of the Tzakol Ceramic Sphere (Tzakol 1 and part of Tzakol 2) in the central lowlands. While Willey et al. (1967: 309) stated that "the Floral Park sphere owes its existence to influences from outside Maya Lowlands," it is suspected that it may be a synthesis of southern influences and the local Terminal Preclassic ceramic tradition expressed at Altar de Sacrificios and in the Lake Peten region. Although Adams (1971: 156) specifically argued "population replacement that probably only partial" during his Salinas Phase, likely that there was almost complete continuity in the

Tayasal - Paxcaman Zone, in accord with Willey's (1973: 39) interpretation for Barton Ramie.

Hoxchunchan Ceramic Complex is a peripheral member of the Tzakol Ceramic Sphere. It is not considered a as the polychromy that characterizes the sphere is not at all common in the Tayasal - Paxcaman "distinctive Central Mexican elements" (Willey et al. 1967: 310) that occur in the Tzakol Ceramic Sphere are only part of the Ceramic mortuary sub-complex in the Tayasal -The non-emphasis of polychrome in the Lake Paxcaman Zone. Peten region, however, is at odds with Willey et al.'s (1967: 310) conclusion that there was "little tolerance local divergence in decorated pottery" during the Early Classic.

the advent of the Tepeu Ceramic Sphere, the Tayasal - Paxcaman Zone (Pakoc Ceramic Complex) was subsumed within the general trends found within the Peten. part of the Late Classic Period in the Tayasal - Paxcaman Zone is viewed as a continuation of the Tepeu Ceramic Sphere in spite of the exterior influence from the Eznab Spanish Lookout Spheres. A polychrome tradition was present in the Tayasal - Paxcaman Zone Hobo Complex throughout existence of this complex; this contrasts with both northern and southern neighboring sites in the Peten. Lombriz Orange (Sabloff 1975: 187-189), found at Seibal in mortuary contexts of the Bayal Ceramic Complex, may

originated in the Lake Peten region. Influences from the Boca Ceramic Sphere are striking in their absence from the Tayasal - Paxcaman Zone.

The Postclassic ceramics of the Tayasal - Paxcaman Zone are full members of the New Town Ceramic Sphere as defined Barton Ramie (Sharer & Chase 1976). The Chilcob Ceramic Complex likely interdigitates on a temporal level with the late facet of the Hobo Ceramic Complex, indicating a "smooth" transition in the Lake Peten region Classic to Postclassic Periods. The Tayasal - Paxcaman Zone is a member of the Central Peten Postclassic Tradition the Early, Middle, and early part of the Late Postclassic Period. The final pottery in the Tayasal - Paxcaman resembles that ethnographically recorded at the village of San Jose on the north shore of Lake Peten (Reina & Hill 1978).

APPENDIX I: CERAMICS FROM THE TAYASAL-PAXCAMAN ZONE

(from A. Chase 1983)

Chunzalam Ceramic Complex

UAXACTUN UNSLIPPED WARE

Achiotes Ceramic Group

Achiotes Unslipped : Achiotes Variety

Jocote Ceramic Group

Palma Daub: Variety Unspecified

Temchay Ceramic Group

Temchay Burnished : Temchay Variety

Cantaral Grooved : Cantaral Variety

FLORES WAXY WARE

Chunhinta Balck Ceramic Group

Chunhinta Black : Chunhinta Variety

Deprecio Incised : Deprecio Variety

Centenario Fluted : Centenario Variety

(PD. T42A-1)

Vecanxan Ceramic Group

Vecanxan Mottled : Vecanxan Variety

Cortales Fluted: Cortales Variety

Joventud Ceramic Group

Joventud Red : Joventud Variety

(PD. T42A-1)

Guitara Incised : Guitara Variety

(PD. T42A-1)

Pital Ceramic Group

Pital Cream: Pital Variety

Pital Cream: Chachacate Variety

Muxanal Red-on-Cream: Muxanal Variety

MARS ORANGE WARE

Savana Ceramic Group

Savana Orange : Savana Variety

Kax Ceramic Complex

UAXACTUN UNSLIPPED WARE

Paila Ceramic Group

Paila Unslipped: Paila Variety

Sapote Ceramic Group

Sapote Striated : Sapote Variety

PASO CABALLO WAXY WARE

Sierra Ceramic Group

Sierra Red : Sierra Variety

(Bu. T27R-1)

Sierra Red : Ahuacan Variety

Sierra Red : Ash Paste Variety (late facet)
Laguna Verde Incised : Laguna Verde Variety

(early facet)

Ahcab Red-on-Buff: Ahcab Variety (early facet)

Repasto Black-on-Red : Repasto Variety

Xex Red : Xex Variety (late facet)

Anil Orange : Anil Variety (?)

Flor Ceramic Group

Flor Cream : Flor Variety

Iguana Creek White: Variety Unspecified (late facet)

Accordian Incised : Accordian Variety

Pochitocus Punctated : Pochitocus Variety

Mateo Red-on-Cream : Mateo Variety

Coxu Black-on-Cream : Coxu Variety

Bucut Multicolor : Bucut Variety

Polvero Ceramic Group

Polvero Black : Polvero Variety

Lechugal Incised: Lechugal Variety

Escobal Ceramic Group

Escobal Red-on-Buff : Escobal Variety

Topol Ceramic Group

Topol Orange: Variety Unspecified (late facet)

UNSPECIFIED WARE

Unspecified Ceramic Group

Sacluc Black-on-Orange : Variety Unspecified (late facet)

Yaxcheel Ceramic Complex

UAXACTUN UNSLIPPED WARE

Quintal Ceramic Group

Quintal Unslipped: Variety Unspecified

(PD. T1E-1; Ca. T1C-3; Bu. T1C-1)

Quintal Unslipped: Quintal Variety

(Bu. T1C-1)

Triunfo Ceramic Group

Triunfo Striated: Variety Unspecified

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PETEN GLOSS WARE
Topol Ceramic Group
     Topol Orange: Topol Variety
     Topol Orange: Varieties Unspecified
     Metapa Trichrome: Variety Unspecified
Aguila Ceramic Group
     Aguila Orange : Aguila Variety
                     (Bu. T1C-1; Bu. T1C-2; Bu. T1C-3
                      Ca. T1C-3; Bu. T1G-3)
Aquacate Ceramic Group
     Aguacate Orange: Variety Unspecified
                       (PD. TIE-1)
     Guacamallo Red-on-Orange : Variety Unspecified
                                (Flores Ob. 2)
Polvero Ceramic Group
     Polvero Black: Variety Unspecified
Paybono Ceramic Group
     Paybono Black : Paybono Variety
                     (Ca. T1F-1; Ca. T1C-3)
UNSPECIFIED WARE
Unspecified Ceramic Group
     Sacluc Black-on-Orange : Variety Unspecified
     Caramba Red on Red-Orange: Variety Unspecified
                 Hoxchunchan Ceramic Complex
UAXACTUN UNSLIPPED WARE
Quintal Ceramic Group
     Quintal Unslipped : Quintal Variety
     Quintal Unslipped: Variety Unspecified
                         (Bu. T3D-1)
     Candelario Appliqued : Candelario Variety
                            (Bu. T1C-1)
     Yohchalek Modeled: Variety Unspecified (late)
                         (Bu. T1C-1)
Triunfo Ceramic Group
     Triunfo Striated: Triunfo Variety
                         (Bu. T27W-2)
PETEN GLOSS WARE
Aguila Ceramic Group
     Aguila Orange : Aguila Variety
                     (Bu. T12B-1)
     Aguila Orange : Vasiety Unspecified
                     (Ca. TIG-1; Ca. TIG-2; Bu. T27W-1)
     Aguila Orange : Oxpayac Variety
                     (Bu. T2A-2; Bu. T12B-1)
Dos Hermanos Ceramic Group
    Dos Hermanos Red : Dos Hermanos Variety (late)
                        (Bu. T1G-2)
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Pucte Ceramic Group
     Pucte Brown : Pucte Variety
                   (Bu. T2A-3)
Balanza Ceramic Group
     Balanza Black : Balanza Variety
                     (Bu. T2A-2; Bu. T12B-1; Bu. T23B-1;
                      Bu. T27W-2; Flores Ob. 1)
     Lucha Incised : Lucha Variety
     Urita Gouged-Incised: Urita Variety
                            (Bu. TlG-1; Bu. TlG-2;
                             Bu. T12B-1)
     Paradero Fluted: Paradero Variety
     Maroma Impressed : Maroma Variety
     Maroma Impressed: Chachachuron Variety
                        (Bu. T2A-2)
     Positas Modeled: Variety Unspecified
                       (Bu. T1G-2)
Dos Arroyos Ceramic Group
     Dos Arroyos Orange-Polychrome : Dos Arroyos Variety
                                     (Bu. T2A-2)
     Caldero Buff Polychrome: Variety Unspecified
                               (Bu. T1G-2)
Discordia Ceramic Group
     Discordia Black: Discordia Variety
                    Pakoc Ceramic Complex
UAXACTUN UNSLIPPED WARE
Cambio Ceramic Group
     Cambio Unslipped: Variety Unspecified
                        (excv. 27X Ob. 1)
     Ucum Unslipped: Variety Unspecified
                      (Ca. T1C-1)
     Chilonche Unslipped: Chilonche Variety
                           (Bu. T16B-1)
Encanto Ceramic Group
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Encanto Striated: Encanto Variety PETEN GLOSS WARE Tasital Ceramic Group Tasital Red: Tasital Variety (Ca. T1C-2; PD. T51A-1) Molino Ceramic Group Molino Black: Molino Variety (Ca. T17A-1) Tinaja Ceramic Group Chaquiste Impressed: Variety Unspecified

Subin Red: Variety Unspecified

Saxche Ceramic Group

Saxche Orange-Polychrome : Saxche Variety

(Bu. T2A-1; Bu. T2A-4; Bu. T2A-5; Bu. T45A-1;

Nima Ob. 5)

Saxche Orange-Polychrome: Variety Unspecified

(Bu. T16B-1; Ca. T17A-2;

Nima Ob. 2; Nima Ob. 4)

Uacho Black-on-Orange : Uacho Variety

(Bu. T2A-1; Bu. T2A-4)

Desquite Red-on-Orange : Desquite Variety

(Bu. T2A-1; Nima Ob. 6)

Bejucal Brown-on-Buff: Bejucal Variety

(Bu. T16B-1)

Jama Red Polychrome : Jama Variety

(Bu. T16B-1)

Juleki Cream-Polychrome : Variety Unspecified

(Bu. T16B-1)

Sibal Buff-Polychrome : Variety Unspecified

(Bu. T16B-1)

