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WILLIAM R. BULLARD, JR.

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Stratigraphic Excavations at San Estevan, Northern British Honduras

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Preface

The first field season of the Royal Ontario Museum's archaeological expedition to British Honduras has already been reported in Occasional Paper 8 under the title *Late Classic Finds at Baking Pot, British Honduras.* In October, 1961, Hurricane Hattie struck the country. It was in the aftermath of this disaster that the second field season was begun in February, 1962. Arrangements were made to work at a ruin close to the village of San Estevan, in the Orange Walk District of northern British Honduras. The San Estevan excavations got underway in mid-March with a crew of from eight to ten workmen and lasted until early June. The expeditionary equipment then was placed in storage and the collection from San Estevan exported for study. The analysis was performed at the Peabody Museum of Archaeology and Ethnology, Harvard University, where large comparative collections from the Maya area were available. The report was prepared during the remainder of 1962 and part of 1963. The whole specimens and type collections of sherds are deposited in the Royal Ontario Museum. Smaller type collections are also deposited with the Harvie Foundation of Calgary and the Peabody Museum of Harvard University.

As in the first season, the expedition received the generous financial support of the *Globe and Mail* of Toronto and the Harvie Foundation of Calgary. To Mr. Kenneth E. Kidd, Miss Lucile Hoskins, and Dr. Edward S. Rogers I wish to express my thanks once more for their encouragement and attention to all my requirements, and to Dr. A. D. Tushingham for his general supervision of the work and his assumption of responsibility for editing the manuscript.

The Government of British Honduras again cooperated fully with the expedition. The Archaeological Commissioner, Mr. A. H. Anderson, M.B.E., acted as liaison between the expedition and the Government. Over and above his official duties, he and Mrs. Anderson offered hospitality and many kindnesses for which my wife and I are greatly indebted.

The Belize Estate and Produce Co., Ltd., through their general manager Mr. A. M. Hore, enabled us to employ their capable representative in Orange Walk, Mr. Gerald V. Smith, as our agent. Moreover, they made available storage facilities for the expeditionary equipment after the San Estevan excavations had closed. In the village of San Estevan, Mr. Adolfo Vasquez gave us permission to excavate on his property and was instrumental in procuring housing and labour.

I am grateful to Dr. J. O. Brew, Director of the Peabody Museum of Harvard University, for making the facilities of that museum available for study of the collection and preparation of the report. I also thank Mr. Robert E. Smith and Dr. James C. Gifford for their advice in matters ceramic. The final architectural drawings and the pottery drawings are the work of Miss Avis Tulloch of Cambridge, Massachusetts.

The labour foreman at San Estevan was don Jacinto Cunil. He was capably assisted by his son, Eufracio. As this paper goes to press, I have

learned of Jacinto's death in his *milpa* at Soccotz on May 1, 1964. Jacinto was sixty-two years old. He began his long archaeological career many years ago with Dr. Thomas Gann. Later he worked for J. E. S. Thompson, W. R. and M. D. Coe, A. H. Anderson, Linton Satterthwaite and others. He worked for me in Peten, Guatemala, in 1958 and 1960 as well as at Baking Pot in 1961. Jacinto also has contributed knowledge of his native Maya culture to ethnological studies. Many of Jacinto's qualities have been described by his *compadre*, J. E. S. Thompson (*see The Rise and Fall of Maya Civilization* [University of Oklahoma Press, 1954], pp. 261–3). For my part, I owe a great debt, not only to Jacinto's skill as an excavator, but more especially to his loyalty, honesty, and persistence. One could rely upon Jacinto Cunil.

WILLIAM R. BULLARD, JR.

Cambridge, Massachusetts,
January, 1964

Introduction

GEOGRAPHICAL DESCRIPTION OF NORTHERN BRITISH HONDURAS

For the purposes of this report, northern British Honduras is considered to be that part of the country lying north of approximately the latitude of Belize city and the southern end of Hillbank Lagoon. Excluded is the strip of territory along the Guatemalan frontier west of the longitude of Blue Creek Village, which is enivronmentally and, I believe, culturally more closely tied with the Peten of Guatemala. The principal drainages included within northern British Honduras are those of the New River, the Northern River, Freshwater Creek and much of the drainage of the Rio Hondo (Fig. 1; p. 64).

The land is low-lying, maximum elevations being less than 200 feet above sea level. Topographically, it is flat to slightly rolling. There are extensive areas of swampland. Such major rivers as the New and Hondo have little gradient and are sluggish, although they are deep in places. During dry years, salt water has been known to work up the New River as far as Hillbank Lagoon, more than 75 miles from the sea. Rainfall decreases as one moves northward in the country. In most of northern British Honduras the annual fall is about 50 to 60 inches, most of it falling between May and November.

The region is underlain by limestones of eocene and miocene origin. Where these are close to the surface—and the bedrock is often very close indeed under the surface—the land supports a deciduous seasonal forest containing such trees as the mahogany, zapote, gombo-limbo, and various palms. The forest composition is generally similar to that of central and southern British Honduras and the Peten district of Guatemala, but because of the drier climate the trees tend to be lower: 50 to 70 feet high as against 70 to 100 feet in the other areas. Leached sandy sediments cover the limestone in much of the area northwest of Belize to the New River and north as far as the latitude of Orange Walk, and also in a narrow strip running just east of the Rio Hondo. These soils are responsible for great tracts of pine savannah with which are interspersed comparatively restricted areas of low broadleaf forest. The pine savannahs are unsuited for agriculture and for this reason were not occupied by the ancient Maya.

The modern population of northern British Honduras north of the town of Orange Walk is mainly of Maya Indian or Maya-Spanish origin, with Spanish the most commonly spoken language. South of Orange Walk, Negroes predominate and one most often hears "Creole," a dialect of English. The Spanish-speaking area is strongly agricultural. Corn and beans are the staple crops, as they were for the Maya of ancient times. These are grown by the ancient *milpa*, or slash-and-burn, techniques which have proved best adapted to the tropical lowland conditions. A recent

development is the great expansion of commercial sugar plantations, especially in the area between the New and Hondo Rivers. Sugar cane has been planted over much land formerly used for *milpa* crops. The inhabitants of several villages which previously were self-supporting now depend upon wage work in the cane fields and must import their staple foods from elsewhere. (For more complete information on the environment and economy of British Honduras see especially Wright *et al.* 1959.)

RESUMÉ OF ARCHAEOLOGICAL AND HISTORICAL KNOWLEDGE OF NORTHERN BRITISH HONDURAS

For some forty years, from the 1890's to the 1930's, Dr. Thomas Gann and his agents combed northern British Honduras for Maya artifacts. There are few large ruin mounds which do not show the scars of his endeavours. The results, published in a long series of reports and popular books, are the basis for the little which is known about the archaeology of the region (*see* Thompson, 1939, Appendix C, for a complete listing). For the modern researcher, the value of Gann's reports is mainly in the illustrations of pottery vessels and other artifacts. Too seldom can we glean from the text adequate information about the associations of the objects, the nature of the sites in which they occurred, and even the locations of the sites. Since Gann's time, a very little archaeological data has been recovered in the area, most of it salvage from mounds torn apart for road fill and building material. No scientific excavations had been undertaken until our work at San Estevan.

The materials collected by Gann and others indicated that northern British Honduras had been occupied at least intermittently by Maya Indians from some time before the time of Christ until the present. The earliest settlement for which there is evidence was during the Formative period. Subsequent remains relate to the Early and Late Classic periods, the late Postclassic period and the Spanish Colonial period. Maya Indians predominate in the population of this part of British Honduras today.

Representing the Formative period are several vessels illustrated by Gann from Nohmul and the area between Nohmul and the mouths of the New and Hondo Rivers (e.g., Gann 1939, Pl. 10, *1–3*). More recently Haberland (1958) has illustrated two vessels, probably Late Formative, from Luisville in the same area. He also reports the existence of a circular platform structure with inset stairway, which is said to have Mamom (Middle Formative) sherds in association.

The Holmul I, or Matzanel, pottery style seems well represented in northern British Honduras. This style was introduced to the lowland Maya area at the very end of the Formative period and overlaps into the Early Classic period. Anderson obtained a good representative collection from tombs in a large mound between Douglas and San Pablo (Anderson and Cook, 1944). The mound in question was being demolished for road fill at the time. It is believed to have been part of Gann's Nohmul. Gann also illustrates Holmul I vessels from the Nohmul area as well as from Santa

Rita (Gann, 1918, Pl. 13, *b*; 1939, Pl. 10, *4*). The Nohmul area, which apparently includes a sizable stretch of country between the New and Hondo Rivers, has also produced Early Classic and Late Classic pieces, the former seemingly better represented than the latter (e.g., Gann, 1911, Pl. 18, *a*; 1939, Pl. 2, *1*, *2–5*, Pl. 3, *2*; Pl. 4, *2*, *4*; Pl. 7).

Traces of Postclassic occupation are not uncommon in northern British Honduras. Sites of this period concentrate in the Chetumal Bay area, along the New River and Freshwater Creek, and in the lower drainage of the Rio Hondo. The most widely distributed objects are human effigy *incensarios*. Other outstanding remains are the famous wallpaintings at Santa Rita and the caches of zoömorphic figurines at that and a few other sites (*see especially* Gann, 1901, 1911, 1918, 1927; Salisbury, 1897). In addition to Santa Rita, Postclassic finds have been reported from Saltillo, Consejo, Benque Viejo (New River), San Andres, Douglas, Nohmul, Guinea Grass and Honey Camp. Most are surface finds of *incensario* fragments. They are from the summits or bases of ruin mounds which are probably of older date than the period of the *incensarios* themselves. However, Postclassic stone architectural remains were certainly present at Santa Rita and must exist at other sites. Sites of the same period are known in adjacent Quintana Roo, the best described being Ichpaatun near Ciudad Chetumal (Escalona Ramos, 1946; Sanders, 1960). The northern British Honduras Postclassic material equates culturally with the late Postclassic Tulum period of Quintana Roo (Sanders, 1960), the Mayapan period of Yucatan (Pollock *et al.*, 1962) and the period of Topoxte in central Peten (Bullard, 1961). These are the artifacts which were in use in this area at the time of the conquest by the Spanish, and some of the *incensario* and effigy forms may in fact have persisted until well into the Colonial period.

At the time of the Spanish conquest of Yucatan, northern British Honduras was part of the important and populous native province of Chetumal. Roys (1957, pp. 157–65) has assembled the available geographical knowledge concerning this province, and Chamberlain (1948) has described the history of its conquest. Its capital lay in the stretch of territory between Chetumal Bay and Lake Bacalar in Quintana Roo, just north of British Honduras and close to the modern Ciudad Chetumal. There were villages along the shore of the bay, along the New River and probably along the Rio Hondo. This is precisely the area in which the late Postclassic *incensarios* and other remains are most frequently found today. Roys estimates the southern boundary of the province of Chetumal to have been just south of Hillbank Lagoon, running to the coast between Northern River and Belize. There were also villages on the Belize River which had close contacts with the Chetumal area in early Colonial times and may have been part of the pre-Spanish native province. But on the other hand, the Belize River villages may not have been settled until the conquest.

Francisco de Montejo and his lieutenant, Alonzo Dávila, entered the Chetumal Bay area in 1528 during Montejo's unsuccessful first attempt to conquer Yucatan from the east. Dávilla returned in 1531–32 and attempted

to establish a Spanish settlement at Chetumal, but was forced by the hostility of the natives to withdraw. The province of Chetumal was finally brought to its knees in 1544–45 by a ruthless war of attrition conducted by Gaspar, Melchor, and Alonso Pacheco. The Pachecos founded the town of Salamanca de Bacalar which was to remain thereafter the administrative centre of the entire region. The Chetumal Indians rose in the Great Maya revolt of 1546–47, but Salamanca did not fall and the region was pacified without serious fighting. The cruel campaigns of the Pachecos effectively destroyed the native province. Many areas were depopulated, their inhabitants fleeing southward to remoter regions. Some undoubtedly joined the independent Itza of Peten.

Not much is known about the subsequent history of northern British Honduras and Chetumal Province. During the early colonial period the region was under at least nominal control from Salamanca de Bacalar. An early church document (Scholes *et al.*, 1936–38, Vol. 2, p. 63) gives us the names of villages which had *visita* churches in 1582. Many were probably within the borders of the modern British Honduras, but the exact locations of nearly all are unknown today. Father Bartolome de Fuensalida, in the account of his famous missionary *entrada* to Lake Peten-Itza in 1618 has left a detailed description of the journey from Salamanca de Bacalar to Tipu, which was on the upper Belize River and the jumping off point for Lake Peten Itza (Lopez Cogolludo, 1867–68, Vol. 2, Book 9). The route went by canoe from Lake Bacalar to the mouth of the Rio Hondo, then along the coast to the mouth of the New River which was then known by its Maya name "Dzuluinicob." Proceeding up the New River, the travellers passed the Indian villages of Ppuncuy, Zonail, Holaptin, and Lamayna or Lamanay, most of which are included in the 1582 church list. Of these New River villages, only Lamayna, on Hillbank Lagoon, can be accurately located today. From Hillbank Lagoon, the route led overland, probably via Paslow's Falls, to the village of Luku on the Belize River, thence upstream to Tipu. The Tipu Indians acted as intermediaries between the Spanish and the independent Itza of Peten. Tipu is on the 1582 church list and was nominally under Spanish control from Bacalar, but the Indians tended to turn apostate during the long intervals between visits by Spaniards. The exact location of Tipu and of the other Belize River villages is unknown today, although Tipu was in existence as late as 1697. From Fuensalida's description, it was probably on either the Macal or Mopan branches of the Belize River in the general vicinity of the modern town of El Cayo.

In the late 1630's the Indians in the southern part of the jurisdiction of Salamanca de Bacalar rose against the Spanish. The New River villages were apparently abandoned at this time, their inhabitants withdrawing into the jungle or going southward to join the Indians of Tipu. The courageous Father Fuensalida led a small unarmed party to try to persuade the Tipu Indians to return to the fold, but was unsuccessful, and his party barely escaped with their lives. We hear nothing more of the old Indian villages of northern British Honduras. Tipu, on the upper Belize River, returned to

Spanish control in the 1690's at the time of the conquest of the Itza of Peten (Villagutierre, 1933), but is fate thereafter is unknown.

Lamayna or Lamanay is the only one of the old New River villages whose site has been identified (Roys, 1957, p. 163). It is Indian Church at the northern end of Hillbank Lagoon. The masonry walls of the church still stand, rising as high as 4 m. in places. The plan is that of a typical early colonial T-shaped *ramada* church. The masonry portion consisted of the chancel with sacristy or choir rooms opening to north and south. The rest of the T-plan was formed by the nave, which extended to the west. This was a thatched *ramada* of perishable materials, and thus no trace of it remains above ground. The Rev. F. de P. Castells has published a plan of the church ruin, but mistakenly thought it to have been of ancient Maya origin (1904). Gann has also referred briefly to the church building at Indian Church (1926, pp. 63–4). Two stela-like stones apparently were set up next to the church wall. One remains; the other, said to have been elaborately painted, has been removed. Just south of the church is a rectangular mound resembling in every way a low Maya substructure platform. Another mound is located just north of the church, but unlike the mound to the south, has been torn apart for its stone. There are no other ruined buildings near the church except for the foundations of a brick building erected during the nineteenth century. The houses of Lamanay were probably of perishable materials and lacked raised substructures, like the houses of the modern Maya, so that they have left no surface traces.

This is undoubtedly the church and town of Lamanay mentioned in the 1582 church list, and which Fuensalida reports as burned in 1641 (Lopez Cogolludo, 1868, Vol. 2, p. 447). Indian Church is also the site of a large mound group of greater antiquity than the sixteenth-century Lamanay. This ruin begins about a quarter of a mile north of the church ruin and stretches a considerable distance along the lagoon shore towards the entrance to the New River. There are at least seven large pyramids and an undetermined number of smaller mounds. At least one sculptured stela, badly weathered and seemingly without hieroglyphs, is present. This ruin probably dates mainly from the Classic period, but I have picked up fragments of Postclassic *incensarios* from the surface. Several of the larger mounds have been badly damaged on their summits by treasure seekers. During the last century, Indian Church was the site of lumber camps and a sugar mill. In the 1860's it was raided by Indians from Icaiché, Quintana Roo, and British troops were stationed there for its protection. Indian Church is now completely abandoned and overgrown.

British logwood cutters were settling the coastal regions of British Honduras and working up the streams into the interior of the northern part of the future colony by the late 1600's. None of the known existing early records of British Honduras mention an indigenous Indian population (Burdon, 1931). In 1718, only twenty-one years after their conquest of the Itza, the Spanish are believed to have sent a military force from Peten to block British expansion on the Upper Belize River. It is not known whether Tipu existed at this time. Belize was attacked by the Spanish

in 1730 via the New River route from Bacalar, as well as from the sea. But despite continuing Spanish opposition, the British logwood cutters were well established by the middle of the eighteenth century along the New and Hondo Rivers and southward to the Sibun River. There seem to have been no Indian settlements on the New River at this time, and none of the place names of the early Spanish colonial period have survived. The present Maya and ladino population of northern British Honduras has moved in during the past 120 years; the majority coming as refugees from the bitter fighting and hard times caused by the War of the Castes and its aftermath the Mexican territory of Quintana Roo.

AIMS OF THE SAN ESTEVAN WORK

Our original plan had been to initiate a project at Indian Church, the old Lamanay, during 1962. But delays and upsets caused by the hurricane of October, 1961, combined with the difficulty of access to the site, made it advisable to seek more limited goals for the 1962 work. The ruins near San Estevan seemed typical of the medium-sized ceremonial centre ruins in northern British Honduras, and damage due to quarrying and other recent activity was comparatively minor. Moreover, the ruins were easily accessible, close to a good labour source, and generally so situated that work could be begun and carried out with a minimum of overhead expense.

The San Estevan excavations were restricted to what could be accomplished in one season of work. Two buildings were tested in order to determine the construction sequences and to obtain samples of pottery and other artifacts associated with the different building periods. We hoped that this data would bear on a number of archaeological problems. Since San Estevan is located on the midst of the area in which Postclassic *incensario* fragments and other remains have been found, is within the limits of the native province of Chetumal, and is on the middle reaches of the New River, long an important route of communication, we hoped especially to recover data which would bear on the later periods of Maya archaeology. Was the region abandoned at the end of the Classic period like the regions further south, and then reoccupied after an interval of time? Or was native settlement continuous from Classic times through the Postclassic period? We thought we might find enough intrustive sherds or other clues to aid in solving the still unresolved problems of Yucaten–Peten chronological correlations during the late Classic and Postclassic periods. At the least, we hoped to find out how the cultural sequence in northern British Honduras corresponded with that of central British Honduras and Peten on the one hand, and the Yucatan area on the other.

In so far as our tests were aimed at the Postclassic period, the findings were negative. We recovered not a single Postclassic sherd from the San Estevan ruin. Nor, to our surprise, did we find even an adequate sample of the Late Classic period, the period which is usually most abundantly represented in the ruins of central British Honduras and Peten. Instead, the bulk of our material pertains to the Late Formative and Early Classic periods.

Description of the San Estevan Site

The San Estevan ceremonial ruin is about two and a half km. south-southwest of the village of San Estevan and about two km. southeast of the nearest bend of the New River. The terrain in the region appears virtually level, and there is nothing which can be described as a hill. Nevertheless, there are broad gentle swells, and the ruin stands at a slightly higher elevation than the surrounding terrain on all sides except the west. To the east, the land falls away gradually to an area of swamp. To the west, there is a perceptible rise of land between the New and Hondo Rivers. From the higher San Estevan ruins, one can make out one or two mounds of the archaeological site which Dr. Gann called *Nohmul*, about 12 km. to the northwest between San Pablo and Douglas, and the range of low hills bordering the Mexican side of the Rio Hondo is visible on a clear day.

This is limestone country with comparatively thin topsoil. The area around the ruin and the lower mounds themselves have been heavily cultivated for *milpa* crops for many years, and today the orginal primary forest of sapodilla, mahogany, palms, and other limestone-loving broadleaf trees is almost entirely replaced by dense young second growth known as *uamil*. *Uamil* is much more impenetrable and difficult to work through than high forest, and our mapping was greatly facilitated by the clearing and burning for cultivation of much of the north part of the site during our working season (Pl. I and II).

The main part of the ceremonial ruin is shown in Figure 2. It covers an area about 280 m. north and south by 130 m. east and west, with the main axis oriented slightly east of north. Most of the nineteen mounds included on the map are arranged around three plazas, Plaza B being at a slightly higher elevation than Plaza C and the smaller Plaza A, where our work was centred, being higher than Plaza B. No buildings stand intact, and only the scantiest traces remain on the surface of a few mounds to denote the underlying masonry construction. The highest single mound is Structure XV, which rises more than 15 m. from its base and was probably the principal temple of the ceremonial centre. Next highest is Structure III, which in absolute elevation is only 2.5 m. lower than Structure XV, although it rises from a higher plaza level. Structure XIX, at the extreme northern end of the site, has a raised court partly surrounded by subordinate platforms and is one of the largest mounds in terms of total bulk. The long mounds, Structures V, VII, VIII, XIII, (Pl. I), and XVI, have traces of minor platforms on their flat summits and may have supported superstructures of perishable material. Stairway projections are apparent on Structures XIII and XVI. Structure XIV, actually two mounds in the centre of Plaza C, was clearly a ball-court and conforms in over-all dimensions to the other Classic period courts in the southern Maya lowlands (Pl. II). Conceivably, another ball-court was between Structures IX and X.

Approximately 150 m. west of Structure II, at the south end of the site, is another large mound accompanied by several smaller ones. Although

they form an integral part of the San Estevan ceremonial centre, we did not include them on the map because they were in very dense growth and it was impractical to cut survey lines and make the necessary clearing because of different property ownership.

We found no certain evidence of stelae or other monuments at San Estevan. However, the butt of an apparently upright stone, badly shattered by *milpa* fires, is visible in the centre of the stairway projection of Structure XVI and may have been a stela. If other monuments once existed in the plazas, it is probable that they would have been broken by the frequent *milpa* fires and likely that the fragments would have been carried away during the sporadic stone removal operations to which the site has been subjected.

Quarrying of stone from the mounds for use as road fill and in modern construction has taken place from time to time. Stone has been taken from the south end of the ball-court mounds, from the northwest corner of Structure VI, and from the sides of Structures IV, V, and VIII which front on Plaza B. Fortunately, the quarrying has not been on a large enough scale to seriously damage the interior structure of the mounds, but about 100 m. south of the ceremonial group on another landholding a complex of small mounds has been almost entirely demolished to obtain stone.

There are two probable treasure-hunter's excavations at the site. One is a trench which enters the top of the high Structure XV from the west side and has almost completely destroyed the summit. The other is a pit in the top of Structure IX. Conceivably, these are the work of Dr. Thomas Gann who worked near San Estevan around the turn of the century (Gann, 1895–97, p. 314; 1911, p. 86), but the older natives of the village believe that Gann worked in mounds closer to the river.

To the east of Plaza C and of Structure XIX is a broad depression where the limestone bedrock has been cut away. This was clearly an ancient quarry for construction material. Scattered over the area around the ceremonial centre and between it and the river are numerous low mounds and mound groups which are presumably remains of domestic houses. Some are two to three m. high, others barely break the ground surface. Many are in little court arrangements of two or three or more. Although such mounds are numerous in the vicinity of San Estevan, they do not form a compact settlement comparable to a modern town. Instead, the ceremonial centre seems to have served a rather dispersed population, as has been reported elsewhere in British Honduras and Peten (Bullard, 1960; Willey, Bullard, Glass, and Gifford, 1965).

Description of the Excavations

INTRODUCTION

We conducted excavations in two mounds, Structures I and II, which border the south and west sides respectively of Plaza A at the extreme southern end of the ceremonial centre. This part of the site was the most

feasible for excavation during 1962, since it was not about to be placed under *milpa* cultivation as was most of the northern part. We started with Structure I, which was of medium size compared with the other mounds at the site. It was somewhat longer and broader in relation to its height than either of the adjacent Structures II and III, and it was thought that the structural remains would be less damaged by erosion than in the other steeper mounds.

Most ancient Maya structures represent several building periods, often spanning, in total, long periods of time. Not only were minor additions and modifications frequent, but when a building was abandoned another might be built over it completely concealing the earlier construction. A major purpose of the work at San Estevan was to obtain a ceramic and artifact sequence in good association with such an architectural stratigraphy. Since we especially wanted information on the later occupation of the site, we devoted much effort to the final building period and intended the deeper excavations to be mainly stratigraphic tests. As the work on Structure I progressed, sherds and other artifacts in good association with the latest building period turned out to be comparatively scarce and the sherds badly weathered. Culturally more informative deposits were found deep in the mound interior, but these pertained to the earlier construction periods. When the season was well along, I decided to excavate Structure II in order to increase the sample from the late period and also to provide a check on the stratigraphy encountered within Structure I.

