The Architecture of Petén at Calakmul: A Regional Comparison

Translation of the Spanish by Alex Lomónaco

Research Year: 2003
Culture: Maya
Chronology: Pre-Classic to Terminal Pre-Classic
Location: Campeche, México
Site: Calakmul

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Abstract

The study of the architectural evolution of the monuments of Calakmul represents without a doubt one of the objectives that, once concluded, would clarify many questions of functional type as of symbolic type of the buildings of the Mayan civilization in general. For its characteristics Calakmul represents an exceptional example of the technological advance reached along 1,500 years of uninterrupted constructive development, also for its conservation characteristics in the scenario where the different contexts are analyzed, offers the opportunity to achieve an integral study of public and private spaces.

In this investigation a standardization of the information was presented in the first term through a format that will allow us to break down the data in different items to let us distinguish differences and persistence in the site level and the chronological level.

In second place, a summary in which the formal characteristics of the buildings typical of the Petén architecture was made starting from the end of the Middle Preclassic period until the Terminal Preclassic period.

Resumen

El estudio de la evolución arquitectónica de los monumentos de Calakmul representa sin lugar a dudas uno de los objetivos que al concretarse, esclarecerá cuestiones tanto de tipo funcional como simbólicas de los edificios de la civilización maya en general. Por sus características, Calakmul representa una muestra excepcional del avance tecnológico alcanzado a lo largo de 1,500 años de desarrollo constructivo ininterrumpido, además, por las condiciones de su conservación, el escenario en que se insertan los diferentes contextos a analizar nos brindan la oportunidad de lograr un estudio integral de espacios públicos y privados.

En esta investigación se presentará en primer lugar la sistematización de la información en un formato estándar que nos permitirá desglosar los datos en diferentes rubros para

que de esta manera se establezcan diferencias y persistencias a nivel intrasitio e intertemporal.

En segundo lugar, se contará con un compendio en el cual se establezcan las características formales de los edificios que caracterizan la arquitectura Petén desde finales del período Preclásico Medio hasta el Terminal.

Submitted 09/21/2004 by:
Omar Rodríguez Campero
calakmuldir@hotmail.com

Introduction

Throughout the studies of the ancient Mesoamerican civilizations, architecture has been the more abundant feature and the one that presents the highest permanence in the archaeological record. Different authors have stated that architecture was the greatest cultural expression of the ancient Maya (Hohmann Vogrin, 2000: 37-54); others point out that archaeologists are characterized by their search of archetypal patterns (Webster, 1998: 5-47), and for dividing the historic perception of Maya architecture in two major periods. The first of them would comprise the studies made in the so-called age of the explorers and antiquarians, when it was believed that the accomplishment of construction projects responded to the following premises: first, to keep people busy; second, the Maya were such a devout people that they built compulsively; third, as a result of the constant moving of settlements, new buildings were constantly built, and finally, the ancient Maya were superior to their descendants in size and strength, and therefore built in excess (Webster, 1998:10).

The second period would correspond to the approach carried out by academic institutions, such as the Carnegie Institute in Washington, summarized in four projects that comprised the period that went from 1924 to 1955: Chichén Itzá (1924 / 1936), Uaxactún (1924 / 1937), Copán (1935 / 1946) and Mayapán (1949 / 1955), and the University of Pennsylvania, in Tikal (1959 / 1969). (Photo 1, below). The major contributions of these projects had to do with the recognition that the structures were built in multiple and different periods, and with the perception that some buildings had been partially demolished for reuse, and covered with new architectural projects. Besides, these early studies were oriented towards the understanding of the specific engineering practices used by the Maya, both in elite buildings and in houses made of perishable materials; an example of this is Wauchope's work, as a part of the Uaxactún project.

