# Lamanai, Belize: Summary of Excavation Results, 1974–1980

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Excavations at the ancient Maya center of Lamanai, Belize, were begun in 1974 and are expected to continue through 1983. Selected because the presence of a 16th-century Spanish church indicated occupation in late pre-Conquest times, the site is now known to have been occupied continuously for more than two millennia. Excavations have revealed the presence of late Pre-Classic (300 B.C. or earlier) ceremonial and residential construction north of the central ceremonial precinct. The precinct itself, which is laid out in strip form along the western shore of New River Lagoon, has yielded extensive evidence of ceremonial activity, including a 33 m. high structure that is the largest securely dated Pre-Classic building in the Maya Area.

While the site center was largely abandoned by the end of the Late Classic (9th-10th centuries A.C.), major ceremonial construction was still being undertaken at that time in its southern part, the area which became the focus of a rich Post-Classic development. Post-Classic structures have yielded a very large number of burials and a massive amount of ceramics, with indications that decorative motifs developed here before the mid-12th century were later adopted at Mayapan. The site has also produced evidence from post-Conquest times, in the form of the church cemetery and 17th-century occupation debris from the desecrated church, which illuminates the final chapter in the longest known occupation span in the Central Maya Lowlands.

### Introduction

Since its inception in 1974, the Royal Ontario Museum excavation project at Lamanai, in the Orange Walk District of Belize (FIG. 1), has had as its primary aim the elucidation of the prehistory of a Maya center that appeared to have seen longer occupation than most other centers in the Central Lowlands. Funding for the project has come from the museum's research budget and grants from the Social Sciences and Humanities Research Council of Canada, with vital support from the Richard Ivey Foundation of London, Ontario, and Mr. W.G. Horsey of the Wilgran Corporation, Toronto. The duration of the project was originally set at nine years but is now expected to span a decade, with at least two seasons thereafter devoted to stabilization and protection of excavated structures. With the completion of the 1980 season we have only two seasons of excavation remaining, and have reached a point at which the course of events in Lamanai's past is sufficiently clear to permit summarization of excavation results to date.

Our choice of the site for intensive investigation was

based on the presence there of a 16th-century secular Catholic church (FIG. 2),<sup>1</sup> the existence of which was first noted by Castells, who incorrectly identified the structure as Pre-Columbian.<sup>2</sup> Castells' description of the church was, unhappily, the basis for Thompson's mention of a structure with round portal columns at the site, possibly reflecting Central Mexican influence in Western Belize.<sup>3</sup> Though the church had been the source of some confusion, its presence demonstrated that Lamanai was inhabited in early historical times, and the possibility clearly existed that the occupation in that period represented the upper end of a continuum from the Classic (3rd to early 10th centuries A.C.) or earlier. There was ample evidence, in the form of obviously com-

2. F. de P. Castells, "The Ruins of Indian Church in British Honduras," *American Antiquarian and Oriental Journal* 26:1 (1904) 32-37.

3. J. Eric S.Thompson, "Excavations at San José, British Honduras," *Carnegie Institution of Washington Publication* 506 (1939) 233.

<sup>1.</sup> David M. Pendergast, "The Church in the Jungle," *Rotunda* 8:1 (1975) 34–35.

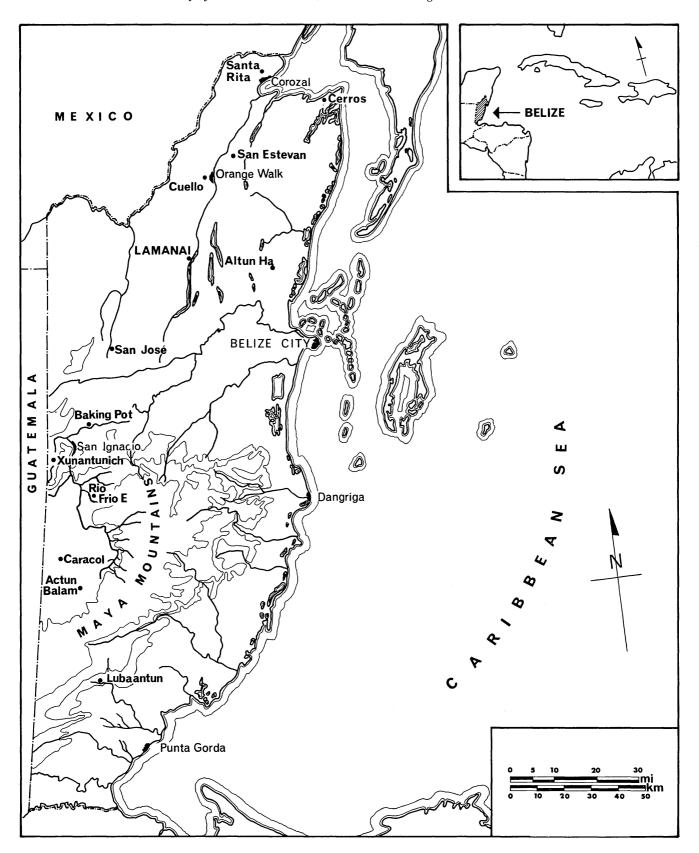


Figure 1. Map of Belize, showing location of Lamanai, selected other archaeological sites, and modern settlements.



Figure 2. The remains of the 16th-century Lamanai church, seen from the sw; only the apse was of masonry.

plex, large structural remains, to indicate that the site had probably been an important center during the Classic, so that excavation could be expected to provide insights into developments in the Central Maya Lowlands over a considerable period.

Though the locale is generally known in Belize as Indian Church, a name apparently coined in the early 19th century, Lamanai is in fact one of the very few Maya sites for which the ancient name is recorded. It appears on a church list of 1582,<sup>4</sup> and the site was visited and very sketchily described by Fathers Bartolome de Fuensalida and Juan de Orbita in 1618.<sup>5</sup> The peripatetic padres returned to Lamanai in 1641

4. Ralph L. Roys, "The Political Geography of the Yucatan Maya," *Carnegie Institution of Washington Publication* 614 (1957) 63.

5. Diego Lopez de Cogolludo, *Los tres siglos de la dominación española en Yucatán, o sea historia de esta provincia* (5th edition, 2 vols: Graz 1971 [1st edition Madrid 1688]) Vol. 2, p. 213.

to find the houses and church burnt and the apostate Maya in league with the inhabitants of Tipu, then the political center of the area.<sup>6</sup> The historical documents give the site name as both Lamanay and Lamayna, the sort of confusion that seems to have beset Spanish recorders of Maya placenames; Thompson has suggested the reading *laman/ai*, "drowned insect", as the most plausible.<sup>7</sup>

The meaning of the name proposed by Thompson hardly appears to be sufficiently pretentious for a major center, but I had worked out a rather elaborate explanation for the name, which was based on the supposition that site names might have been dictated by the first object seen as settlers arrived. Given the location of Lamanai on the shore of New River

## 6. Ibid. 505-506.

7. J. Eric S.Thompson, The Maya of Belize: Historical Chapters since Columbus (Belize 1972) 10.

Lagoon, the headwaters of the New River (known as the *Dzuluinicob*, "foreign men", in prehistoric times<sup>8</sup>), the existence of some arthropod floating legs up amidst the littoral reeds seemed a likely enough basis for the site name, however much it may have grated on the ears of Lamanai's inhabitants.

The conjectural etymology of *Lamanai* seemed convincing enough until recently, when the suggestion was made that the linguistic confusion of the 16th-century Spaniards was a bit greater than supposed, and had involved the failure to hear a final "n" in the site name. The change from *Laman/ai* to *Lama'an/ayin* alters the meaning considerably; rather than "drowned insect", the name comes to mean "submerged crocodile".<sup>9</sup> Laboring over the exact spelling and meaning of the site name might seem a bit too much of a struggle when so few ancient Maya place-names are known, but in this case the new reading has, as we shall see, important implications regarding religious beliefs at the site. Nonetheless, as the name Lamanai has been enshrined in print, we continue to use it.

From the time of Castells' recording of the church until our work began, Lamanai remained untouched by archaeologists, unless one wishes to take note of the work, fortunately limited in scope, carried out there by Thomas Gann in 1917.<sup>10</sup> Thompson passed by the site on his way to San José, some 48 km. to the sw,11 and several other archaeologists, including W.R. Bullard, Jr., visited the area and made surface collections,<sup>12</sup> but the years immediately prior to 1974 saw only the depredations of looters, luckily as restricted in scale as Gann's trenching of more than a half century earlier. Thus when we began our investigations we were armed only with the knowledge derived from historical documentation plus a small surface collection made in 1967 by Thomas Lee of the New World Archaeological Foundation, which contained some late Post-Classic Tulum-related sherds, an expectable element in view of the presence of potential parishioners at Lamanai when the Spaniards arrived, perhaps by or before 1570.