Before describing the architectural features found, it is desirable to add a word concerning the terminology used in this report. Ancient Maya buildings consisted basically of two parts, a *substructure* and a *superstructure*. The substructure is a raised platform with a solid fill and masonry retaining walls. It supports on its summit the superstructure, which is reached by means of a stairway. The superstructure may have one or several rooms and walls of stone masonry or of perishable material. Roofs were sometimes of masonry and corbel vaulted, of beams and mortar and flat, or thatched. In this report, features encountered in the excavation are lettered and numbered in the order in which they were found, although they are described in the order in which they were built. For example, Floor 1 was the first floor discovered in the excavation, although the latest floor built. The different building periods within a mound are termed *constructions* and are lettered. Thus, in Structure I, Construction I-A was the first building period to be uncovered and was the latest built. Construction I-C represented the third building period discovered and, as far as we know, was the earliest building period of Structure I. Should some future excavation uncover a still earlier building period beneath Structure I, it could be termed Construction I-D without requiring alteration of the nomenclature.

STRUCTURE I (Figs. 3–8; Pls. IV–XII)

Before excavation, no wall lines or other structural features were visible on the surface of Structure I. It was an oval mound with basal dimensions

a little more than 30 m. east and west and 20 m. north and south. The rounded summit was about six m. above the ground level of Plaza A. The slopes of the mound on the north, or plaza, side were more gradual than on the south side, where there was a steep drop to the lower terrain lying south of the ceremonial group.

After the mound had been cleared of all vegetation, except for a few small trees left temporarily for shade, we trenched across the centre of the summit at right angles to the long axis of the mound. The 10 to 20 cm. of dark topsoil gave way to white powdery marl and squared blocks of soft limestone. Soon we struck walls and the edge of a doorway. When the trench reached floor level across the mound, we extended the excavation and followed the floors and walls until the superstructure of Construction I-A was completely cleared of debris. At the same time, we trenched into the mound base on the north side, uncovering the edge of the latest plaza floor and steps of the main stairway rising from the plaza. A stratigraphic test pit was started through the plaza floor in order to determine the sequence of floors and the nature of the plaza fill. Eventually, this test reached a depth of about 2.5 m. below ground level, below the base of the earliest construction period discovered in Structure I. Fill continues still deeper. The surface of Plaza A is 3 m. higher than that of Plaza B and apparently this rise is entirely artificial.

We completely cleared the main stairway, Stairway 1, and then tried to follow the substructure base in a trench around the east end of the mound. This part of the excavation proved the most difficult. The mound slopes were very badly eroded, the upper parts of the substructure retaining walls had completely fallen, and we even had trouble finding the basal courses in some stretches. The late building fill of Structure I had been composed of freshly quarried marl and stone blocks and contained very few sherds or other cultural material, some parts of the mound being completely sterile. The soft and crumbly limestone blocks used in the fill and in masonry construction were little more than consolidated marl themselves. The compacted fallen debris at the base of the substructure was thus very similar in colour and consistency to the mound fill, from which it was mainly derived. In places where the substructure wall could not be found, we cut into the mound until we were certain we were in fill. In Maya ruin mounds, at least the substructure base is normally preserved by the mass of debris collapsed from above. That so little was preserved here suggests that stone may have been stripped off after abandonment of Structure I for re-use elsewhere. Hoping to find better preservation on the other side of the mound, we attempted to locate the northwest substructure corner, but met with even less success than at the northeast corner.

After the features of the latest building period, designated Construction I-A, had been recorded, we started a trench 2 m. wide through the doorways of the superstructure, and a connecting trench 3 m. wide through the centre of the stairway at plaza level. Floor 2, which we designated Construction I-B, was found and cleared within the limits of the trench, and then cut through. Below we came upon the well-preserved walls of Construction I-C which were followed to their base on Floor 3. In order

to follow out the plan of this interesting building, we widened the excavation in the centre of the mound to about 8 m., necessitating removal of a considerable amount of overburden. The substructure of Construction I-C was followed to its base in a narrow cut along its west side. Finally, we trenched under the floor of Construction I-C to below the level of the substructure base, encountering no earlier building. At the close of the work, the trench around the base of the mound and the deeper parts of the excavations into the centre were backfilled.

TEST THROUGH PLAZA FLOOR

The test pit through the floor of Plaza A at the foot of the main stairway of Construction I revealed a sequence of artificial fill deposits but did not reach sterile soil (Fig. 3; Pl. III). The earliest construction feature encountered was Plaza Floor VI which lies below the level of the base of Construction I-C. The floor surface was of stucco or packed marl and, like nearly all floors excavated at San Estevan, lacked a base of pebbles. The floor dipped very slightly towards the south and disappeared before reaching the southern edge of the test pit. The fill beneath Floor VI was built up of irregular layers of marl and small stones interspersed with lenses of dark soil. Sherd material was relatively abundant in this deposit.

Floor V was about 90 cm. higher than Floor VI. The fill separating the two was similar in composition to that below Floor VI, but it contained a much greater proportion of black refuse-laden soil than of marl. The upper 20 cm. of the deposit consisted only of black soil and pebbles and contained an especially large number of sherds. Floor V was a hard plaster floor underlain by 15 cm. of nearly sterile marl. It reaches into the mound as far as the foot of Stairway 2, which is part of Construction I-C, and the two are surely contemporary. However, we could not clearly determine a direct contact between Floor V and the stairway, and the possibility exists that there was another floor surface between Floors V and IV which we failed to identify in the field.

The various resurfacings of Plaza A represented by Floors IV through I are plastered floors laid on fills composed of freshly quarried marl. Virtually no sherds or other refuse material occured in these deposits. Floors IV and III are associated with the original base of Stairway I, Floors II and I with Stairway Ia which is an addition to Stairway I. The surface of the final plaza floor, Floor I, had weathered away except for a narrow strip abutting the stairway.

CONSTRUCTION I-C (Figs. 3–6; Pls. IV, V, VI, VII)

Construction I-C, representing the earliest building period of Structure I, is composed of two more-or-less separable parts. The major part, which was more fully investigated, is a small masonry-walled superstructure building, probably a temple, standing on a substructure not quite 2 m. high. The building opens on its north side onto a long platform oriented with its long axis east and west so that in its entirety Construction I-C

had a "T" form. The east-west platform constitutes the second part of Construction I-C. It had a stairway to the plaza on the north and it apparently supported superstructure walls of lighter construction than those of the main building. Since only a narrow strip of this platform was exposed by excavation, and since it was not completely trenched through, we do not know its complete plan nor the exact chronological relationship between the two parts of Construction I-C. However, it is probable that they were built at the same time and as a unit. We will describe first the main superstructure building and its substructure, and then the long platform on its north side. Various secondary modifications and additions which were made before final abandonment of Construction I-C will also be described.

The superstructure building has exterior dimensions of about 5 by 6 m. The main entrance was to the north, facing the plaza. The upper part of the walls had been sheared off when the later Construction I-B was built over them. The back (south) wall stood intact to a maximum height of 2.2 m. above floor level, the front wall to a height of 1.6 m. One course of a projecting exterior molding was preserved at the top of the back wall and is probably close to roof height.

The original floor, Floor 3b, was level throughout the building. It was of stucco laid directly on the substructure fill. The walls were of roughly squared blocks of limestone laid in courses. Mortar was apparently of marl, and chinking stones were used abundantly. Wall width varied from about 50 to about 80 cm. in different parts of the building. The south and west walls had central recesses on the interior sides, and the south (back) wall also had a projecting panel on the exterior. The interior of the building was divided into two rooms, Rooms 1 and 2, by a segment of wall and a masonry pier. Wall surfaces both on the exterior and interior of the building had been well plastered and painted red (Munsell Colour 7.5R 5/4 to 10R 6/4). Floor 3b and probably the later Floor 3a has been similarly painted.

On the east side of the building, an interior stairway led upward from Room 2 (Figs. 4, 5*b*). The entire northeast corner of the building had been filled to support the stairway, and there was a pronounced outward bulge of the exterior east wall at this corner. Treads and risers of the interior stairway had been painted red. Since it is very unlikely that the building had a second storey, the stairway must have led to the roof.

Windows, uncommon features of ancient Maya buildings, were present in the south and east walls (Figs. 4, 5). In addition, there was a doorway in the west wall which probably had been constructed originally as a window. The windows and the doorway had had long wooden lintels set into the masonry of the walls. The window in the south wall was in the centre of the recessed area with its lintel 1.10 m. above floor level. As first constructed, it was 45 cm. high by 85 cm. wide. Subsequently, the south half of the opening had been twice reduced in size with stones and clay so that, in its final form, the window was actually a wall niche with a small opening to the outside (Fig. 5*a*). The doorway in the west wall had

its lintel at the same height and was about the same width as the south window. It is thought to have been originally built as a window because the lintel is too low for a doorway without cutting away the floor beneath and because the exterior Stairway 3 with which it connects is clearly a secondary construction. The window in the east wall was smaller than the south window but had not been reduced in size. The sill was nearly flush with the tread of the second step of the interior stairway and its north edge was flush with the riser of the third step.

A wall feature of unknown purpose occurs in both the south and east walls of Room 2. The example in the south wall is more completely preserved (Fig. 5*a*). In the upper part of the wall and slightly to the east of the centre of the recessed area is a wall niche which exposes a short section of a long beam which had been set horizontally into the masonry interior of the wall. The niche was 35 cm. high, 20 cm. wide and 30 cm. deep. Its steeply sloping floor was coated with smooth hard plaster. Plaster also filled the space between the exposed section of beam and the back of the niche. Although the beam itself had completely rotted away, its impression in the plaster was well preserved. It had been 10 to 15 cm. in diameter and 4.2 m. long, running nearly the entire length of the south wall. The example in the east wall (Fig. 5*b*) was at approximately the same height and was similar in construction, except that the beam was shorter and its north end terminated within the niche. Perhaps these features were used to support heavy hangings of some sort, but the presence of plaster between the beams and the back of the niches would have prevented cords being wrapped around the beams.

Other wall features include a drain in the centre of the south wall, running on a slight slope from floor level to the outside of the building (Fig. 5*a*), and a small irregular cavity, in the east wall of Room 2, 60 cm. above floor level (Fig. 5*b*). The latter might have held a projecting piece of wood or stone.

Fallen sections of plaster in the debris filling the rooms provided valuable evidence concerning roof construction (Fig. 6*a*). Poles 5 to 10 cm. in diameter had been set parallel and close together. Over them were placed twilled mats which provided support for a plaster cap 15 cm. thick. The upper surface of the plaster, forming the surface of the roof itself, had been carefully smoothed and painted red like the rest of the building. Although matting and wood had decayed, the plaster preserved the cast of the matting and the contours of the wooden poles over which the matting was laid (Fig. 6*a*). Very probably, the poles had been supported by larger beams, but no evidence of these remained.

The substructure facing of Construction I-C was excavated only along part of the west side of the building (Fig. 4; Pl. VII). It was sloping with apron and basal moldings and rose 1.9 m. above a plaza floor which corresponded in level and was almost certainly continuous with Plaza Floor V on the north side of Construction I-C. This floor did not run under the substructure. Where protected by the fill of Stairway 3, a secondary construction, the substructure facing was in excellent condition. It had been

covered with smooth plaster and painted red, with the exception of an unpainted band about 40 cm. wide in the recess just above the basal molding. The edges of the band were carelessly executed and drops of paint had run down over the unpainted surface. The plaza floor abutting the substructure base was also painted red. The fill of the substructure, penetrated by a trench beneath the centre of Rooms 1 and 2, was composed of lenses of pebbles, marl, and black refuse-laden soil. It may have been laid up in sections, since a rough retaining wall was found. In composition, the fill was similar to the fill beneath Plaza Floor V, and these presumably contemporary deposits contained comparatively high concentrations of sherds.

Modifications to Construction I-C include the following. The recess in the south wall of Room 2 was walled up so that the window and other features of that wall were concealed. The entire superstructure floor was resurfaced and raised about 7 cm. (Floor 3a). The doorway in the west wall was made at this time. It has been mentioned above that this doorway probably was at first a window similar to the window in the south wall. Because its wooden lintel was placed too low—1.10 m. above floor level—for convenient use as a doorway, a slot-like section of floor was cut away beneath so that one stepped down 40 cm. before passing under the lintel. On the exterior, Stairway 3 was built up against the substructure to connect the doorway with plaza level.

As described in the beginning of this section, the superstructure building opens onto a platform whose long axis runs east and west so that in its entirety Construction I-C was more-or-less "T"-shaped. The length of the platform was not determined; its width was about 5 m. On its north side, a main stairway (Stairway 2) led to plaza level. The steps were each composed of two courses of limestone blocks and resembled in construction the steps of the superimposed Stairway 1. The surface of the platform is slightly lower than that of the main superstructure building, but it will be noted on Figure 3 that both Floors 3b and 3a run without break over the step. The fill behind the steps appears homogeneous with the fill beneath Rooms 1 and 2, and it is likely that the two parts of Construction C were built together as a unit.

Near the south edge of the platform, running just north of the front wall of Room 1, is a row of postholes which cut through the plaster floor surface and are spaced 2.5 to 3.5 m. apart. Connecting with the line of posts and in alignment with the north wall of Room 1 is a masonry wall which is broken by doorways on each side (Pl. vii). The masonry wall is clearly a secondary construction, but the posts were probably original features of the platform. Probably postholes and walls exist on the other sides of the platform but were missed by our trench. Presumably the posts supported a roof of light construction, perhaps thatched. The sides at first may have been open or walled with light materials such as poles and plaster. Later, the masonry walls were added. In the west side of the excavation, where we probed deeper, we found steps leading down against the side of the apron molding of the substructure so as to connect the doorway in the east-west platform with Stairway 3. The installation of

the masonry walls and these steps must have occurred at the same time as the laying of Floor 3a, the closing of the recess in Room 2, and the making of the doorway and construction of Stairway 3.

CONSTRUCTION I-B (Figs. 3, 7; Pl. VIII)

No attempt was made to work out the plan of Construction I-B, and we have knowledge only of those features which were directly superimposed over the excavated part of Construction I-C. These include part of the superstructure floor of Construction I-B, Floor 2b, and a minor secondary modification represented by Floor 2a (Fig. 3).

Construction I-B represents a considerable enlargement of Structure I-C. The roof and upper parts of the walls of the older Construction I-B were torn out and the debris used to help fill the rooms. Varying materials were used in the fill packed around Construction I-C. Part of the fill was of freshly quarried marl devoid of cultural refuse. Other parts were of stones, and there were occasional lenses of refuse containing ash, bits of charcoal and comparatively large and well-preserved sherds. We found sherds belonging to the same vessel in different parts of the fill, indicating that the enlargement of the mound took place quite rapidly. A barrel-shaped cache vessel with a lid (Fig. 16, *a*) was found in the fill of Construction I-B near the northeast corner of Room 1 of Construction I-C and 50 cm. below Floor 2b. It was designated Cache 2. This vessel was probably placed in position when the later Construction I-A was built and was inserted down through Floor 2b from above.

Floor 2b has three main levels ascending from north to south. In addition, there is apparently a step between the second and third levels. The three levels probably correspond with three superstructure rooms, the back rooms being higher than the front rooms as in the overlying Construction I-A. The third or highest level of Floor 2b had burned patches on its surface. A secondary modification was the raising of the third level (Floor 2a) and the enlargement of the step between the second and third levels. The surface of Floor 2a was heavily burned and covered by a thin layer of wood ash. We found no traces of masonry superstructure walls within the excavated strip of Construction I-B. They may have been missed by the excavation, superstructure walls may have been of perishable materials, or wall stones may have been torn out upon abandonment of Construction I-B.

The north edge of Floor 2b seems to be cut by the treads of Stairway 1, which is part of Construction I-A. This suggests that the stairway associated with Floor 2b had been torn out upon abandonment. However, the sequence of construction uncovered by our trench through the stairway reveals nothing to support this interpretation. An alternate possibility is that Floor 2b originally connected with the top of the sixth step of Stairway 1 and that the connection was broken when Construction I-A was built and additional steps installed. If so, the original lower two steps of the stairway which connect with Plaza Floors IV and III were probably features of Construction I-B. Supporting this possibility is the fact that

these features directly overlie the stairway and plaza floor associated with the earlier Construction I-C.

While searching for traces of the northwest corner of the substructure of Construction I-A, we struck the buried corner of an earlier substructure (Fig. 7). Because of the relative elevation of its base and top we suspect that it belongs to Construction I-B but do not have sufficient information to prove the association. The substructure facing slopes inward slightly and is ornamented with apron and basal moldings similar to those of Construction I-C. The surfaces are well plastered but without evidence of paint.

CONSTRUCTION I-A (Figs. 3, 8; Pls. IX, X, XI, XII)

Construction I-A represents the final building period of Structure I. It was more completely excavated than Constructions I-B and I-C. Upon the abandonment of Construction I-B, the substructure had been raised about 70 cm. and a superstructure building with masonry walls erected on top. The fill of the enlargement was composed of marl and blocks of soft limestone. It was almost completely lacking in potsherds and other refuse material. The overall east-west length of Construction I-A was about 27.5 m., the width about 15 m., and the height of the floor of the back room of the superstructure was 4.7 m. above the final plaza floor.

Excepting the stairway, the substructure was in very poor condition. The retaining walls were almost completely broken down, and only with difficulty could we trace the substructure base around the east end of the mound. The plan, as nearly as we could make out, is shown in Figure 8. It will be noted that the front room of the superstructure, Room 1, is longer than the back room, Room 2. This difference is reflected in the greater length of the front (north) part of the substructure over the back part. The northeast corner has a series of insets. The northwest corner surely had the same plan, but we were unable to follow the wall base there. The most intact part of the substructure retaining wall was at the extreme east end of the building where it had been covered and protected by the marl fill of a low secondary platform. The wall stones had exposed faces measuring about 40 by 20 cm. and were about 20 cm. deep. The wall rose with a slight inward batter and had a basal molding rising 80 cm. above plaza level. The maximum preserved height was 1.5 m., and nothing remained to show whether an apron molding had been present or whether the substructure had been of one or of two terraces. There were no surviving traces of wall plaster. Our difficulties in tracing the substructure retaining walls suggest that re-useable stone may have been stripped off after final abandonment of Structure I. Stones were also missing from parts of lower treads of the main stairway where collapse would seem a less likely possibility than ancient stone-robbing.

The main stairway, Stairway 1, was 15 m. wide and ran across most of the north side of the substructure. Each step was composed of two

courses of limestone blocks, the risers being 30 to 40 cm. high and the treads about 50 cm. deep. The three protruding lower steps, designated Stairway Ia, represent a secondary addition. Originally, the stairway descended directly to plaza level, connecting with Plaza Floors IV and III. It was mentioned previously that Stairway 1 may at first have risen only as high as the top of the sixth riser of the original stairway so as to connect with Floor 2b, and that it was part of Construction I-B. Thus, the uppermost steps and Stairway 1a may represent additions made at the time Construction I-A was built. The west halves of the fourth to eighth steps (of the stairway in its final form) were set slightly forward of the east halves, resulting in a pronounced curve or bulge in the centre portion of these steps. The ninth step runs perfectly straight and may actually be part of the building platform of the superstructure. A short step was placed between the curving eighth and the straight ninth steps. From the tread of the ninth step there is a further rise of 75 cm. to the level of Floor 1. This is greater than the height of the other steps of the stairway. It is probable that the arrangement at the head of the stairway was as restored in Figure 3, but erosion has removed all traces except for the horizontal location of the riser of the tenth step.

The superstructure building had masonry walls, a hard plaster floor (Floor 1), and was divided into two long narrow rooms. The end walls of both rooms were nearly entirely destroyed by erosion and the front and back walls were also badly fallen. The maximum standing wall height was 1.4 m. on the median wall dividing the rooms. The room fill contained very few potsherds or other artifacts. It was composed of fallen wall stones and marl, the latter probably deriving from roof and wall plaster and from crumbling of the soft limestone building blocks.

Walls were 1.0 to 1.1 m. thick and faced with rectangular blocks of limestone laid in courses. There was no standard stone size, but an average stone was about 20 cm. wide, 40 to 50 cm. long, and 20 to 30 cm. deep. The wall interiors, behind the facings, were of marl and small unshaped stones. Wall surfaces had been covered with a plaster coating 2 to 3 cm. thick. The few patches of plaster which still adhered to the walls bore no surviving traces of paint. The wall plaster curved out at the wall bases to become continuous with the surface of Floor 1.

Room 1, the front room, was 2.3 m. wide and 15.5 m. long. It was entered from Stairway 1 by three doorways of which the central was the widest. At the west end of the room, the floor terminated against a plastered step about 30 cm. high. Since the walls at the ends of the room had fallen, it was not possible to determine what the step represented. There may have been a raised bench at the end of the room, or another smaller adjoining room somewhat similar to Room 3 of Structure II. The east end of Room 1 had completely fallen away, but a similar arrangement probably existed there. The median wall of the building had been set slightly back from the edge of the platform forming the higher floor of Room 2 so as to form a narrow ledge or offset in the south wall of Room 1.

Room 2 was smaller than Room 1, 13.5 m. long and 1.4 m. wide. Its floor was 75 cm. above that of Room 1, from which it was entered by a single doorway and a step which protruded into Room 1. A ledge or offset 28 cm. wide and 40 cm. above floor level ran the length of the back wall. There were burned patches in the central part of the floor in line with the doorway, perhaps caused by the burning of copal incense or other offerings. However, no pottery vessels or other artifacts were found, and the floors of both rooms were notably clean.

Although no direct evidence was found concerning the construction of the roof, it was probably of beam and mortar rather than vaulted. No specialized vault stones were present, nor did the debris seem sufficient for collapsed vaults. Moreover, the walls themselves, composed of soft stone and marl, seemed structurally too weak to have carried the heavy weight of masonry required by corbelled vaults.

Although the entire central portion of Construction I-A was removed by excavation, we came across only two possible caches and one burial. Burial 1. Cache 1 lay in the fill directly beneath the doorway of Room 2. It consisted of small fragments of shell (*ostrea*) and sea-urchin tests. They were scattered over an area about one square m. in extent. The fragments, of marine origin, may have been thrown in the fill as a purposeful deposit, but it is also conceivable that they are fossils deriving from the limestone itself and that their presence here is fortuitous. Cache 2 was located below Floor 2b (part of Construction I-B) near the northeast corner of the more deeply buried Construction I-C. It consists merely of a barrel-shaped cache vessel with a lid (Fig. 16, *a*). No contents survive. The vessel is nearly identical to one in Burial 1. It was probably deposited when Construction I-A was built, its pit going deep enough to penetrate Floor 2b.

Burial I was the only burial found in our excavations at San Estevan. It lay in a stone cist at the bottom of a pit beneath the protruding step between Rooms 1 and 2 (Fig. 3; Pls. XI, XII). The grave had been dug down from the floor level of Room 1 before the floor had been laid and the step installed. Thus it is contemporary with the building of Construction I-A. The pit was roughly rectangular, 60 cm. wide by 2 m. long, and was dug to a depth of 1.5 m., cutting through the floor of Construction I-B into the fill of Construction I-C. The sides of the bottom of the pit were lined with slabs set on edge. These were capped with two layers of slabs placed horizontally so as to form a cist with an interior height of 40 cm. The extra-cranial skeleton was poorly preserved, and we could only determine that the body had been placed extended, on its back, with head to the east. Third molars were present and the sutures of the skull were well closed, denoting that the burial was that of an adult. Further observations were precluded by the condition of the bones. Several teeth had jade insets. A small jade pendant (Fig. 18, *f*) was found under the head and could originally have been at the neck or in the mouth. A basal-flange bowl was inverted over the head (Fig. 16, *d*), two hemispherical bowls were set on edge near the head (Fig. 16, *b*, *c*), and a barrel-shaped cache vessel with a lid was placed at the left of the legs. The latter was badly

smashed by slumping of the lower tier of capstones of the cist. It was nearly identical to the vessel designated Cache 2 (Fig. 16, *a*).

CERAMIC ASSOCIATIONS AND DATING

The dating of the building periods is determined by their association with the ceramic complexes. These complexes are described in detail in the pottery chapter of this report. From early to late they are:

(1) Vasquez—Late Formative, probably contemporary with Chicanel.

(2) Barklog—early Early Classic, contemporary with Tzakol 1–2.

(3) Trial Farm—late Early Classic and Late Classic contemporary with Tzakol 3 to Tepeu 2 (?).

Plaza Floor VI

Plaza Floor VI is the earliest evidence of finished construction found in our excavations. The sherds in the fill below this floor were exclusively of the Vasquez complex. No typological differences could be determined between the pottery types below this floor and between it and Floor V. Floor VI is probably contemporary with the Vasquez complex and, consequently, Late Formative in age.

Construction I-C

Two cuts were made into the substructure fill of Construction I-C. One was a trench beneath Rooms 1 and 2; the other penetrated behind Stairway 2. Since Plaza Floor V is associated with Construction I-C, the material from below this floor is also of aid in dating the building. From all of these deposits the sherds were overwhelmingly of the Vasquez complex. However, in the two cuts in the substructure fill there were a very few vessel body sherds, both of the slipped and unslipped categories, which corresponded in ware characteristics to types of the Barklog complex.

Construction I-C was buried while still in good condition. Thus, no great length of time could have elapsed between its final abandonment and its incorporation into the substructure of Construction I-B. The fill encasing I-C included refuse lenses with well-preserved, apparently freshly broken sherds of the Barklog complex. The number of earlier Vasquez sherds mixed with them was negligible.

An interpretation based on the numerical predominance of Vasquez sherds in the substructure would call for a Late Formative dating. But I think a more reasonable explanation of the facts given above is that Construction I-C was built at the beginning of the time of the Barklog complex, that is, at the very beginning of the Early Classic period. Refuse from the older Vasquez occupation of the site was used as construction fill, but a very few contemporary Barklog sherds were mixed with it.