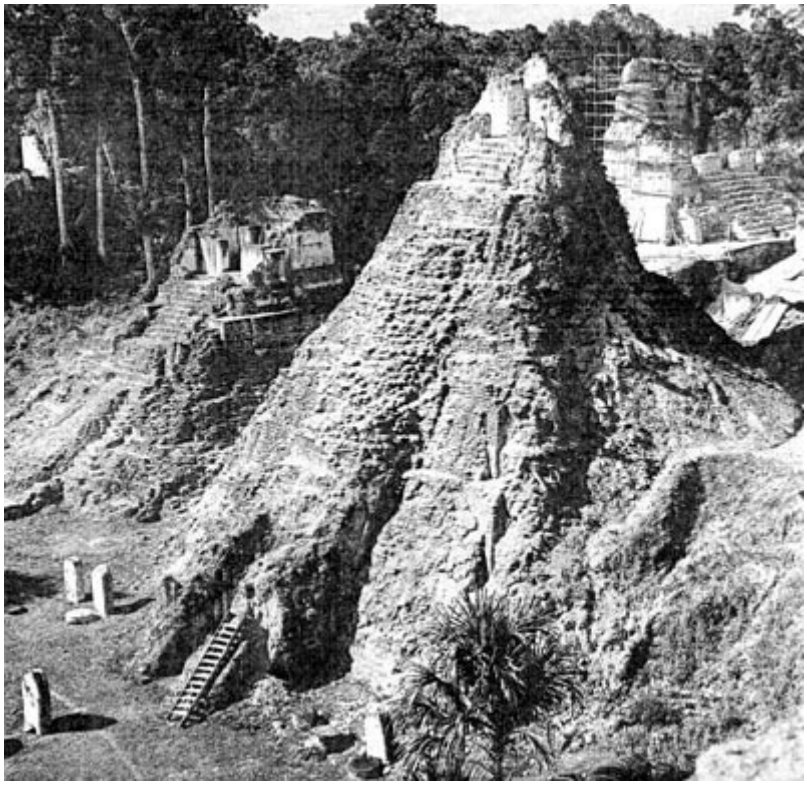


Photo 1. Works of the Tikal Project of the University of Pennsylvania at the North Acropolis, Building 5D.33

The works conducted by Manuel Gamio at Teotihuacán in 1925 should be added to this panorama, as his comprehensive research work took into account architectural restoration and the study of urban design; there is also the book by Ignacio Marquina: *Arquitectura Prehispánica* (1951) a work which presents the different architectural examples that integrate Mesoamerican cultures in a global manner. In this summary, architecture is visualized like static data, which in addition to representing a useful tool for the touristic development of the archaeological areas, provides a limited contribution to the investigation of Mayan society.

The present research registers itself in the process of understanding the functioning mechanism of buildings in the ruling lineages of power, that is to say, I consider that buildings had an ideological character, and for this reason, in addition to being buildings of a functional type they were a means for conveying messages to society. From this assumption we may establish that architecture can be analyzed as a communication system susceptible to being studied by semiotics, which in the words of Umberto Eco (1981:330) would be: *"A discipline that can and must concern itself with the entire culture",* in which any cultural manifestation becomes a message capable of being treated like a semantic body. Upon accepting that architecture may be considered like a system of signs, we may establish, as Giovanni K. Koenig puts it (in Eco, 1981:331), that architecture is composed of signal vehicles which promote behaviors. The harmonic, rational and human relation of societies is reflected on them; this relation

bears not only the imprint of their activity but their history itself. Every urban planning involves an intrinsic code, and it is in this code where the requirements of functionality and spatial consciousness of communities take shape, their religious, administrative, ceremonial, commercial, and residential needs, generated in the built environment that makes of architecture an incarnation of this cultural activity.