Hobo Ceramic Complex

UAXACTUN UNSLIPPED WARE

Cambio Ceramic Group

Cambio Unslipped : Cambio Variety

Cambio Unslipped : Xax Variety

Maroma Impressed : Variety Unspecified

Miseria Appliqued: Miseria Variety

Pedregal Modeled : Pedregal Variety

Encanto Ceramic Group

Encanto Striated : Encanto Variety

PETEN GLOSS WARE

Nanzal Ceramic Group

Nanzal Red : Nanzal Variety

(Bu. T45A-1)

Achote Ceramic Group (late facet)

Achote Black : Variety Unspecified

Meditation Ceramic Group (early and late facet)

Meditation Black: Variety Unspecified

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Palmar Ceramic Group (early)
     Palmar Orange Polychrome : Palmar Variety
                                (Bu. T5B-1; Bu. T7B-1)
     Yuhactal Black-on-Red: Yuhactal Variety
                             (Str. T108 Bu. 1; Bu. T13A-1)
     Zacatel Cream-Polychrome : Zacatel Variety
                                (Bu. T5B-1; Bu. T7B-4;
                                 excv. 25B Ob. 1;
                                 PD. T3000-1; Bu. T30PP-2)
     Paixban Buff-Polychrome : Paixban Variety
                               (Bu. T7B-4; Str. T108 Bu. 1)
     Mex Compoxite: Variety Unspecified
                     (Str. T108 Bu. 1)
Tinaja Ceramic Group
     Tinaja Red : Tinaja Variety
                  (PD. T25A-1; PD. T27G-1)
     Tinaja Red: Tanaha Variety
     Tinaja Red : Variety Unspecified
     Pantano Impressed : Pantano Variety
     Chaquiste Impressed: Variety Unspecified
     Cameron Incised: Cameron Variety
     Cameron Incised: Variety Unspecified
Asote Ceramic Group
     Asote Orange: Variety Unspecified
                    (Bu. T7B-1)
Maquina Ceramic Group
     Maquina Brown : Maquina Variety
     Pepet Incised: Variety Unspecified
                     (Bu. T7B-4; Bu. T3ØPP-1)
Danta Ceramic Group
     Danta Orange-Polychrome : Variety Unspecified
                               (Bu. T7A-2; Bu. T7B-3
                                Bu. T7B-2; Nima Ob. 1)
     Saptan Buff-Polychrome : Saptan Variety
     Lombriz Orange Polychrome: Variety Unspecified
                                 (Ca. T7A-1; Bu. T7B-1)
     Joyac Cream-Polychrome : Variety Unspecified
                              (Bu. T7B-3)
     Jato Black-on-Gray: Variety Unspecified
                          (Bu. T7B-4)
     Chumeru Polychrome : Chumeru Variety
                          (Ca. T7A-1; Bu. T7B-1; Bu. T7B-3;
                           Bu. T13A-1; Bu. T36B-1)
     Leona Red-on-Orange : Variety Unspecified
                           (PD. T34B-1)
Simaron Ceramic Group
     Simaron Red-on-Orange : Simaron Variety
                             (Deposit 1C-1)
     Tziche Polychrome : Tziche Variety
                         (Deposit 1C-1; PD. T30PP-1)
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FINE ORANGE WARE

Altar Ceramic Group

Tumba Black-on-Orange : Tumba Variety

Group (s) Unspecified

Types and Varieties Unspecified

PUUC or CHICHEN RED WARE

Kik Ceramic Group

Kik Red : Variety Unspecified

(Str. T108 Bu. 1)

Tzibana Gouged-Incised : Variety Unspecified

THIN SLATE WARE

Ticul Ceramic Group

Xul Incised: Variety Unspecified

Chilcob Ceramic Complex

PASAJA UNSLIPPED WARE

Nohpek Ceramic Group

Nohpek Unslipped: Nohpek Variety

(Deposit 33H-1)

Suctuk Incised : Suctuk Variety

CHAPEL UNSLIPPED WARE

Maskall Ceramic Group (early facet)

Maskall Unslipped : Variety Unspecified

TOHIL PLUMBATE WARE

Tohil Ceramic Group

Malacatan Modeled: Malacatan Variety (early facet)

(Ca. T17B-1)

Probably SAN PABLO GLOSS WARE

Daylight Ceramic Group (early facet)

Daylight Orange : Daylight Variety

VITZIL ORANGE-RED WARE

Augustine Ceramic Group

Augustine Red : Augustine Variety

(Bu. T9I-2)

Augustine Red : Buete Variety

Pek Polychrome : Pek Variety

(Deposit 33H-1)

Chacocote Resist : Chacocote Variety

Hobitzina Composite: Hobitzina Variety

Hobonmo Incised : Hobonmo Variety

VOLADOR RED WARE Tanche Ceramic Group (late facet) Tanche Red: Tanche Variety Jobompiche Red on Paste: Jobompiche Variety Chachacate Polychrome: Chachacate Variety Purucila Incised: Purucila Variety Trapeche Ceramic Group (late facet) Trapeche Pink: Trapeche Variety Xuluc Incised: Xuluc Variety Xuluc Incised: Tan Variety Mul Polychrome: Mul Variety Dolorido Polychrome: Dolorido Variety Chuntuci Composite: Chuntuci Variety Paxcaman Ceramic Group (late facet) Ixpop Polychrome: Variety Unspecified

Cocahmut Ceramic Complex

```
PASAJA UNSLIPPED WARE
Nohpek Ceramic Group
     Nohpek Unslipped : Nohpek Variety
     Nohpek Unslipped: Variety Unspecified
                        (Bu. T9H-1; Bu. T12C-1)
     Puxteal Modeled:
                        Puxteal Variety
                      (Flores Investigation 41B Ob. 1)
     Special (T9Q-1)
VOLADOR RED WARE
Paxcaman Ceramic Group
     Paxcaman Red : Paxcaman Variety
     Picu Incised: Picu Variety
     Picu Incised: Variety Unspecified
                    (Nima Ob. 3)
     Picu Incised: Thub Variety
     Ixpop Polychrome : Ixpop Variety
     Saca Polychrome : Saca Variety
     Chaman Modeled: Variety Unspecified
                      (Deposit 43G-1)
     Juntecholol Composite : Juntecholol Variety
TOHIL PLUMBATE WARE
Tohil Ceramic Group
     Tohil Plumbate: Tohil Variety (or Tejutla)
                        (Bu. T9F-1)
```

Kauil Ceramic Complex

PASAJA UNSLIPPED WARE

Nohpek Ceramic Group (early)

Nohpek Unslipped: Variety Unspecified

MONTICULO UNSLIPPED WARE (?)

Chilo Ceramic Group (late)

Chilo Unslipped : Chilo Variety

(excv. 18A Ob. 1; Deposit 31H-1)

Undesignated Ceramic Group

Xuxchichi Unslipped : Xuxchichini Variety

(PD. T13A-1; PD. T9A-1)

VOLADOR RED WARE

Paxcaman Ceramic Group

Paxcaman Red : Oppol Variety

Macanche Red-on-Cream : Variety Unspecified

CLEMENCIA CREAM PASTE WARE

Topoxte Ceramic Group

Topoxte Red : Topoxte Variety

Chompoxte Red-on-Cream : Chompoxte Variety

WARE UNSPECIFIED

Tachis Ceramic Group

Tachis Red-on-Paste : Tachis Variety

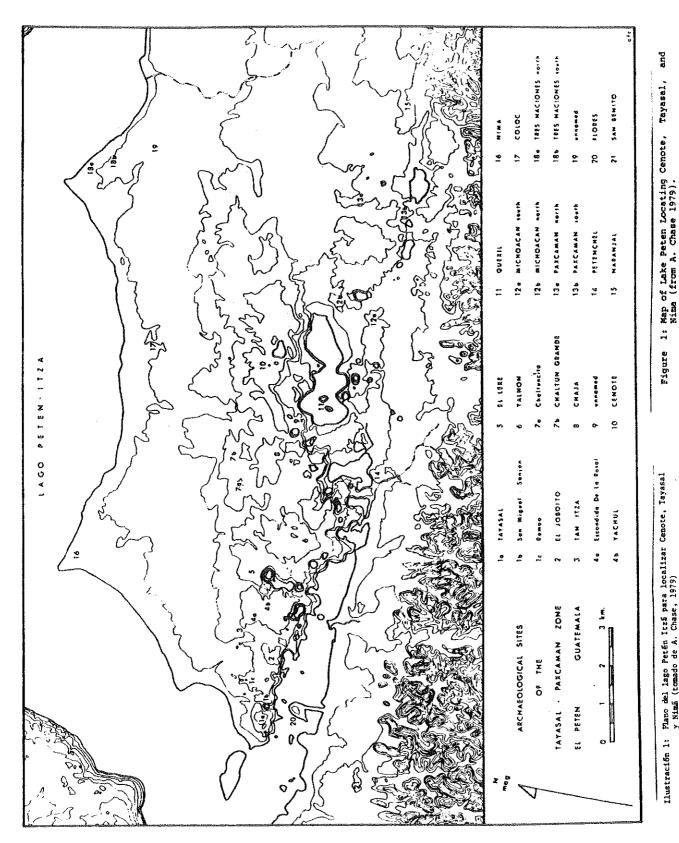


Ilustración 1: Plano del lago Petén Itzá para localizar Cenote, Tayasal y Nimá (tomado de A. Chase, 1979)

| terrent species de mais de misma de alguns, | DATE | TAYASAL | UAXACTUN | TIKAL | BARTON RAMII | ALTAR | SEIBAL |
|---|------|----------------|--|---|-----------------|---------------------------|---|
| | 1700 | late facet | | | | | |
| LATE | 1600 | KAUIL | | | | | |
| POSTCLASSIC | 1500 | early facet | | | | | |
| LODICTUDDIC | | earry raced | | | | | |
| MIDDLE | 1400 | 000133415 | | | late facet | | |
| POSTCLASSIC | 1300 | COCAHMUT | | | NEM | | |
| EARLY | 1200 | late facet | | | TOWN | | |
| POSTCLASSIC | 1100 | CHILCOB | | | early facet | | |
| TERMINAL CLASSIC | 1000 | facet | | CABAN | butty tocar | JIMBA | -C |
| reassassassas FRUDDIC | 800 | facet HOBO | ************************************** | EZNAB | SPANISH | late facet | BAYAL |
| LATE | 700 | early facet | TEPEU 2 | IMIX | LOOKOUT | early facet late facet | -transition TEPEJILOTE |
| CLASSIC | 688 | PAKOC | 1 | IK | TIGER RUN | PASION | ~*~*~*~*~ |
| EARLY | 500 | HOXCHUNCHAN | 3 | late facet | | CHIXOY VEREMOS | ? |
| CLASSIC | 400 | | TZAKOL 2 | MANIK | HERMITAGE | AYN | JUNCO |
| CPUCALC | 300 | YAXCHEEL | 1 | early facet | | SALINAS | |
| ., | 200 | late facet | | CIMI | FLORAL | | ariamidianity attractor of order to the objects |
| | 100 | ~~~~~~~~ | | | PARK | late facet | late facet |
| LATE | .D. | KAX | CHICANEL | CAUAC | MOUNT | | 100 to 100 to 100 to 100 to 100 to 100 to |
| | .C. | early facet | | | HOPE | PLANCHA | CANTUTSE |
| PRECLASSIC | 200 | | | CHUEN | BARTON CREEK | early facet | early facet |
| 40 mg 40 mg 40 mg 40 40 40 40 40 | 300 | | | A TO THE PARTY OF | | | |
| | 400 | | | TZEC | late facet | late facet SAN | |
| MIDDLE | 500 | | MOMAN | anto-como especiação com i estance qui espicação quinto parte | | PELIX | ESCOBA |
| PRECLASSIC | 600 | CHUNZALAM | | | ЈЕММ Ү | early facet | -pour adaptage up sprama arterio |
| | 700 | | 1 | EB | CREEK | | post |
| | 800 | | | | parly facet | XE | REAL |
| | 900 | | | | | | |
| | 1000 | | | | | | |

Ilustración 2: Complejos cerámicos de las tierras bajas mayas meridionales y su relación con la zona Tayasal-Paxcamán (tomado de A. Chase, 1983)

Figure 2: Ceramic Complexes of the Southern Haya Lowlands and Their Relationship to the Tayasal-Paxcaman Zone (from A. Chase 1983).