Construction I-B

The sherds from the fill of Construction I-B were almost all of Barklog complex types, the few exceptions being of the earlier Vasquez complex. Construction I-B appears to have been erected immediately after the abandonment of Construction I-C, which is thought to be of very Early Classic date.

Construction I-B was succeeded by I-A which also is Early Classic, although late in the period. Thus I-B's position in time is well bracketed and it can be placed more or less in the middle of the Early Classic period.

Construction I-A

No form sherds were found in the almost sterile marl fill of Construction I-A. The building date rests on the pottery associated with Burial 1, which was placed in the mound when I-A was being completed, and also on sherds found in the room debris and in other post-construction deposits. All of this pottery is placed in the Trial Farm complex. The Trial Farm complex probably lasted into the Late Classic period, but it must have begun in the latter part of the Early Classic. The vessels from Burial 1 conform most closely to Early Classic types, and one of the most ubiquitous forms in the post-construction debris is the basal-flange bowl, a hallmark of the Early Classic period. So, Construction I-A probably was built before the end of that period.

In sum, the ceramic evidence indicates that the three building periods of Structure I are all Early Classic (ca. A.D. 300 to A.D. 600 by the Goodman-Thompson correlation of the Maya and Christian calendars). Although the large number of Late Formative sherds in the deeper deposits shows that there was a major occupation of the site at that time, the only construction of the Late Formative period identified was Plaza Floor VI.

STRUCTURE II (Figs. 9, 10)

Structure II was a steep-sided pyramidal mound 7 m. high and about 20 m. across both the east-west and north-south axes. The only structural elements visible on the surface before excavation were a few courses of the exterior surface of the back wall of the superstructure (Pl. XIII).

Excavation started at the summit. We immediately struck the inner face of the back wall and followed it down to the floor level of Room 2 of Construction II-A. The remainder of the intact portion of the superstructure was then cleared and, at the same time, we ran a trench 3 m. wide up the east slope of the mound, exposing steps of the main stairway. Erosion had destroyed much of the superstructure, and the stairway was in much worse condition than the stairway of Structure I. Thus it seemed not worth while to attempt further investigation of the substructure.

After recording Construction II-A, we laid out a trench 2 m. wide in order to test the fill beneath the floor. The trench started at the base of the west wall of Room 2 and extended 8 m. eastward through the doorways of Rooms 2 and 1. The excavation was carried downwards until it struck Construction II-B, whose features within the confines of the trench were cleared. We found that the east end of Construction II-B had been torn out when II-A was built. At the west end of the trench, we followed the substructure retaining wall of Construction II-B down to about 2 m. from its top, which was as far as the limited working space would allow. Excavation of this wall to its base would have required considerable extension of the excavation and removal of up to 6 m. of

overburden. The final operation in Structure II was a test under the floor of II-B in order to obtain a sherd sample, after which the deeper parts of the trench were backfilled.

CONSTRUCTION II-B (Figs. 9, 10 *b*; Pl. XIV)

The limited exposure of the 2 m. wide test trench was insufficient to explain the plan of Construction II-B or the intricate superstructure features present (Fig. 10*b*).

The substructure rose an estimated 3 m. above the original plaza level. The fill, penetrated by a cut through Floor 3, was of dark gray clay containing small stones and refuse. It produced a good sample of well-preserved sherds. The substructure retaining wall on the back (west) side of the building sloped inward slightly from bottom to top. At its top was an offset and a further rise of 50 cm. to the level of Floor 3. In the south half of the trench, the substructure retaining wall protruded some 20 cm. further west than in the north half. If we assume that the protruding section was part of a panel in the centre of the back side of the building, then the centre line of Construction II-B must lie to the south of the test trench and, therefore, south of the centre line of the superimposed Construction II-A. The retaining wall was of limestone blocks measuring about 40 by 20 cm. on the exposed face and extending 40 to 50 cm. into the hearting. No evidence of plaster remained on this wall.

Floor 3, a plaster floor without a pebble base, has been twice resurfaced. Along part of its west edge was a single course of stones about 15 cm. high, perhaps a footing for a wall of perishable material. Floor 4 is 30 cm. higher than Floor 3, with which it connects by a narrow doorway. Rising from Floor 4 is a series of narrow walls of different heights. The higher of these, at least, appear to have been sheared off when Construction II-A was built. Floor 5, of which only a small portion was excavated, is 10 cm. lower than Floor 4 and connected with it by a step. To the east of Floor 4, the construction had been torn away completely, probably when Construction II-A was built. At the edge of the break in the south side of the trench was a narrow remnant of floor which was at the same elevation as Floor 3. The superstructure walls had been plastered, and both walls and floors had been painted red. A deposit of ashes and refuse covered Floor 3 to the north of the doorway connecting with Floor 4. A similar deposit lay on the narrow terrace between Floor 3 and the edge of the substructure retaining wall.

CONSTRUCTION II-A (Figs. 9, 10 *a*; Pls. XV, XVI)

The only excavated part of the substructure of Construction II-A was a 3 m. wide strip up the stairway on the east side (Fig. 10 *a*). No steps were complete across this strip, the lower ones being in particularly poor condition, and it is possible that stones were removed after abandonment for re-use elsewhere. Steps were of similar dimensions to those of Stairway 1 of Structure I. Between the third and fourth steps above plaza level

there seems to have been a platform or landing about 1.8 m. wide, similar to but wider than the platform formed by the addition of Stairway 1a to Stairway 1 of Structure I.

The substructure fill of Construction II-A was of marl and blocks of limestone. Some stones had one plastered and painted surface and evidently had been robbed from the superstructure of Construction II-B which the fill encased.

Erosion of the mound slopes had cut away much of the superstructure. Of the three rooms for which evidence remained, only Room 2 had a completely preserved floor area. The front room, Room 1, was 1.9 m. wide and of undetermined length. It was entered from the stairway by a doorway 3.4 m. wide. As in Construction I-A of Structure I, the floor of the back room, Room 2, was 75 cm. higher than the floor of Room 1 and was reached by a step which protruded into Room 1. Room 2 was 7.3 m. long and 2.2 m. wide. Part of its back (west) wall was standing to a height of 2.2 m. above floor level. A narrow ledge 15 cm. wide ran the length of this wall 40 cm. above floor level. It was narrower but at the same height as the similar ledge in the back wall of Construction I-A. A doorway in the north wall of Room 2 led into Room 3, of which only the end remained. Room 3 was the same width as Room 2, but its floor was 20 cm. higher. The step between the two was placed in the centre of the doorway.

The room floors had been resurfaced. In Room 2 there were burned patches in the centre of both the original floor and its later resurfacing. Walls were similar in construction to those of Construction I-A. They were slightly more than 1 m. in thickness, with the exception of the partition between Rooms 2 and 3 which was 80 cm. thick. Wall surfaces had been plastered. Small fragments of red-painted carved stucco ornamentation were scattered through the debris filling the rooms, but none still adhered to the walls. The roof is believed to have been of beam and mortar.

CERAMIC ASSOCIATIONS AND DATING

Structure II had only two building periods, whereas in Structure I we identified three. Nevertheless, the stratigraphy of the two mounds was very similar and the results of each excavation served to check and reinforce the other.

Construction II-B

The trench into the substructure fill of II-B produced an assemblage of pottery types almost identical with that in the fill of Construction I-C in Structure I. Vasquez sherds were by far the most numerous, but with them were a few vessel body sherds of the Barklog complex. Immediately after II-B was abandoned, lenses of refuse were dumped on its floor and in the accumulating fill around the building. The sherds in this refuse were apparently freshly broken fragments of Barklog vessels. These refuse lenses and their contents closely resembled the refuse lenses in the fill

surrounding Construction I-C. There is little doubt that the earliest buildings in both mounds were built at the same time and abandoned at the same time. Consequently, Construction II-B can be placed with I-C in the early part of the Early Classic period.

Construction II-A

Sherds in the substructure fill of Construction II-A included both Barklog and Vasquez types, but none of the Trial Farm complex. The fill included many limestone blocks which had been torn out of Construction II-B, and this re-use of earlier building material probably accounts for most of the Vasquez sherds. Sherds in post-construction deposits of II-A were Trial Farm. II-A may have been built at about the same time as I-B, but it evidently remained in use contemporary with I-A, which it resembled architecturally. That II-A may have been older than I-A is suggested by the resurfaced floor of the former; the floor of I-A had not been resurfaced or obviously repaired during the lifetime of the building. In any event, Construction II-A can be placed chronologically in the middle to later part of the Early Classic period.

Pottery

INTRODUCTION

For the Maya area, the San Estevan pottery collection, comprising about 5000 sherds and 8 complete vessels, is a modest one considering the amount of excavation accomplished. This is because large portions of the fills of the excavated mounds were devoid of potsherds and because burials and cache deposits were very few. Nevertheless, a clear-cut pottery sequence was obtained from each mound. Three ceramic complexes were determined by stratigraphic position within construction deposits. Each complex was distinctive, with little overlap of types and little mixture of earlier material with later in the deposits. The three complexes, with the number of sherds used in their definition and their approximate chronological position, are as follows:

(1) Vasquez complex (1330 sherds), Late Formative.

(2) Barklog complex (1350 sherds), Early Classic.

(3) Trial Farm complex (2130 sherds), late Early Classic and Late Classic.

The Vasquez complex was named after the owner of the land on which most of the San Estevan ceremonial site stands. Barklog and Trial Farm are the names of adjacent properties.

The basis for classification of any collection should depend upon the size, condition, and composition of the collection, as well as the amount of prior knowledge concerning its relationships. The San Estevan pottery collection, although obviously related to Maya pottery elsewhere, is in a region where no detailed pottery analysis has previously been attempted

and where cultural differences may be expected. Since the collection is comparatively small, the range of variation of many attributes is poorly known; even many vessel shapes cannot be reconstructed in their entirety. Thus, current methods of classification which stress minor variations in attributes, and which are applicable to large collections, are not so useful or feasible here. Adequate illustration and simple nomenclature have been the goals.

The primary basis of classification is into "slipped" and "unslipped" categories. In the Barklog complex the slipped category is divided into polychrome and monochrome. In the Trial Farm complex difficulty was experienced with even the slipped-unslipped breakdown because of the high proportion of sherds whose surface had been completely weathered away. Wares within the slipped and unslipped classes tend to be quite uniform, although occasional individual sherds are ecountered which in a larger, more representative, collection might be assigned to separate sub-categories.

Within the major classes, breakdown is by vessel form, an attribute which is one of the most significant for chronological studies of Maya pottery. Minor variations in surface treatment, such as the presence and absence of incision, are described under the particular vessel form to which they apply. A good argument could be made for setting the Vasquez complex red-and-cream dichrome apart from the monochrome of that complex. This was not done because I found no form distinctions between the monochrome and the dichrome; moreover, many weathered or fire-clouded sherds might have belonged to either category.

Colour descriptions are according to the Munsell system (Munsell Soil Color Charts, Baltimore). Commonly used shape and size categories follow R. E. Smith (1955, p. 4) and J. E. S. Thompson (1939, pp. 68, 70). They are as follows. *Diameters* of vessels are measured from the outside edge of the lip. *Thickness of side* is based on the average thickness of the side below the rim: *thin*, 0.25–0.5 cm.; *medium thick*, 0.5–0.8 cm.; *thick* 0.8–2 cm. *Height of neck* is taken vertically from the lip to the junction of the neck and side: *low*, 1–3 cm.; *medium high*, 3–6 cm.; *high*, 6 cm. and over. A *plate* is a vessel with an unrestricted orifice whose height is less than one-fifth its diameter. A *dish* has an unrestricted orifice and a height between one-third and one-fifth its diameter. A *bowl* has an unrestricted or slightly restricted orifice, and its height may be equal to, but not less than, one-fifth its diameter. A *vase* is a vessel whose height clearly exceeds its diameter.

The paste of the San Estevan pottery has not been subjected to expert microscopic examination. Thus, detailed descriptions of paste and temper are not attempted. Generally speaking, San Estevan wares, both slipped and unslipped, are tempered with either quartz or calcite. Tuff temper, common in other parts of British Honduras, is either completely absent or so scarce as to be negligible. Sherd temper may be present in some Vasquez complex pastes, but cannot be confirmed without analysis. Where texture description is attempted, the Wentworth scale (Shepard, 1956, p. 118) is used as a basis.

THE VASQUEZ CERAMIC COMPLEX

PROVENIENCE AND GENERAL CHARACTERISTICS

The Vasquez Ceramic Complex dominates the deepest stratigraphic deposits excavated at San Estevan. Specifically, these include (1) the fill deposits beneath Plaza Floors V and VI, (2) the fill of Construction I-C (beneath Floor 3b and behind Stairway 2), and (3) the fill of Construction II-B (beneath Floor 3 of Structure II). The physical divisions between these and later stratigraphic units were clear, as were the typological distinctions between the Vasquez and the later ceramic complexes. Few Vasquez sherds came from Barklog deposits; even fewer Barklog sherds were found in Vasquez deposits. It did not prove possible to make chronological subdivisions within the Vasquez complex. For example, the same pottery attributes were present in the deepest deposit tested, the fill beneath Plaza Floor VI, as in stratigraphically later deposits.

Characteristic of the Vasquez complex is a red slipped monochrome ware with a "waxy" feel. An important variant of this is a dichrome in which one surface of the vessel, usually the interior, is slipped red and the other surface slipped a cream colour. Simple incision is comparatively common as a decorative device, painted designs being rare and restricted to the most simple motifs. The characteristic vessel form, to which more than one-half of the total form sherds belong, is an outcurving sided plate with a flat bottom. Unslipped jars have very low necks, and, in contrast with later ceramic complexes at the site, striation of jar bodies is numerically insignificant.

SLIPPED WARE (639 sherds)

The slipped pottery of the Vasquez complex is predominantly a red monochrome with a gray to buff paste of fine to medium texture. Slipped surfaces are well polished and lustrous with the "waxy" feel characteristic of much pre-Classic ware in Peten. The slip is soft and tends to flake off, revealing a cream to buff undersurface. Crazing is frequent. The most characteristic surface colour is a darkish red (10 R 4.5/4 and near variants), with some sherds of slightly more orange hue (in the 2.5 YR range). About 40 per cent of the sherds show firing variations. Most of these are probably accidental, since usually they affected only parts of the vessels and there are intergradations between them. The most important are a darkening of the slip through reddish-brown to black, and irregular mottling usually in red and black. The mottling frequently follows craze lines. Less often, parts of vessels have fired to a buff.

About 10 per cent of the slipped pottery is a red and cream dichrome. The dichrome occurs on plates, dishes, and bowls, but no shapes were found in the dichrome which were not also in the monochrome. The interiors and rims are red, the exteriors have a cream slip (central colour is 10 YR 7/2) or, occasionally, are left unslipped. The cream slip often shades to a buff, and often shows rootlet markings. Vessels with a cream slip all over are very rare or absent at San Estevan.

The most characteristic decorative technique is a shallow pre-slip groove incising made with a blunt tool. The width of the incisions is from 1 to 3 mm. They occur only as simple horizontal lines, often multiple, encircling the vessel rims or exteriors. Sometimes they appear so casually executed as to suggest that they were formed in the smoothing process. Less common decorative techniques, all pre-slip, include groove incising deeper than the above, chamfering of plate bases, finger impression, and appliqué ridges. The last two seem associated only with the dichrome.

Painted decoration occurs rarely on the dichrome and consists of very simple broad-line elements in red-on-cream. One or two poorly preserved sherds may be decorated by negative resist technique.

Plates with Outcurving Sides (140 sherds; Fig. 11, *a*, 1–31)
Form: Outcurving, rarely flaring, medium thick to thick sides; bottoms flat or slightly convex when viewed from exterior. Rims are frequently thickened, occasionally tapered, occasionally everted or downturned, but wide everted rims are rare. Lips are rounded, pointed, occasionally flat or bevelled. Lip diameters (based on 15 sherds): 18–34 cm., average 30 cm.; average height: 4.2 cm.
Decoration: Monochrome vessels are slipped all over, including the bottom. Approximately one-third of the sherds have very shallow pre-slip groove incising. The incisions occur as horizontal lines, often multiple, on rim interiors and upper surfaces and on vessel exteriors. Commonly, there are one or two grooves on the exterior just above the basal angle (Fig. 11, *a*, 23, 26). The side just above the basal angle may also be chamfered or, rarely, have a slight molding (Fig. 11, *a*, 24, 26, 27). The shallow groove incision and the basal chamfering occur on both monochrome and dichrome vessels.
Dichrome: Dichrome sherds comprise slightly more than 15 per cent of the total sherds of this form. Ordinarily, interiors are slipped red, exteriors have a cream slip or, more seldom, are left unslipped. Minor decorative variants of the dichrome include: vertical stripes on the cream exteriors (8 sherds; Fig. 11, *a*, 25–27); finger impressed exteriors (2 sherds; Fig. 11, *a*, 28); red and cream panels separated by raised ridges on exterior (3 sherds; Fig. 11, *a*, 29, 30). One sherd of the last variant is the only dichrome sherd found which had been entirely slipped in red before the cream was applied. All others had the cream slip applied directly to the paste. One weathered sherd, probably of this form, has a red exterior and a cream interior with vertical bands seemingly done by resist negative technique (Fig. 11, *a*, 31).

Dishes with Medial Angles (6 sherds; Fig. 11, *b*)
Form: Medium thick sides recurving or sloping inwards. Base below medial angle is convex. Of two rim sherds, one has a triangular bolster rim, the other a plain rim with rounded lip. Lip diameters (2 sherds), 22 and 34 cm.
Decoration: Five sherds are monochrome, one is dichrome. Two monochrome sherds have deep horizontal groove-incised lines on exterior (Fig.

11, *b*, 1). The dichrome sherd has a red interior, rim and base. The exterior is cream with simple broad-line criss-cross design elements in red (Fig. 11, *b*, 3). One other sherd may have had a cream base.

Hemispherical Bowls or Dishes (10 sherds; Fig. 11, *c*)
Bowls or dishes with rounded to nearly straight medium thick sides. No base sherds identified. Rim slightly thickened on one sherd, plain on the others. Lips pointed or rounded. Lip diameter (5 sherds) 18 to 34 cm., average 27 cm. Most sherds weathered but all apparently slipped red on interior and exterior.

Bowls or Dishes with Vertical or Near-Vertical Sides and Thickened Rims (8 sherds; Fig. 11, *d*)
Form: Thin to medium thick vertical or slightly recurved sides. Rim thickened or bolstered and sometimes slightly everted. Lip rounded. No lower wall or base sherds were identified. Lip diameter (6 sherds) 26 to 29 cm.
Decoration: Two and possibly three sherds are dichrome with red interiors and rims and cream exteriors; the rest are monochrome. One monochrome has a rounded ridge on the exterior below the rim (Fig. 11, *d*, 5). One dichrome sherd has a multiple groove-incised red band below rim on the exterior (Fig. 11, *d*, 3).

Bowls with Slightly Restricted Orifice (6 sherds; Fig. 11, *e*)
Incurving or insloping medium thick sides; rim plain or slightly thickened; lip pointed or rounded. No base sherds were identified. Lip diameter (4 sherds) 15 to 20 cm. Vessels were apparently slipped on both exterior and interior. Three sherds have very shallow groove-incised horizontal lines encircling exterior below lip.

Jars with Low Necks (6 sherds; Fig. 11, *f*)
Globular jars with low vertical or slightly flaring necks; angle at junction of neck and shoulder is sharp; lip is pointed or rounded. Lip diameters (3 sherds) 10 to 19 cm. One sherd has slip on exterior of neck and upper shoulder; the rest of the vessel was apparently unslipped. Other sherds include only necks and were slipped on both surfaces. One neck has shallow groove-incised bands on exterior.

Spout (1 sherd; Fig. 12, *a*)
Spout tapers towards rim, is oval in section with lip diameters 3.0 and 1.9 cm.; length of fragment 6.3 cm. May have been placed vertically, but no definite evidence. The exterior is slipped.

Sherds Possibly Later than the Vasquez Complex
The following four sherds come from levels which contain a predominance of Vasquez sherds, but they differ in surface treatment and form from other Vasquez types. Nor do they closely resemble types of the succeeding Barklog complex. The first three were found in the fill of Construction I-C. A

few Barklog sherds were identified in this stratum although Vasquez types were by far the most numerous. The fourth sherd comes from a level between Plaza Floors V and VI which contained only Vasquez types, excluding only this large sherd which closely resembles a Late Classic type elsewhere in British Honduras.

Brownware Cuspidor ? (1 sherd; Fig. 12, *b*, 1): Nearly vertical medium thick sides or neck, slightly bolstered rim, flat lip, possibly globular body below neck. Lip diameter 32 cm. Slipped inside and out with a glossy reddish brown (about 3 YR 5/4) slip. The vessel surface below the slip is not perfectly smoothed and, because of the resulting roughness, the surface resembles the Barklog monochrome ware.

Z-angle Vessel ? (1 sherd; Fig. 12, *b*, 2): Vertical thin sides, protruding basal or medial angle. Rim has slight labial flange and pointed lip. Lip diameter about 14 cm. Sherd is weathered, but appears to have been brownware like the preceding.

Flaring-sided Plate (restorable half vessel; Fig. 12, *b*, 3): Flaring medium thick sides, flat base, lip diameter 12 cm. Interior is slipped orange (2.5 YR 6/8), rim is painted red (10 R 4/6), and the exterior below the rim is unslipped. The ware and finish resemble Barklog pottery, but this shape and decoration were not identified in that complex.

Brownware Vase (1 sherd; Fig. 12, *b*, 4): Nearly vertical medium thick sides, lip diameter 19 cm. The interior and exterior have a brown slip (5 YR 5/2) which is well smoothed but of low lustre. The exterior has a simple decoration in parallel post-slip narrow incised lines. The paste is pinkish with probably calcite temper. This sherd resembles and is identified by Dr. J. C. Gifford as "Orange Walk Incised, Sotero Ceramic Group," which at Barton Ramie belongs in the early part of the Late Classic period. Its presence in a deposit which otherwise contained only large quantities of Vasquez (Formative period) sherds must result from an intrusion through the plaza floor which we did not identify during excavation.

UNSLIPPED WARE (688 sherds)

The unslipped ware of the Vasquez complex is well smoothed but not polished. The paste is medium to coarse in texture. Surface colours range from gray to buff. Most are in the colour range of Munsell 7.5 YR 6 to 7/2; dark extremes run to N 6/0, buff extremes to 2.5 YR 6/4. In marked contrast to the later ceramic complexes, striated or raked ware forms an insignificant proportion of the unslipped category. Of 571 unslipped body sherds, only 31 (about 5 per cent) are striated, and most of these come from a single provenience beneath the floor of Construction I-C and are mostly from the same vessel. If we exclude this provenience unit, we have a total of 468 unslipped body sherds of which only 11 (about 2 per cent) are striated.

Plates with Flaring Sides (19 sherds; Fig. 12, *c*)
Flaring medium thick sides; rim usually slightly tapered; lip pointed or

rounded; base probably flat. Lip diameters (8 sherds) 16 to 30 cm., average 23 cm. A few sherds are weathered and might have been slipped. Compared to the predominant slipped form, the sides seldom outcurve, the rims usually taper instead of thickening, and there are no traces of groove-incising.

Vessels with Widely Flaring Sides (14 sherds; Fig. 12, *d*)
Rim sherds of widely flaring or outcurving sided vessels. Side gradually thickens towards rim, which is squared off; lip is pointed. No base sherds identified. Lip diameters (11 sherds) 22 to 35 cm. These rim sherds are probably from plates or dishes. Some could be from large storage jars with widely flaring rims, but no other evidence for such vessels was found with the Vasquez complex.

Bowls or Dishes with Rounded Sides (5 sherds; Fig. 12, *e*)
Medium thick rounded sides with plain rims and pointed or rounded lips. One sherd from a bowl with slightly incurving sides has red pigment on part of the unslipped surface as in the Daub Ware of Uaxactun.

Jars with Low Thick Necks (8 sherds; Fig. 12, *f*)
Low thick vertical jar necks with flat lips. Thick strap handles, whose upper surfaces were flush with the jar lip, connected the neck to the shoulder. Bodies were probably globular. Lip diameters (5 sherds) 12 to 18 cm. Neck height (6 sherds) 1.6 to 3.2 cm.

Jars with Very Low Necks or Collars (6 sherds; Fig. 12, *g*)
Medium thick sides, very low neck or collar which may flare slightly. No base sherds identified. Lip diameter (2 sherds) 10 and 26 cm. Neck height (4 sherds) 0.5 to 1.0 cm.

Miscellaneous Jar Sherds (3 sherds; Fig. 12, *h*)
(1) Neck–shoulder angle of a flaring necked jar (Fig. 12, *h*, 1); (2) jar body sherd with raised finger-indented band (Fig. 12, *h*, 2); (3) flat base of large jar (Fig. 12, *h*, 3).

Miscellaneous Bowl and Jar ? Sherds (2 sherds; Fig. 12, *i*)
(1) Bowl with thickened rim and groove below rim on exterior, lip diameter 32 cm. (Fig. 12, *i*, 1); (2) rim of bowl or jar neck, slightly bolstered rim, pointed lip, lip diameter 18 cm. Exterior has comparatively broad vertical striations or raking (Fig. 12, *i*, 1).

Adorno (1 sherd; Fig. 12, *j*)
Fragment, oval in cross-section, with three appliqued pellets on one end.