The situation of Lamanai along the western margin of New River Lagoon was probably a major contributing factor in a decidedly non-standard settlement pattern, in which the usual arrangement of one or more ceremonial precinct plaza

8. Lopez de Cogolludo, op. cit (in note 5) 213; Thompson, op. cit. (in note 7) 5.

9. Barbara MacLeod, personal communication (1978).

10. Thomas W.F. Gann, Ancient Cities and Modern Tribes: Exploration and Adventure in Maya Lands (London 1926) 63-64.

11. Thompson, op. cit. (in note 3) 2.

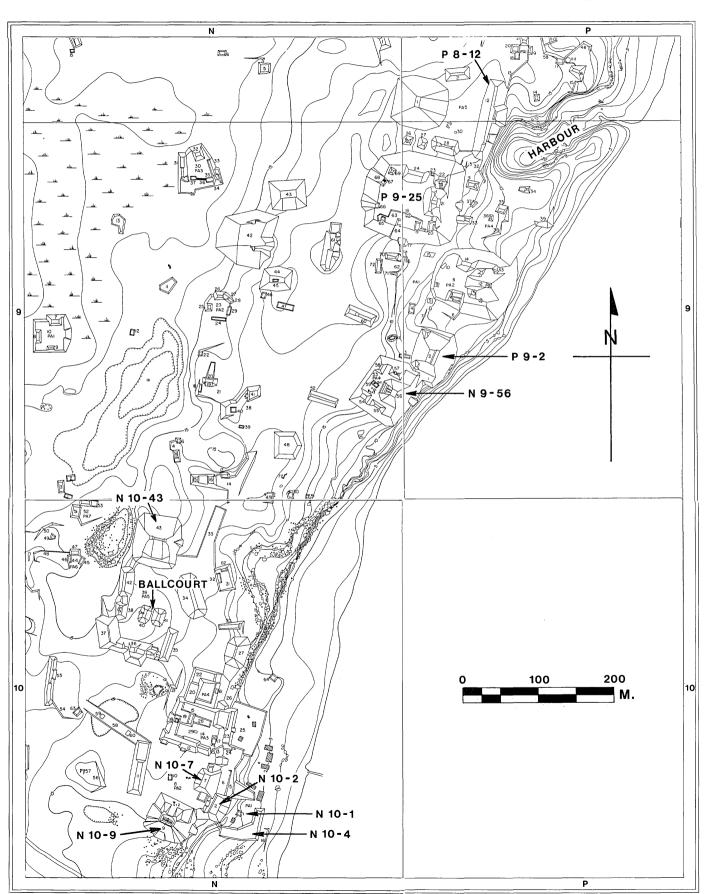
12. William R. Bullard, Jr., Stratigraphic Excavations at San Estevan, British Honduras. Royal Ontario Museum Art and Archaeology Occasional Paper 9 (1965) 11. groups, surrounded by zones of residential and other small structures, gives way to a sort of massive strip development with not a single ceremonial grouping resembling those generally encountered elsewhere (FIG. 3). This fact, in combination with the very few architectural features visible on the surfaces of some large structures prior to excavation, suggested that Lamanai might be sharply different from neighboring sites such as Altun Ha, ca. 40 km. to the east,<sup>13</sup> and San José. The unusual site plan also made our initial investigations difficult, in that there was nothing to indicate which areas might have had Post-Classic occupation. Fortunately a solution to the problem was provided by our choice of a camp site, which proved to be in the zone of densest late pre-Conquest occupation.

Since 1974 we have spent approximately six months of each year in excavation, with the work of the first two seasons concentrated in the southern portion of the site center, where Post-Classic remains from the 10th to the 15th century A.C. predominate. While our knowledge of life at Lamanai during these centuries is very far from complete, the results of the first two seasons have been considerably expanded in the season just completed, so that we are now on reasonably solid ground in discussing the spatial extent and many of the particulars of the Post-Classic occupation. At the same time we have recovered a significant amount of information bearing on developments in the Pre-Classic and Classic portions of an almost certainly unbroken occupation spanning more than 2,000 years.

The mapping work, carried out under the direction of Dr. H.S. Loten of Carleton University, Ottawa, from 1974 through 1976, recorded a total of 718 structures within the 4.5 sq. km. investigated. As with other Central Lowlands sites, no real community boundaries were identifiable; mapping was generally carried outward from the lagoon-edge ceremonial area to points at which mound density diminished markedly. We have to date sampled or intensively investigated 37, or slightly more than 5%, of the structures, in an area extending westward ca. 0.5 km. from the lagoon shore. Partly because of the logistics of work in zones containing concentrations of small structures in the far north and west, and partly because of weather patterns over the 1977-1979 seasons, our sample is presently weighted on the side of ceremonial construction, but in 1981 and 1982 this imbalance should be corrected, while work on a few large structures in the site center is continued.

13. David M. Pendergast, *Excavations at Altun Ha*, *Belize*, 1964–1970 Vol. 1 (Toronto 1979) Map 1.

Figure 3. Plan of the central portion of Lamanai. Structure P8-9 lies 175 m. north of the map limit, and the church is 720 m. south of the south limit of Map Square N10. Contour interval: 1 m.



In conjunction with the archaeological investigations, botantical studies of several sorts have been carried out by Dr. J.D.H. Lambert of Carleton University, Dr. J.T. Arnason of the University of Ottawa, and Dr. Richard Hebda of the British Columbia Provincial Museum, Victoria. A summary of a portion of the studies of modern flora has been published,14 but the principal results of the work are to be included in the final excavation report. Both the modern botanical work and the archaeobotanical studies have implications beyond Lamanai itself, while Dr. Hebda's work in the latter field may also assist in fixing the date of the beginning of agriculturally based life at the site. In addition, the discovery in 1978 of a raised-field system immediately north of our mapping boundary has led the botanical team into research, now essentially completed, that supplements studies of similar and related systems elsewhere in the Maya lowlands. Collection of ichthyological, amphibian, and reptilian fauna was carried out in 1978 and 1979 by James Lovisek of the Royal Ontario Museum with the aim of providing local reference material for identification of the large quantity of excavated faunal remains. Other specialized studies are likely to be undertaken in the remaining years of the project, including the final analysis season scheduled for 1983. In 1980 investigation of the probable site of the 16th and 17th century community was begun by Olivier de Montmollin, graduate student in the Department of Anthropology, University of Michigan; this work is expected to continue in coming seasons.

The archaeological picture that has emerged from our excavations seems, by the standards of other sites, an oddly skewed one. This picture may in part be a result of the unusual site plan, which has clearly structured our sample, though in ways that we cannot now fully assess. It may also be an accurate reflection of the ebb and flow of developments at Lamanai, though this appears the less likely possibility. The apparent skewing lies not at the ends of the time scale, where gaps often occur elsewhere, but rather squarely in the middle of the Classic, a period which is usually very heavily represented in both elite and proletarian contexts. It is a curiosity of Lamanai that we can now say more about the late Pre-Classic (ca. 300 B.C.-100 A.C.) and Early Classic (300-550 A.C.), and, of course, about the Post-Classic, than we can about the supposed zenith of Maya achievement in the centuries between ca. 550 and 700 A.C.

# The Pre-Classic and Classic: 300 B.C. or Earlier to 10th Century A.C.

Following completion of the bulk of our investigations of Post-Classic and terminal Classic construction in the southern part of the site center in 1975, we turned much of our attention to the southernmost major ceremonial structure and to ceremonial and residential buildings in areas farther north. In the central part of the ceremonial precinct we undertook investigation of a moderate-size platform group bordering the lagoon, dominated by a structure ca. 17 m. in height (Structure N9-56). This group was selected because of the apparent similarities between the principal structure and that at the southern limit of the site center, Structure N10-9. Work on this latter building was begun in early 1976 and continued through 1979, producing extensive architectural and other data bearing on the Early Classic through the Post-Classic. Comparison of this structure with those farther north led us not only to N9-56 but also to Structure N10-43, the tallest at Lamanai, which forms the north border of the next plaza north of that associated with N10-9 (FIG. 3). Work on both of these structures was begun in 1977, and is likely to be completed in 1981.

In 1977 an isolated major structure, P9-2, on the lagoon margin north of the N9-56 group, was added to the lot under investigation; work here has been carried on intermittently since, and is now essentially completed. At the same time, investigation of small structures proceeded whenever possible, extending in 1979 and 1980 to zones as much as 0.6 km. north of the northernmost major structures. In the season just concluded we also began investigation of the largest complex at the site, a platform 90  $\times$ 110 m. on the top and 18 m. high, bearing buildings as much as 9 to 10 m. in height. Concurrently with this work we commenced excavation of an obviously special range structure (P9-30), 97 m. long at the top, which sits at the inner edge of a large depression that was almost certainly a harbor in ancient times, and completed work on the lone ballcourt at the site, first investigated in 1978.

It would be premature to present here a detailed discussion of the construction history of any of the buildings investigated, especially as work is still in progress on many of them. There are, however, a number of patterns that have emerged from the excavations that bear examination, as do special features of several buildings. Generally speaking, the excavation data confirm impressions based on initial survey of the site; Lamanai appears to have been distinctive in several respects in addition to overall plan, and to have been a center of very considerable importance for a long time, beginning earlier than one could have suspected before our excavations commenced.

While much of the information gathered in the southern part of the site center bears on the Post-Classic, there is also evidence of activity during the Classic period in this area, primarily from the single major building, Structure N10-9. The evidence for dating the primary construction in the N10-9 sequence, or at least the earliest on which we have

<sup>14.</sup> John D.H. Lambert and Thor Arnason, "Distribution of Vegetation on Maya Ruins and its Relationship to Ancient Land Use," *Turrialba* 28:1 (1978) 33-41.

any appreciable body of data, unfortunately consists only of an offering, which included a small number of carved jade objects and 571 obsidian cores. The unfortunate aspect is the absence of datable ceramics. A pair of jade ear ornaments that formed part of the cache are of the large quadrangular style that appears to be Early Classic, but the possibility that they were heirlooms when interred leaves their temporal significance in N10–9 open to question. The core sherd sample from this portion of the construction contains no identifiable Late Classic ceramics, but this sample, too, is not a solid basis for dating the structure. Based on the dating of later levels of modification, however, it appears likely that the primary structure was built in the Early Classic, perhaps in the 6th century A.C.

Following the primary construction, modifications were undertaken on the front of N10–9 only, repeating a pattern encountered elsewhere at Lamanai, as also at Altun Ha,<sup>15</sup> and perhaps characteristic of many Central Lowlands sites. The two major modifications consisted of new stairs and stairside outsets, the first constructed in the Late Classic, probably in the 8th century, and the second at some time in the early to mid Post-Classic, probably not later than the 13th century A.C.