TAYASAL~PAXCAMAN ZONE: CERAMIC TYPE CLASSES AND MAJOR GROUPS BY COMPLEX

| COMPLEXES | Unslipped Red | Red | Cream | Black | Orange | Bichrome | Polycrome |
|--------------------------------|----------------------|-----------------------|----------------------|------------------|---|-------------------------|-------------|
| 220 | Achiotes Temchay | Joventud Savana | Vecanxan | Chunhinta | | | |
| Kax - eerly | Paila Sapote | Sterra | Flor | Polvero | | Ahcah Escobal | |
| - Late | Palla Sapote | Sterra | Iguana Creek Polvero | ek Polvero | Topol | Sacluc | ******* |
| Yaxcheel | Quintal Triunfo | Aguacate | | Payhono | Topol | Sactuc | |
| roxcnunenan | Quintal Triunfo | Dos Rermanos | (Puete) | Balanza | Agulla | Dos Arroyos Dos Arroyos | Dos Arroyos |
| . 1 | Cambio Encanto | Tasitai | | Molino | Saxche | Saxche | Saxche |
| Hobo - early | Cambio Eneanto | Nanzal | | Inflerno | Saxche | Palmar | palmar |
| - Late | Cambio Encanto | Kik Tinaja | | Meditation Alter | Altar | Denta Missron | Danta |
| Chilcob early | Maskall Cambio | Augustine Trapeche | | | Daylight | e k | (Tohil ?) |
| Late | Nohpek | Augustine Tanche | (Trapeche) | | | Ixpop | |
| Coeahmut | Nohpek | Paxcamen | | | | Ixpop | Saca |
| Kauil - early Nobpek Xuehie | Nohpek Xuehlehini | Paxcaman Topoxte ? | | | | Macanehe ? | |
| - Late | Chilo | Tachis ? | 7 | | • | Majolies | |
| | | | | | Total Control of the | 777 | |

llustración 3: Distribución de clasificaciones tipológicas por complejo cerúmico en la zona layasal-Paxcamán (tomado de A. Chase, 1983)

Figure 3: Type-Classic Distribution by Ceramic Complex in the Tayasal-Paxcaman Zone (from A. Chase 1983).

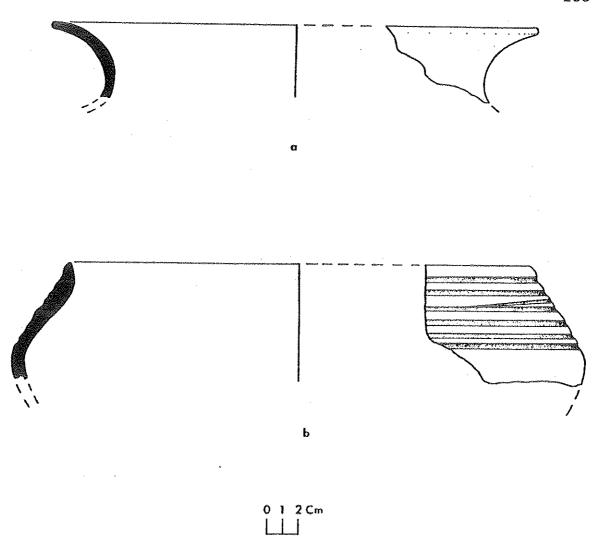
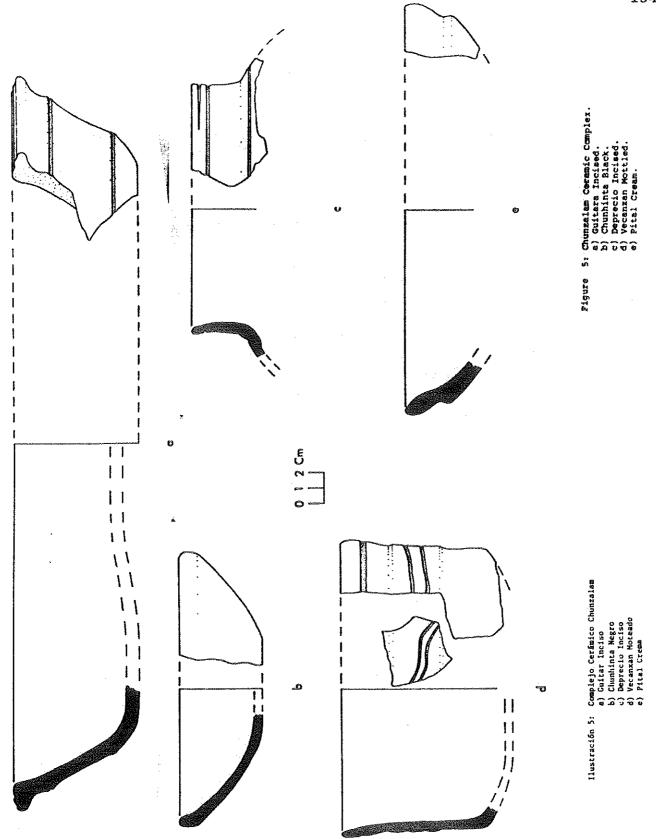
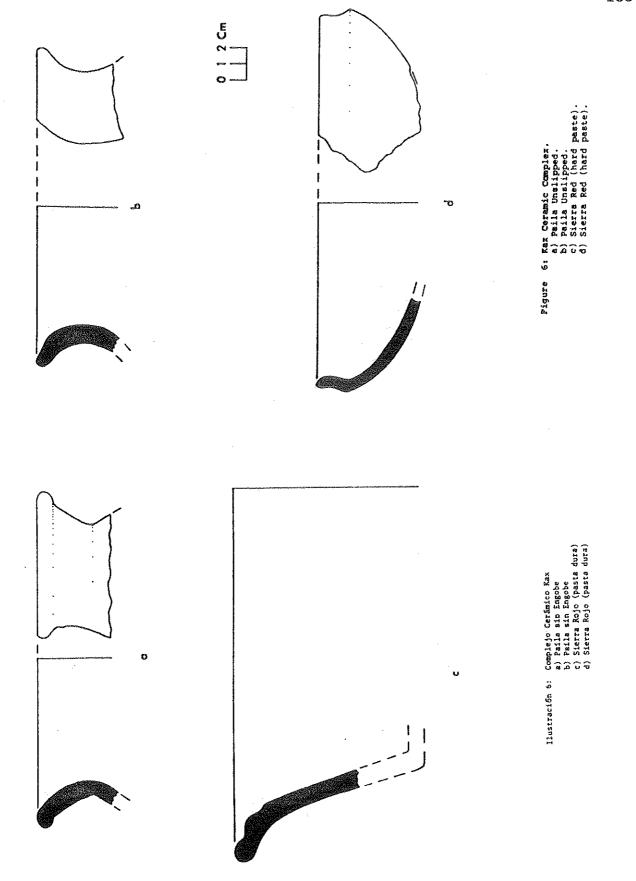


Ilustración 4: Complejo Cerámico Chunzalam a) Achiotes sin Engobe b) Temchay Bruñido

Figure 4: Chunzalam Ceramic Complex.
a) Achiotes Unslipped.
b) Temchay Burnished.