THE BARKLOG CERAMIC COMPLEX

PROVENIENCE AND GENERAL CHARACTERISTICS

The Barklog complex comes from fill deposits laid down immediately after the abandonment of Constructions I-C and II-B. In Structure I the deposits formed part of the substructure fill of I-B, in Structure II of II-A. The fill

of each of these constructions was composed in large part of freshly quarried marl or limestone blocks. These parts of the fill were nearly or entirely devoid of artifacts. However, lenses and other limited deposits of ash and refuse occurred which contained concentrations of large, well-preserved, and evidently freshly-broken sherds. It is these sherds which form the basis of the Barklog complex. In Structure I, the refuse lenses were in contact with the walls of I-C both inside and outside of that building. In Structure II, a refuse deposit lay on the floor of Construction II-B and another was found adjacent to the west wall of its substructure. The separation between the Vasquez and Barklog complexes was sharp. Comparatively few Vasquez sherds were identified in association with Barklog sherds. These could be easily segregated by shape and ware; moreover, most were more weathered and battered than the Barklog sherds with which they were associated.

The Barklog complex is completely different from the Vasquez complex in ware and vessel shapes. The "waxy" slipped ware of the latter is replaced by a slightly thinner and often less smooth-surfaced ware which is related to the "gloss" ware of central Peten. The sharp Z-angle bowl is the characteristic vessel shape. Other common shapes include flaring sided dishes and slipped jars with cylindrical necks. Flat basal supports are more common than ring supports, although both occur. The elaborately painted red, black, and orange polychrome of the Maya classic period appears in combination with the basal-flange bowl, but both polychrome and the basal-flange form are believed imported because of ware characteristics. In the unslipped ware, striated jars, previously scarce, become dominant and occur most commonly with high necks which are quite unlike the jar necks of the Vasquez complex.

SLIPPED WARE: POLYCHROME (16 sherds)

The polychrome pottery of the Barklog complex is decorated with red and black designs on an orange ground. Munsell colours for the red range from about 7.5 R 4/6 to 10 R 4/8. The orange is usually 5 YR 5/8 or 6/8 with the reddish extreme about 2.5 YR 5/8. One sherd has a red-and-black-on-cream (7.5 YR 7/2) exterior decoration.

Surfaces are almost perfectly smooth and lustrous. The paste is distinctive from that of the common slipped monochrome of the Barklog complex. Of most sherds it is pinkish (10 R 5/4) in colour, is tempered with grayish particles, and is of finer texture than the paste of the monochrome. The paste of the two tetrapod vessels is buff (5 YR 7/3 and 10 YR 7/3) and is tempered with very fine particles seemingly of calcite.

Basal-break Bowls with Tetrapod Supports (fragments of two vessels; Fig. 12, *k*)
Form: Almost vertical straight, or slightly incurved, medium thick sides; rounded or pointed lip; simple basal angle; convex base. Four large foot supports were certainly mammiform in shape. Lip diameters 15 and 18 cm. Height (1 vessel) 7.2 cm. Diameter of foot (1 vessel) 4.8 cm.
Decoration: All-over orange slip, excepting base of one vessel. Interior

decoration: red lip bordered with black band. Exterior decoration: panels with curvilinear scroll elements alternating with plain panels which are solid red or outlined with red.

Basal-flange Bowls (3 sherds; Fig. 13, *a*)
Form: Flaring, medium thick sides with flange at junction of side and base. The one sherd which included the rim has a rounded lip and is from a vessel with a lip diameter of 34 cm. Length of flange (2 sherds) 2.2 cm. and 2.5 cm.
Decoration: Horizontal parallel lines and stripes. The most complete specimen (Fig. 13, *a*, 1) has an exterior design composed of open work crosses, parallel lines with dots, and curvilinear elements.

Rim Sherds, Probably from Basal-flange Bowls (7 sherds; Fig. 13, *b*)
Form: Flaring sided vessels with diameters about 30 cm. Rounded lips. Most, if not all, of these sherds are probably from basal-flange bowls.
Decoration: Black (6 sherds) or red (1 sherd) lips. Interior: red or red and black rim stripes. Exterior: red or red and black rim stripes below which are rectilinear or curvilinear elements too fragmentary to identify. One sherd has a red-and-black-on-cream design (Fig. 13, *b*, 4). All others are red-and-black-on-orange.

SLIPPED WARE: MONOCHROME (707 sherds)

The slipped monochrome pottery of the Barklog complex is nearly all red ware. The most common colour is 9 R–10 R 5/6 and near variants; the red extreme is 8 R 4/6, the orange extreme about 2.5 YR 5/8. Fire clouding is present on a minority of sherds and causes colour variations through reddish brown to black, less commonly to a brownish gray (10 YR 6/3). True dense black ware is represented by less than five sherds of which only two are form sherds. Black ware is not treated here as a separate category.

Slipped surfaces are lustrous and the ware is related to the Peten Gloss Ware (Smith 1955, p. 27). However, apparently because of imperfect smoothing before the vessels were slipped, the surfaces of most bowls and dishes are slightly rough to the touch and the total effect is dull. On the other hand, jar sherds tend to be more perfectly smooth and shiny. The slip of the dull ware tends to flake off; that of the shiny ware is harder and more durable.

The paste of the monochrome is gray to buff and of medium texture with inclusions mainly of quartz. Paste of the jars and other vessels which are more highly polished tends to be more compact and somewhat finer in texture with more variety in tempering material. But clear-cut differences are not always apparent.

Sharp Z-angle Bowls (74 sherds and one restored half vessel; Fig. 13, *c*)
Vertical, rarely flaring, medium thick sides; protruding basal angle. Rim has a slight bolster or is plain; lip is rounded or flattened, sometimes with an interior bevel. Basal support is flat on most vessels, rarely a ring base.

Lip diameter (8 sherds) 24 to 40 cm., average 32 cm. Lip to basal angle height (11 sherds) 3.3 to 5.7 cm., average 4.7 cm. The last measurement excludes two exceptionally low sided vessels which have sides only 2 cm. high. The red slip covers the interior and the exterior side including the basal angle. The base was not slipped. One sherd, probably of this form, has a glossy black slip.

Rounded Z-angle Bowls (19 sherds, from 2 or 3 vessels; Fig. 13, *d*)
Slightly flaring or outcurving thin sides. The protruding basal angle is rounded off. Rim plain or bolstered, lip flat or rounded. Basal support flat. Lip diameter 22 cm. Lip to basal angle height 3.3 to 3.8 cm. The red slip is on the interior and exterior side including the basal angle. The base is not slipped. This form differs from the preceding not only in the shape of the basal angle but, especially, in the thinness of the side and base.

Flaring-sided Bowls or Dishes with Plain Rims (36 sherds; Fig. 13, *e*)
Flaring medium thick, rarely thin, sides; plain rim; lip usually flat, rarely rounded. Lip diameter (7 sherds) 23 to 30 cm. The interiors are slipped, the exteriors either slipped or unslipped. Two sherds are heavily fire clouded and one may have an intentional back slip.

Bowls with Incurving Sides and Slightly Everted Rims (8 sherds; Fig. 13, *f*)
Bowls with slightly incurving thin to medium thick sides. Rim or collar slightly everted. No base sherds were identified, but basal support probably was flat. Lip diameter (4 sherds) 17 to 18 cm. Interior and exterior slipped, except that base apparently unslipped on some vessels. Light pre-slip incised lines may encircle interior of the rim.

Bowls or Dishes with Bolstered or Slightly Everted Rim (8 sherds; Fig. 13, *g*)
Known only from comparatively small rim sherds and complete vessel form or forms unknown. Flaring, occasionally vertical, sides; rim bolstered or slightly everted and usually with an interior bevel. Lip diameter (3 sherds) 22 to 28 cm. Red slip on interior and usually on exterior.

Basal-flange Bowls (2 sherds; Fig. 13, *h*)
Protruding basal flange is at junction of base and side. One sherd has thin walls and a ring base, the other has medium thick sides. Neither is a rim sherd. The slip is on the interior and the exterior side to the tip of the flange. The thicker sherd may actually be from a dichrome or polychrome vessel. Both sherds have a smoother, more lustrous surface than the majority of Barklog complex slipped sherds. The paste of one sherd is pinker and finer textured than the usual Barklog monochrome and resembles that of the polychrome. The other sherd has a more heterogeneous temper than most Barklog sherds.

Basal-break Bowls with Everted Rims (2 sherds; Fig. 13, *i*)
Slightly flaring medium thick sides; thickened everted rim; rounded lip;

simple basal angle. Lip diameters 15 cm. One sherd slipped red, the other a reddish brown (5 YR 4/3), which may be intentional or an unintentional firing variation.

Covers for Bowls or Dishes (13 sherds, 12 of which are from the same vessel; Fig. 13, *j*)
Downward sloping from centre to rim. Rim is raised, its underside being notched to engage the lip of the bowl. The most complete fragment had a raised handle. Lip diameters (2 specimens) 23 and 25 cm. The upper surface only is slipped. The larger fragment was slipped red and heavily fire clouded. The other had a highly polished intentional black slip.

Jars with Medium-high Near-vertical Necks (131 sherds, representing 5 or 6 vessels; Fig. 14, *a*)
Globular jars with slightly insloping or slightly outflaring medium-high necks. Sharp angle between neck and shoulder. Sides below neck are thin to medium-thick. Jars with slightly insloping necks have rounded or pointed lips; jars with flaring necks have a single lip groove. Basal support probably ring (Fig. 14, *a*, 4) or flat, but no proven association of base and rim sherds. Lip diameters (4 sherds) 9 to 12 cm. Neck height (5 sherds) 2.6 to 5.2 cm., average 4.0 cm. The exterior of the neck and body slipped red. Slipped surfaces are smother and more lustrous than the surfaces of most bowls and dishes of the Barklog complex.

Jar with Finger-indented Band on Shoulder (1 sherd; Fig. 14, *b*)
Sherd represents shoulder to junction of neck. Form of body and neck unknown. Neck and upper part were slipped, rest of vessel apparently unslipped. A raised finger-indented band is just below edge of the slip.

This is one of two Barklog sherds which have the red slip applied in thin horizontal bands of differing density so as to render a streaky effect. The same technique is characteristic of the type Sierra Red, Society Hall Variety, at Barton Ramie and is there placed in the Formative period Barton Creek Phase.

Potstand (1 partly-restored vessel; Fig. 14, *c*)
Vertical medium thick sides, flaring rim and base. Lip diameter 12 cm., height 6 cm. Openings had been cut through the centre of the sides while the clay was damp, but the size and shape of these openings could not be determined from the fragments. The potstand is actually dichrome rather than monochrome. The lips of the rims and base were painted red; the remainder was an unslipped but well-polished buff (7.5 YR 6/4).

Spout ? (1 sherd; Fig. 14, *d*)
Cylindrical, diameter 2.5 cm. There are traces of a probably red slip.

Miscellaneous Bowl or Vase Rims (5 sherds; Fig. 14, *e*)
These probably represent different vessel shapes. All have vertical or near-vertical sides, plain or thickened rims and lip diameters from 18 to 20 cm.

UNSLIPPED WARE (580 sherds)

The unslipped pottery is gray to buff in colour, most sherds being around 5 YR 5/1. Dark extremes run to N 4.5, buff to 5 YR 6/4. Surfaces are well smoothed but not polished. Paste ranges from medium to coarse in texture, and the temper is apparently either quartz sand or calcite.

Slightly more than 80 per cent of the unslipped sherds are fragments of striated jars. Of the remaining percentage a large proportion must be from parts of the same vessels which did not bear the striations, such as bases and necks.

Storage Jars with Striated Bodies (approx. 80 per cent of the unslipped pottery; Fig. 14, *f*)
Form: Globular jars with medium-thick sides and flaring necks. One basal fragment identified as from this form has a ring base. Necks are apparently of two types.

(1) (6 sherds) high flaring necks with bolstered rim and rounded lip; lip diameters (3 sherds) 24 to 26 cm. (Fig. 14, *f*, 1, 2).

(2) (3 sherds) medium-high flaring necks with grooved lips; lip diameters (2 sherds) 16 and 24 cm. (Fig. 14, *f*, 3).
Decoration: Body of vessels below neck striated with a multiple pointed tool. The striations are commonly vertical or diagonal, occasionally criss-cross. Neck type No. 2 has striations up as far as the rim. Other decorative elements include appliqued discs on shoulder (3 sherds) (Fig. 14, *f*, 5) and a finger-impressed band on shoulder (1 sherd) (Fig. 14, *f*, 6).

Miscellaneous Jar Necks (6 sherds; Fig. 14, *g*)
It is uncertain whether or not these were associated with striated bodies.

(1) (3 sherds) Outcurving or flaring necks, probably low to medium high, with rounded lips (Fig. 14, *g*, 1).

(2) (2 sherds) Thick low widely-flaring necks with round lips (Fig. 14, *g*, 2).

(3) (1 sherd) Low thick vertical neck with flattened lip, similar to a Vasquez complex form (Fig. 12, *f*), and perhaps derived from an earlier deposit.

Incurved-sided Bowl (1 sherd)
Rounded incurving sides, plain rim with rounded lip.

Inner-inverted Foot Vessel (3 sherds; Fig. 14, *h*)
A flaring-sided vessel with open tubular projections rising from the interior of the side. Rim is bolstered and lip grooved. This unusual form closely resembles the dishes with four inner-inverted feet found in the Tzakol phase at Uaxactun (R. E. Smith, 1955, fig. 17a). No definite evidence has been uncovered concerning their use. Smith suggested that basket cylinders may have been tied to the four tubular projections or "feet" and a cover placed on top so as to make a receptacle for seed which would let in air and keep out rats (*ibid.*, p. 127). Borhegyi (1959, pp. 54–5) thinks

them more likely to have been parts of pronged *incensarios*. Not improbably they are related to a Teotihuacan form known as the "inside-handled suspension bowl".

THE TRIAL FARM CERAMIC COMPLEX

PROVENIENCE AND GENERAL CHARACTERISTICS

The Trial Farm Complex represents the latest sherd material which could be segregated stratigraphically at San Estevan. It comes from the debris filling the rooms of the latest building period of both Structures I and II, and from the debris and soil removed in clearing the substructure of Construction I-A and the stairway of Construction II-A. The offerings found with Burial 1 are also placed in this complex. Because much of the fill of the latest building period was freshly quarried marl containing few or no artifacts, it is probable that the majority of Trial Farm sherds are derived from occupation debris of the latest constructions rather than from deposits accumulated during the building-up of the mounds.

The outstanding characteristic of the Trial Farm sherds is the severe weathering to which they have been subjected, a result of their exposure comparatively close to the ground surface. Those sherds which are comparatively well-preserved do not appear different from Barklog sherds in regard to ware characteristics, but vessel forms show marked changes. The most prominent form, found in all provenience units, is the basal-flange bowl. A few examples of this form were also found with the Barklog complex, but were nearly all polychrome and were all believed imported because of ware characteristics. In the Trial Farm complex, basal-flange bowls completely replace the earlier Z-angle bowl form and are made in the local ware. Other forms, including flaring-sided and incurving-sided bowls and dishes and deeper bowl and vase forms, are specifically different shapes from those found with the Barklog complex, although the small sample sizes and very fragmentary nature of much of the material makes knowledge of some complete forms uncertain. Ring basal supports become dominant over flat supports. In contrast to changes in the slipped categories, unslipped storage jars appear comparatively unchanged.

Noteworthy is the apparent lack of mixture between the Trial Farm and earlier complexes. Very few sherds of types specifically characteristic of the Barklog and Vasquez complexes occurred in the surface debris. For example, not a single sherd of the dominant Barklog form, the sharp Z-angle bowl, was found in a Trial Farm provenience unit.

Because of the advanced degree of weathering, the Trial Farm complex could not be divided reliably into slipped and unslipped categories as were the earlier complexes. Of over 2100 sherds comprising the complex, only about 17 per cent showed definite evidence of a slip and 18 per cent of striations. The remaining 65 per cent were analyzed in a "weathered and plain unslipped" category, the great majority of which were probably slipped originally. Paste differences between slipped and unslipped were

not sufficiently marked to provide a criterion. For the purposes of description, use has been made of "probably slipped" and "probably unslipped" headings.

Unweathered sherds of both the slipped and unslipped wares were apparently similar to Barklog complex wares in colour, surface treatment, and paste characteristics.

SLIPPED AND PROBABLY SLIPPED WARE

Polychrome and Dichrome (9 sherds; 1 complete vessel; Fig. 14, *i*, 16 *g*)
The severe weathering of most of the Trial Farm sherds probably is responsible for the scarcity of identifiable polychrome and dichrome.

(1) (1 sherd; Fig. 14, *i*, 1) Interior has a black rim stripe on an orange slip. Exterior has a simple band design with dots in orange-and-black on a cream (?) background. From a flaring-sided vessel with lip diameter about 35 cm.

(2) (1 sherd) Black-on-orange exterior decorated with simple parallel lines. Form unknown.

(3) (7 sherds, all from the same vessel; Fig. 14, *i*, 2) Unslipped vessel of unknown form with traces of a simple broad-line design in either red or black. The ware is not Slate ware.

(4) (1 complete vessel; Fig. 16, *g*) Flaring-sided, simple silhouette dish with ring base. Lip diameter 43 cm., height 12 cm. Interior black on red. Design, executed in a free-flowing, almost casual, style, may represent an animal or plant bordered with simple band elements. The vessel form corresponds with that of the "Flaring-sided Dishes, Plates, or Bowls," Type 2 (*see below*), some of which probably also were dichrome or polychrome. This particular vessel was found by accident in a house mound about one half mile from the main ruin.

Basal-flange Bowls or Dishes (43 sherds, 1 complete vessel, 1 restorable vessel; Figs. 14, *j*; 15, *a*; 16, *d*)
Form: Flaring medium-thick sides, rounded or flattened lip, plain rims except for one vessel which has bolstered rim. Probably ring base. Flange at angle of base and side. Lip diameters 32 to 45 cm. Paste of most sherds gray in colour and of coarser and looser texture than paste of the few basal-flange bowls found in the Barklog complex.
Flange types: (1) (6 sherds; Fig. 14, *j*, 1) No sharp division between base and flange. This type seems transitional between the sharp z-angle and the basal flange. Compared to the latter, the sides are more flaring and the angle between side and base more open. (2) (14 sherds; Fig. 14, *j*, 2–4) Flange triangular in section, projecting 6 to 10 mm. from side of vessel. (3) (12 sherds; Fig. 14, *j*, 5, 6) Flange a pointed or rounded ridge, projecting not over 7 mm., and sometimes filleted onto vessel body. (4) (9 sherds) Flange parallel sided or slightly triangular, projecting 12 to 25 mm. from side of vessel.
Decoration: Most sherds bear traces of a red slip. No certain evidence exists that any were polychrome.

One restorable vessel (Fig. 15, *a*) has a plano-relief decoration on the

exterior side. The design includes raised rectangular interlocking elements. The background of the design panel is textured by raking with a multiple pointed tool. This vessel, which is badly weathered, probably had a black slip except for the cut-out portions of the design.

Flaring-sided Dishes, Plates or Bowls (72 sherds; Fig. 15, *b*)
These are rim sherds only, no connecting base sherds being identified. Most are badly weathered, but all or most were probably slipped and some may have been polychrome or dichrome.

(1) (46 sherds; Fig. 15, *b*, 1–3) Thin to medium-thick sides, plain rim, flat lip, lip diameters greater than 30 cm. Most of these rims are probably from basal-flange bowls or dishes. 9 sherds are slipped red on both sides; 2 sherds apparently slipped on interior only; remainder badly weathered.

(2) (15 sherds; Fig. 15, *b*, 4–6) Medium-thick to thick sides; pointed, rounded, or occasionally slightly bevelled lip. Diameters greater than 35 cm. A few sherds probably are from basal-flange bowls, but the majority are from simple silhouette flaring-sided dishes similar to the dichrome vessel in Figure 16, *g*. All were probably slipped and two may have been dichrome or polychrome.

(3) (4 sherds, probably from the same vessel; Fig. 15, *b*, 7) Widely flaring-sided dish or plate with wide interior rim bevel. Apparently slipped on interior only.

(4) (3 sherds; Fig. 15, *b*, 8) Bowls with thin sides, diameters about 30 cm. The sherds are so badly weathered that no trace of slip is visible.

(5) (4 sherds; Fig. 15, *b*, 9, 10) Medium-thick to thick, slightly outcurving sides, with plain or tapered rim. Lip diameters greater than 30 cm. Trace of red slip on one sherd. The other three sherds are distinguished by a pinkish paste. Possibly jar rims, but diameters seem too great.

Dish with Lateral Flange (1 vessel; Fig. 16, *e*)
Widely flaring sides and slightly rounded base. The side-base division is marked on the interior only, and the form closely approaches a simple silhouette. A slightly projecting flange is on the exterior side about half way between the rim and the base. Base has a ring support. Lip diameter 38 cm. Height 9 cm.

This vessel, the only example of its form found at San Estevan, comes not from the main ruin but was salvaged from a house ruin about half a mile from the main ruin. It was associated with the dichrome vessel in Figure 16, *g*.

Bowls or Dishes with Incurving Sides (28 sherds; Fig. 15, *c*)
Vessels with incurving sides and slightly restricted orifices. Most sherds have traces of a slip.

(1) (13 sherds; Fig. 15, *c*, 1, 2) Medium-thick sides, rim slightly thickened, lip pointed or rounded. Lip diameters (6 sherds) 21 to 31 cm. Rims with pointed lips tend to have sharper curve of side than do rims with rounded lips, and some of the latter may actually be from barrel-shaped vessels. About half of the sherds have traces of a red slip.

(2) (12 sherds; Fig. 15, *c*, 3–5) Thin to medium thick sides. Rim usually thickened on interior and overhanging. Lip has a steep interior bevel. Lip diameters 20 to 32 cm. (4 sherds). Most sherds had a slip.

(3) (3 sherds; Fig. 15, *c*, 6, 7) Medium-thick to thick sides, rim bolstered (1 sherd) or thickened with exterior ridge (2 sherds). Lip diameter about 35 cm. One sherd has traces of a red slip.

Bowls with Slightly Incurving Sides and Everted Rims (3 sherds)
Apparently the same as a Barklog complex form and possibly derived from earlier deposits (*See Fig.* 13, *f*).

Bowls or Dishes with Bolstered or Thickened Rims (8 sherds; Fig. 15, *d*)
A miscellaneous group sharing medium-thick to thick sides, bolstered or thickened rims, and outcurving or slightly rounded sides. Lip diameters 26 to 45 cm. All seem to have been slipped red.

Bowls with Rounded Sides and Plain Rims (12 sherds, 2 complete vessels; Figs. 15, *e*; 16, *b*, *c*)
Thin, occasionally medium-thick, rounded sides. Rim plain, sometimes very slightly thickened. Lip rounded, flat, or pointed. Bases with flat or ring support. Lip diameters 17 to 24 cm. The two complete vessels from Burial 1 (Fig. 16, *b*, *c*) have a heavily smoke-darkened red slip on the interior. One is slipped on the upper part of the exterior; the other has an unslipped striated exterior. About half of the sherds have traces of a red or black (?) slip.

Cylindrical or Slightly Barrel-shaped Bowls or Vases (15 sherds, 2 restorable vessels; Figs. 15, *f*; 16 *a*)
Thin to medium-thick vertical or very slightly insloping sides. Rim tapered or plain, with pointed or rounded lip. One vessel has a slightly bolstered rim with flat lip. Base flat. Lip diameter (7 sherds, 2 vessels) 14 to 19 cm. About one half of the total number of sherds have traces of a red or black slip. The two complete vessels have a heavily-smudged red slip on the exterior. One body sherd has a basal molding, another an encircling ridge.

The two complete vessels, one from Cache 2 and the other from Burial 1, had lids in place when found (*see below* Covers or Outcurving-sided Plates).

Covers or Outcurving-sided Plates (2 vessels; Fig. 16, *a*)
Both vessels would have been interpreted as plates with widely outcurving medium-thick sides and flat bottoms if they had not been found in place as lids for barrel-shaped vases (*see above*). Lip diameters 17 to 18 cm.; heights 3 to 4 cm. Both vessels formerly slipped red on interior and possibly on exterior, but both are heavily smudged by burning.

Barrel-shaped Vases or Bowls? (4 sherds; Figs. 15, *g*; 16, *f*)
Incurving thin sides, pointed lip. Lip diameter between about 10 and 17 cm. Vessel form probably a barrel-shaped vase or neck-less jar. Sherds were all probably slipped.

Basal Supports (11 sherds)
Basal supports for which the form of the remainder of the vessel is unknown include 9 ring supports, 1 flat base, 1 hollow foot (Fig. 15, *h*). Four ring supports are from vessels with red slips; the other sherds are too weathered to determine whether slipped or not.

Slipped Jar Necks (5 sherds; Fig. 15, *i*)
Medium high, slightly flaring or vertical necks with plain rims. Lip diameters 10 to 15 cm. Two sherds slipped red, others weathered but probably originally slipped.

Carved Ware (1 sherd)
A fragment of a bowl or dish with a carved relief decoration on the exterior. The sherd is too small and weathered for determination of the nature of the design. The paste is calcite tempered.

Effigy Whistle (1 sherd)
A badly weathered and battered fragment of a figurine whistle. It probably represented a bird.