We shall return to the later modification in the discussion of the Post-Classic; for the moment it is the earlier effort and the structure that preceded it that are of interest, for they represent one of the distinctive features of the site's architecture. Though placement of elements is different in the two, both share the feature of a chambered building (two in the case of the later construction) set athwart the center stair, with no building at the structure summit (FIGS. 4-5). This was the first evidence recovered at Lamanai for what we can now recognize as a form characteristic of the site. The structure type was previously known only from one example at Altun Ha,<sup>16</sup> though platform/building relationships other than the standard substructure/superstructure one are recorded at several other Maya sites. Offerings in the two-building modification included a jade mosaic mask (FIG. 6) which lay unaccompanied in stair core,<sup>17</sup> and a giant bowl and an animal-motif dish (FIG. 7), both black-on-red, the latter related to Bullard's Trial Farm Complex dishes, to which he assigns an early Late Classic (7th-8th centuries A.C.) date.<sup>18</sup> A subsequent stair renewal contained similar

15. Pendergast, op. cit. (in note 13) figs. 58-60.

16. David M. Pendergast, Altun Ha, British Honduras (Belize): The Sun God's Tomb. Royal Ontario Museum Art and Archaeology Occasional Paper 19 (1969) fig. 3.

17. David M. Pendergast, "A Face from the Past," *Rotunda* 10:1 (1977) 4-11.

18. Bullard, op. cit. (in note 12) 57, fig. 16g.



Figure 4. Structure N10-9 near the end of the Early Classic, perhaps 6th century A.C.; height ca. 19 m. The Lamanai Building Type was already present at this stage. All architectural drawings are by H.S. Loten.



Figure 5. N10-9 as modified in the Late Classic (7th-8th centuries A.C.).

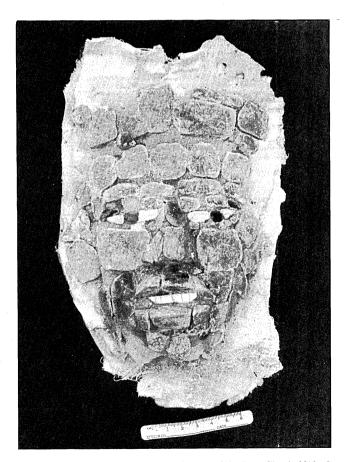


Figure 6. Jade mosaic mask from stair core of the Late Classic N10-9 modification. Height ca. 19 cm.

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Figure 7. Black-on-red dish from Cache N10–9/8, of early Late Classic (7th-8th centuries A.C.) date (D. 42.3 cm.). Pottery drawings by G. Hosek and L. Christianson.

ceramics, suggesting a long life span for the ware and the style of decoration.

As noted above, selection of Structure N9-56 for excavation was based on apparent similarities between it and N10-9, judging by surface contours of a mound without visible architectural features. Initial excavation of N9-56 showed that the surface-based judgement was correct; the final major modification of the structure was indeed an example of what we have come to term the Lamanai Building Type, though in other respects this structure differed considerably from its southern counterpart. Unfortunately we recovered no offerings or other evidence for dating this portion of the N9-56 sequence, but offerings from antecedent modifications show that construction took place around the end of the Early Classic and the beginning of the Late Classic, probably not later than ca. 550-650 A.C. This dating in turn suggests a Late Classic date for the



Figure 8. Structure N9-56 seen from the NW during excavation, with portions of several successive structures exposed.

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Lamanai Building Type in N9-56, perhaps approximately contemporaneous with that in N10-9.

The construction sequence in N9–56 is now the most thoroughly explored among the larger structures at Lamanai, and it also extends over one of the longer spans of time. Underlying the late Early Classic construction mentioned above we encountered a well-preserved building that served as the primary structure for the modifications that followed (FIG. 8); as in N10–9, all subsequent efforts were frontal developments, with the side and rear terracing of the primary structure left exposed to view. The preservation of the primary structure is a matter worthy of note, as it is an exception to the norm at Lamanai, which involved extensive, and seemingly random, demolition of structures prior to the raising of new units. The demolition seems random because little of it appears to have had an engineering rationale; portions of stairs, building walls, and other elements were chopped away while other bits of the same units were left intact, often creating problems for the builders of the new structure rather than reducing them. In the instance of N9-56, though, demolition was limited to a very few areas, and seems to have been dictated entirely by engineering concerns.

The excellent preservation of the N9–56 primary structure is particularly fortunate, for it has left to us the large and unusual masks that adorn the stairside outsets (FIG. 9). We have excavated only those at the south, but limited probing indicates that the northern masks exist in an equally good state of preservation. The lower mask at the south is complete except for the front part of the headdress, cut away to permit construction of a small stair that later capped the outset. Constructed of stone rather than of stucco laid over a rudimentary armature as is generally the case elsewhere, the mask retains virtually all of its features as well as some

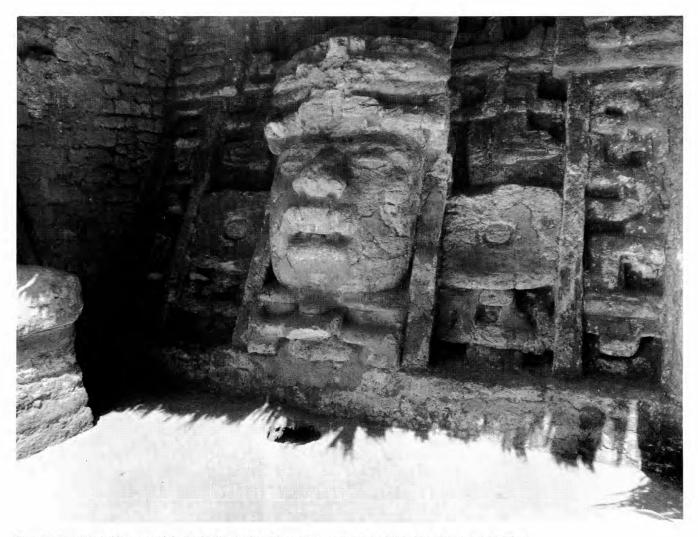


Figure 9. South stairside outset of the Early Classic (late 5th-early 6th centuries A.C.) N9-56 structure; height 4.2 m.

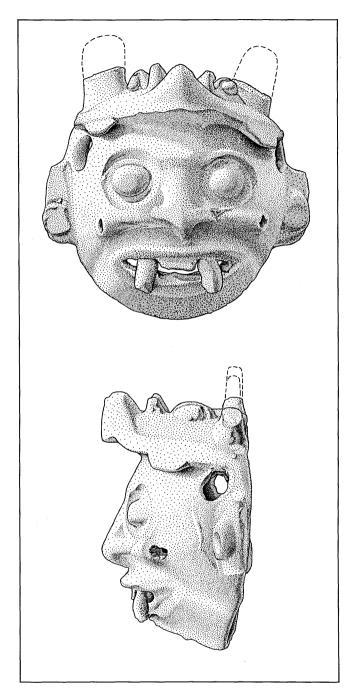


Figure 10. Pottery maskette with crocodile headdress, from a 12th century A.C. context in Structure N10-2. Height 10.9 cm. Drawing by David Findlay.

of the 1-3 cm. thick coating of unusual grey stucco, created by mixing ash or ground charcoal with the plaster. The facial features are clearly related to those characteristic of Olmec iconography in the Gulf Coast of Mexico, particularly in the upturned upper lip and the broad nose. The overall treatment of the mask and back panel is, however, unlike anything reported from the Olmec area. Unfortunately we have only the back panel of the upper outset mask, as the face was sheared away during later construction, but the remaining features show that the two masks were sharply different in almost all respects.

While the masks are of interest from a number of iconographic and other points of view, it is the headdress of the lower mask that is perhaps the most significant element, and it is here that we return to the etymology of *Lama'anayin*. As early as 1975, we had recovered from Post-Classic contexts several fragmentary representations of what appeared to be some sort of reptile, often occurring as a vessel adornment. In addition, excavations in Structure N10-2 yielded a pottery maskette of Post-Classic date depicting an individual wearing the reptilian head as a headdress (FIG. 10). The principal identifying features include an upturned snout, projections rising from the area behind the snout and at the back of the head, protruding eyes, and two or more tab-like teeth in the maxilla. The fortunate conjunction of these crocodile-like features, especially the snout and eye characteristics, with MacLeod's independent suggestion regarding the site name is obvious; it was strongly reinforced by the discovery of the N9-56 mask, as the headdress here originally had most if not all of the features listed above. Appearance of the crocodile in this ceremonially important setting underscores the likelihood that the name of the site was indeed Lama' anayin, designating the community as a place where the reptile enjoyed an exalted status in religious belief. Whether or not that status was reflected in special ritual practices involving crocodiles is something we do not know, but it may be that protection rather than sacrifice or other ritual use of the saurians was dictated, as no offering or interment has included crocodile remains.

In view of the Post-Classic date of the crocodile representations recovered in earlier years, the date of the N9–56 primary structure is of particular interest, as indeed it is for reasons of numerous other iconographic and architectural features. Tunnelling in the core of the structure revealed the first of two tombs thus far encountered at Lamanai, set at the structure base near the front of the stair. The tomb contained only two vessels, but the form and decoration of one of these (FIG. 11) fixes the date of construction at about 500 A.C. The tomb data provide an object lesson in the pitfalls of structural testing, for had we relied on core sherds for dating we would have placed the primary N9–56 structure at least half a millennium earlier, with the kind of firm confidence that flourishes on insufficient information.

The N9-56 tomb is known, as a result of discovery of a second elite crypt in 1980, not to be unique at Lamanai in construction and contents; it is, however, most certainly beyond the spectrum of tomb construction reported from other sites of the Central Lowlands. Prior to the discoveries

at Lamanai, the only major variation on the "standard" tomb (consisting of a vaulted chamber with or without bench) was that at Altun Ha, where crypts with slab roofs and rough boulder walls were universally in use during the Classic period.<sup>19</sup> The Lamanai tomb form is a divergence in an entirely different direction, and seems an even more eccentric approach to elite burial than that adopted at Altun Ha.