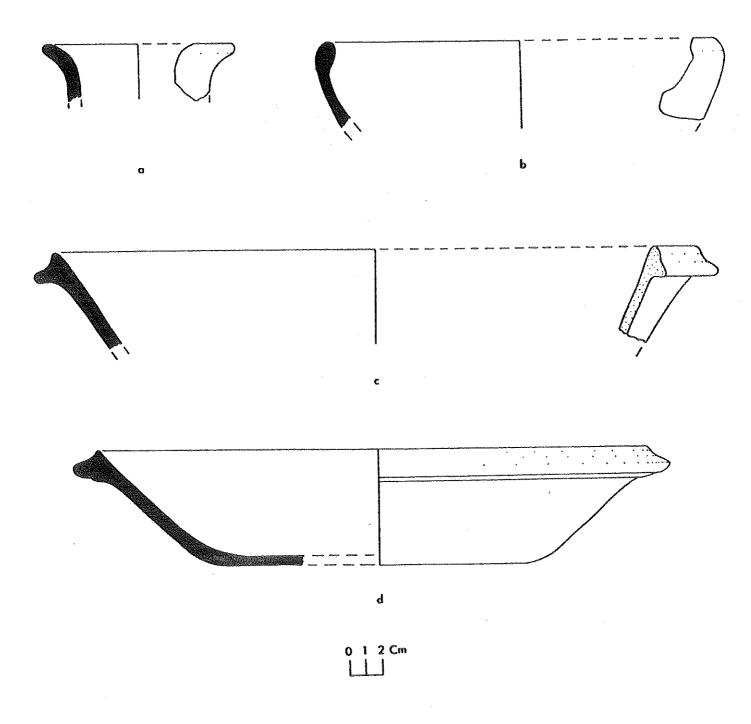
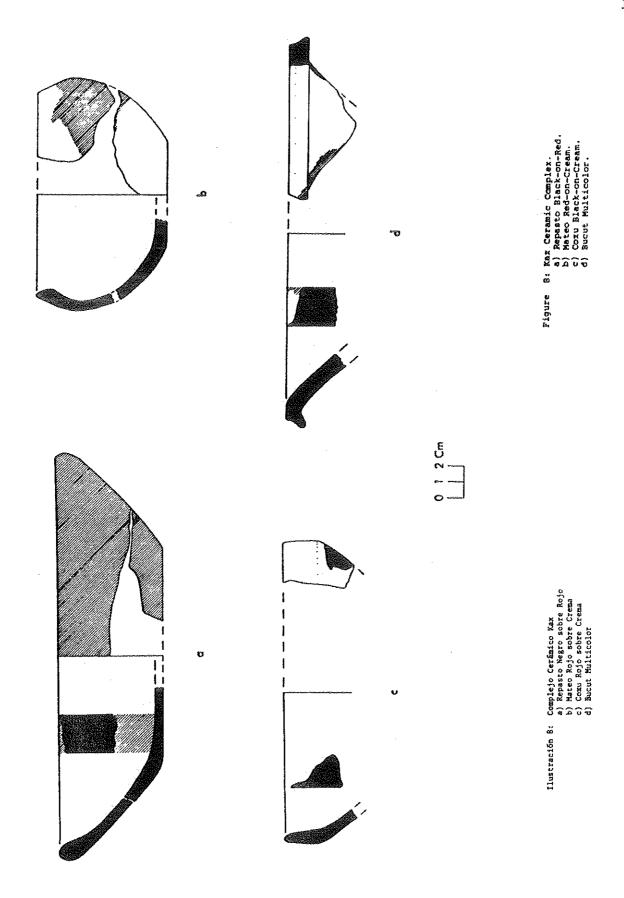
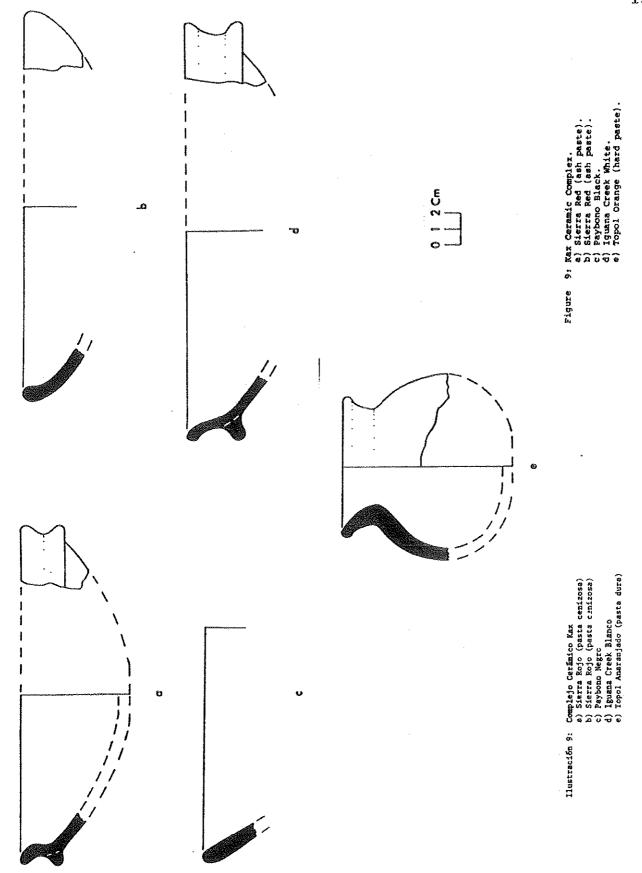


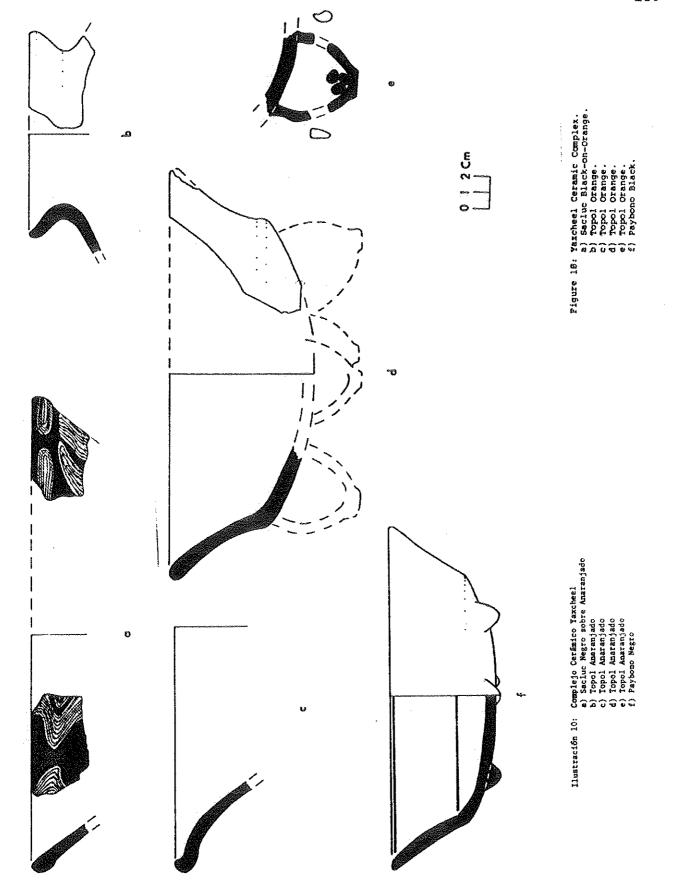
Ilustración 7: Complejo Cerámico Kax a) Polvero Negro b) Polvero Negro c) Flor Crema d) Flor Crema

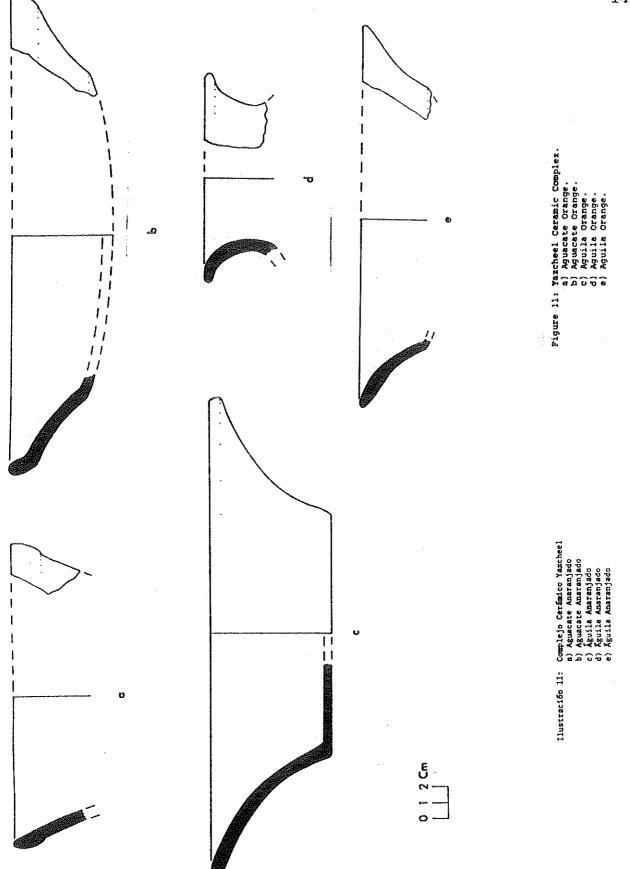
Figure 7: Kax Ceramic Complex.

a) Polvero Black.
b) Polvero Black.
c) Flor Cream.
d) Flor Cream.









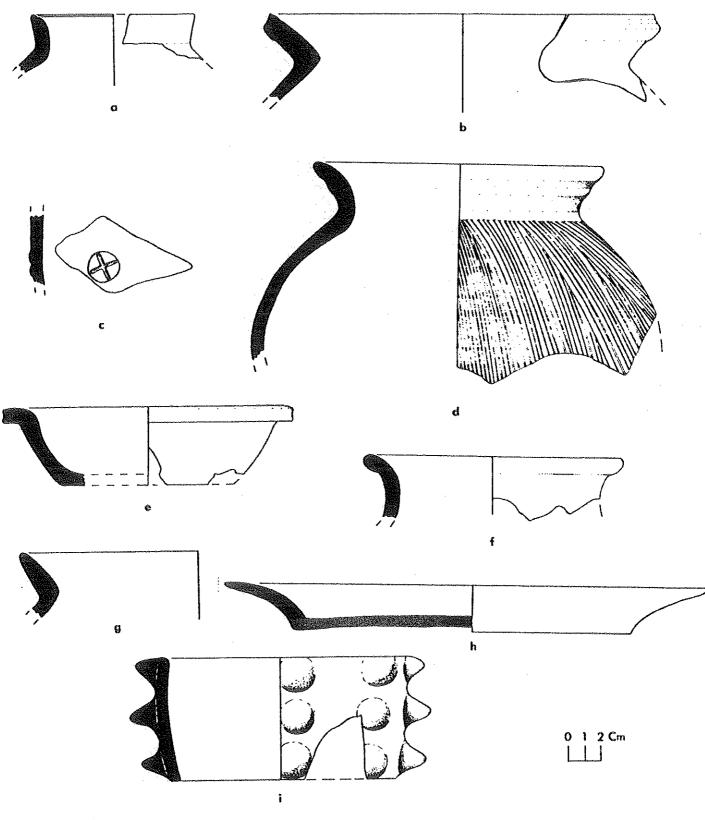
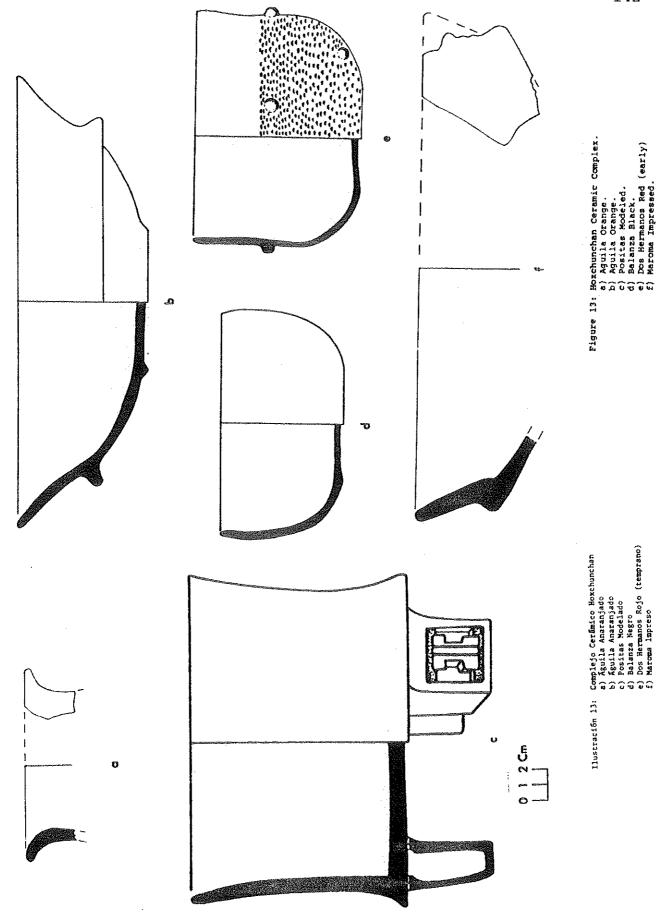


Ilustración 12: Complejos Cerámicos Yaxcheel y Hoxchunchan
a) Quintal sin Engobe (temprano)
b) Quintal sin Engobe (temprano)
c) Triunío Estriado
d) Triunío Estriado
e) Quintal sin Engobe (interior ennegrecido)
f) Quintal sin Engobe (tardío)
g) Quintal sin Engobe (terdío)
h) Quintal sin Engobe (temprano)
1) Candelario Aplicado

Pigure 12: Yaxcheel and Hoxchunchan Ceramic Complexes.

a) Quintal Unslipped (early).
b) Quintal Unslipped (early).
c) Triunfo Striated.
d) Triunfo Striated.
e) Quintal Unslipped (blackened interior).
f) Quintal Unslipped (late).
g) Quintal Unslipped (late).
h) Quintal Unslipped (early).
i) Candelario Apppliqued.