UNSLIPPED AND PROBABLY UNSLIPPED WARE

Unslipped Jars
Because of the advanced degree of weathering of most Trial Farm sherds it is impossible to determine accurately the proportion of striated jar sherds in the unslipped category. Only 341 sherds were identified as striated, while 1158 sherds were classed during analysis as "weathered and unslipped plain." But probably many weathered sherds were striated and the proportion therefore substantially higher than the above figures seem to indicate.

Striated jar sherds resemble those of the Barklog complex, except that a large proportion of the well preserved sherds have traces of a reddish wash lightly applied over the striations. Neck forms are as follows:

(1) (12 sherds; Fig. 15, *j*, 1–3) Outcurving necks with bolstered or everted rims, medium-thick to thick sides, lip diameters 19 to 24 cm. Most sherds probably from striated jars with medium or high necks.

(2) (5 sherds; Fig. 15, *j*, 4, 5) Outcurving necks with overhanging or triangular rims and sharply pointed lips. Lip diameters 17 to 24 cm. One sherd with overhanging rim has horizontal impressed lines on exterior below rim.

(3) (3 sherds; Fig. 15, *j*, 6) Slightly flaring or outcurving medium-high necks with plain rims. One sherd has grooved lip; another has lip with interior bevel. Lip diameter 12 to 18 cm.

Strap Handle (1 sherd; Fig. 15, *k*)
A jar handle attached either horizontally or vertically to body. Width of handle, 3.5 cm. Has traces of a lightly applied red wash similar to that on striated body sherds.

Bowls(?) with Triangular Rim Bolster (2 sherds; Fig. 15, *l*)
Medium thick, slightly rounded sides, triangular rim bolster, pointed lip. Lip diameter more than 35 cm. Both sherds weathered, but originally probably unslipped.

Bowls or Jars with Spikes and Piecrust Rims (10 sherds; Fig. 15, *m*)
Sides insloping or slightly flared. Finger-indented fillet on exterior of rim with top of fillet nearly flush with lip. Spikes and possibly other ornamentation were appliqued to exterior. Spikes protrude from a minimum of 3 mm. to a maximum of 15 mm. Lip diameter 15 to 18 cm. These vessels were quite likely *incensarios.*

CHRONOLOGICAL POSITION OF THE CERAMIC COMPLEXES

SOURCES OF COMPARISON

The dating of the San Estevan pottery complexes, and consequently of the building periods, relies upon comparisons with documented pottery sequences elsewhere in the Maya lowlands. Most of the data appropriate for comparison and now available comes from work within a few restricted regions, particularly west central British Honduras and central Peten. For large parts of the lowland area we have no pottery studies at all.

In northern British Honduras, no stratigraphic work has been done previous to the tests reported herein. Many pottery vessels from the region exist in private and museum collections (*see* Thompson, 1939, Appendix C), but for the great majority we know next to nothing concerning associations or exact provenience. The nearest useful stratigraphic work is at San Jose (Thompson, 1939). To the north, Sanders made limited tests near Chetumal, Quintana Roo, but most of his material is of later date than the San Estevan finds (Sanders, 1960, pp. 203–8).

In west central British Honduras, there are two significant ceramic studies in the Belize River valley. The first, of more limited scope, is Thompson's work at Benque Viejo (Thompson, 1940). The other is the analysis by J. C. Gifford of approximately 200,000 sherds from nearly 70 separate stratigraphic tests at Barton Ramie (Smith, Willey, and Gifford, 1960; Willey and Gifford, 1961; Willey, Bullard, Glass and Gifford, 1965). Although I have been able to examine the type collections and have profited from discussions with Gifford, the Barton Ramie pottery analysis has not yet been described, and detailed comparisons with it are consequently difficult.

The most detailed published study of a large collection is R. E. Smith's analysis of the Uaxactun pottery (R. E. Smith, 1955). This remains the prime source of comparative data and is still the "standard" for the Peten Region. Recent work at Tikal (Culbert, 1963) will doubtless refine the Uaxactun sequence, but not alter its essentials. Other studies of subordinate value to the present work include Thompson's of Mountain Cow, British

Honduras (1931), and Vaillant's of Holmul in Peten (Merwin and Vaillant, 1932).

Lying to the west and northwest of San Estevan are the large and elaborate ruins of interior Quintana Roo and Campeche (Ruppert and Denison, 1943). These are ruins which are possibly of great significance for understanding the archaeology of northern British Honduras and they may well hold the key to many of the major chronological and cultural problems concerning the ancient Maya. But they remain today untouched by the archaeologist's spade and their ceramic histories are unknown. For Yucatan, we have the results of Brainerd's surveys (Brainerd, 1958) supplemented by Sanders' work in Quintana Roo (1960). The Dzibilchaltun ceramic sequence and R. E. Smith's study of Yucatan pottery are not yet available.

THE VASQUEZ COMPLEX

The general charactristics of the Vasquez complex are those of other Formative stage pottery complexes in the Maya lowlands: monochrome "waxy" ware, predominance of comparatively simple plate forms, low necks on storage jars, and decoration by incision in preference to painting. With respect to colour and other characteristics of the slip, direct comparison of sherds reveals that the Vasquez slipped ware has a much stronger resemblance to the "waxy ware" of the Mamom and Chicanel phases at Uaxactun than it does to the slipped ware of contemporary phases at Barton Ramie. Barton Ramie Formative wares tend to be thinner and to have a somewhat more yellow hue with less contrast between the slip and the yellowish or buffy undersurface.

When the presence of a Formative pottery complex at San Estevan was first recognized, we assumed that it would be the temporal equivalent of such Late Formative complexes as Chicanel and San Jose I. Stratigraphically, it lay directly beneath a clearly Early Classic complex, the Barklog. Moreover, nothing in the excavations suggested either an appreciable gap in time between the two or the existence of an intervening pottery complex. But placement of the Vasquez complex proved less easy when detailed comparisons were attempted. While some elements indeed corresponded to Chicanel and San Jose I, others seemed to resemble more closely the earlier Mamom complex of Uaxactun.

The Vasquez complex shares with Chicanel and San Jose I, as well as other Late Formative complexes, such specific traits as a general tendency towards thickened rims, the triangular rim bolster, the composite silhouette bowl with medial angle, and the simple painted decoration on some dichrome plates. However, these traits by themselves cannot be considered diagnostic. The most striking thing in comparing with Chicanel and San Jose I is the complete absence of such widespread and characteristic Late Formative traits as labial and lateral flanges and vessel supports. Moreover, widely everted rims are scarce and those that do occur are not of the deeply grooved horizontal type common at Uaxactun. The absence of these traits gives an early look to the Vasquez complex and, were

San Estevan further to the south, we should suggest that it be placed coeval with Mamom or at least with very early Chicanel. However, the absences may be due to geography instead of chronology. Judging by the large number of presumed Late Formative sherds from Yucatan illustrated by Brainerd, labial and lateral flanges are scarce in Yucatan. Moreover, the widely everted rims of Yucatan are mostly of the simple downturned type which occurs at San Estevan but apparently not at either Uaxactun or San Jose. Thus, in regard to vessel shape, the Vasquez complex may be affiliated more with the now poorly known north than it is with the southern lowlands.

Comparing Vasquez with Mamom, we note that in both plates predominate over dishes and the Vasquez outcurving-sided plates more closely resemble their Mamom equivalent than they do the plate forms of Chicanel. Chamfering, a type of surface treatment restricted to Mamom at Uaxactun, occurs in Vasquez, although only to modify the basal angles of plates in a manner not reported at Uaxactun. But Vasquez lacks Mars Orange, daub ware, figurines and cuspidors (unless some of the "bowls with vertical or near-vertical sides and thickened rims are of this form). These are traits which are not only diagnostic of Mamom, but which are also common in the contemporary Jenney Creek complex at Barton Ramie.

A dichrome in which separate areas of the vessel surface are coloured red, and cream is fairly common in theVasquez complex. At Uaxactun, a very similar dichrome is considered diagnostic of Mamom. The techniques and colour ranges are similar, but whereas at Uaxactun it is the interiors which are most commonly slipped the cream colour, at San Estevan it is almost exclusively the exteriors which are so coloured. Nevertheless, some individual sherds would not seem out of place at either site. Dichrome apparently was not found in San Jose 1, which is equivalent in time to Chicanel, unless the Buff Ware of that period be somehow construed as similar. These indications of early placement do not hold at Barton Ramie, for there a related dichrome persists into phases contemporary with Chicanel. Moreover, recent work at Tikal may extend the duration of dichrome in central Peten (Culbert, 1963).

Although the Formative period is often regarded as a period of widespread cultural similarity, regional and local variations in culture were present during this time and are reflected in the different pottery complexes. For example, San Jose 1, while related to Chicanel, nevertheless has its own emphases and its own seemingly unique ceramic forms. It is no surprise to find the same true of Vasquez. Thus, the unslipped jars with low thick flat-lipped necks have not been reported from elsewhere and seem to be a purely local trait. Nor should we expect the pottery types at San Estevan necessarily to represent the same combinations of attributes as do related pottery types elsewhere. For example, attributes which may be sorted out in time in central Peten or in the Belize valley may occur together at San Estevan.

The conclusion which I favour is that Vasquez is more or less contemporary with Chicanel and that it represents a conservative Late Formative pottery complex somewhat similar to the Late Formative complexes of

Yucatan. The early look of the complex arises from the retention of such presumably earlier traits as the dichrome and the simple plate forms and, especially from the failure to adopt specialized late Formative traits of more southern distribution such as the labial and lateral flange and the wide-everted and grooved rim.

An alternative conclusion is that Vasquez actually is contemporary with late Mamom or very early Chicanel and that a gap exists in the San Estevan sequence. A third, which I think the least likely, is that the fill deposits which were excavated were built up of refuse derived from several Formative periods and that Vasquez represents material contemporary with both Mamom and Chicanel but with the former predominant. More stratigraphic excavations in northern British Honduras are needed to confirm the correct placement.

THE BARKLOG COMPLEX

As is generally true in the Maya lowlands, the ceramic break between the Formative and Classic periods is very marked at San Estevan. The new slipped ware of the Barklog complex, related to the gloss wares of the Maya Classic period, is quite different from its "waxy" predecessor and there is no overlap in the inventory of forms.

The Barklog complex is clearly related to such other Early Classic manifestations as Tzakol at Uaxactun. San Jose II, and the Hermitage Phase at Barton Ramie. Diagnostic are the red-and-black-on-orange polychrome basal flange bowls. Other characteristic Early Classic traits include Z-angle bowls, flaring-sided bowls or dishes with plain rims, scutate covers for bowls or dishes, slipped jars with vertical or slightly flaring medium high necks, vessels with inner-inverted feet, and the striated storage jars with high and medium-high necks.

Particularly interesting is the relationship between the Z-angle and basal-flange bowls at San Estevan. The latter appear in the Barklog complex only as polychrome and one or two monochrome sherds and, because of the ware characteristics, all sherds of this form are believed imported. The local equivalent was the sharp Z-angle bowl, one of the most abundant forms of the Barklog complex. In the succeeding Trial Farm complex the picture is different. Then locally-made basal-flange bowls become a dominant form and replace the sharp Z-angle vessels completely. Thus the priority of the Z-angle bowl over the basal-flange bowl is clear at San Estevan. The latter, although made elsewhere and traded to San Estevan during Barklog times, did not become established as an indigenous type until later. The basal-flange evidently was introduced to San Estevan from the same source that provided the intrusive polychromes of the Barklog complex, probably regions to the south or southwest.

The Z-angle to basal-flange succession is interesting not only for the light which it throws on the spread of the basal flange form, but also because it implies a position early in the Early Classic period for the Barklog complex. At Uaxactun, Z-angle bowls are especially characteristic

and outnumber basal flanges in the Tzakol 1 subphase, although they are reported as a minor form through Tzakol 3. In Yucatan, the form also seems to belong very early in the Early Classic period to judge by a collection of Z-angle sherds with designs like Tzakol 1 from near Merida (Brainerd, 1958, pp. 238–9). Another indication of early position is the occurrence on Z-angle vessels of mammiform tetrapod feet, a feature of the Holmul 1 or Matzanel style which falls chronologically between the Formative and Classic periods (*for example*, Thompson, 1931, Pl. 44, upper left; Merwin and Vaillant, 1932, pl. 18, c). Such feet never, or very rarely, occur on basal-flange vessels although they are sometimes associated with basal-flange vessels in tombs. Although the sharp Z-angle bowl denotes an early position where it occurs, its distribution is sporadic. None are reported from San Jose nor from Barton Ramie. Indeed, when we have better geographical coverage of pottery sequences, the temporal and spatial relationships between the Z-angle and the basal flange may throw important light on the beginnings of the Maya Classic period.

Fragments of two polychrome vessels with mammiform tetrapod feet were found in the Barklog complex. As mentioned, these are features of the Holmul 1 or Matzanel style. A potstand, also belonging with the complex, might be considered a feature of this style also. The Holmul 1 style is most abundantly represented in British Honduras and eastern Peten, and is believed to be somehow connected with the cultural influences which triggered the Classic development in the lowland area. Vessels representing this style have been found in association both with Late Formative deposits and, more frequently, with Early Classic deposits. Most finds have been in grave lots. But at Barton Ramie, evidence from house ruin tests demonstrated a complex of domestic as well as funerary types which were associated with the Holmul 1 style. This complex, the Floral Park, is believed to represent an intrusion of foreign peoples who strongly influenced, but did not completely break, the indigenous cultural continum from Late Formative to Early Classic (Willey and Gifford, 1961). In central Peten, recent work at Tikal shows strong Holmul 1 influence in the Late Formative "Cimi" complex, but continuities with earlier Formative complexes are thought too strong to denote introduction of the features by a large-scale population movement (Culbert, 1963).

Holmul 1 vessels are fairly common in northern British Honduras (*see* Introduction of this report). The best documented collection comes from tombs near Douglas about 10 miles from San Estevan (Anderson and Cook, 1944). Here Holmul 1 vessels apparently were associated with Tzakol 1 or 2 basal-flange bowls in tomb assemblages which closely resembled that of the upper tomb at Holmul.

At San Estevan, we found no evidence for a Holmul 1 "period" comparable to the Floral Park phase at Barton Ramie. The only traces of the style were the aforementioned polychrome vessels and possibly the potstand. The polychrome decoration of the vessels seems somewhat more developed than that represented on the Douglas specimens, and the vessel surfaces are more perfectly smoothed and lustrous than on specimens from Holmul and Barton Ramie which I have handled. At present, we

have inadequate evidence concerning the maximum duration of Holmul 1 features into the Early Classic period, but their presence supports a comparatively early position for the Barklog complex.

In sum, the evidence indicates a position for Barklog in the early part of the Early Classic period, contemporary with Tzakol 1 and probably at least part or Tzakol 2.

THE TRIAL FARM COMPLEX

The Trial Farm complex cannot be fixed in time with the same accuracy as the Barklog complex. Most of the material comes from stratigraphically terminal deposits, including units in the present topsoil zone, and the terminal date of the complex is necessarily open. In surface and other deposits created mainly by erosion and collapse after abandonment, types of various periods may be mingled together. Moreover, much of the material is very weathered and fragmentary, making knowledge of ware, decoration, and complete vessel forms particularly difficult.

The slipped and unslipped ware of the Trial Farm complex seems to have been unchanged from that of Barklog. Continuity is also suggested by the necks of the unslipped jars. But nearly all other forms are new.

The characteristic Trial Farm vessel form, found in all provenience units, is the basal-flange bowl. It is manufactured with the same paste as the Z-angle bowls of Barklog, but, significantly, no sherd of the latter was found in a Trial Farm provenience. The basal-flange bowl is a hallmark of the Early Classic period in the Maya area. It implies contemporaneity of Trial Farm with such phases as Tzakol, San Jose II, Holmul II to IV, and Hermitage at Barton Ramie. Since there is good evidence for placing Barklog in the early part of the Early Classic, Trial Farm should fall in the later part and be contemporary with Tzakol 3. Other vessel forms which conform to this position are the barrel-shaped vases and outcurving-sided plates found in Burial 1 and Cache 2. These are forms frequently associated with Early Classic caches and burials.

But other Trial Farm forms are more at home in the Late Classic period. The bowls or dishes with incurving sides resemble San Jose III to V and Tepeu forms more than they resemble any San Jose II or Tzakol form. The simple silhouette flaring-sided bowls, such as the example illustrated in Figure 16, *g*, is a Period III form at San Jose (Early Late Classic), although at Uaxactun it seems to be Tzakol 3. At San Estevan, the most complete example which was found was associated with a ridged plate (Fig. 16, *e*), which is a marker for San Jose III and Tepeu I, so an early Late Classic position seems to be best. A definite Late Classic trait at San Estevan is the mold-made figurine whistle, represented by one battered but indisputable example. Other forms, such as the bowls or dishes with bolstered or thickened rims, and the flaring-sided vessels with wide interior rim bevels suggest Late Classic modes, but the vessel forms are too poorly known to allow comparison. Still other rim sherds could belong to either Early or Late Classic forms.

The construction fills of the final building period represented in the

excavations were remarkably free of refuse and sherds. Accordingly, the bulk of the Trial Farm sherds must have come from deposits associated with the occupation of the final structures. The actual building of Constructions I-A and II-A must have been late Early Classic. All of the pottery offerings with Burial 1, which is contemporary with the completion of I-A, fit well into this period. Furthermore, in Structure II the stratigraphic evidence indicates that II-A was built up at the end of the time of the Barklog complex, which would be in the middle or later part of the Early Classic.

The prevalence of basal-flange forms in debris deposits formed after the abandonment of I-A and II-A suggests that the most intensive occupation was also late Early Classic. Other forms, such as the incurving-sided bowls, suggest continuation of occupation into the Late Classic contemporary with San Jose III–Tepeu I and perhaps later. In other words, one suggested interpretation is that the Trial Farm complex is a mixed assemblage representing several ceramic periods spanning the last part of the Early Classic and much of the Late Classic.

Another interpretation is that Trial Farm is a transitional complex, occupying a period of time when both Early Classic and Late Classic pottery types were in use together. Still another alternative, which I believe least probable, is that Trial Farm is predominantly a Late Classic complex and that in northern British Honduras the basal-flange form persisted later than it did in central Peten and in west-central British Honduras. Such a survival would accord with Rands' suggestion that the reappearance of the basal flange in notched or stepped form in Tepeu 2 implies its continuing elsewhere through the time of Tepeu I (Rands, 1961, p. 335).

Whatever the correct explanation, the surprising thing is the strong, apparently Early Classic representation in the final pottery complex which we could discover stratigraphically. The impression is that occupation tapered off and that there was no new construction during the Late Classic period. In other parts of British Honduras and Peten where excavations have been carried out, the Late Classic emerges as a time of population growth and ceremonial centre expansion, and this situation is reflected in the great abundance of Late Classic pottery types in the final deposits of the sites. Whether the history of San Estevan and northern British Honduras was truly different, or whether the Trial Farm complex results from abnormal conditions of deposition, remains for future excavations to decide.

The suggested chronological correlation of the San Estevan pottery complexes with phases at Uaxactun and San Jose is summarized in Figure 17.

Stone and Miscellaneous Artifacts

The most lucrative sources in a Maya site for artifacts are tombs and ceremonial caches. At San Estevan, the single burial found was not a particularly rich one and of the two caches discovered one contained only a

pottery vessel and the other only unworked shell. Thus the artifact yield was meagre. Utilitarian implements of chipped flint predominated, followed by tools and ornaments of ground stone. No worked bone or shell was encountered. In the descriptions which follow, dimensions given are the maximum dimensions unless otherwise noted. The numbers of each artifact type found with each pottery complex are also given.

OBJECTS OF CHIPPED FLINT

The chipped implements are made from a good quality flint which is gray or tan in colour. Rare pieces are dark brown or milky white. A few pieces have pinkish or brownish veins.

CELTS (Pl. XVII, upper left and upper centre)

Pointed at one end, rounded or squared at the other. Bifacially worked with retouching of edges usual. *Length* (2 complete specimens): 15.0 and 17.0 cm.; *Width* (5 specimens): 6.4 to 7.5 cm.; *Thickness* (8 specimens): 1.8 to 3.5 cm., average 2.2 cm. Of 4 complete blunt ends, 2 show signs of battering and a third use-polish. *Number*: Vasquez, 0; Barklog, 2; Trial Farm, 5. Points probably from this implement: Vasquez, 3; Barklog, 3; Trial Farm, 4.

The distribution and purpose of this implement have been discussed by Kidder (1947, p. 5) and W. Coe (1959, p. 11). They refer to it as a "general utility tool" or "chopper." Its distribution appears to be restricted to the Maya lowlands. At least in Yucatan, it goes out of use at the end of the Classic period or shortly thereafter. In British Honduras and Peten it is probably the most common utilitarian stone tool to be encountered in Maya ruins. I have picked many from the ground surface while travelling on horseback through Peten and once ran across a manufacturing site where the ground was covered with a litter of celt fragments and spalls. Kidder believes the polish on some examples is due to protracted use in the earth presumably as an agricultural tool. Other specimens are believed to have been used for stone working or chopping because of battering of the rounded end. It is difficult to avoid the conclusion that they were primarily forest-clearing and wood-cutting tools. Living as they did in a heavily forested tropical land, the ancient Maya must have had to clear land and cut wood quite constantly, and no other tool as generally suitable for the purpose as the chipped celt has been found. Coe notes that no consistent pattern of abrasions has been found to demonstrate conclusively that the celts were hafted. Nevertheless, it seems likely that the pointed butts of the celts were sometimes inserted through wooden hafts to form a hatchet-like implement resembling in shape the ceremonial models of hatchets made of clay, obsidian (Thompson, 1939, p. 171, Pl. 28a), and slate (from Barton Ramie) which have been found in British Honduras.

DRILLS OR PICKS ? (Pl. XVII, upper right)

Thinner and more gradually tapering than celts; bifacially worked with secondary chipping at the edges. No complete specimens were found.

Length of longest fragment: 9.6 cm.; *Width*: 2.0 to 3.4 cm.; *Thickness*: 1.2 to 1.9 cm. *Number*: Vasquez, 1; Barklog, 3; Trial Farm, 1.

PECKING TOOLS ? (Pl. XVII, centre row, centre)
Small, rather crudely chipped bifacial tools which are pointed at one end. One complete specimen has secondary retouch along the edges, and the point and the edges are somewhat battered. The other specimen has a similar shape but no retouch. *Length*: 6.7 cm. and about 8.5 cm. (estimated); *Width*: 3.2 and 3.5 cm.; *Thickness*: 1.6 and 2.3 cm. *Number*: Barklog, 1; Trial Farm, 1.

THREE-POINTED TOOL (Pl. XVII, centre left)
A rather crudely chipped, but apparently carefully shaped, bifacial tool with three sharp points. Some retouching of edges. *Length*: 7.6 cm.; *Width*: 4.9 cm.; *Thickness*: 1.9 cm. *Number*: Vasquez, 1.

TANGED POINT (Pl. XVII, centre right)
Made from a large flake. The inner surface (in relation to the parent core) is slightly curved and is unworked except for the tang which is bifacially worked. The outer surface is convex with secondary working along the edges. The point is broken from this specimen and the edges are somewhat battered. *Length* of fragment, including tang: 15.4 cm., original length about 19 cm.; *Width*: 7.7 cm.; *Thickness*: 1.7 cm. *Number*: Barklog, 1.

The distribution of this distinctively shaped artifact has been discussed by Kidder (1947, p. 19) and W. Coe (1957). It is found in the southern Maya lowlands and has been reported most frequently from British Honduras. It also occurs in lower Central America and, surprisingly, in Haiti.

CHIPPED AND POLISHED POINT
The pointed tip of a probable awl-like implement, chipped and well polished, possibly from use. *Length* of fragment: 2.3 cm. *Number*: Trial Farm, 1.

HAMMERSTONES (Pl. XVII, lower row)
Of two specimens, one is approximately spherical with diameters 6 to 8 cm. and is battered on nearly the entire surface. The other is more-or-less discoidal with one battered side, diameter 9.5 cm.; thickness, 4 cm. *Number*: Trial Farm, 2.

Hammerstones of the spherical type are reported from Piedras Negras (Coe, 1959, p. 12) but not from Uaxactun or San Jose.

PLANO-CONVEX SCRAPERS
A group of 5 artifacts, at least 3 of which are fragmentary, which share little in common except that all are made from large flakes, are worked on only one face, and have one or more edges of the convex surface retouched. Specimens range from about 3 cm. to about 7 cm. in length. *Number*: Vasquez, 1; Barklog, 3; Trial Farm, 1.

WORKED FLAKES
Irregular flakes showing use chipping on one or more edges were found sparingly in deposits of all periods.

OBJECTS OF OBSIDIAN

The only obsidian artifacts found at San Estevan were flake blades. These were the common small cutting tools of the ancient Maya. The material was imported mainly from the Guatemalan highlands. At San Estevan, all are of black obsidian, quite transparent when thin, and several specimens have light black streaking. All specimens are fragments whose edges are nicked by use. *Width*: .05 to .14 cm., average .09 cm. *Number*: Vasquez, 4; Barklog, 10; Trial Farm, 5.

OBJECTS OF GROUND STONE

METATES (Fig. 18, *a*, *b*)

Two small fragments from probably leg-less metates. One is of pink granite and apparently was turtle-backed in shape with a concave grinding surface (Trial Farm; Fig. 18, *b*). The other is of a fine-grained gray-green granitic stone and had a concave grinding surface, a flat bottom and rather irregularly finished sides (Vasquez; Fig. 18, *a*). A fragment of vesicular basalt found on the ground surface may also be from a metate. *Number*: Vasquez, 1; Trial Farm, 1.