The N9-56 tomb was constructed atop the floor associated with an earlier structure, almost certainly just prior to commencement of the new building. On the floor a mass of wooden objects, probably artifacts, was laid out and burnt, after which the body of the deceased was placed atop the pile of ash and charcoal, the upper body supported by soil and stones in an area where no burnt material lay, and the hips resting in a large redware basal-ridge dish. Around the body and the underlying material a wall of stones and clay was raised to a height of 26-28 cm. to serve as a base for the tomb enclosure. The corpse was coated with red pigment and then a layer of clay, perhaps to retard decomposition in the tropical heat and humidity, while the surrounding area was filled with a variety of artifacts. Then atop the encircling wall a framework of wooden members was erected, with cross-bracing probably tied or mortised into the rather irregular hoopwork. Over the framework went a coating of plaster bandages consisting of coarse textiles soaked in lime plaster, creating a cocoon-like chamber. Fine textiles, either dyed red or soaked in red pigment, were laid over the coarse material, with both layers of cloth generally not stretched tight enough to prevent sagging between the sticks of the frame. With the coating in place, the tomb builders began to lay-up mortar and stones around the cocoon, eventually placing a row of capstones above the cloth-bound chamber, and, above these, masses of chert chips and obsidian flake blades and cores.

As the tomb construction is unusual, so are some of the contents. The cocoon appears to have contributed to better preservation than normal, though some wooden-backed mosaic objects, notably large ear ornaments incorporating human faces, had decayed. There was, however, a considerable portion of a rotted wooden figurine with jade ear ornaments and, near the feet, a mass of clay which on microscopic examination proved to be the remains of plaited mats, textiles of several weaves, and cordage masses that may represent nets. But the most striking preservation is that of a complete section through a tree,  $68 \text{ cm.} \times 47 \text{ cm.}$  and 27 cm. thick, weighing ca. 24.1 kg.; no signs of modification now exist on the piece, but its presence, set on edge at the head of the burial, suggests that it may once have had low-relief carving on at least one face. Radiocar-



Figure 11. Dish with red and black decoration on orange ground, from Tomb N9-56/1, contemporaneous with the stairside outset shown in Figure 9 (D. 38.0 cm.).

bon dates almost *ad infinitum* are obviously possible with such wood samples, but have not yet been run.

Extension of work in the tomb area unearthed, or rather explored by means of a rabbit-warren of tunnels, a structure that is clearly, from architectural features such as corner stairs and moulding-free terraces, of Pre-Classic date. The sharp differences between this structure and the subsequent mask-decorated building make it clear that the later construction and the tomb it housed marked a truly major transmogrification in N9-56, probably at least as significant ceremonially as it was architecturally. The Pre-Classic structure is in essentially pristine condition, save for the twochambered building that once stood at the summit of the platform, but was completely razed prior to the completion of the overlying structure. Luckily the razing left us with the full plan of the building laid out in black paint on the platform surface, a feature encountered at Tikal,<sup>20</sup> but otherwise apparently unknown in the Central Lowlands.

Tunnelling along the north upper terrace face of the Pre-Classic N9–56 structure in 1979 revealed a plasterwork mask that closely resembles those found at Cerros, some 80 km. NE of Lamanai in the Corozal District of Belize.<sup>21</sup> The N9–56 mask has much of its painted decoration intact, and is damaged structurally only where struck by stones tossed into a surrounding cribwork by the builders of the overlying structure. The link with Cerros indicates a date in the late Pre-Classic, probably around 100 B.C., and suggests a closer relationship between the two sites than had previously been demonstrable.

20. H.S. Loten, personal communication (1980).

21. David A. Freidel, "Culture Areas and Interaction Spheres: Contrasting Approaches to the Emergence of Civilization in the Maya Lowlands," *Am Ant* 44:1 (1979) 45–46, figs. 7 and 8.

Work in 1980 revealed a few portions of a structure antedating that with Cerros-type masks, possibly the earliest on the N9-56 site. In conjunction with this we undertook extensive clearing of the platform surface fronting N9-56, as well as exposure and sectioning of the platform's central and northern access stairs. Exposure of the second stage in the center stair sequence revealed a unique series of five offerings cut into treads and risers during construction of the succeeding unit. Each was contained in a pair of unslipped round-side vessels resembling mixing bowls, every pair different from the others; one lay on the primary axis (the stair midline), while the remainder were scattered, apparently at random, on both sides of the axis. In several instances the two members of a pair of objects, including jade ear ornaments and carved beads, were placed in separate offerings, underscoring the ceremonial bond among the five units. The ceramics do not provide a basis for dating, but on stratigraphic grounds the offerings appear to postdate the N9-56 tomb. An earlier single-vessel offering in the stair is stratigraphically linked with the tomb, and confirms the date of that interment.

Excavation of the north platform stair brought us to a second tomb, similar in construction to that in N9–56 but placed in a pit 3 m. deep beneath the stair. The location resulted in extreme dampness in the crypt, which left little more than ceramics and one jade bead to accompany bits of the skeleton. The vessels place the interment in the middle to late Early Classic, roughly contemporaneous with the N9–56 tomb. This date leaves open the question of whether or not the unusual tomb form is a marker of the Early Classic, a matter we hope to investigate in coming seasons.

Investigation of Structure P9-2 has extended our knowledge of late Pre-Classic use in the area of the N9-56 group; the platform, which apparently never supported a chambered building, contained two offerings that resembled the group of five from the N9-56 platform, but appear on ceramic grounds to be of 1st century A.C. date. Farther north, testing of P8-12 indicates late Pre-Classic dating for the last major modifications, but we do not yet have any information on earlier units. Like P9-2, this structure was a platform that appears not to have supported a chambered building, except on an extension that overlooks the harbor, but beyond this no guesses regarding its use or relationship to the harbor can be made at present. Identification of the feature east of P8-12 as a harbor rests partly on form and the fact that the area holds some water in the rainy season, but is supported by sediment corings that show corn-pollen frequencies many times normal, pointing to specialized use unlikely to have occurred except where water was present. Investigation of the harbor is being considered, though the problems of work in what is now a forbidding swamp are somewhat daunting.

Testing of two structures atop the giant platform P9-25, sw of P8-12, has not yielded any offerings or other solid bases for dating, but there are some grounds for suspecting that the final modification of one structure occurred not later than about 400 A.C. Early construction of at least parts of the platform seems indicated, but probing of such a massive unit cannot be carried on to any great extent, given the time limit imposed on the excavation programme.

Farther to the north, we have recently undertaken work in small structures to supplement investigations of such structures in areas bordering the harbor. While two of the harbor-area mounds yielded not even a single sherd, a third produced ceramic evidence of late Pre-Classic construction. The structures to the north have documented residential use of areas adjoining the ceremonial precinct beginning in the late Pre-Classic or earlier and extending through the Post-Classic. Testing of a larger neighboring structure (P8–9) has produced evidence of a sequence of ceremonial construction ending at about 300 B.C.; the earlier portion of this sequence is to be investigated in 1981.

Concurrently with the excavation of ceremonial and residential structures near the lagoon, we have undertaken investigation of small residential plazuela groups, individual small structures, the lone ballcourt at the site, and the major structure N10-43, all lying at a greater remove from the water's edge. The small-structure work has yielded evidence for construction and use in the 8th-10th centuries A.C., with only small core sherd samples to suggest Pre-Classic presence in the area. In some cases it appears that there was a terminal Classic (late 9th-early 10th centuries A.C.) intrusion of residential structures into at least the periphery of the ceremonial precinct, primarily in the area around the base of the giant platform mentioned above. While the extent of this phenomenon cannot yet be assessed, the intrusion appears to have coincided with cessation of use of many or all ceremonial structures in the northern part of the ceremonial precinct, as the focus of ceremonial activity at the site contracted southward.

Though the last part of the Classic saw dwindling use of many northern ceremonial structures, excavation of the ballcourt that lies south of Structure N10-43 has shown that new ceremonial construction was being essayed in the central precinct during the time of diminishing activity. In rather poor condition, the ballcourt is distinguished by the small size of its open-ended playing area and the gigantic size of its marker disc, which occupied almost the entire floor surface at center court. Raising of the disc in 1980 revealed an offering consisting of a lidded vessel containing miniature vessels and small jade and shell objects resting atop a pool of 9.7 cc. (131.9 gms.) of mercury, a material previously reported only from the Maya Highlands. Both the container and two crushed vessels on which it rested show affinities with material from San José that fix the date of the deposit at or near the end of the 9th century A.C.

Structure N10-43 has been the scene of major efforts in the past four seasons, with the result that we have now examined virtually all of the construction sequence, much of which can be dated securely. We now know that, while the final major modification to the front of N10-43 took place in Late Classic times, the bulk of the construction is Pre-Classic. N10-43 is, therefore, with its height of 33 m., the largest securely dated Pre-Classic structure known in the Maya Area, a fact that has obvious implications for our assessment of the early importance of Lamanai in the Maya lowlands.

The earliest Pre-Classic construction cleared thus far consists of a large multi-terrace platform without a standard chambered-building arrangement at the summit, and with features that suggest an early version of the Lamanai Building Type. Above the mask-flanked lower center and side stairs is a large landing that supported a central subsidiary platform, almost certainly the base for a small chambered building. The tripartite pattern of the lower stairs was probably repeated in flanking structures east and west of the central element, and certainly in the upper stairs, now extensively chopped. The upper stairs led to the platform summit, where two small chambered buildings atop two-terrace platforms face inward toward a centre unit that has three frontal stairs flanked by masks, but no building at its top (FIG. 12). This unusual arrangement has no counterparts at Lamanai, but both the landing-level buildings and the triple stairs seem to presage the pattern typical of most if not all of the site's major Classic ceremonial structures.