Since 1996, the Calakmul Archaeological Project conducted by the archaeologist Ramón Carrasco Vargas, has had the characterization and analysis of the early periods of the site as one of its major research lines, and for that reason, following an intense program of stratigraphic survey and topological recording of the data obtained, a tridimensional model of the building was created (Structure II) (Photo 2, below), in which, although in a fragmentary manner, the different building stages could be observed. With the purpose of refining this perspective, the work of archaeological survey of the buildings dating from the Pre-Classic period was undertaken in 1999, with the elaboration to this purpose of a penetration tunnel where the second mask of the west side of the building is located, and which corresponds to the second half of the Early Classic period. These investigations resulted in the convergence that Calakmul's Structure II is the building with the largest architectural sequence known at the site and in the entire Maya area, as it starts by the end of the Middle Pre-Classic period and culminates with the abandonment of the city in the Terminal Classic period.

Photo 2. View of Structure II, Calakmul, Campeche.

In archaeological terms, the notion exists so far that the architecture corresponding to the Middle Preclassic period is characterized, according to Hansen's views for Nakbé (late Ox phase, 600 to 400 B.C.) by structures of up to 18 m in height. Also, in this era platforms were built with a height that ranged between five and eight meters (Hansen, 2000:81) (Figure 1, below). Another feature which seemingly had its origin in this period of time are the so-called Filling Boxes; this building technique consists in the

construction of rustic walls with a rectangular or square-shaped scheme, with the occasional use of akalché mud as a binder, and in other cases, a system known as Dry Joint. These boxes were usually filled with rubble from the quarries or with debris derived from the residential areas; that is why the excavation of refills have exposed such varied materials as: ceramic fragments, debris of lithic materials, human and animal bones, etc. These boxes were usually sealed with compacted sascab or with stucco floors, depending on the construction epoch.

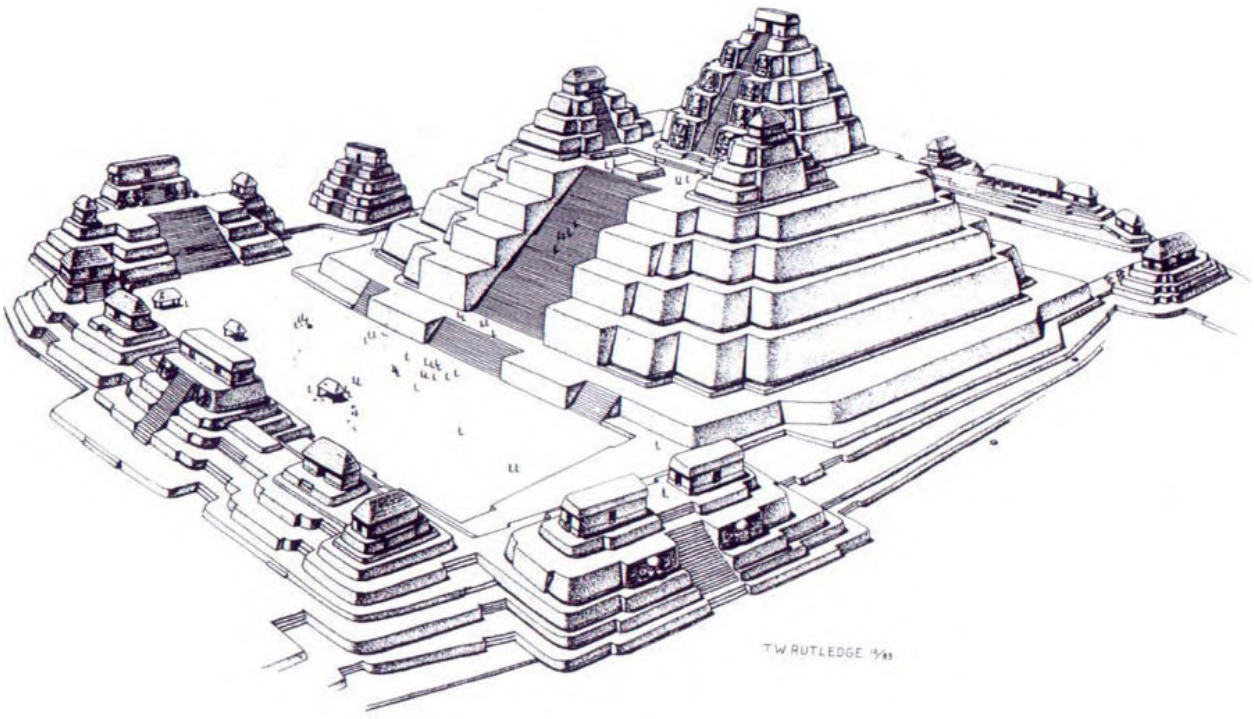


Figure 1. Reconstruction of the Tiger Group, El Mirador, Guatemala. Drawing by T.W. Rutledge.