MANOS (Fig. 18, *c*, *d*)

Two fragments of limestone manos. One, from a central portion of the implement, is plano-convex in cross-section with three surfaces polished by use. *Width*: 7.4 cm.; *Thickness*: 5.3 cm. (Trial Farm; Fig. 18, *c*). The other is wedge shaped in cross-section with wear on two surfaces, end is blunt. *Width*: 6.1 cm.; *Thickness*: 3.5 cm. (Trial Farm; Fig. 18, *d*).

One pink granite fragment is probably from a mano with plano-convex cross-section with one surface polished from use, thickness about 4.5 cm. (Vasquez). The pink granite of which this mano and one of the metate fragments are made comes from the Mountain Pine Ridge in the Cayo District of British Honduras.

BARK BEATER (Fig. 18, *e*)

The single specimen is of limestone and about one-half complete. There is a hafting groove around the rim. One surface is scored, the other is plain. *Width*: 7.5 cm.; *Thickness*: 3.9 cm.; *Number*: surface find, 1.

EAR PLUG (Fig. 18, *g*)

Fragment of an ear-plug flare of a fine grained gray stone. The interior is grooved and the entire object highly polished. *Diameter*: 3.6 cm.; *Width*: 2.0 cm. (Trial Farm).

JADE PENDANT (Fig. 18, *f*)

A simple jade pendant more highly polished on one surface than the other. A bi-conical suspension hole is drilled transversely through the top. *Length*: 2.7 cm.; *Width*: 1.6 cm.; *Thickness*: 0.6 cm. Found with Burial 1 (Trial Farm).

DENTAL INLAYS

Jade chips 2.0 to 2.5 mm. in diameter and 1.0 to 1.5 mm. thick set into the medial and lateral incisors, canines and first pre-molars of the upper jaw of Burial 1 (Trial Farm).

WORKED SHERDS

PERFORATED DISK

Irregularly circular, diameter 3.5–4.0 cm. In the centre a bi-conical perforation. *Number*: Vasquez, 1.

UNPERFORATED DISKS

Of three specimens, one had a diameter of only 2.0 cm. (Barklog). The other two had diameters of 3.5 to 4.0 cm. and were found together (Trial Farm).

Similar perforated and unperforated disks made from potsherds are reported from San Jose (Thompson, 1939, p. 153, Fig. 91, n, r), Benque Viejo (Thompson, 1940, Fig. 55), Uaxactun (Ricketson and Ricketson, 1937, p. 218; Kidder, 1947, p. 68), Piedras Negras (W. Coe, 1959, p. 69), and Copan (Longyear, 1952, pp. 103–4), and are probably common everywhere. The perforated ones may have been spindle whorls, the unperforated ones gaming pieces, unfinished spindle whorls, or—when large enough—lids for small-mouthed containers.

MATTING (Fig. 6)

In Construction I-C, woven mats had been placed over the roof beams before laying of the plaster capping of the roof. Fallen fragments of plaster retained the impressions of the mats, which had themselves decayed. The weave was a simple over-two and under-two twill, the individual cane elements being approximately 1 cm. wide. Similar evidence was also found of mats of the same weave but with the elements about 5 cm. wide and each element composed of 6 strands.

Summary and Conclusions

SUMMARY OF THE FINDINGS

During 1962, work was carried out at a medium sized ancient Maya ceremonial centre at San Estevan, on the New River in northern British Honduras. Two adjacent mounds, Structures I and II, were excavated stratigraphically in order to determine the cultural sequence. Remains were found spanning the range in time from the Late Formative period to the Late Classic period (from probably before the time of Christ until the eighth or ninth centuries A.D.).

Three building periods were found in Structure I. These were designated, from early to late, Constructions I-C, I-B, and I-A. The latest, Construc-

tion I-A, was almost completely excavated; the others only partly. Construction I-C is believed to date from the very beginning of the Early Classic period. Constructions I-B and I-A appear to have been built later in the Early Classic period. No construction dating from the Late Classic period was identified in either of the two mounds excavated.

Construction I-C was probably "T"-shaped in its entirety, but the main portion was a small masonry-walled building, probably a temple, standing on a substructure platform not quite 2 m. high. The building had two rooms, windows, and an interior staircase which formerly led to the top of a beam-and-mortar roof. The substructure had apron and basal mouldings and the entire structure had been painted red.

Construction I-B was only trenched. It was larger and higher than I-C, which it covered, and it may have had three superstructure rooms, one behind the other. The latest component of Structure I, Construction I-A, had a substructure platform more than 4 m. high with a broad stairway across the front. The superstructure had two rooms, one behind the other, with the back room at a higher level than the front room. The latter was 15 m. long and had three doorways opening onto the stairway; the back room was smaller and was entered by one doorway. I-A probably had a beam-and-mortar roof. A burial, the only one found at San Estevan, was associated with Construction I-A.

In Structure II, two building periods were identified. Associated sherds indicated that Construction II-B, the earliest, was built at the same time as the earliest construction in Structure I, that is, at the beginning of the early Classic period. Too little of II-B was cleared to explain its plan, but it consisted of a superstructure building on a substructure about 3 m. high and, like I-C, had been painted red. The superimposed Construction II-A was built later in the Early Classic period and was in use contemporary with the latest construction of Structure I, Construction I-A. II-A had a higher substructure than II-B and a superstructure composed of a long front room and two or three back rooms placed side by side at a higher level than the front room. Like I-A, it probably had a beam-and-mortar roof.

The architectural stratigraphy at San Estevan was clear cut and three distinct pottery complexes were associated with the building remains. From early to late, the pottery complexes are (1) *Vasquez*, (2) *Barklog*, and (3) *Trial Farm*.

In its general characteristics, the Vasquez complex resembles Formative period pottery complexes in the Maya area. It features monochrome "waxy" ware, predominance of comparatively simple plate forms, low necks on storage jars, and decoration by incision in preference to painting. The complex is thought to fall into the Late Formative period and to be approximately contemporary with the Chicanel phase at Uaxactun and with San Jose I. However, certain widespread and characteristic Late Formative pottery features are lacking, for example, labial and lateral flanges and vessel supports. Moreover, wide everted rims are comparatively scarce. These absences, plus the prevalence of a red and cream dichrome, give the Vasquez complex an early look and suggest the possibility of contemporaneity with Mamon or early Chicanel. But the interpretation is favoured

that geography, rather than chronology, is responsible for the absences since the same features apparently are absent or scarce in Late Formative pottery of Yucatan. The Vasquez complex may relate more closely with that area than to the more southern parts of the Maya area, but it is acknowledged that more work is needed in northern British Honduras to confirm the relationships.

The Barklog complex is sharply differentiated from the Vasquez complex in ware characteristics, vessel forms, and decoration. It belongs in the early part of the Early Classic period contemporary with Tzakol I to II at Uaxactun. The outstanding vessel form is the sharp Z-angle bowl. Others include simple flaring-sided bowls or dishes, scutate covers, vessels with inner-inverted feet, and slipped jars with medium high cylindrical necks. Sherds of polychrome basal-flange bowls are also present, but are believed to be imported because of ware characteristics. No basal-flange bowls made with the local paste occur in the Barklog complex, their place being taken by the Z-angle bowl. Holmul 1 or Matzanel traits present in the Barklog complex include two mammiform tetrapod vessels and possibly a potstand, but no evidence was found for a distinct complex of such material at San Estevan.

The Trial Farm complex comes from deposits which are stratigraphically terminal and which are believed to have been derived mainly from the occupation, rather than the construction fills, of the excavated mounds. The sherds are very badly weathered. The outstanding form in all deposits is the basal-flange bowl which, in contrast with the basal-flange bowls of the earlier Barklog complex, is now made in the local paste. The basal-flange bowl is a hallmark of the Early Classic period, but other common forms, such as bowls or dishes with incurving sides, fit best in a Late Classic context. Trial Farm probably spans a considerable length of time and, except as a stratigraphic division at San Estevan, its status as a meaningful pottery "complex" is dubious. Its main importance is to indicate that the final construction in this part of the San Estevan site was probably in the later part of the Early Classic period and that occupation and use of the buildings diminished in intensity thereafter.

Non-ceramic artifacts were comparatively few and unspectacular. We found no rich caches, and the only burial was not a rich one. No worked bone or shell was found. Most common were simple utilitarian tools of chipped flint, especially the chipped celt which was probably the common forest clearing tool of the lowlands. Obsidian flake blades and pieces of metates and manos, including examples made of Mountain Pine Ridge granite, turned up. The one burial had jade inlays in the teeth and a small jade pendant, but luxury items were otherwise practically absent.

CONCLUDING REMARKS

Our work has demonstrated that the period of occupation of the San Estevan ceremonial centre was several centuries long. Moreover, since we did not plumb the deepest deposits at the site, it is possible that there are remains even earlier than the presumably Late Formative Vasquez

complex. It is no surprise to find that the earliest occupation was during the Formative period. Remains of that period have been found underlying all large sites which have been excavated in the southern Maya lowlands. President evidence is that the Maya population was spreading through the Yucatan peninsula in the Middle Formative period (*ca.* 700–300 B.C.) and that during Late Formative times (*ca.* 300 B.C.–A.D. 300) they were fully established in all the regions and localities where we find them during the Classic period. Evidently northern British Honduras was no exception.

The ceramic changes which take place between the Vasquez and Barklog complexes correspond in general to the changes which occur in other parts of the lowland Maya area between the Late Formative and Early Classic periods, but one cannot fail to be impressed at the completeness and abruptness of the changes. In effect, one long-lived ceramic tradition comes to an end and another begins. It has been felt that the Holmul 1, or Matzanel, style has something to do with these changes and a separate period, the Protoclassic, is sometimes set aside for it. At San Estevan, Holmul 1 attributes turned up on two vessels of the Barklog complex, but we found no evidence for a distinctive associated pottery complex which was comparable to the Protoclassic Floral Park phase at Barton Ramie (Willey and Gifford, 1961). If a population intrusion was responsible for bringing the Holmul 1 style to the lowland Maya area, then San Estevan, like Uaxactun, was evidently outside the area of intrusion and must have received its influences indirectly.

While the Vasquez–Barklog transition represents a break in tradition, the Barklog–Trial Farm transition represents continuity. Especially interesting here is the evidence that San Estevan adopted the ubiquitous basal-flange form as a local product only comparatively late in the Early Classic period.

The most surprising result of the San Estevan work was the feeble representation of the Late Classic period. Not only could we not subdivide the cultural material from the Late Classic period, but we could not even obtain a good stratigraphic separation between Early and Late Classic. Although other explanations are possible, we have favoured the interpretation that the final construction was during the late part of the Early Classic period and that use of the buildings diminished from then until abandonment sometime during the Late Classic. This contrasts with the picture from excavated sites in central British Honduras and Peten. There, the Late Classic seems to have been the time of greatest population, and pottery and other artifacts of that period are the most abundant in the upper levels of the sites. Did the Classic Maya decline begin in northern British Honduras relatively earlier than in other parts of the southern lowlands? Or is the situation the result of purely local factors—perhaps even restricted to part of the San Estevan site?

We found no objects assignable to the post-Classic period, although San Estevan is in the midst of an area where numerous late post-Classic *incensarios* and other items have been found. It is also worthy of note that among the numerous published illustrations of antiquities collected from northern British Honduras there appear to be no objects of obviously early

post-Classic origin. What seems the most likely is that northern British Honduras, like most of the southern lowlands, was abandoned during or at the close of the Late Classic period and the post-Classic finds represent a comparatively late movement back into the area, probably from the north or west, of the Maya who formed the populace of the native province of Chetumal.

The San Estevan excavations produced a poor representation of the finer products of ancient Maya civilization, and it is hard to avoid the impression that the site occupied a relatively marginal and provincial status. But the results of one season of test excavations provide only a part of the evidence for reconstructing the culture history of northern British Honduras. We will need more knowledge concerning the region than we now have before our findings can be placed in their proper perspective.

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Fig. 1 Map of Northern and Central British Honduras.

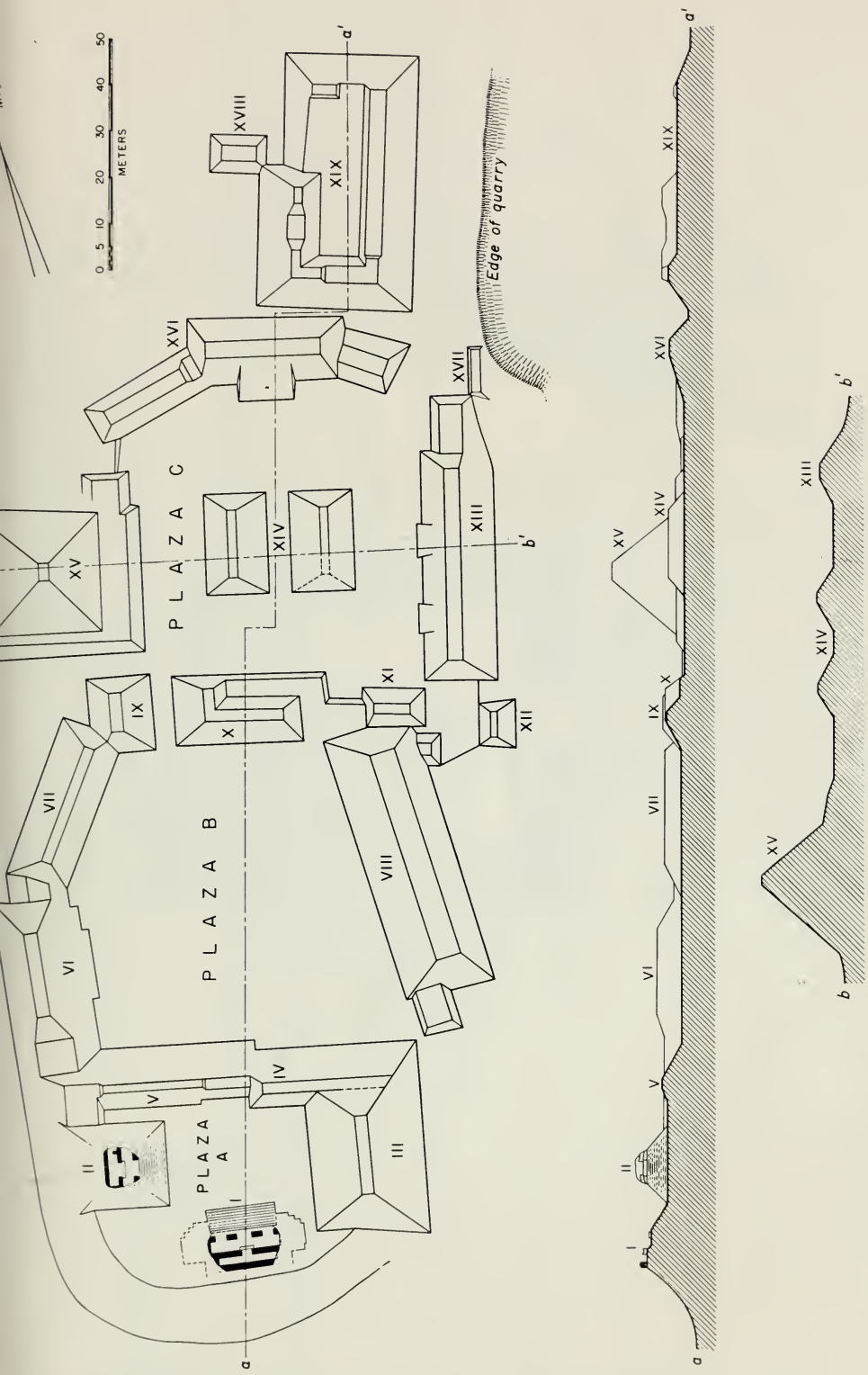


Fig. 2. San Estevan Ruin, Plan and Cross-sections.

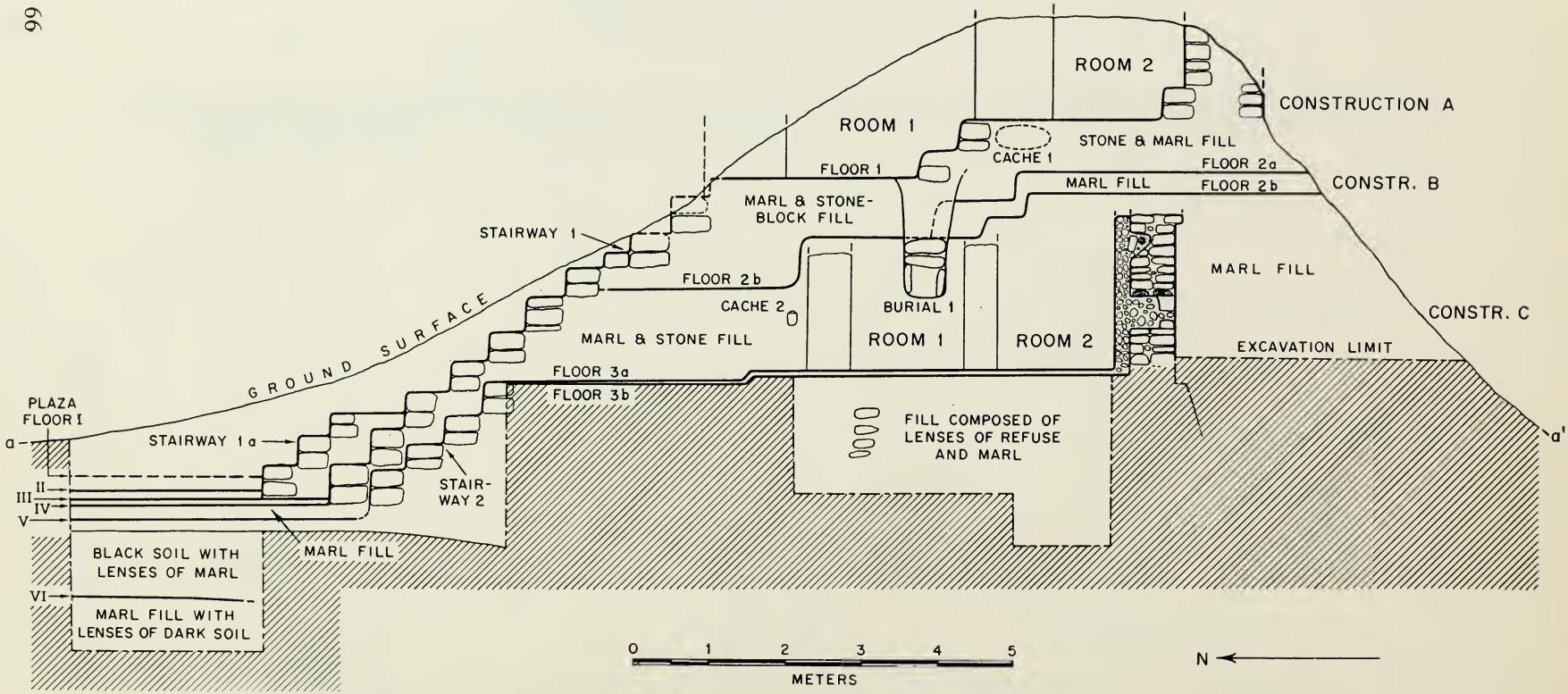


Fig. 3. Structure I, North-South Cross-section (Section a-a').

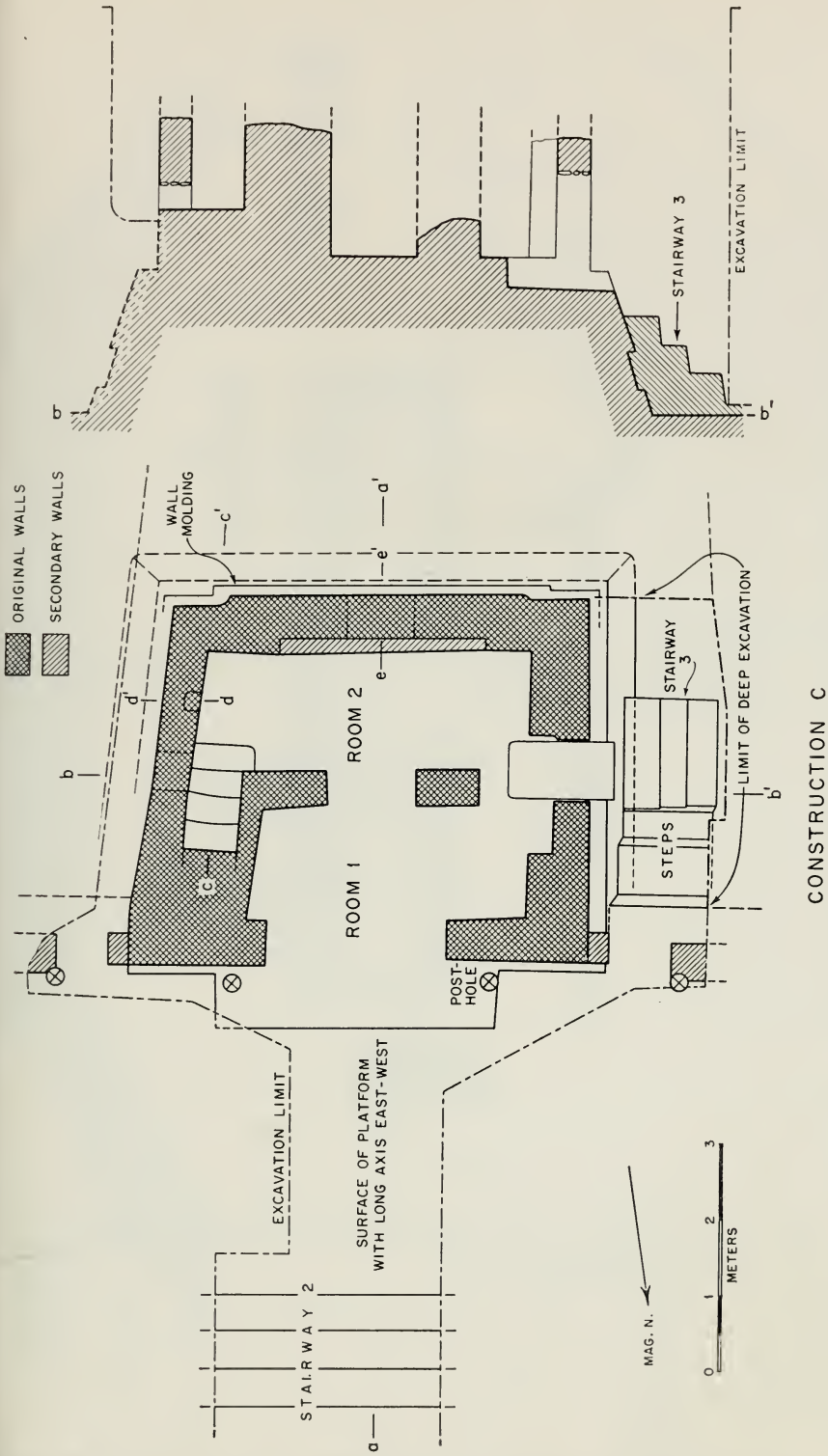


Fig. 4. Structure I, Plan and East-West Cross-section (Section b-b′) of Construction C. For Section a-a′, see Fig. 3; for Sections c-c′, d-d′, e-e′ see Fig. 5.

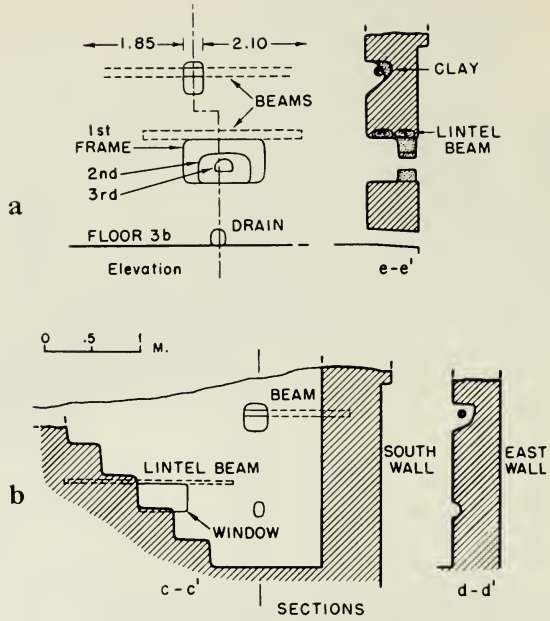


Fig. 5. Structure I-C.
a, Elevation and Cross-section (Section e-e′) of Middle of South Wall.
b, Elevation of East Wall and Cross-sections of South Wall (Section c-c′) and East Wall (Section d-d′).

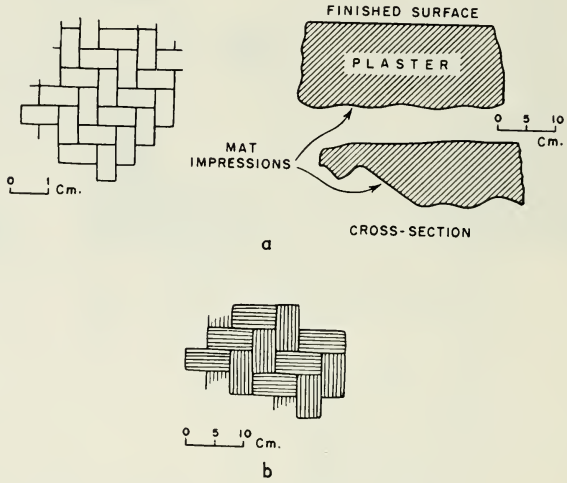


Fig. 6. Structure I, Mat Impressions from Construction I-C.
a, Weave and typical cross-sections of plaster mat impressions from roof.
b, Six strand matting.