Following a number of small-scale changes, the Pre-Classic form of N10-43 was radically altered, probably early in the Late Classic, through placement of a long single-room building atop the chopped remains of the landing-level units. The new frontal reshaping, which included modification of both lower and upper stairs, incorporated part of the central building platform as a bench in the central doorway of the single room, perhaps in recognition of the aura surrounding a structure that was by then extremely venerable. The summit of the Late Classic structure lacked a building, giving the edifice all the standard features of the Lamanai Building Type, enhanced by later additions that extended the single-room building across the full front of the structure (FIG. 13).

Two offerings, the first in the structure with twin inwardfacing buildings at the top and the second in the full Lamanai Building Type modification, are critical to the dating of the construction sequence. The former consists of four vessels of late Pre-Classic shapes and surface treatments, suggesting

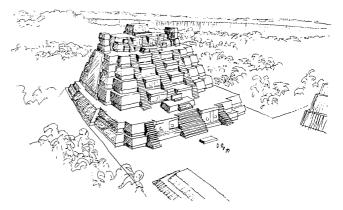
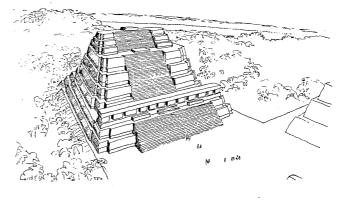


Figure 12. Structure N10-43 as it appeared ca. 100 B.C.; height 33 m.

a date of 100 B.C. or slightly earlier. The later offering includes a giant black-on-red bowl probably related to those from N10-9, placing the construction in the Late Classic, perhaps in the 7th century A.C. The remainder of the offering consists of a redware dish that served as a lid for the bowl, a group of *Spondylus* shells, a small piece of jade, and 1,024 obsidian cores and 7,503 blades and chips, having a total weight of almost 15.6 kg. Though they do not shed any light on the date of the offering, the obsidian objects suggest, as do those from an N10-9 cache of later date, that this material was of special importance for major construction offerings in the Late Classic at Lamanai.

Additional offerings have been encountered in tunnelling, which has also revealed portions of a structure antedating the Pre-Classic effort described above. Associated with this structure is an offering consisting of a flaring-side redware Pre-Classic dish containing the articulated skeleton of a juvenile bird of moderate size, lacking the beak and frontal portion of the skull, accompanied by bones of one or more other birds. The vessel cannot be placed within the Lamanai ceramic sequence with certainty, but is likely to be of the 2nd century B.C. or earlier. Perhaps most unexpected are the

Figure 13. N10-43, Late Classic (perhaps 7th century A.C.) modification of the Pre-Classic structure shown in Figure 12.



indications encountered in 1980 that the N10-43 site saw residential use before ceremonial construction began; beneath the earliest ceremonial unit lies a low, plaster-surfaced platform associated with and overlying a complex of use surfaces and hearths, all of them probably not antedating the ceremonial construction by more than a century. Though exposure of the material is made difficult by the mass of overlying later construction, work is to continue in this area in coming seasons.

The combined evidence from N10-43, N9-56, P9-2, P9-30, and P8-9, as well as from residential structures in the north and near the harbor, indicates an extensive and well-developed occupation at Lamanai by some time prior to 300 B.C., with the beginnings of the settlement likely to lie considerably farther back in time. That the importance of Lamanai as a Central Lowlands center was securely established by or before 100 B.C. is convincingly demonstrated by the existence of N10-43, clearly the product of the labor of a community of considerable size under the full control of a powerful elite group. While the twin inward-facing structures atop N10-43 during this period have parallels elsewhere in Maya architecture, the other occurrences are of later date, and it is therefore tempting, and probably totally incorrect, to see N10-43 as the progenitor of a Classic architectural style which, as far as we can now determine, was not adopted at Lamanai itself. What is surely of greater significance is the indication in N9-56 of architectural links, at least in the area of embellishment, between Lamanai and Cerros, for the similarities are great enough to suggest that the architects of the two centers were in close contact. The extent to which such contact may be reflected in other areas of material culture is something neither we nor those investigating Cerros are yet in a position to determine.

Apart from the external ties reflected in N9-56, the existence of a Pre-Classic structure here that differs markedly from the approximately contemporaneous effort in N10-43, and the earlier Structure P8-9 indicates that diversity of form characterized the Pre-Classic at Lamanai. In other respects, however, Lamanai seems even at this stage to have been marked by a fair amount of rigidity and control in such areas as ceramic form and surface treatment and, perhaps more important, in the general nature of offerings. Neither here nor in later times did the offerings achieve the uniformity reputed to mark Classic Tikal, but in comparison with those from Altun Ha they seem to be of limited variety, consisting usually of two or more vessels generally arranged as lid and container, with a minimal amount of other material, not including any appreciable quantity of jade. We do not have a large body of data on trade connections during the Pre-Classic except insofar as jade is concerned; on this basis one would be inclined to see trade links as no more than moderately important in early Lamanai, and one would most likely be wrong. The architectural evidence argues for recognition of Lamanai as a very important Pre-Classic center, and with this importance must have come links with both neighboring and distant areas. That we cannot identify many such links is surely a result of sampling error, rather than a reflection of reality.

In the Classic, one can see first of all a sharp divergence from the course set in Pre-Classic architectural design, though features such as triple access stairs continued in use. Early Classic construction seems to have been underway throughout the site center, perhaps by as early as the 5th century A.C. even at the south end of the ceremonial precinct. Offerings from this period are uniformly of the two-vessel class, usually containing some marine material, a small amount of jade, and at least one small mosaic of either jade or shell. This pattern, accompanied by what at first glance appears to be considerable diversity in architectural form, continued until the late 6th century; in fact, the appearance of architectural diversity is lessened when one takes into account the focus on frontal modification exemplified by all structures examined. We are in the rather odd position of having a large body of data on the Early Classic, yet no burials save the two tombs, but from the evidence at hand it is clear that the 4th through 6th centuries were a time of extensive construction and, one would judge, enhancement of the status the community had achieved in the Pre-Classic.

Our greatest gap in the data occurs in the early to middle Late Classic (7th and 8th centuries A.C.). We have ample architectural evidence from this period to show that the Lamanai Building Type was the most popular construction form, if not absolutely de rigeur in all structures, and we have offerings from both N10-43 and N10-9 that demonstrate that the Pre-Classic and Early Classic pattern of two vessels containing objects persisted, though the quantity and nature of the objects changed. What we lack is what most extensive excavations have yielded, that is, data on elite and proletarian burials. We have no tombs from the Late Classic, and virtually all the burials are of very late or terminal Late Classic date. Despite this phenomenon, it is clear that Lamanai was in general very like other centers in the Late Classic, with strong indications of heavy control, at least in the early part of the period, in architecture and probably in other areas of life.

The contrast between Lamanai, with its essentially typical Late Classic attitudes, and Altun Ha, with its riotous catholicity of taste then as before, is a striking one, and should have been meaningful for the histories of the two settlements. In times of stress, when Classic organization began to give way at the seams, one would expect that the more flexible, presumably more resistant community would have found a way to survive, while the rigid would have gone down to destruction. Yet it was Altun Ha that saw a sharp decline in the power exercised by the elite over the populace in the late 8th and 9th centuries, while at Lamanai construction efforts and other undertakings of considerable scale continued. It was at Altun Ha, as at other Central Lowlands centers, that the Classic ended in collapse, while at Lamanai the progress of life continued almost unchecked, and perhaps even enriched in some respects, into the Post-Classic.

#### The Post-Classic: 10th to 17th Centuries A.C.

The results of excavations to date demonstrate that the people of Lamanai somehow managed to bring the patterns of their existence through the time of collapse almost intact, and to carry on with life throughout the Post-Classic while gradually abandoned neighboring centers were falling into decay. We are now able to describe a good many aspects of Post-Classic life at the site, including relationships between Lamanai and centers in northern Yucatan. We can also make some statements about the Classic/Post-Classic transition and about events that followed the arrival of the Spaniards in the 16th century. While it is possible to hazard some guesses regarding the causes of stability at Lamanai in the 9th and 10th centuries, these remain no more than conjecture at present, and even the most sanguine observer of the archaeological record would probably see the odds against definitive statements on this matter as very great indeed. We are left, then, with far more description than explanation, but even the description is illuminating.

Work begun in 1974 and continued through the following season revealed sequences of ceremonial construction in two comparatively small buildings (Structures N10-1 and 2), as well as a more complicated series of events involving multiple and probably long-term use of a Classic structure (N10-4) as a burial mound, followed by construction of two or more small houses atop the burying-ground. Nearby, investigations in 1976 and 1977 showed that major construction efforts had taken place in terminal Classic through perhaps middle Post-Classic times on two structures of Classic date, N10-7 and N10-9. It is these latter two structures, together with the ballcourt, that shed light on the transition from Classic to Post-Classic, while the remainder have provided a truly remarkable quantity of data on early to late Post-Classic architecture, burial practices, and artifact inventory. There is, in addition, a body of evidence on Post-Classic use of the northern portion of the ceremonial precinct and residential areas beyond the precinct boundary, as well as, in the south, on events subsequent to the arrival of Europeans. What we lack at present is evidence of residential construction in areas bordering the zone of major Post-Classic ceremonial activity, a lack that may be remedied in the 1981 season.

Excavation of Structure N10-7 showed that the bulk of this moderate-size building was constructed as a single effort near the end of the Classic (probably late 9th century A.C.)

to cap a burial accompanied by ceramics directly related to those of San José at this time. The burial was cut into a low platform of undetermined earlier date, which appears to be the initial construction at this locus. The size of the the later unit, together with the ballcourt data, clearly indicates that the scale of terminal Classic construction had not diminished appreciably, though on the basis of presently available evidence its extent seems to have been limited. Burials intruded into the upper core of N10–7 attest continuing use of the structure until middle Post-Classic times, but other evidence, discussed below, suggests that the structure did not remain in use for long after this, and was probably in ruins by no later than the end of the 14th century A.C.