According to Dr. Richard Hansen (Hansen, 2000:73-108), the monumental Middle Pre-Classic architecture lacks any artistic expression as a consequence of the poor preservation of the exposed stucco, and therefore he concludes that the lack of an architectural art for this period is a diagnostic pattern. Laporte and Valdés (1993: 9-46) report a similar situation for Tikal. With such evidence, it would seem that in the Middle Pre-Classic period there is a general absence of monumental architectural sculpture. However, such notions were modified with the finding of Substructure II c-1 at Calakmul, as that structure has maintained all the formal and structural attributes of its architecture (Photo 3, below).

Photo 3. View of the area where Substructure II c is located, Calakmul, Campeche.

On the other hand, the classic studies on the Maya and Mesoamerican civilizations have defined the Late Pre-Classic period as the moment when the bases for the development of the large urban centers from the Classic period are set. As investigation progressed, new explorations provided additional information regarding the temporality of the sites in this period. It is being now verified that in some regions, groups that settled by the Late Pre-Classic period had achieved a remarkable growth, until they finally became a complex society with large urban centers, the product of an evolution that was apparently initiated in the Middle Pre-Classic period (Carrasco, 2001:2).

The concepts and timeframe still in force concerning the development of the Mayan culture, correspond to a partial sample of the reality that underlies in most of the massive buildings of the lowland cities, as it is not only evident that a continuity exists in the traits that characterize the Mayans' ritual activities from the Pre-Classic to the Terminal Classic periods, and even well into the Postclassic period, but also that their origins date back to increasingly earlier periods, and that by the end of the Middle Pre-Classic, they were fully consolidated. In his review of the Pre-Classic period, Ringle

(2000: 103-221) shows that many facets of the ritual practices were beginning to develop, and that these persisted during the Classic period. As research gradually broadens and our knowledge of the architecture and the artistic expressions of the Pre-Classic settlements increase, we may verify that they had already achieved a degree of complexity that competed and in many cases exceeded those of the Early Classic period. All this has led us to revise the different concepts and referential images we have, and which archaeology has maintained since de mid and even the beginning of the century we recently left behind.

The Architectural Semiotics

The main objective of this investigation attempts to understand the role played by buildings in the conformation of the mechanisms that legitimated the power of the ruling lineages, and this has led us to think that in addition to being constructions of a functional type, they were a means for conveying messages to society; as of this, we may establish that architecture is a communications system susceptible of being studied by semiotics, which in Umberto Eco's words (1981:330) is: "*A discipline that can and must concern itself with the entire culture*", and in which any cultural manifestation becomes a message fit to be used as a semantic body.

Once architecture can be considered as a system of signs, we may establish, after Giovanni K. Koenig (in Eco, 1981:331) that architecture is composed of signing vehicles that promote behaviors where the characterization of the sign is based only on one coded meaning that a specific cultural context attributes to a signifier (Eco, 1981:333). Thus, we use two types of codes or conventions that might facilitate the way for better explaining the messages expressed: **the syntactic codes**, which would embody the entire series of postulates of the construction science; this is to say, they frame the architectural forms without a reference regarding its function or its denoted space, by only applying a structural logic (Eco, 1981:362). With such concept, the technical description of the architectural characteristics of buildings could be established, for example: the type of basal platform, which may be stepped, with inset or rounded corners; the type of surface: unadorned, in the shape of a sloping wall, with an apron, etc.; the shape of the stairways, outset or inset, etc.