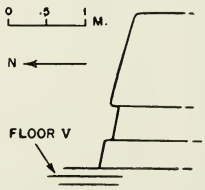


Fig. 7. Structure I, Substructure Corner of Construction I-B(?).

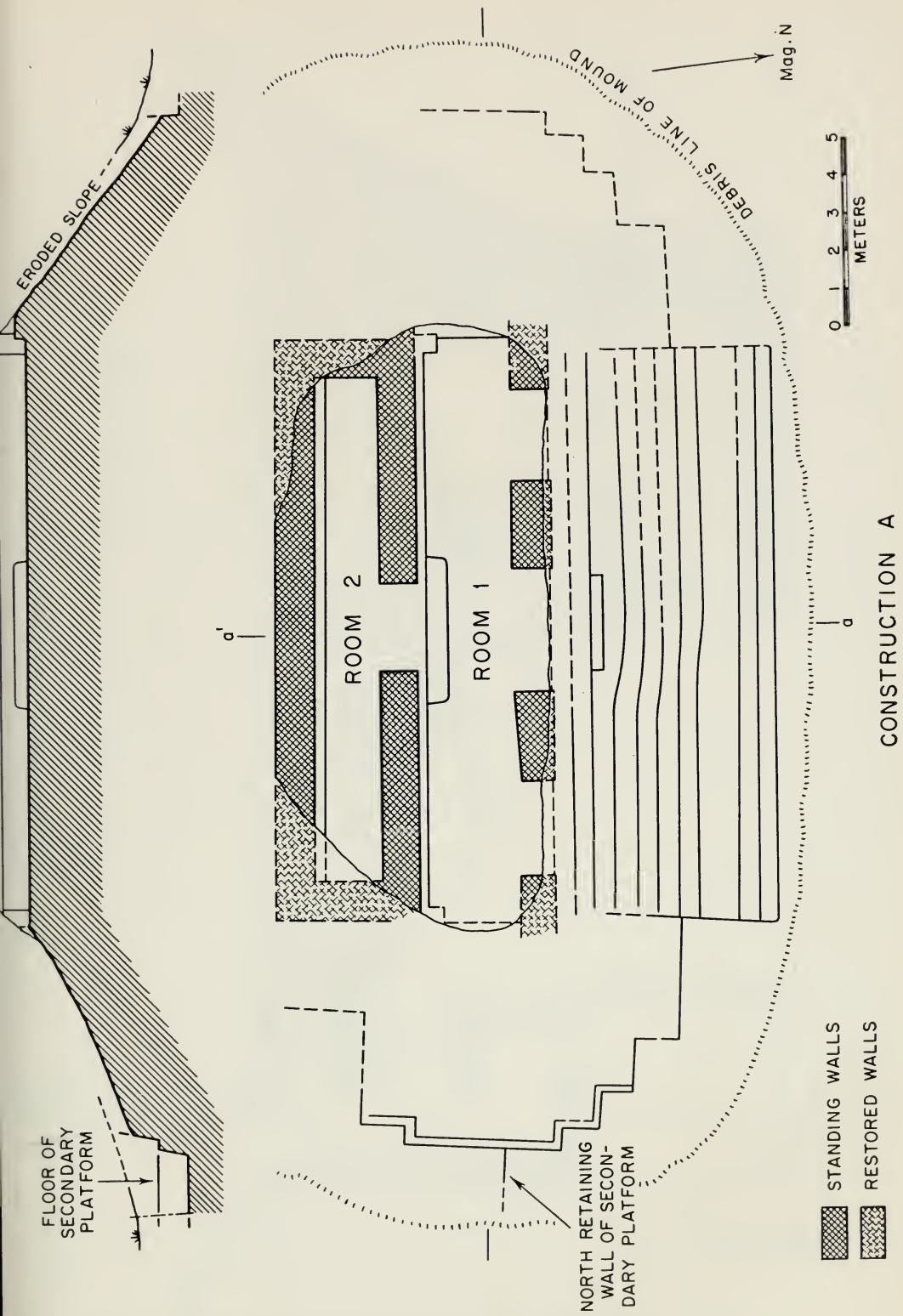


Fig. 8. Structure I, Plan and East-West Cross-section of Construction I-A. Cross-section runs through Room 1.

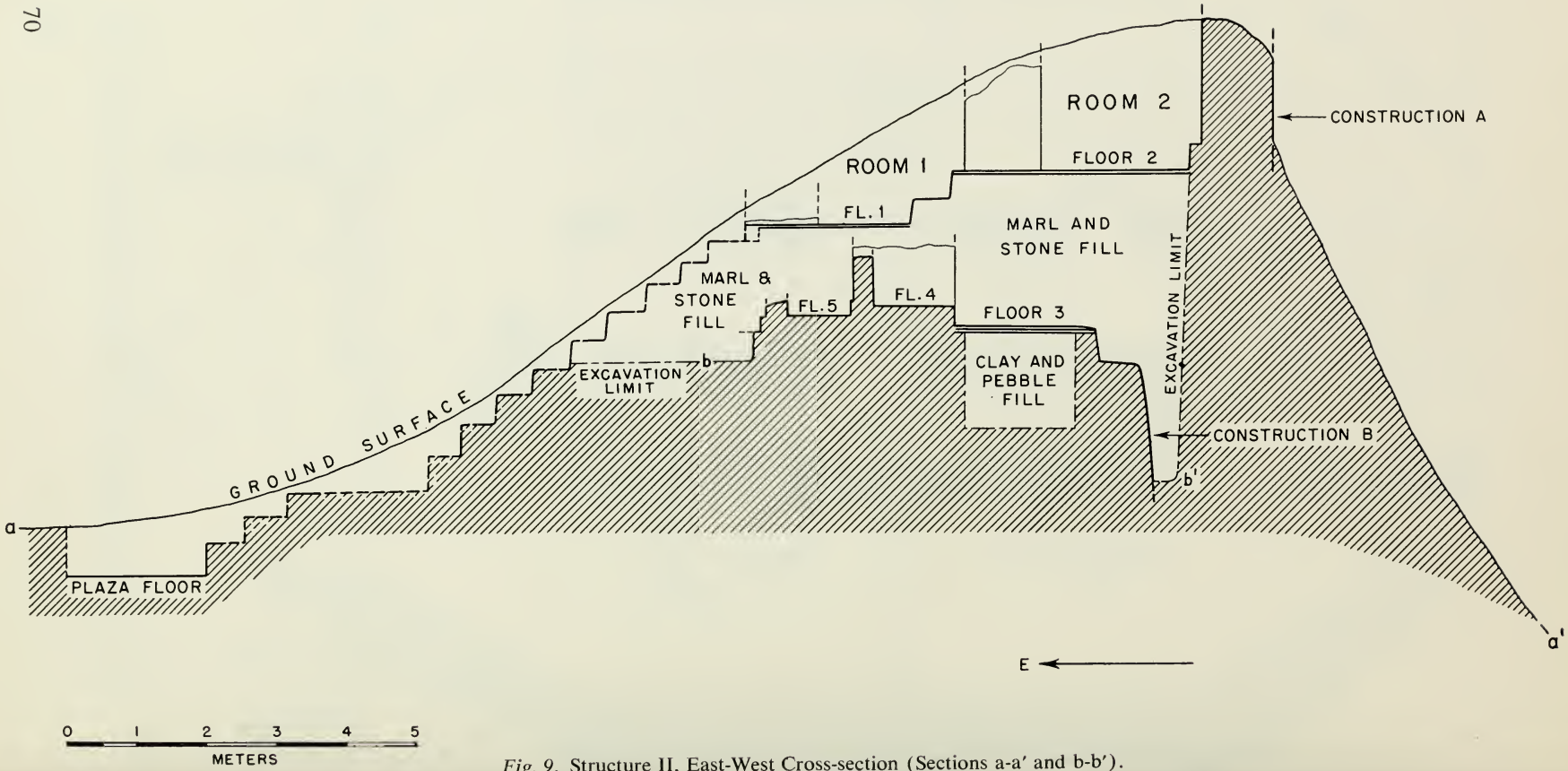
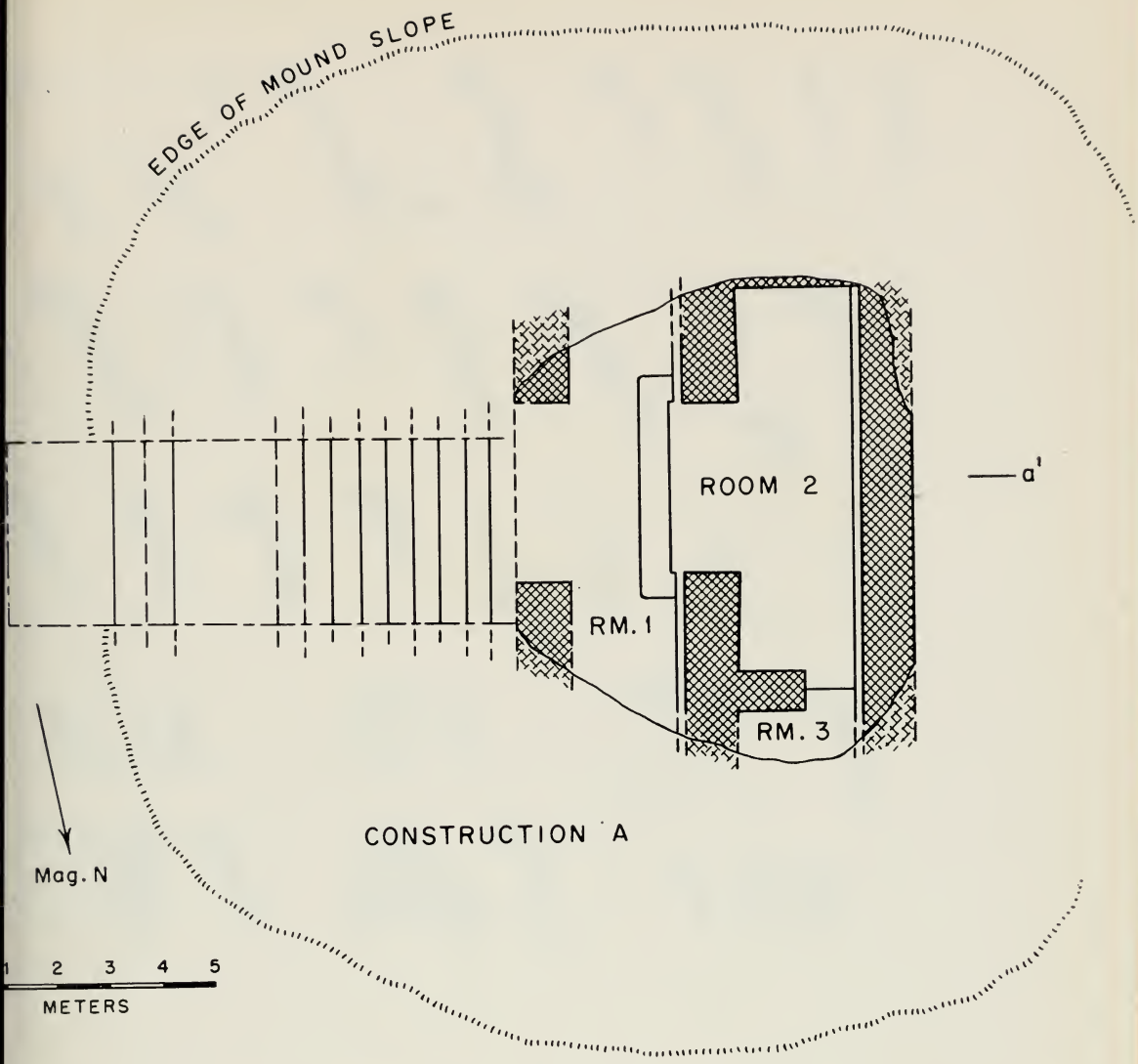


Fig. 9. Structure II, East-West Cross-section (Sections a-a′ and b-b′).



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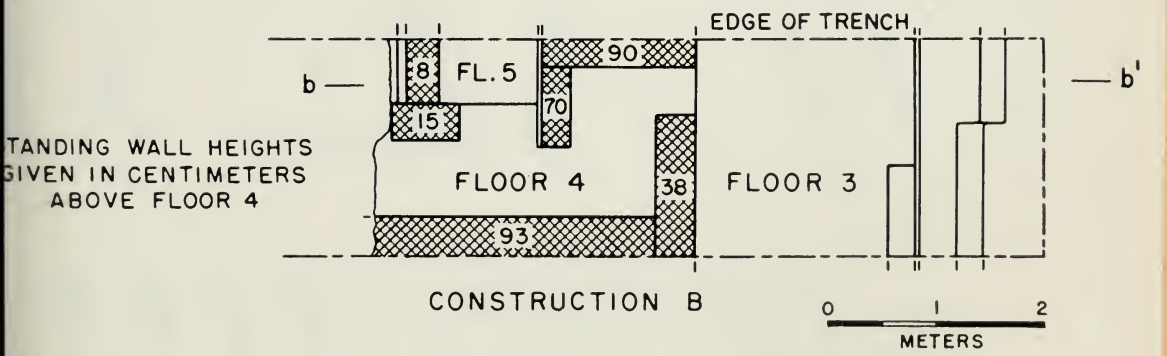
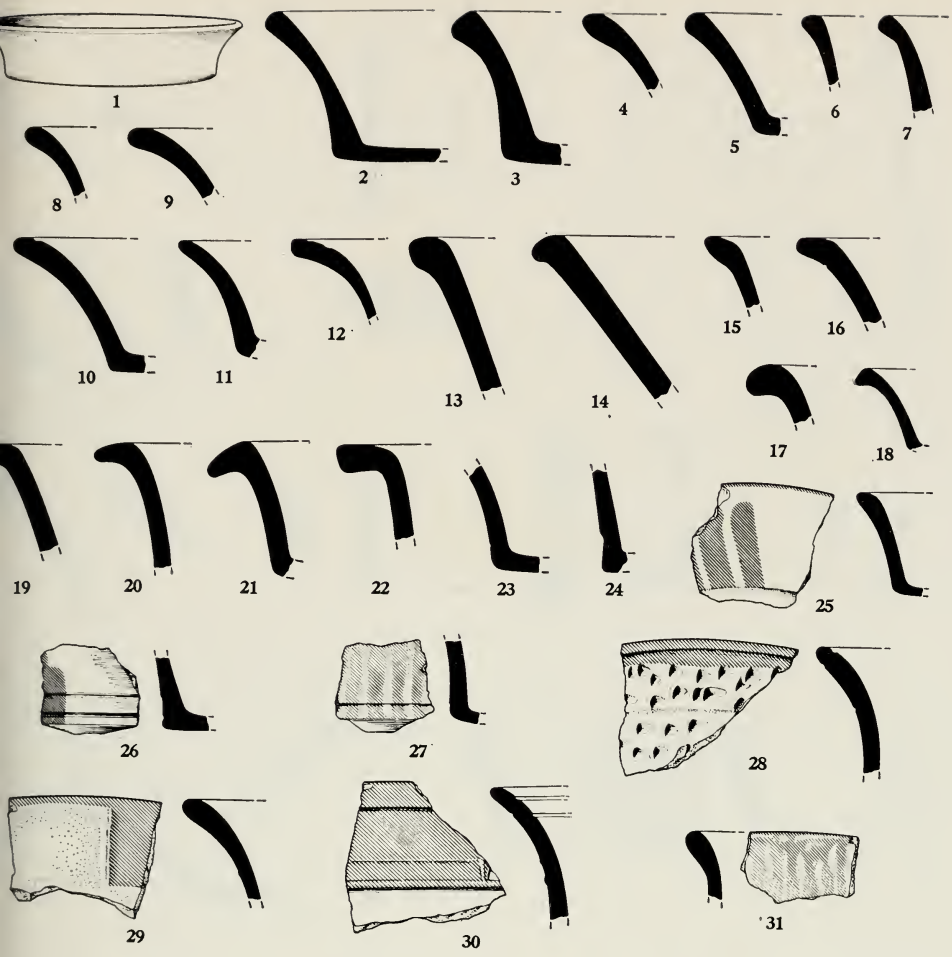


b

Fig. 10. Structure II, Plans of Constructions A and B. For Cross-sections, see Fig. 9.
a, Plan of Construction A.
b, Plan of Excavated Part of Construction B.

Fig. 11. Vasquez Complex Slipped Forms. (Scale: 1/3)
a, Plates with outcurving sides; *b*, Dishes with medial angles; *c*, Hemispherical bowls or dishes; *d*, Bowls with vertical or near vertical sides and thickened rims; *e*, Bowls with slightly restricted orifices; *f*, Jars with low necks.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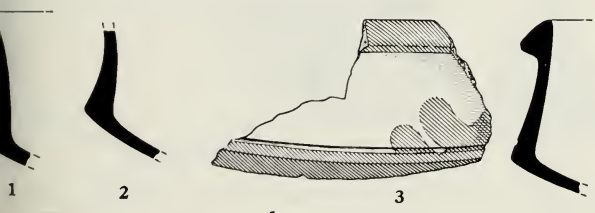
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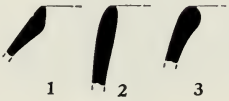
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Fig. 12. Vasquez Complex Slipped and Unslipped Forms, Barklog Complex Polychrome Form. (Scale: 1/3)
a-j, Vasquez complex; *k*, Barklog complex.
a, Spout; *b*, Sherds possibly later than Vasquez; *c*, Unslipped plates with flaring sides; *d*, Unslipped vessels with widely flaring sides; *e*, Bowls or dishes with rounded sides; *f*, Jars with low thick necks; *g*, Jars with very low necks or collars; *h*, Miscellaneous jar sherds; *i*, Miscellaneous bowls and jar sherds; *j*, Adorno; *k*, Polychrome bowls with tetrapod support.


a
b
c
d
e
f
g
h
i
j
k
RED
ORANGE
BLACK

Fig. 13. Barklog Complex Slipped Forms. (Scale: 1/3)
a, Polychrome basal-flange bowls; *b*, Polychrome rim sherds; *c*, Sharp Z-angle bowls; *d*, Rounded Z-angle bowls; *e*, Flaring-sided vessels with plain rims; *f*, Bowls with incurving sides and slightly everted rims; *g*, Vessels with bolstered or slightly everted rims; *h*, Basal-flange bowls; *i*, Basal-break bowls with everted rims; *j*, Covers.

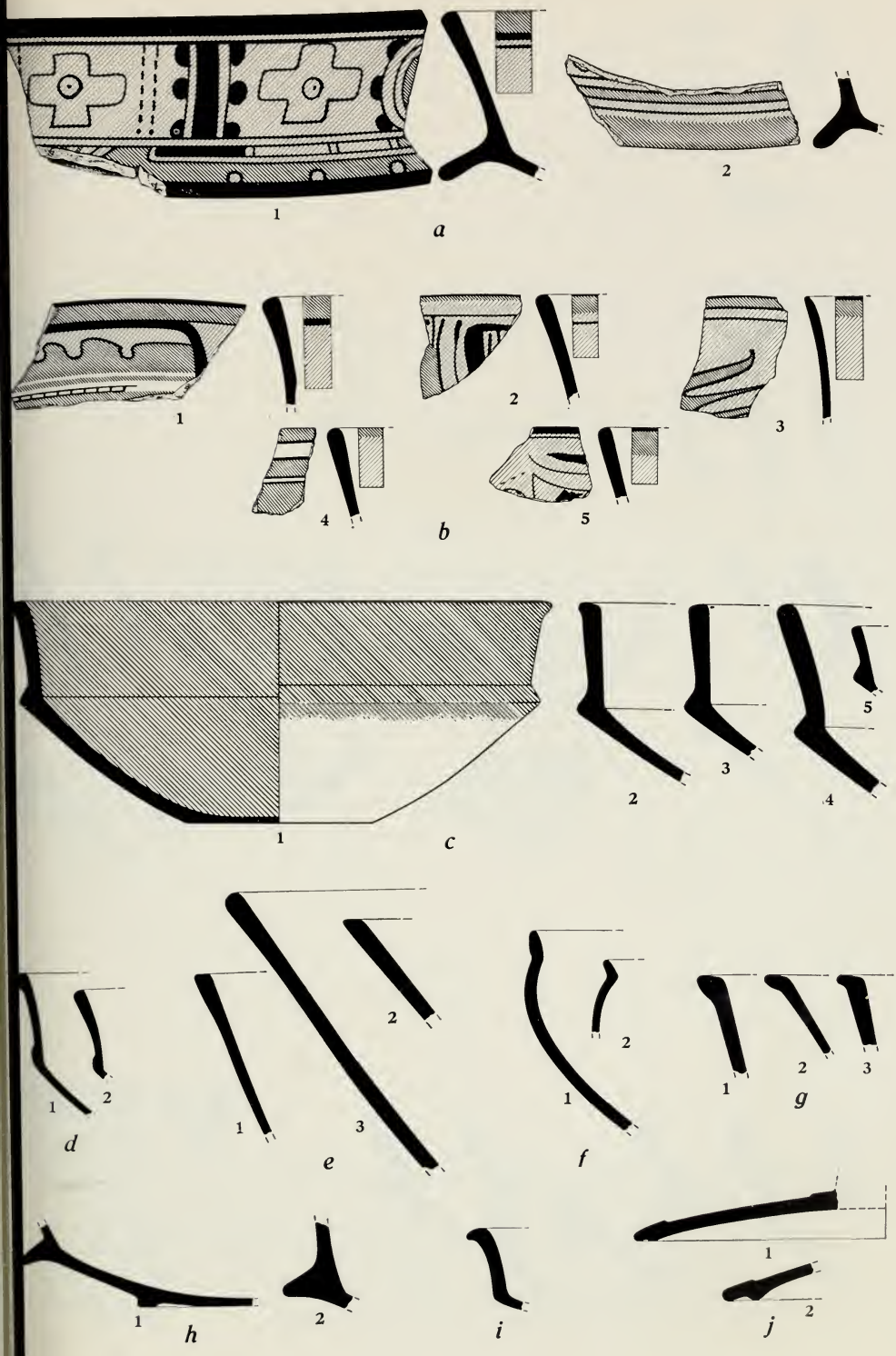
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Fig. 14. Barklog Complex Slipped and Unslipped Forms, Trial Farm Complex Slipped Forms. (Scale: 1/3)
a-h, Barklog; *i*, *j*, Trial Farm. *a*, Jars with medium-high necks; *b*, Jar with finger-indented band on shoulder; *c*, Potstand; *d*, Spout; *e*, Miscellaneous slipped bowl or vase rims; *f*, Unslipped striated storage jars; *g*, Miscellaneous unslipped jar necks; *h*, Vessel with inner-inverted feet; *i*, Polychrome and dichrome sherds; *j*, Basal-flange bowls or dishes.