In N10-9, the nearest neighbor to N10-7, the course of events was somewhat different, probably in large part because of the prominent role played by the structure within the plaza group of which it was the main focus. The frontal modifications to N10-9 in Classic times, limited as they were to renewals of stairs and stairside outsets, left the terraces of the primary structure platform exposed, a condition in which they were to remain in the Post-Classic as well. Evidence recovered during excavation of the last Classic additions (involving a structure of the Lamanai Building Type) indicates that, as one would expect, the by now rather antiquated platform terraces were well-maintained at least up to the time of the additions. It is clear as well that the outsets, stairs, and building that belong to the additions were kept in repair during their period of use, which must have extended through part of the early Post-Classic. There is, then, evidence of a continuum of use that bridged the Classic/Post-Classic transition, and this continuum in turn suggests that at least some of the forms and rituals of Classic times survived relatively unchanged into the Post-Classic.

In the matter of overall structure maintenance, however, the continuum was broken, at a point which we cannot determine. Before Post-Classic modifications to N10-9 were undertaken, the main platform terraces were allowed to fall into decay, presumably creating a rather sharp contrast with the well-maintained central front units. This neglect may have resulted from inability of the Post-Classic community to marshall sufficient forces to undertake the upkeep of the entire structure, but it is also possible that it reflects a change in the focus of interest in Post-Classic times, with an even greater concentration on the portion of the structure around the primary axis than had marked the Classic. In any event, the rulers of Post-Classic Lamanai were able to exact sufficient labor tax from the populace to permit one final major reconstruction effort in which the stairside outsets were once again renewed, but this time in a form that departed from that of the Classic (FIG. 14). The building of earlier times was retained in the renewed structure, so that the Lamanai Building Type persisted long after many elements of the Classic probably had faded from memory.



Figure 14. Structure N10-9 in the Post-Classic (12th-13th centuries A.C.), retaining most features visible in Figure 5, but incorporating new stairside outsets.

Based on core sherd content, the last stairside outsets of N10-9 were built in the 12th century A.C. or later; the ceramics provide no basis for establishing an upper limit date. There is, however, evidence from elsewhere in N10-9 and from its environs, including N10-7, that indicates that construction of the final stairside outsets is likely to have taken place no later than the 13th century. The earlier part of the evidence consists of one to perhaps three minor additions built before construction activity on N10-9 came to an end; architectural features of the latest unit suggest a date in the 14th or early 15th century A.C. Following this construction, but coming at a time that cannot be fixed with any precision, abandonment of N10-9 appears to have signalled a major change in the use to which the plaza was put.

At or after the abandonment of N10–9 a very large amount of pottery, including a number of vessels in the distincitive Lamanai shape category termed "chalices" (FIG. 15), was deposited over the N10–9 stair, perhaps at the same time that deposition of midden in the plaza at the east side of the structure began. The ceramics from atop the stair appear identical to those of earlier times in the Post-Classic, though some forms are included that are not found in burial lots. The midden contents, which after excavation of about half the mass run to approximately 150,000 sherds, seem also not to differ materially from burial ceramics that are demonstrably earlier.

As the midden engulfed the east base of N10-9 and the south side of N10-7 and then flowed down over the platform edge to spread along the rear of N10-2, one might assume that at least a moderate amount of time was required for the amassing of the malodorous heap; there is, however, no visible stratification within the meter-deep deposit nor any other clue to the nature or period of accumulation. We are left, therefore, with strong indications of ceramic conservatism from early through middle Post-Classic times or later, but with no means of assigning specific dates to the phenomenon.

Immediately east of the N10-9 plaza, lying at the rear

of the lagoon shore slope and separated from the plaza by a high terrace, are structures that border a small plaza probably begun in Early Classic times. The area appears to have been of something less than outstanding importance throughout the Classic, but it became the scene of what was probably the most ambitious Post-Classic construction effort, and of other kinds of significant activity as well. The focal point, insofar as ceremonial construction was concerned, was N10-2 at the west side of the plaza. Here at least two structures of probable Early Classic date were capped by a sequence of four buildings, all a distinct departure from the architectural traditions of earlier years. Because the extensive demolition practiced in the Classic remained in vogue during the Post-Classic, we have reasonably complete data on only the second of the four construction efforts, but these are sufficient to indicate a building type marked by affinities with northern Yucatecan structures. Construction was, however, sharply different from that of northern buildings: set atop a platform faced with small, poorly smoothed stones was a building consisting of a single large room floored with a layer of plaster generally less than 2 mm. thick, and with wattle and daub walls that were extremely thin in comparison with masonry units of earlier times. The load of a massive roof, probably of timber combined with matting and other materials, was borne by two rows of huge wooden columns, the sockets for which remained visible in the floor (FIG. 16). It appears likely that the front of the structure had the effect of a columned portico (FIG. 17), and it is in this area that the resemblance to Yucatecan structures is closest, though the materials were completely different. The sole masonry unit within the room was a small, square altar set at the rear center, presumably as the focal point in what was surely an impressively large ceremonial enclosure.

In the core of the structure, as in that of the next two succeeding efforts, lay very large numbers of burials. The total, including two from the earliest Post-Classic unit, is 50, of which only 17 were not accompanied by artifacts. Twenty-six of the burials yielded one or more pottery vessels, in all but one case deposited in the fashion typical of the Post-Classic, with the pots smashed and strewn over the interment (FIG. 18). In every instance, at least one piece of each vessel is missing, a fact that suggests retention of fragments by relatives or others, perhaps for ceremonial use. Among the burials in the second building was the most important in N10-2, a complex double-pit inhumation of an adult male who was seated in the lower pit and accompanied by a pyrite mirror, a copper bell, and several gold sheet coverings from perishable objects. In the upper pit were three censers (FIGS. 19-20), the largest containing an almost conformal pair of chile-grinding vessels. Since 14 of the 26 burials associated with the second building contained vessels, we have an excellent cross-section of ce-

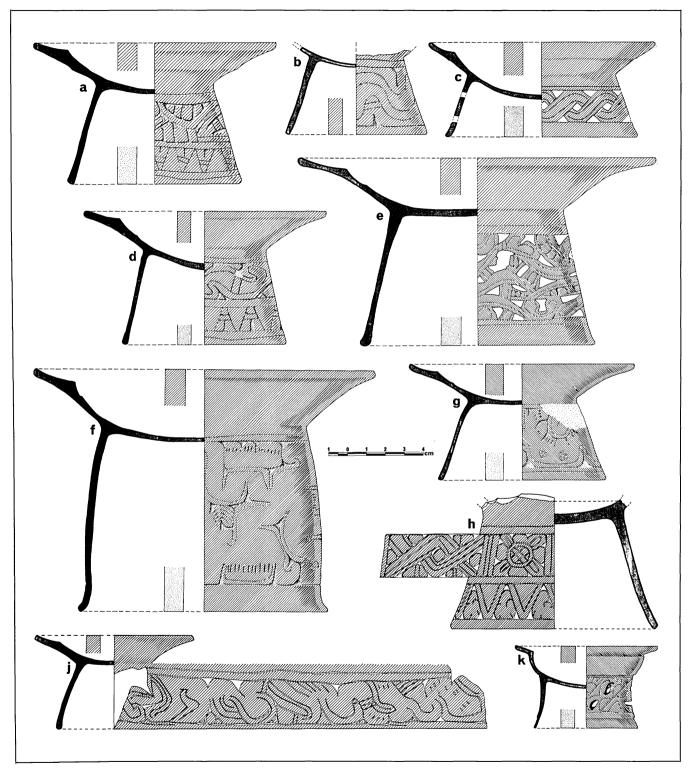


Figure 15. Orangeware and redware "chalices" from various Post-Classic contexts, including the deposit atop the stair of N10-9 (a,d,h) and a burial interred in debris at the structure's base (h). Vessel g is from Burial N10-7/2, while c is from midden abutting that structure. The remainder are from N10-2; vessel f is from the same burial as Figure 26g, j and m, contemporaneous with b and j, while k is earlier.



Figure 16. Structure N10-2 under excavation. At the right is part of the floor of the best-preserved Post-Classic structure, with two postholes visible in section.



Figure 18. Burial N10-2/20, typical of the Post-Classic. Of 12th century date, it was associated with the structure shown in Figure 17. Atop the two individuals are nine shattered and scattered vessels, four of which are shown in Figure 15f and 26g, j, and m.

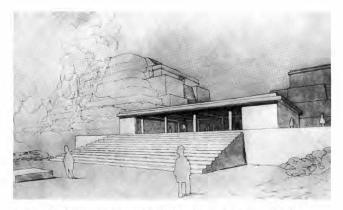


Figure 17. Perspective drawing of N10-2 based on data partially shown in Figure 16. Despite its modern appearance, the structure is of the 12th century A.C.; the cornice form is conjectural, but based on structural requirements of the roof as shown.



Figure 19. The upper pit of the principal interment in N10-2, associated with the 12th-century structure shown in Figure 17. The pit contained three censers; one, in the foreground, was buried intact, while the other two were smashed and spread in the pit. Pit D. 180 cm.

ramics from a restricted period, while vessels with 11 later burials provide some basis for assessment of changes in ceramics over time.

The data from N10-2 were extensively supplemented by excavation of N10-1, a small platform in the center of the plaza, and N10-4, which borders the plaza on the east. Two burials were encountered in the primary structure and lone modification of N10-1, while N10-4 yielded 47 interments, all placed in a single construction unit added in Post-Classic times atop the chopped remains of a Classic structure. The N10-1 burials add materially to the ceramic sample obtained elsewhere; the earlier, probably of the 12th



Figure 20. Censer shown in the foreground on Figure 19, depicting an unidentified deity. Height 50.0 cm.