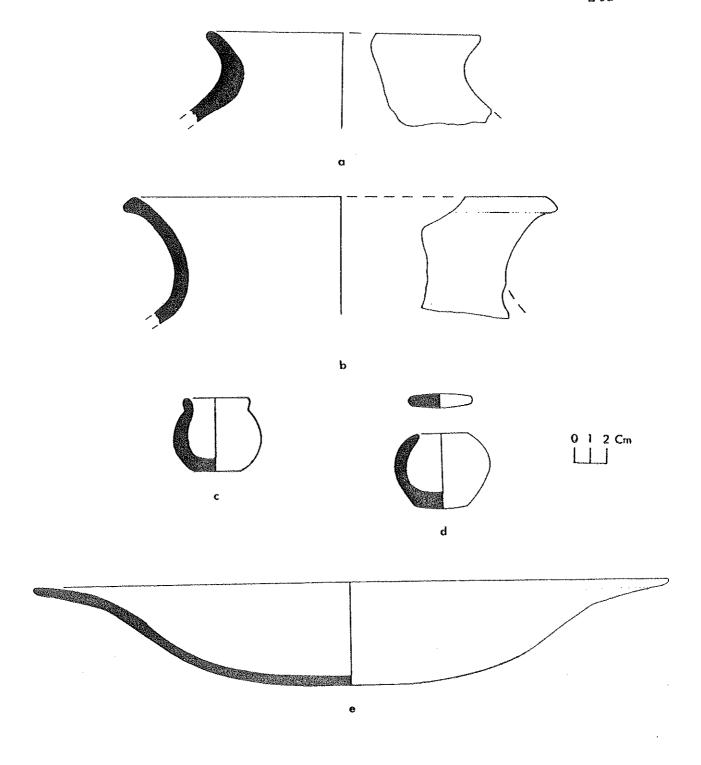
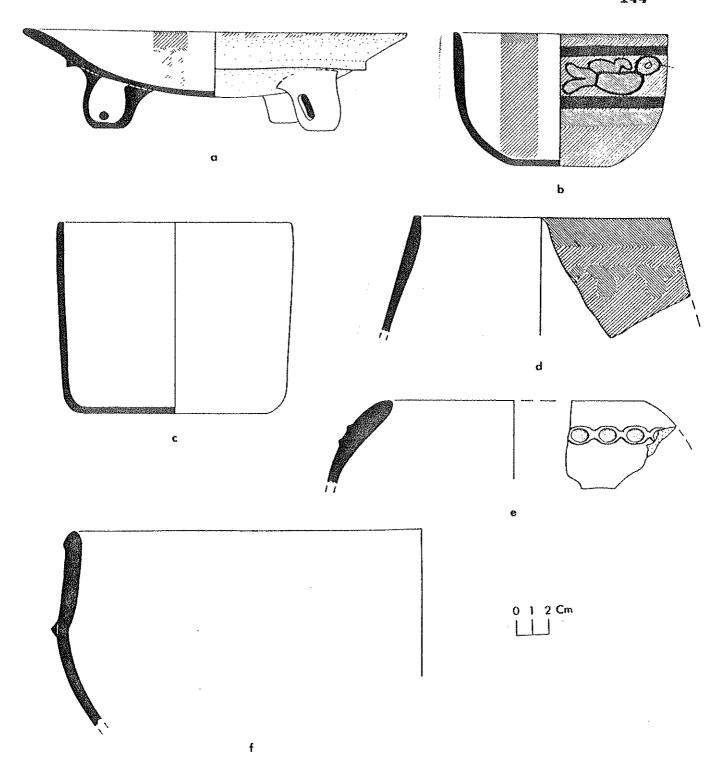


Ilustración 14: Complejo Cerámico Pakoc a) Cambio sin Engobe b) Cambio sin Engobe c) Cambio sin Engobe d) Ucum sin Engobe e) Chilonche sin Engobe

Figure 14: Pakoc Ceramic Complex.

a) Cambio Unslipped.
b) Cambio Unslipped.
c) Cambio Unslipped.
d) Ucum Unslipped.
e) Chilonche Unslipped.



11ustración 15: Complejo Cerámico Pakoc
a) Saxche Anaranjado Polícromo
b) Saxche Anaranjado Polícromo
c) Molino Negro
d) Desquite Rojo sobre Anaranjado
e) Chaquiste Impreso
f) Subin Rojo

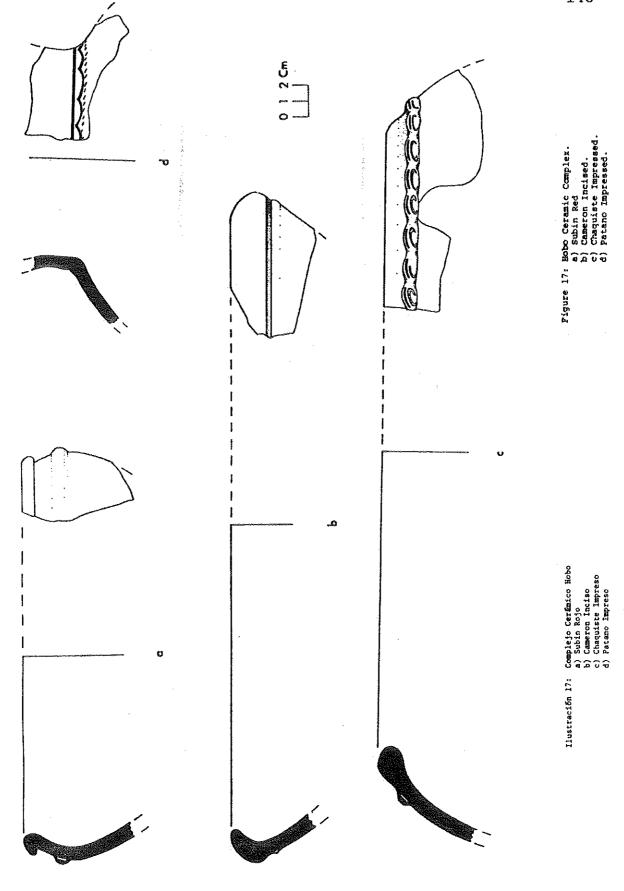
Figure 15: Pakoc Ceramic Complex.

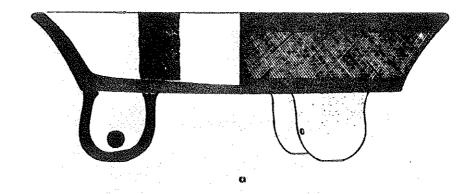
a) Saxche Orange Polychrome.
b) Saxche Orange Polychrome.
c) Molino Black.
d) Desquite Red-on-Orange.
e) Chaquiste Impressed.
f) Subin Red.





Ilustración 16: Complejo Cerámico Pakoc a) Bejucal Pardo sobre Ante







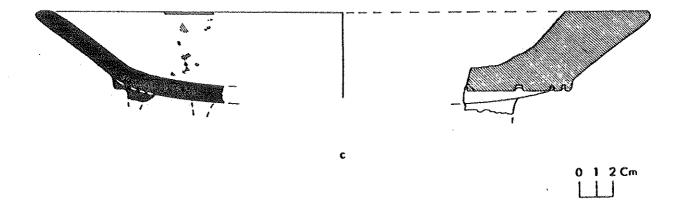
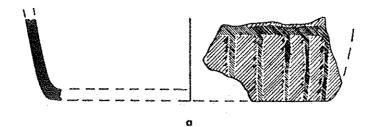
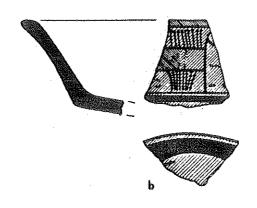
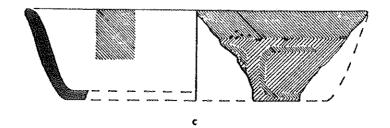


Ilustración 18: Complejo Cerámico Hobo a) Jato Negro sobre Gris b) Chumeru Polícromo c) Simaron Rojo mobre Anaranjado

Pigure 18: Hobo Ceramic Complex.
a) Jato Black-on-Gray.
b) Chumeru Polychrome.
c) Simaron Red-on-Orange.







0 1 2 Cm

- Ilustración 19: Complejo Cerámico Hobo
 a) Palmar Amaranjado Polícromo y "multipincelade"
 b) Palmar Amaranjado Polícromo
 c) Simaron Rojo sobre Amaranjado

- Figure 19: Hobo Ceramic Complex.

 a) Palmar Orange Polychrome and "multistroke."
 b) Palmar Orange Polychrome.
 c) Palmar Orange Polychrome.