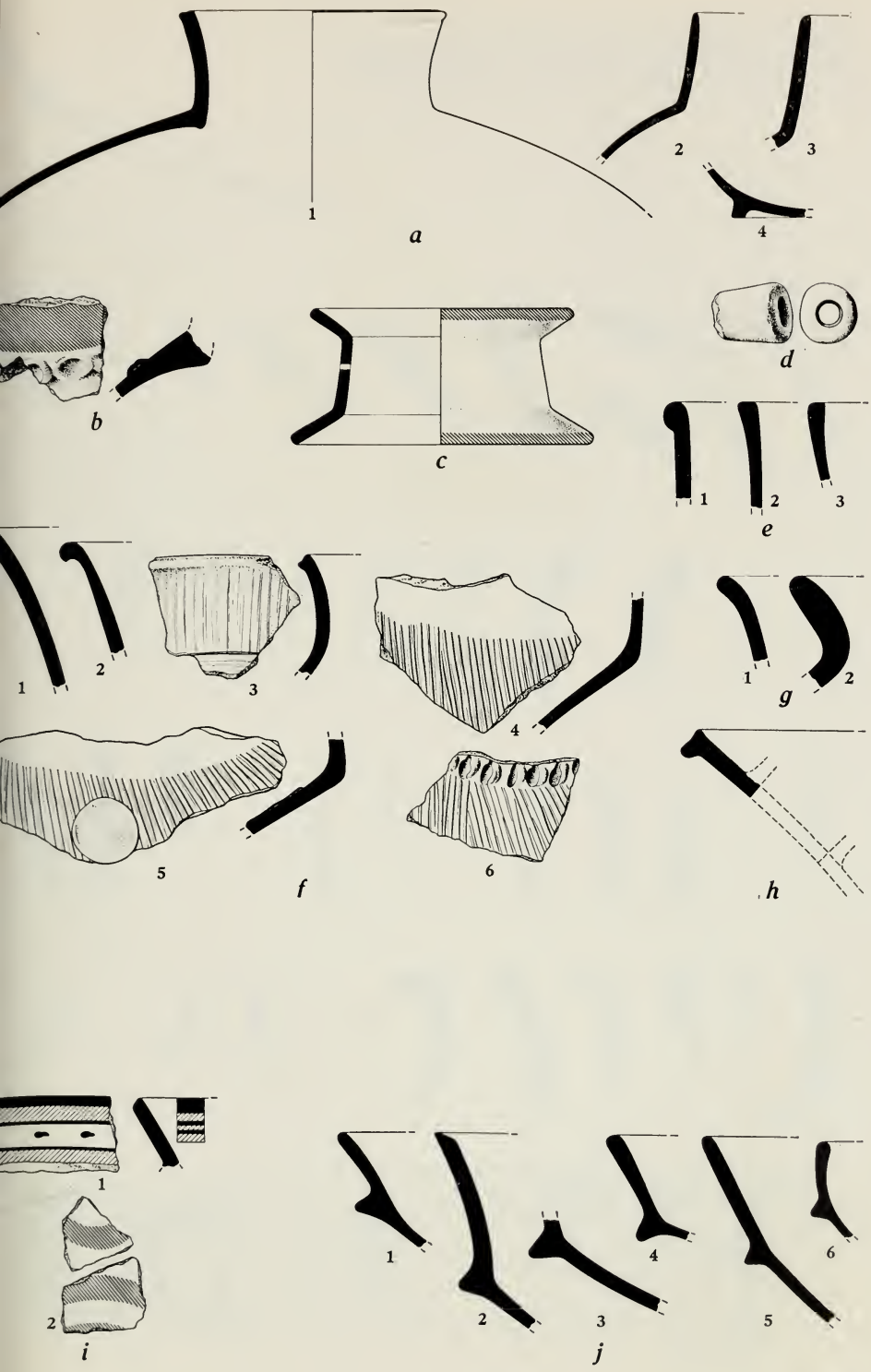
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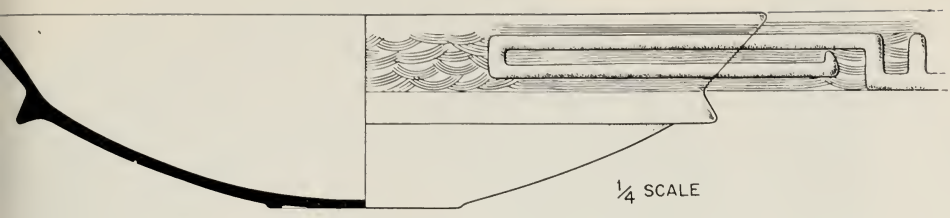
Fig. 15. Trial Farm Complex Forms. (Scale: *a*, 1/4; *b-m*, 1/3)
a, Basal-flange bowl with plano-relief decoration; *b*, Flaring-sided vessels; *c*, Bowls or dishes with incurving sides; *d*, Vessels with bolstered or thickened rims; *e*, Bowls with rounded sides and plain rims; *f*, Cylindrical or slightly barrel-shaped bowls or vases; *g*, Barrel-shaped vase or bowl ?; *h*, Hollow vessel support; *i*, Slipped jar necks; *j*, Unslipped jar necks; *k*, Strap handle; *l*, Bowls with triangular rim bolster; *m*, Vessels with spikes and pie-crust rims.



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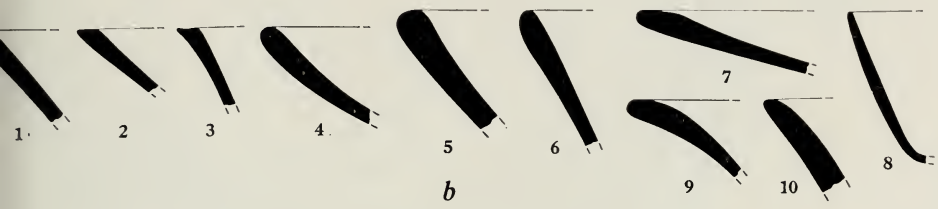

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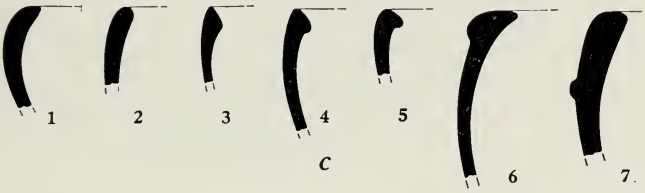
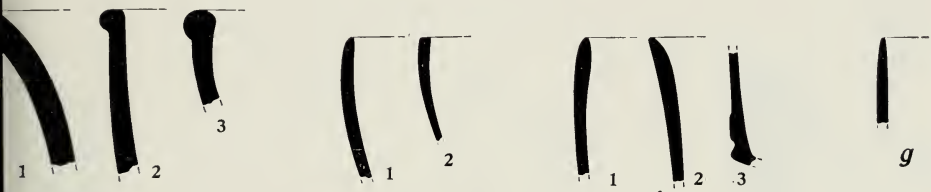
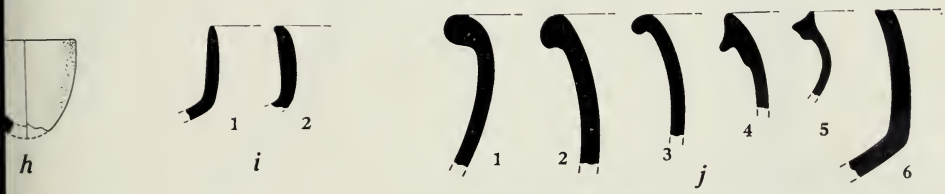


c



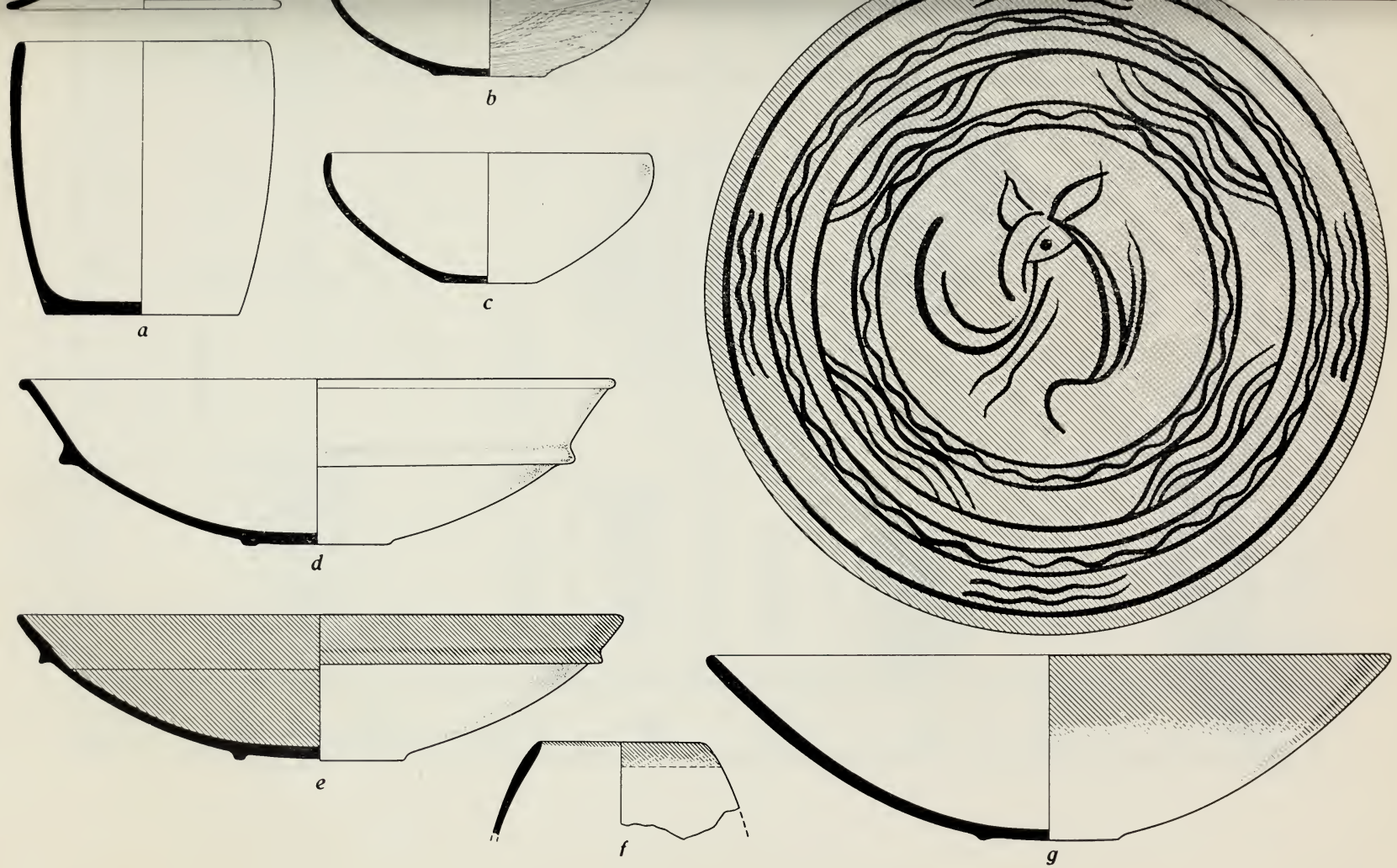
d *e* *f*



h *i* *j*

k *l* *m*

Fig. 16. Trial Farm Complex Vessels from Cache 2, Burial 1, and House Ruin Outside Main Ruin. (Scale: 1/4)
a, from Cache 2; *b-d*, from Burial 1; *e-g*, from House Ruin. *a*, Barrel-shaped vase and cover; *b*, *c*, Round-sided bowls; *d*, Basal-flange bowl; *e*, Dish with lateral flange; *f*, Barrel-shaped vase; *g*, Black-on-red dish (design restored).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		TEPEU 3	S.J. V	LATE CLASSIC
800				
		TEPEU 2	S.J. IV	
		TEPEU 1	S.J. III	
600	TRIAL FARM			
		TZAKOL 3	S.J. II	EARLY CLASSIC
		TZAKOL 2		
400	BARKLOG	TZAKOL 1		
200		MATZANEL		
A.D. 0 B.C.	VASQUEZ	CHICANEL	S.J. I	LATE FORMATIVE
200				
400		MAMOM		MIDDLE FORMATIVE
600				

Fig. 17. Chronological Correlation of San Estevan Pottery Complexes.

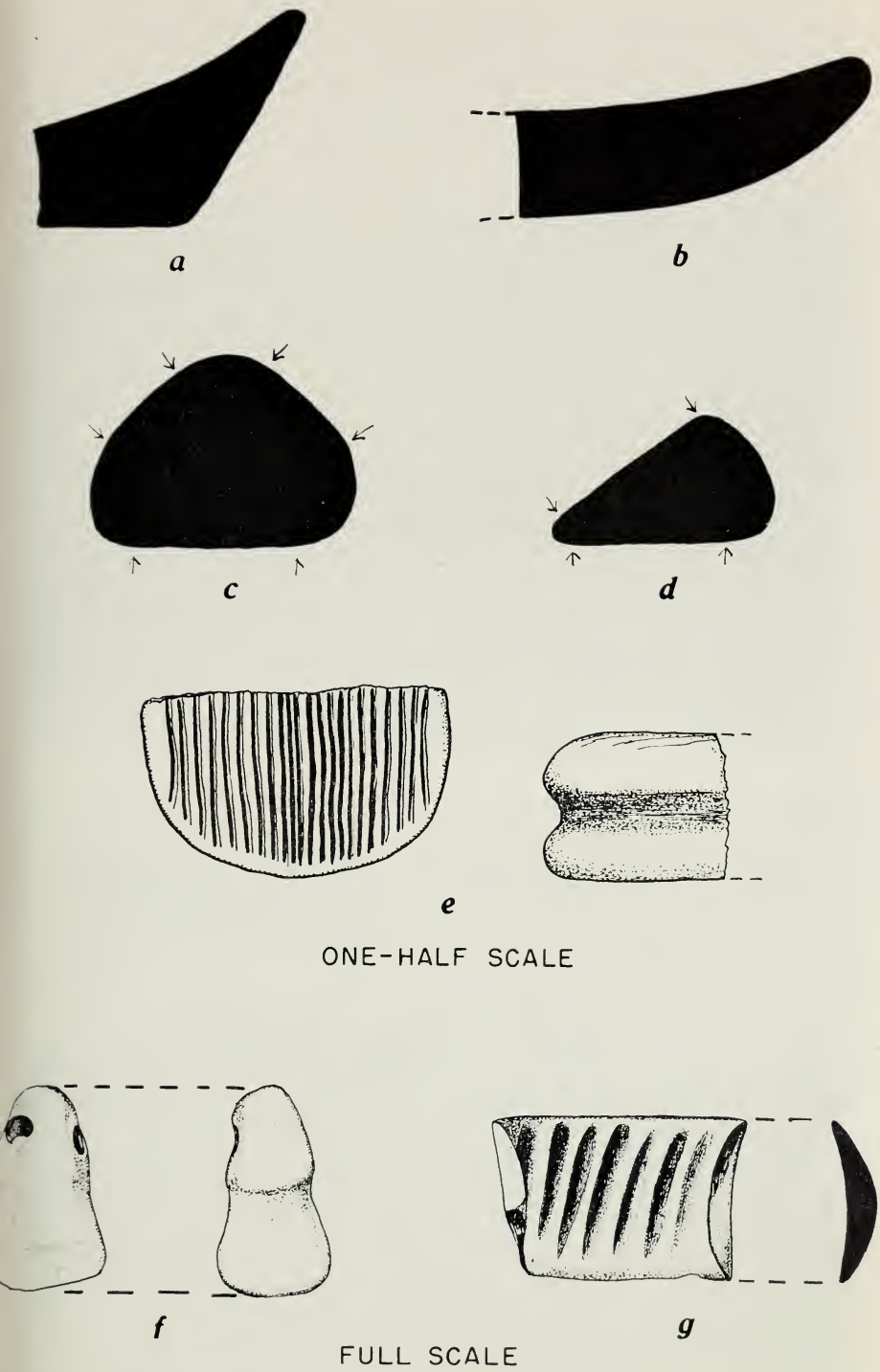

Fig. 18. Ground Stone Artifacts. (Scale: *a-e*, 1/2; *f*, *g*, 1/1)
a, *b*, Metate rim sections; *c*, *d*, Mano cross-sections, arrows delimit worn surfaces; *e*, Bark-beater fragment; *f*, Jade pendant; *g*, Ear-plug fragment.

PLATE I. *Structure XIII from Structure XVI.*

PLATE II. *View north from Structure X, showing Structure XIV.*

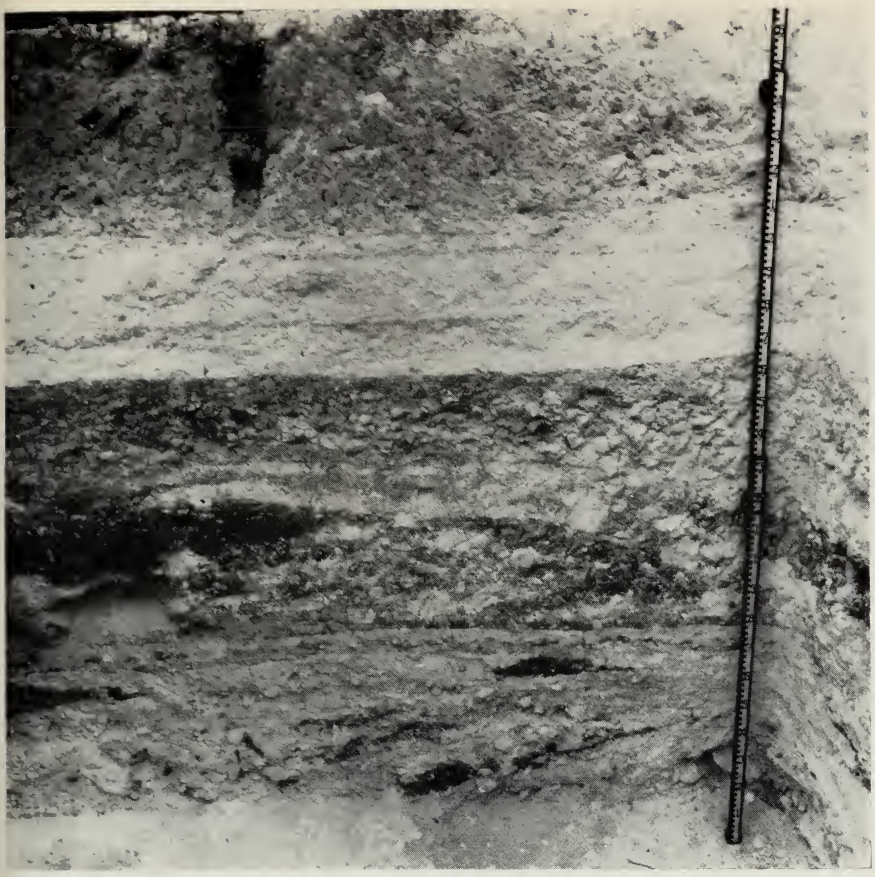

PLATE III. *Stratigraphy in test through plaza floor. Floors II-V show as fine-textured white bands.*

PLATE IV. *Construction I-C, east side of interior.*

PLATE V. *Construction I-C, west side of interior, showing doorway and fallen masonry pier.*

PLATE VI. *Construction I-C, interior side of south wall showing wall features (Lintel beam of window is a replacement).*

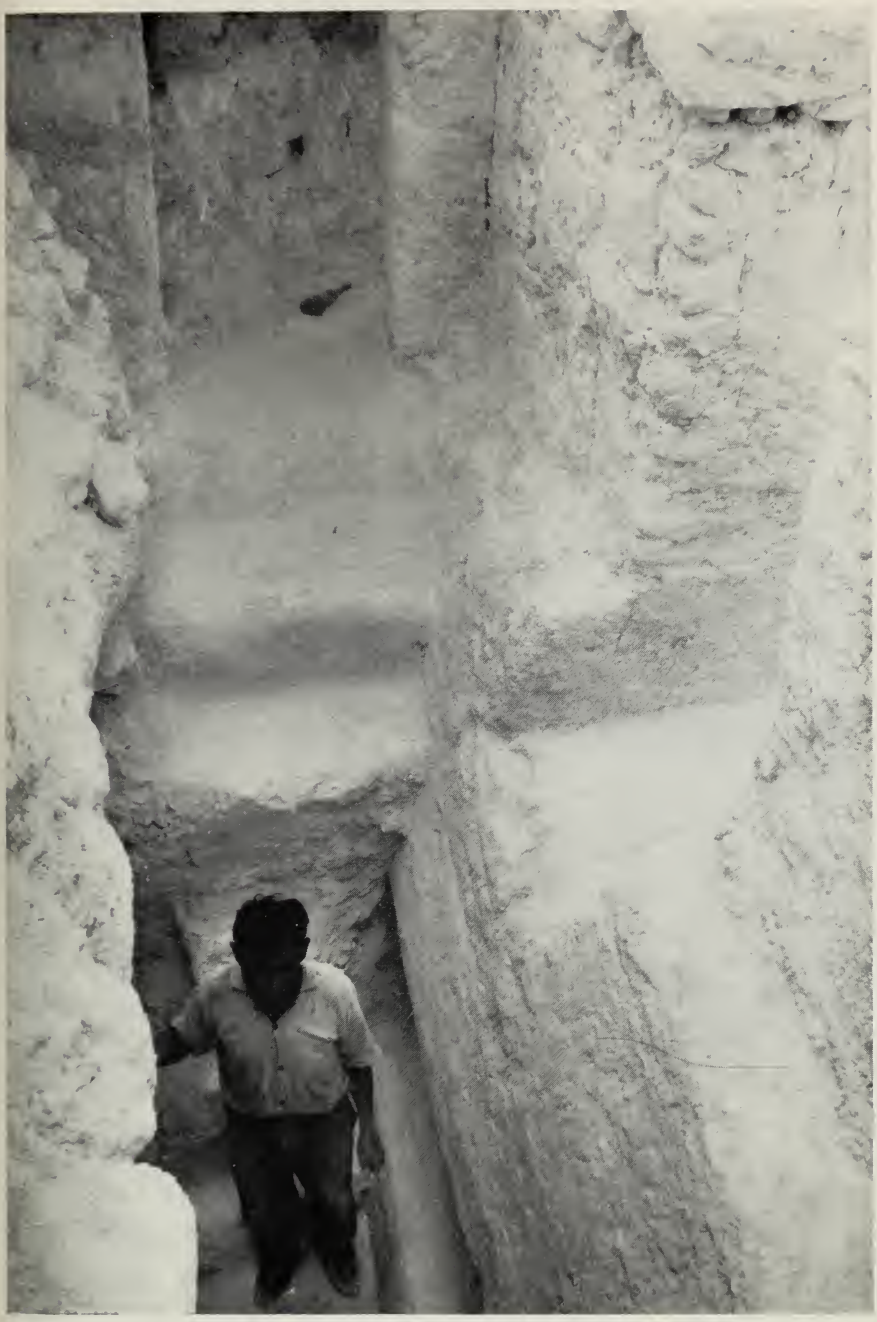

PLATE VII. *Construction I-C. West side of exterior, looking north. Shows substructure mouldings, doorway through west wall (right), doorway through secondary wall (top). Most of Stairway 3 has been removed.*

PLATE VIII. *Structure I, floor of Construction I-B (Floor 2a) beneath Construction I-A.*

PLATE IX. *Structure I, Construction I-A.*

PLATE X. *Structure I, Construction I-A.*

PLATE XI. *Burial 1, upper tier of capstones.*

PLATE XII. *Burial 1, east end of cist, showing pottery vessels over and near skull.*

PLATE XIII. *Structure II, before excavation. View is from Structure I.*

PLATE XIV. *Structure II-B, superstructure features. View looks east.*

PLATE XV. *Structure II-A, viewed from Structure I.*

PLATE XVI. *Structure II-A, Room 2, showing doorway to room 3.*

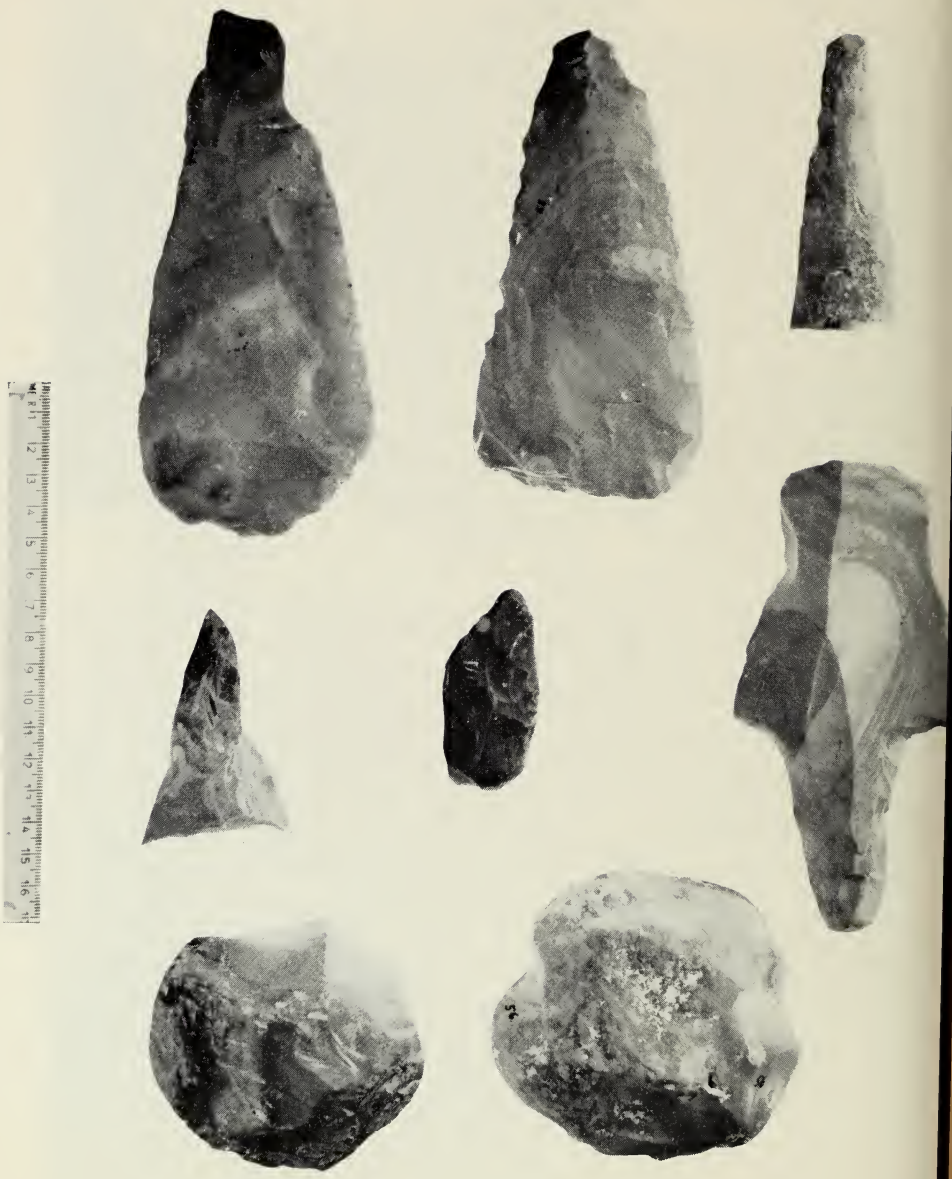

PLATE XVII. *Chipped stone artifacts (Scale 1/3). Upper row, left to right: Celts and drill or pick; Centre row: Three-pointed tool, Pecking Tool, Tanged point; Lower row: hammerstones.*