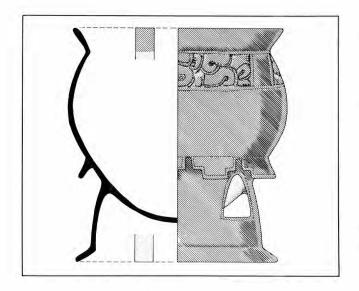


Figure 22. Redware pedestal-base censer from Burial N10-4/46, concealed beneath the seated individual in Figure 21. Height 25.4 cm.



Figure 21. Burial N10-4/46, the principal interment in Structure N10-4, of the 15th or early 16th century A.C. Several secondary interments are set at the right, with a seated individual at the left. View from NW.

century A.C., combined locally manufactured vessels with a Chichen (X) Fine Orange vase, while the later consisted of a giant lidded censer containing the skeleton of an adult male and resting atop a bed of 18 crushed bowls, censers, and jars (see FIG. 26, F, K, N, O). Twenty-six of the 46 N10-4 interments yielded vessels, and while the burials cannot all be demonstrated to be contemporaneous, it appears that most come from a fairly restricted period possibly approximating that of the last two modifications in N10-2. One N10-4 burial, the most important in the group (FIG. 21), is clearly of very late date; from the interment comes a wide range of vessels including paired decorated Tulum Red tripod dishes, carved redware censers and bowls without known counterparts elsewhere (FIG. 22), and a large pierced, stuccoed columnar censer, as well as one copper bell and two carved bone tubes, one of which depicts a dignitary in elaborate costume, with bird-head headdress (FIG. 23). The ceramics indicate a date in the 15th or early 16th century, a period from which we have little evidence elsewhere at the site.

Two of the N10-2 interments and seven from N10-4 were associated with copper objects ranging from simple globular bells to strapwork rings and what are probably clothing ornaments, with cruciform or single-strap attachments. The use of the probable ornaments is not entirely clear, but two bell-headed pins, which retain fragments of cloth on their surfaces, were found in a position that indicates they were used to fasten an adult female's garment at



Figure 23. Carved bone tube from Burial N10-4/46; height 15.0 cm.

the hip. Some of the forms are not typologically distinctive, and metallurgical analyses aimed at pinpointing places of manufacture are not yet complete, but the button-like ornaments from Burial N10–4/28 (FIG. 24) are duplicated in gold in Tomb 7 at Monte Alban, where they are identified as headband ornaments.<sup>22</sup> This link may point to the Oaxaca area as the source of much or all of the Lamanai copper, though the 12th-century date of N10–2 metal objects raises some questions in this regard.

The gold-sheet objects from the principal burial in N10-2and from three N10-4 interments were probably coverings for wooden discs and staffs, and none has features that permit comparisons with gold objects from other Maya sites. Taken together with the wealth of ceramics, though, these and the copper artifacts bespeak the existence of a stillpowerful community in Post-Classic Lamanai, enjoying both trade and intellectual contacts with sites within and beyond the borders of the Maya Area.

In addition to the artifacts mentioned above, the inventory from Post-Classic burials includes a wide range of shell objects, a moderate amount of worked stone but, as in Classic times, very little jade, and a variety of bone items, outstanding among which are the tubes mentioned above and a large felid mandible carved to represent an animal and adorned with glyphs and groups of numerals, now largely abraded (FIG. 25). All of the materials presumably reflect the wealth of the upper stratum of Post-Classic Lamanai society, as the N10-2 context is clearly ceremonial and the proximity of N10-1 and N10-4 to that structure suggests that the individuals buried there were of high rank or status as well. The absence of data from residential structures near the south end of the site center leaves us with a fragmentary picture of Post-Classic life in this area, but we hope to fill the gap in 1981 by investigating structures west of the N10-9 plaza.

The ceramics associated with the burials share certain traits with those of Mayapan, principally the use of carved decoration, often incorporating serpent motifs, and the presence of segmented basal flanges, usually with border lines and center notches or vertical-line embellishment (FIGS. 15, 26).<sup>23</sup> Based on these shared features, it initially appeared that the Lamanai ceramics might be approximately contemporaneous with those from far northern Yucatan, and therefore likely to date from 1250 A.C. or later. Radiocarbon dates, however, from the structure in N10–2, which contained the largest number of burials, indicate that the Lamanai Post-Classic ceramic complex was fully developed

<sup>22.</sup> Alfonso Caso, *El Tesoro de Monte Albán* (Mexico 1969) 125, plate 22i and j.

<sup>23.</sup> Robert E. Smith, *The Pottery of Mayapan. PapPeaMus* 66 (1971) figs. 40, 1–7 and 43h,m,n.

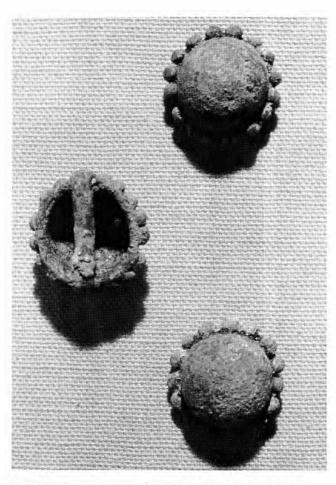


Figure 24. Copper ornaments from Burial N10-4/28, duplicating a form from Tomb 7 at Monte Alban, Oaxaca. Mid-14th century A.C. or later; D. 2.0 cm.

by about 1140 A.C.,<sup>24</sup> and presumably had its origins in the 11th century if not earlier. Judging by the apparent date of the ceramic features of Mayapan, the argument is strong for Lamanai as the source from which the concepts were transmitted northward. This reconstruction of events reinforces the picture of Lamanai as an important Post-Classic center based on the wealth and variety of artifacts alone.

Unfortunately data on the final centuries of the Post-Classic in the south site center do not extend far beyond those provided by the N10-4 burial described above. Though a small number of Tulum-related vessel fragments, including the typical double-vented cylindrical foot form, occur in the upper portion of the great Post-Classic midden, they are mixed with the remainder of the material in such a way as to make their relative temporal placement uncertain. There is a single Tulum-related tripod chile-grinding bowl from

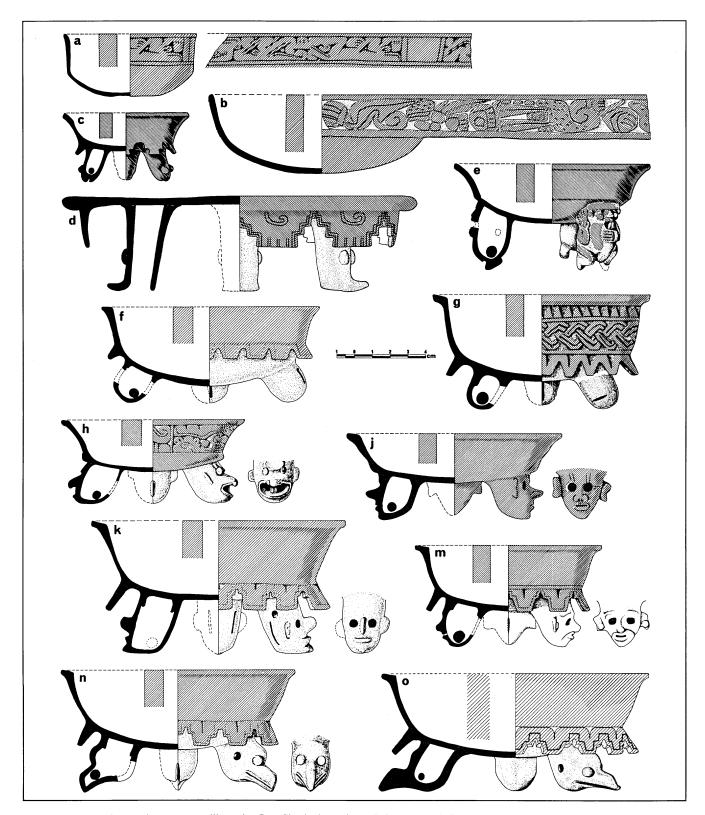
24. Geochron Laboratories' samples GX-  $4660,\,4661,\,4663,\,4666,$  and 4670.



Figure 25. Carved felid mandible from Burial N10-4/9, probably of the 14th century A.C. or later, with glyphs and bar-and-dot numerals; the number 13 appears on the animal's snout, beside a glyph. Height 20.1 cm.

a burial in the penultimate unit of N10-2, associated with vessels from four other burials, a fact suggesting that many of the standard early to middle Post-Classic forms may have disappeared by the 15th century A.C.

In addition to the structural and midden data, there is an extensive sample of material from the surface of the area north of N10-2 that includes a considerable amount of Tulum pottery. Burials without structural association, or perhaps linked with entirely perishable buildings, have been found scattered throughout this area, but only two have ceramic associations, and the vessels appear unrelated to anything recovered elsewhere at the site. It is tempting, but obviously not possible on stratigraphic grounds, to see the burials and surface material as evidence for the final occupation in the southern part of the site center, after all major construction had ceased. Unless we discover resi-



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Figure 26. Vessels from various contexts, illustrating Post-Classic decorative techniques. Vessels f, k, n, and o are from the crushed lot at the base of Burial N10-1/2; g, j, and m are from Burial N10-2/20, contemporaneous with the structure in Figure 17, and vessels e and h are from other burials in the same context. Vessels a, c, and d are from burials and an offering in N10-4, and probably postdate the N10-2 specimens, as does vessel b, from Burial N10-7/2.

dential structures from the late Post-Classic in this area, however, the significance of the remains is likely to remain uncertain.