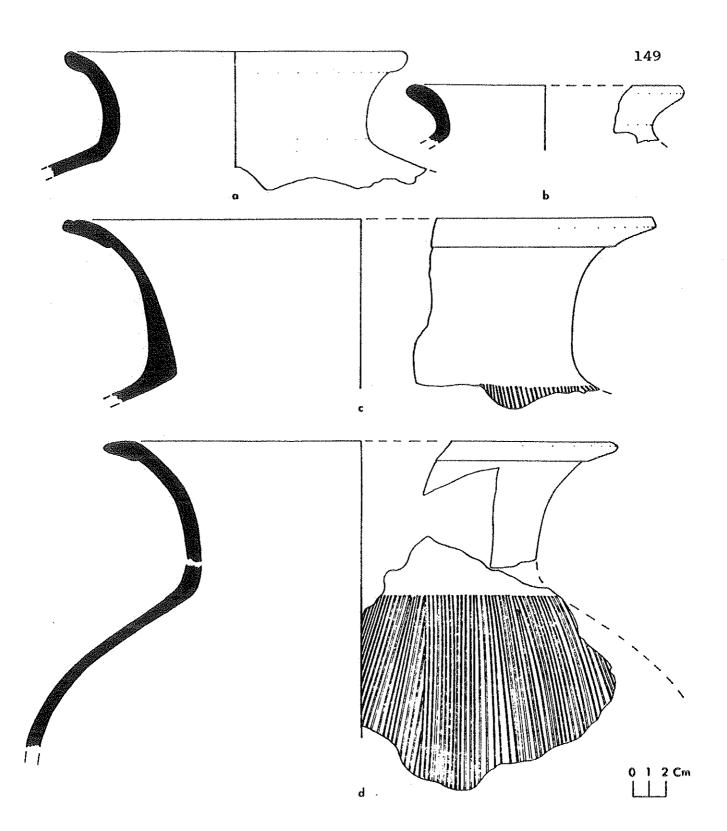


Ilustración 20: Complejo Cerámico Hobo a) Cambio sin Engobe b) Cambio sin Engobe c) Encanto Estriado d) Encanto Estriado

Figure 28; Hobo Ceramic Complex.

a) Cambio Unalipped.
b) Cambio Unalipped.
c) Encanto Striated.
d) Encanto Striated.

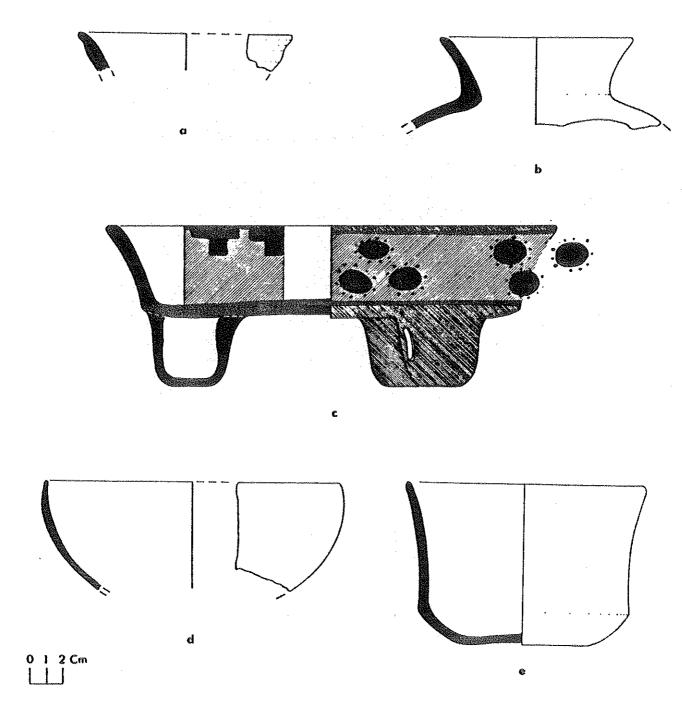
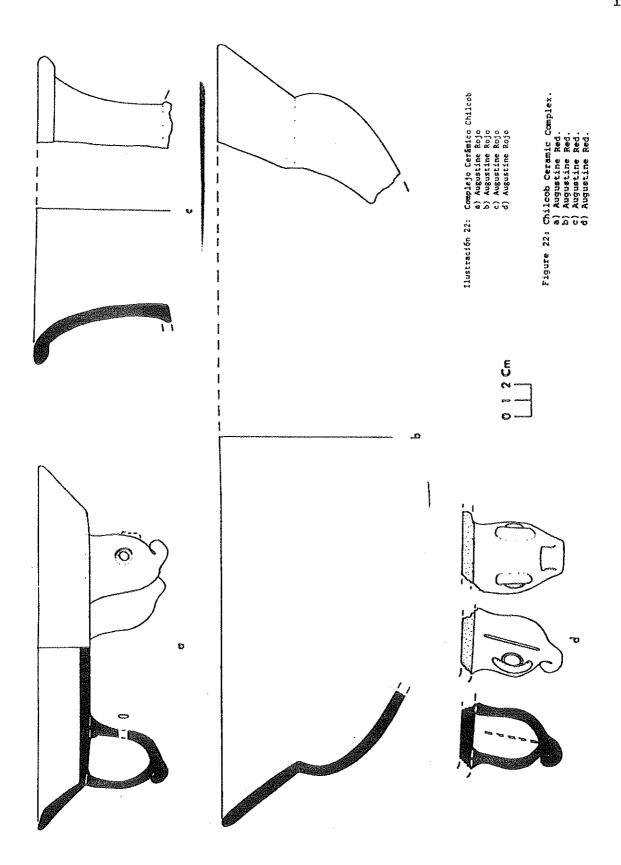
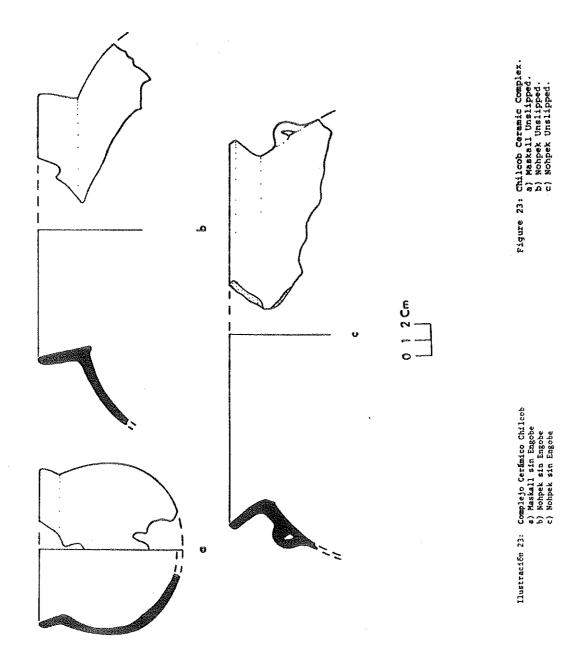
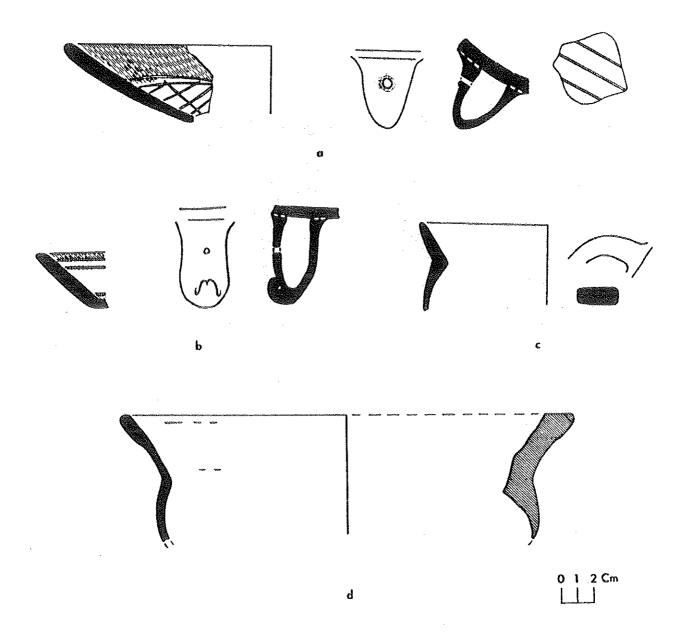


Ilustración 21: Complejo Cerámico Hobo a) Nanzal Rojo b) Tinaja Rojo c) Lombriz Anaranjado Polícromo d) Altar Grupo Fino Anaranjado e) Kik Rojo

Figure 21: Hobo Ceramic Complex.
a) Nanzal Red.
b) Tinaja Red.
c) Lombriz Orange Polychrome.
d) Alter Group Fine Orange.
e) Kik Red.







1¢ustración 24: Complejo Cerámico Chilcob a) Trapeche Rosado b) Trapeche Rosado c) Trapeche Rosado d) Tanche Rojo

Figure 24: Chilcob Ceramic Complex.
a) Trapeche Pink.
b) Trapeche Pink.
c) Trapeche Pink.
d) Tanche Red.

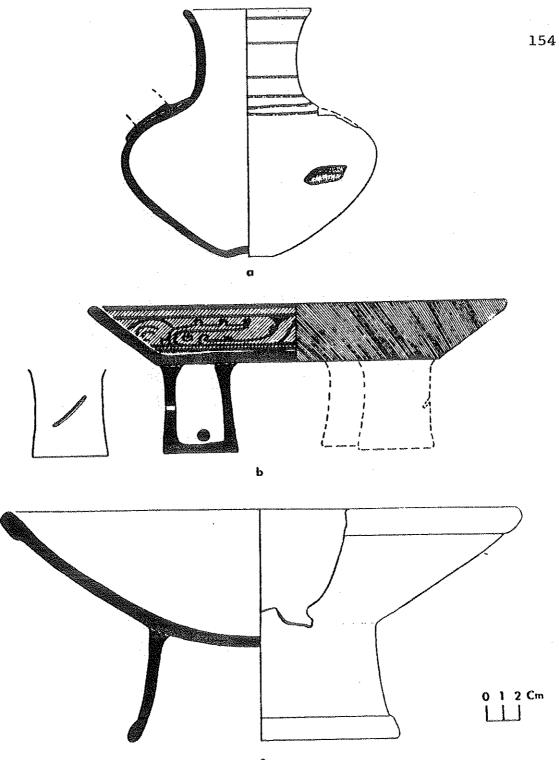
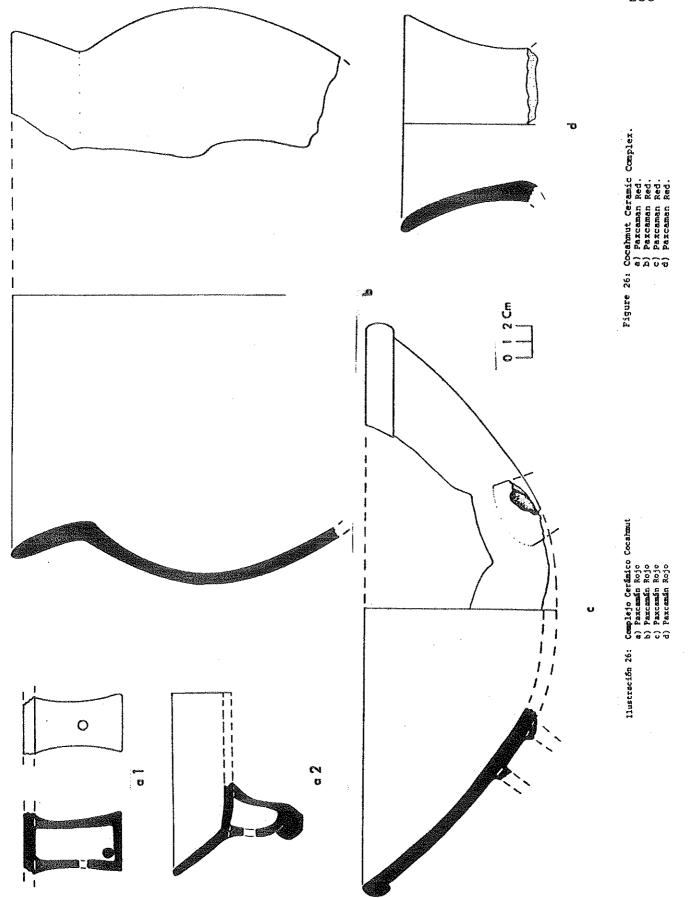
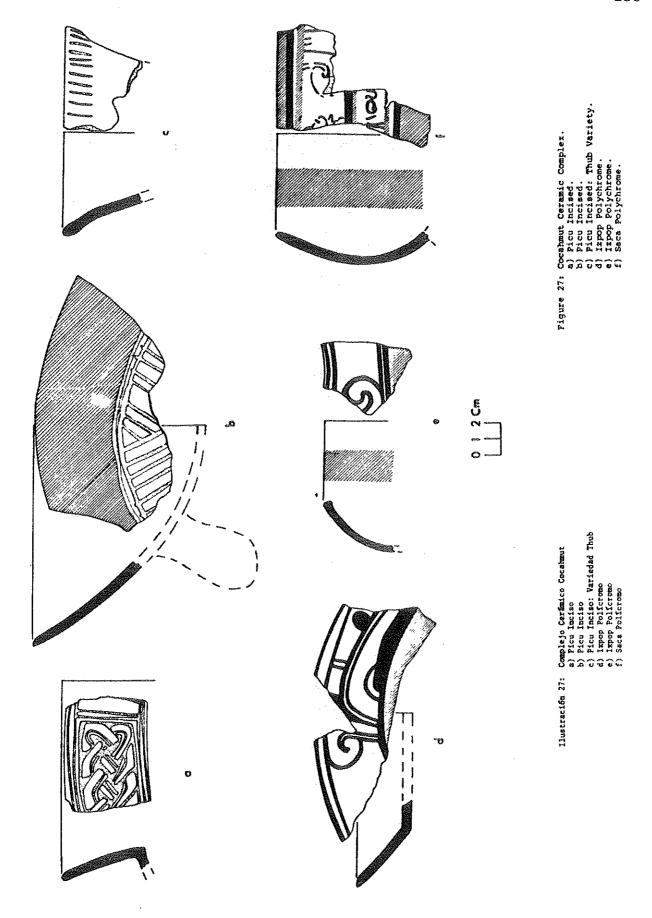


Ilustración 25: Complejo Cerámico
a) Tohil Plumbate
b) Pek Polícromo
c) Nohpek sin Engobe: Variedad Suctuk

- Figure 25: Chilcob Ceramic Complex.
 a) Tohil Plumbate.
 b) Pek Polychrome.
 c) Nohpek Unslipped: Suctuk Variety.





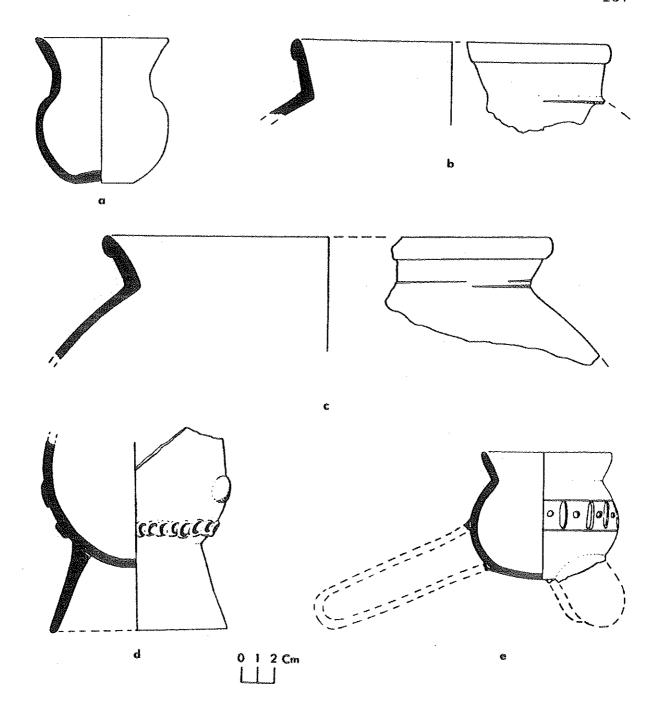


Ilustración 28: 'Complejo Cerámico Cocahmut
a) Nohpek sin Engobe
b) Nohpek sin Engobe
c) Nohpek sin Engobe
d) Puxteal Modelado
e) Chaman Modelado

- Figure 28: Cocahmut Ceramic Complex.

 a) Nohpek Unslipped.
 b) Nohpek Unslipped.
 c) Nohpek Unslipped.
 d) Puxteal Modeled.
 e) Chaman Modeled.

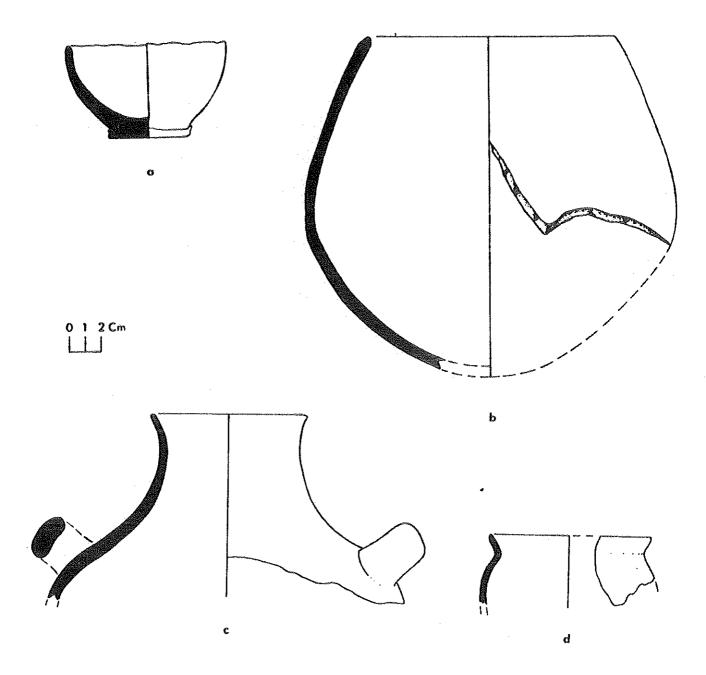


Ilustración 29: Complejo Cerámico Kauil
a) Xuchichini sin Engobe
b) Xuchichini sin Engobe
c) Chilo sin Engobe
d) Chilo sin Engobe

Figure 29: Kauil Ceramic Complex.
a) Xuchichini Unslipped.
b) Xuchichini Unslipped.
c) Chilo Unslipped.
d) Chilo Unslipped.

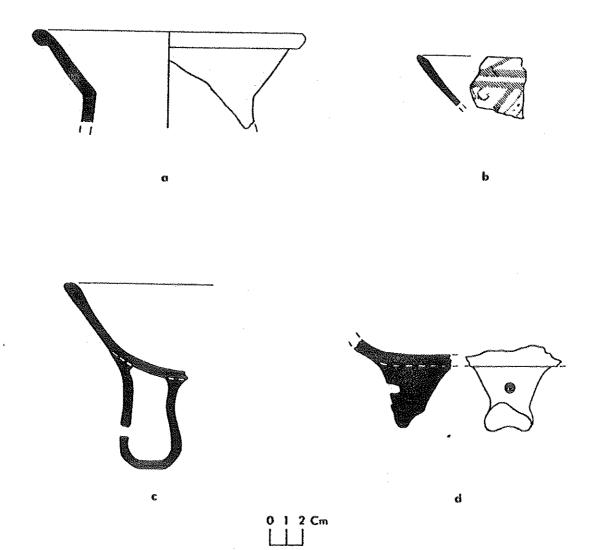


Ilustración 30: Complejo Cerámico Kauil
a) Topoxte Rojo
b) Macanche Rojo sobre Crema
c) Paxcamán Rojo (pasta arenosa)
d) Paxcamán Rojo (pasta arenosa)

Figure 30: Kauil Ceramic Complex.
a) Topoxte Red.
b) Macanche Red-on-Cream.
c) Paxcaman Red (sandy paste).
d) Paxcaman Red (sandy paste).

- ADAMS, R. E. W.
 - 1971 The Ceramics of Altar de Sacrificios, Guatemala, Papers of the Peabody Museum of American Archaeology and Ethnology, Harvard University 63(1).
- BALL, J. W.
 - 1976 Ceramic Sphere Affiliations of the Barton Ramie Ceramic Complexes, in Prehistoric Pottery Analysis and the Ceramics of Barton Ramie in the Belize Valley, Peabody Museum Memoirs 18: 323-330.
 - 1977 The Archaeological Ceramics of Becan, Campeche, Mexico, Middle American Reserach Institute Publ.
 43, Tulane University, New Orleans.
 - 1980 The Archaeological Ceramics of Chinkultic, Chiapas, Mexico, Papers of the New World Archaeological Foundation, No. 43, Provo.
- BULLARD, W. R., JR.
 - 1973 Postclassic Culture in Central Peten and Adjacent British Honduras, in Culbert, Ed., The Classic Maya Collapse, Univ. of New Mexico Press, Albuquerque, pp. 225-242.
- CASE, R.
 - 1982 Type: Variety Analysis and the Protoclassic Ceramics of El Pozito, Belize: A Critical Review, M.A. Thesis, Department of Anthropology San Diego State University, California.
- CHASE, A. F.
 - 1976 Topoxte and Tayasal: Ethnohistory in Archaeology, American Antiquity 41: 154-167.
 - 1979 Regional Development in the Tayasal Paxcaman Zone, El Peten, Guatemala: A Preliminary Statement, Ceramica de Cultura Maya 11: 86-119.
 - 1982 Con Manos Arriba: Tayasal and Archaeology, American Antiquity 47(1): 167-171.
 - 1983 A Contextual Consideration of the Tayasal Paxcaman Zone, El Peten, Guatemala, Ph.D. Dissertation, Department of Anthropology University of Pennsylvania. (December)
 - 1984 Contextual Implications of Pictorial Vases from Tayasal, Peten, in E. Benson, Ed., <u>Cuarto Mesa Redonda de Palenque</u>, Vol. 5, University of Texas Press.