While we have no evidence of large-scale Post-Classic construction from elsewhere in the ceremonial precinct, it is clear that the Maya continued to make use of most if not all of the site center. Evidence for such use ranges from scattered sherds to an offering from N10–43, consisting of a vessel and a single jade bead, intruded into collapse debris at the structure base, over which there is a moderate amount of Post-Classic pottery. The major evidence for late use of a Classic structure comes from N9–56, obviously a focal point in the site for many centuries; here, atop what was already a decayed ruin, people carried out one or more large ceremonies in which numerous Mayapan-type figurine censers (FIG. 27) were smashed and strewn over the front, sides, and back of the mound.

At about the same time as the censer-smashing activity came the construction of a group of small, low platforms in front of N9-56, their facings consisting of vertically set single stones, heavily coated with stucco. Principal among these was N9-59, built to support a re-sited Classic stela set with its side toward N9-56 and its carved front facing an uncarved stela newly sited farther south. The core of the platform yielded a mass of reconstructable vessels plus an offering of two vessels accompanied by jade and shell beads. Re-siting of monuments is also in evidence in the area of N10-9, where the lower half of a carved stela was dragged up onto the debris slope capping the center stair, and an altar was moved into a decidedly non-Classic location in front of N10-7. As with the N9-59 construction, stratigraphic evidence shows that the events cannot have occurred until long after the Classic structures had been abandoned.

While Post-Classic residential life remains unknown in most parts of the site, excavations in 1980 north of the ceremonial precinct produced evidence of occupation in the period not long before the arrival of the Spaniards. Atop a platform begun in the Pre-Classic and added to in the 7th century A.C. we encountered a small residence that housed a vessel offering probably of the 15th century. The platform construction resembled that of N9-59, a fact that seems to indicate use of vertical slab facings for various kinds of structures from the 13th or 14th century A.C. onward. At about the same time as the building of the residence, a tiny platform of unknown use was constructed at the opposite end of the Pre-Classic unit, and the builders also placed a vessel offering in the 7th-century addition. Added to these data is information from a midden deposited at the front of a Pre-Classic structure just north of the platform group; the presence of the refuse indicates that more residential data may be produced by excavations in the area in coming seasons.



Figure 27. Mayapan-style figurine censer from the massive offering scattered over N9-56; probably 14th-15th centuries A.C. Height 37 cm.

At the moment we have no way of knowing whether either the northern residential zone or the south end of the site center was still occupied when the Spanish arrived. One thing that is certain, however, is that there was a community at Lamanai in the 16th century; no religious order, however dedicated or fanatic, builds its churches where there are no parishioners. The church at Lamanai is almost 0.75 km. south of the principal area of Post-Classic ceremonial and mortuary construction, in a zone with very few visible structural remains except for two mounds adjacent to the church itself; this location may indicate that the settlement of the historical period lay south of the Post-Classic occupation zone, or that it was moved southward at the behest of the Spanish priests. It is also possible that the church was set within an existing settlement that extended from the south part of the site center southward in scattered array along the lagoon, as does a modern squatter occupation. Unfortunately, that occupation makes testing of this possibility impossible, so that we have been confined to the area of the church, where work in 1980 revealed pits, burials, and rough stone construction possibly of the 16th century or later.

Excavation of the church and the mound south of it has

provided us with two important bodies of data. The first, from the time during which Catholicism held some sort of sway over the people of Lamanai (ca. 1570 - 1640), is the church cemetery. As the church was literally founded upon a rock, its foundations resting on dense limestone, there was no natural soil deep enough to accomodate burials; the faithful, therefore, turned to a Post-Classic mound south of the structure, building stairs at its front and back and converting it into a very limited burying-ground. Here, in a jumble that defies description, lie all those adherents of Christianity who perished over a period of about seventy years. Their burial destroyed all but the shell of what appears to have been a late Post-Classic ceremonial building, but the loss is balanced by the importance of the interments themselves. The cemetery offers us the opportunity to look, for the first time in a Central Lowlands site, at a real population within a known period of time, rather than an assemblage of burials from a variety of times and places within a site. As a true population sample, the cemetery material should provide more meaningful data on mortality curve, sex ratio, and pathology than can be derived elsewhere, though the applicability of the information to the period before contact with Europeans will remain open to question. Associated artifacts are expectably few, the major item among them being a fragmentary bone rosary. The nature of the cemetery makes recovery of the material extremely difficult, and work is not expected to be completed until 1982.

From the church itself comes information that is at once illuminating and somewhat disconcerting. We know the date of abandonment to be 1640-1641 from the observations of Fathers Fuensalida and Orbita, and can take this to be the lower limit date for evidence showing that the church was occupied at some time following its desecration. From within the chancel and sacristy and also from the exterior of the building has come midden material with comparatively high sherd content; there are also three offerings and a burial which, because of their stratigraphic positions, must post-date desecration of the church. While the apostate Maya may have moved into the church not long after the redoubtable Fathers passed by the settlement, we cannot know how long they remained in residence, though the quantity of refuse might indicate occupation spanning as much as four to five decades. Maya presence at Lamanai is thus likely to have extended to about the end of the 17th century, but this is something we would probably not know had we not found the midden in association with the church, as the ceramics appear indistinguishable from those of the last centuries of the Post-Classic. This means that evidence of occupation in the 16th-17th centuries may exist at other sites, but may be recognizable only if encountered in a special context. Unfortunately, the Spaniards did not aid us by leaving churches throughout the Central Lowlands, so

early historical remains may go undetected more often than not.

The picture of Post-Classic life at Lamanai seems to be one of gradual decline in at least some respects, as most of the monumental architecture of earlier times was allowed to fall into decay. Occupation continued in the north, and may have persisted in the west as well, but much of the lagoon-side heart of the Classic site clearly became a ghost town, where ruined buildings may have been chosen as scenes for ceremonial activity because of some aura that surrounded them, rather than for their visible identity as temples. While we can now say a fair amount about ceremonial activity in the 10th to 16th centuries, and about links between the people of Lamanai and those elsewhere in Mesoamerica, the population dynamics of this period remain dimly perceived, as they may remain so even when the project is at an end.

At the time of Spanish arrival the population of Lamanai may have been smaller, and the level of prosperity lower, than in preceding centuries, but unless we are able to extend our sample in the area of historical-period occupation, we shall likely never have an adequate picture of life in those times. The church midden material does show, however, that what we take to be ceremonial ceramic forms, particularly Mayapan-like figurines, were still in use in the 17th century. This evidence may be enough of a thread, thin though it is, on which to hang a picture of something less than an absolutely decimated, destitute population of the historic period at Lamanai.

Continuation of both ceremonial and utilitarian ceramic traditions born in the Post-Classic suggests the kind of conservatism in this area of material culture that existed in those earlier years as well; yet, at the same time, there is evidence of architectural change, showing that the flow of life was far from stagnant. One might see the ruined structure within the cemetery mound as evidence of innovation, and perhaps of a re-focusing of the community, in the 15th century, but its abandonment well before the church was built argues that the force of such change had been blunted prior to the last quarter of the 16th century. Perhaps by that time the fabric of life at Lamanai was indeed very badly worn at the edges, though not yet completely unravelled at the center.

Whatever we may come to know of the end of occupation at the site, the larger question surely lies at the beginning of the Post-Classic. Why was it that Lamanai survived the Classic collapse, when neighboring communities did not? Direct archaeological evidence is not likely to be forthcoming on this point, as reasons for survival generally leave fewer traces than do those for collapse. Chief among the undetectable factors is one known to have been a force for stability in the face of crisis in many societies; that is, the strength and personality of a community's leaders. Lacking evidence on this matter, we are left with the physical nature of the site as the best source of information, and here it is setting rather than size or complexity of the occupation remains that may have been critical to Lamanai's continued existence.

Situated as it is on the edge of a large lake, Lamanai offered its inhabitants a richer and more varied diet than that available at many land-locked sites. This diet was supplemented by locally-grown produce from the raised fields north of the site, and one can see the combination of vegetable foods with abundant fish and turtle as a probable basis for a healthy, vigorous population. But does physical health engender societal health? Not necessarily. That Lamanai was an attractive place because of its resources is probably so, but attractiveness does not shelter a community from the storms of social upheaval. What may in fact have been the salvation of Lamanai was the great lake and its river, not because these supplied fish and turtles but because they were an open means of communication with the northern Maya area, and thereby ultimately with many other parts of Mesoamerica.

To select any one factor as the cause of Lamanai's survival is as misleading as any monocausal explanation of complex social phenomena, but it is hard to avoid the conclusion that Lamanai's lacustrine setting at least assisted in keeping life at the site going by offering a route over which ideas, and perhaps materials, could flow into and out of the community. The Putun Maya, those noted seagoing salesmen whom some see as a main part of the commercial adhesive that bound Post-Classic Maya settlements together,<sup>25</sup> may have played an important role in keeping links between Lamanai and other sites open, but we cannot now identify their presence at the site, and I think it unlikely that we shall be able to do so.

The possibility that ceramic innovations developed at Lamanai were later carried to Mayapan may indicate that Lamanai did not survive solely on infusion of ideas from elsewhere, but found a strength of its own whereby it could cope with the changes that marked the Post-Classic. Precisely where that strength came from and how it waxed and waned in the centuries before the Spanish arrived are matters we shall likely understand more fully when analysis of the excavation results is complete, but I fear that this knowledge, like altogether too many aspects of ancient Maya life from its earliest stages to the initial centuries of the historical period, may remain forever beyond our firm grasp. In the seasons remaining to us we shall attempt to tighten that grasp, as we broaden our examination of more than two millennia of occupation at Lamanai.

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<sup>25.</sup> J. Eric S. Thompson, *Maya History and Religion* (Norman 1970) 7; Jeremy A. Sabloff, "Old Myths, New Myths: The Role of Sea Traders in the Development of Ancient Maya Civilization," *The Sea in the Pre-Columbian World* (Washington, D.C. 1977) 67–88.