- CHASE, A.F. (continued)
 - in press a Postclassic Peten Interaction Spheres: The View From Tayasal, in A. Chase and P. Rice, Eds., The Lowland Maya Postclassic: Questions and Answers, University of Texas Press.
 - in press b Time Depth of Vacuum: The 11.3.0.0.0.0.

 Correlation and the Lowland Maya Postclassic, in
 J.A. Sabloff and E.W. Andrews V, Eds., Late

 Lowland Maya Civilization: Classic to Postclassic,

 School of American Research, University of New

 Mexico Press.
 - n.d. Troubled Times: The Archaeology and Iconography of the Terminal Classic Southern Lowland Maya, Paper prepared for the Palenque 5th Round Table Conference, June 12-18, 1983, Palenque, Mexico.
- CHASE, D. Z.
 - 1982a Spatial and Temporal Variability in Postclassic Northern Belize, Ph.D. Dissertation, Department of Anthropology, University of Pennsylvania.
 - 1982b The Ikilik Ceramic Complex at Nohmul, Northern Belize, Ceramica de Cultura Maya 12: 71-81.
- CHASE, D. Z. and A. F. CHASE
 - 1982 Yucatec Influence in Terminal Classic Northern Belize, American Antiquity Vol. 47: 596-614.
- COE, W. R.
 - 1962 A Summary of Excavation and Research at Tikal, Guatemala: 1956-1961, American Antiquity 27: 479-507.
 - 1965a Tikal, Guatemala, and Emergent Maya Civilization, Science 147: 1401-1419.
 - 1965b Tikal: Ten Years of Study of a Maya Ruin in the Lowlands of Guatemala, Expedition 8(1): 5-56.
 - 1967 Tikal: A Handbook of the Ancient Maya Ruins, Philadelphia, University Museum.
- COWGILL, G. L.
 - 1963 Postclassic Period Culture in the Vicinity of Flores, Peten, Guatemala, Unpublished Ph.D. Dissertation, Harvard University.
- CULBERT, T. P.
 - 1973 Ed., The Classic Maya Collapse, University of New Mexico Press, Albuquerque.

- CULBERT, T.P. (continued)
 - n.d. <u>Tikal</u> <u>Ceramics</u>, various manuscripts on file in <u>Tikal</u> <u>Room</u>, <u>University</u> <u>Museum</u>, <u>Philadelphia</u>.
- EVANS, D. T.
 - 1973 A Preliminary Evaluation of Tooth Tartar among the Preconquest Maya at Tayasal Area, El Peten, Guatemala, American Antiquity 38: 489-493.
- FORSYTH, D.
 - 1979 An Analysis of the Prehispanic Ceramics of Edzna, Campeche, Mexico, PhD. Dissertation, University of Pennsylvania.
- GIFFORD, J. C.
 - 1965 Ceramics, in Willey et al., <u>Prehistoric Maya</u>
 Settlements in the Belize Valley, Papers of the Peabody Museum Number 54: 319-390.
 - 1976 Prehistoric Pottery Analysis and the Ceramics of Barton Ramie in the Belize Valley, Peabody Museum Memoirs, Vol. 18.
- GUTHE, C. E.
 - 1921 Report of Dr. Carl E. Guthe, <u>Carnegie Institution</u> of <u>Washington Yearbook 20: 364-368</u>, <u>Washington</u>.
 - 1922 Report on the Excavations at Tayasal, Carnegie Institution of Washington Yearbook 21: 318-319, Washington.
- JOHNSON, J.
 - in press Postclassic Maya Site Structure at Topoxte, El Peten, Guatemala, in <u>The Lowland Maya Postclassic:</u>
 Questions and Answers, edited by A. Chase and P. Rice, University of Texas Press.
- JONES, G.D., RICE, D.S. & P.M. RICE
 - 1981 The Location of Tayasal: A Reconsideration in Light of Peten Maya Ethnohistory and Archaeology, American Antiquity 46: 530-547.
- KIDDER, A. V.
 - 1950 Introduction to Smith, A. L. <u>Uaxactun</u>, <u>Guatemala</u>: <u>Excavations</u> of 1931-1937, Carnegie Institute of Washington, Pub. no. 588, Washington, D. C.
- MEANS, P. A.
 - 1917 History of the Spanish Conquest of Yucatan and of the Itzas, Papers of the Peabody Museum, Vol. 7, Harvard University, Cambridge.

- MORLEY, S. G.
 - 1937-38 The Inscriptions of Peten, Carnegie Institution of Washington, Pub. 437.
- MORLEY, S. G. and G. W. BRAINERD
 - 1956 The Ancient Maya (3rd edition), Stanford University Press, Stanford.
- PRING, D.
 - 1976 Outline of Northern Belize Ceramic Sequence, Ceramica de Cultura Maya 9: 11-52.
 - 1977 The Preclassic Ceramics of Northern Belize, Unpublished Ph.D. Dissertation, University of London.
 - 1977b Influence or Intrusion? The "Protoclassic" in the Maya Lowlands, in Social Process in Maya Prehistory: 135-165, N. Hammond, ed., Academic Press, London.
- PROSKOURIAKOFF, T.
 - 1962 Civic and Religious Structures of Mayapan, in Mayapan, Yucatan, Mexico: 87-163, Roys, et al., eds., Carnegie Institution of Washington, Publication 619.
- PULESTON, D. E. 1965 The Chultuns of Tikal, Expedition, 7(3):24-29.
- REINA, R. E.
 - 1966 A Peninsula That May Have Been an Island: Tayasal, Peten, Guatemala, Expedition 9(1):16-29, Philadelphia.
- REINA, R.E. AND R. HILL JR.

 1978 The Traditional Pottery of Guatemala, University
 of Texas Press, Austin.
- RICE, D. S. & P. M. RICE 1981 Muralla de Leon: A Lowland Maya Fortification, Journal of Field Archaeology 8(3): 271-288.
- RICE, P. M.
 - 1979a The Ceramic and Non-Ceramic Artifacts of Lakes Yaxha-Sacnab. Part I. The Ceramics. Section A. Introduction and Middle Preclassic Ceramics, Ceramic de Cultura Maya 10: 1-36, Philadelphia.

- RICE, P.M. (continued)
 - 1979b Ceramic and nonceramic artifacts of Lakes Yaxha-Sacnab, El Peten, Guatemala, Part I, The Ceramics, Section B, Postclassic Pottery from Topoxte, Ceramica de Cultura Maya et al., no. 11: 1-86, M. Kirkpatrick, ed., Philadelphia.
- RICKETSON, O.G. JR. AND E.B. RICKETSON
 - 1937 <u>Uaxactun</u>, <u>Guatemala</u>: <u>Group E 1926-1931</u>, Carnegie Institution of Washington Publication No. 477, Washington, D.C.
- ROBERTSON, R.A.
 - 1980 The Ceramics From Cerros: A Late Preclassic Site in Northern Belize, Unpublished PhD. Dissertation, Department of Anthropology, Harvard University.
- SABLOFF, J.A.
 - 1975 Ceramics, Excavations at Seibal, Department of Peten, Guatemala, Peabody Museum of Archaeology and Ethnology Memoirs 13(2), Cambridge.
- SHARER, R.J.
 - 1978 General Editor, The Prehistory of Chalchuapa, El Salvador, University of Pennsylvania Press, Philadelphia.
- SHARER, R.J. & A.F. CHASE
 - 1976 New Town Ceramic Complex: New Town Ceramic Sphere, in Prehistoric Pottery Analysis and the Ceramics of Barton Ramie in the Belize Valley, Peabody Museum Memoirs 18: 288-315.
- SHARER, R. J. & J. C. GIFFORD
 - 1970 Preclassic Ceramics from Chalchuapa, El Salvador, and Their Relationships with the Maya Lowlands, American Antiquity 35(4):441-462.
- SMITH, A. L.
 - 1950 <u>Uaxactun</u>, <u>Guatemala</u>: <u>Excavations of 1931-1937</u>, Carnegie Institution of Washington, Publication 477, Washington, D.C.
 - 1972 Excavations at Altar de Sacrificios: Architecture, Settlement, Burials, and Caches, Papers of the Peabody Museum of Archaeology and Ethnology 62(2), Cambridge.
 - 1982 Major Architecture and Caches, Excavations at Seibal, Vol. 15, No. 1, Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge.

- SMITH, R. E.
 - 1955 Ceramic Sequence at <u>Uaxactun</u>, <u>Guatemala</u>, Middle American Research Institute, <u>Tulane University</u> Pub. 20, New Orleans.
 - 1971 The Pottery of Mayapan, Papers of the Peabody Museum, Vol. 66, Harvard University.
- SMITH, R.E. & J. GIFFORD
 - 1966 Maya Ceramic Varieties, Types, and Wares at Uaxactun: Supplement to "Ceramic Sequence at Uaxactun, Guatemala," Middle American Research Institute Publication 28: 125-174, Tulane University, New Orleans.
- THOMPSON, J. E. S.
 - 1939 Excavations at San Jose, British Honduras, Carnegie Institution Pub. 506, Washington, D.C.
 - 1951 The Itza of Tayasal Peten, in <u>Homenaje</u> al <u>Doctor</u> Alfonso Caso: 389-400, Mexico.
- WILLEY, G. R.
 - 1973 Certain Aspects of the Late Classic to Postclassic Periods in the Belize Valley, in The Classic Maya Collapse: 93-106, Culbert, ed., School of American Research, University of New Mexico Press, Albuquerque.
 - 1978 Artifacts, Excavations at Seibal, Department of Peten, Guatemala, Peabody Museum of Archaeology and Ethnology 14(1), Harvard University, Cambridge.
- WILLEY, G.R., W.R. BULLARD JR., GLASS, J.B., & J.C. GIFFORD

 1965 Prehistoric Maya Settlements in Belize Valley,
 Papers of the Peabody Museum of Archaeology and
 Ethnology, Harvard University, Vol. 54, Cambridge.
- WILLEY, G.R., CULBERT, T.P. & R.E.W. ADAMS
 1967 Eds., Maya Lowland Ceramics: A Report from the
 1965 Guatemala City Conference, American Antiquity
 32:289-315.
- WILLEY, G.R., SMITH, A.L., TOURTELLOT III, G. & I. GRAHAM

 1975 Excavations at Seibal, Department of Peten,
 Guatemala: Introduction: The Site and Its Setting,
 Memoirs of the Peabody Museum of Archaeology and
 Ethnology 13(1), Harvard University, Cambridge.