On the other hand, we have **the semantic codes** that are in turn subdivided into two types of articulations: in the first place that of the **Architectural Features**, which provide a frame for the factors that point to the closest meanings of the physical characteristics of the features, such as structures, the stairways, basal platforms, etc.; in the second place, the features that display a degree of abstraction or of knowledge of the symbolic universe of a much more sophisticated society, and which could be represented by the altar/stela complexes, the iconography imprinted in friezes and masks, etc. (Eco, 1981:363).

The second articulation corresponds to the **typological genres**, which provide a frame for the factors that identify a building with the purpose for which it was built (*Ibid*:363), in other words, this articulation indicates why a construction is a temple and not a residential house, or why an area within the city is residential and not ordinary;

moreover, it serves to distinguish between the different construction systems and styles that have developed throughout time in a specific space, such as the styles of Petén, Río Bec, Chenes, Puuc, etc.

In his statement, Eco emphasizes the basic concepts for conceiving architecture as a system of communication to the masses, for it is:

"*An operation directed towards human groups, to satisfy some of their demands and for persuading them to live in a specific way.*" (Eco, 1981:366).

Within this scope he attempts to individualize the related characteristics existing between mass communication and architecture, through several premises:

The architectural reasoning is persuasive: it starts from admitted premises and brings them together in well-known and accepted schemes, and induces consent of some specific type. (I shall live this way, because this is the proposal I am being presented with, basing myself on spatial forms that resemble others already known, while I am being shown that related in such a manner, I will be able to live in a more convenient and comfortable way) (Eco, 1981: 366-367).

The architectural reasoning is psychagogical: through a mild violence (although I may not become aware of it), I am being pushed to follow the instructions of the architect, who not only defines the functions, but also promotes and induces them. (Just as when we speak of hidden persuasion or psychological inducement) (*Ibid*).

The architectural reasoning is enjoyed through inattention: in a way similar to how we enjoy a film or a television show, comics, or mystery novels. (One does not enjoy the art, specifically, which demands absorption, attention, devotion towards the work to be interpreted, respect for the presumed intentions of the issuer) (*Ibid*).

The architectural message may be full of aberrant meanings: and the receiver may not realize that he or she is perpetrating treason. (He who uses the Venus de Milo to obtain erotic stimulation knows well that he is betraying the original communicative function —of an esthetic nature— of the object; but he or she who uses the Ducal Palace in Venice to protect himself from the rain or he or she who uses a church to house troops, is unable to notice that he is perpetrating a treason) (*Ibid*).

In this sense, the architectural message fluctuates between a maximum restrictiveness (you must live this way) **and a maximum irresponsibility** (you may use this form as you see fit) (*Ibid*).

Finally, **architecture is subject to oblivions and successions of rapid meanings** (Eco, 1981:366-367).

Among the properties of architecture is that of being a self-signifier, inasmuch as the contents of the message form a whole with the materials that help to support them, thus following the laws of the esthetic message. And in this self-signifying, it informs not only about the functions it promotes and denotes, but also about the WAY it has decided to

promote and denote them. (Eco, 1981:368 the underlining is mine) because like Eco notes:

"…Following the semiotic chain that goes from the stimulus to the denotation, and from the denotation to the connotation (and from the system of denotations and connotations to the self-signifying message that connotes the architectural intentions of the issuer), we have that in architecture stimuli are in turn ideologies. Architecture connotes an ideology of living and therefore at the same time it persuades and allows for an interpretative reading fit to offer an accretion of information…" (Eco, 1981:368-369 underlined by the author).

In this way, the buildings, not only of the Mayan culture but of any cultural system, may be considered as architectural bodies susceptible of being analyzed as of their syntactic characteristics, allowing to identify and to outline their semantic characteristics, which, although they could seem obvious, make it necessary to sustain and justify the inferences that lead us to such reasoning.

To this aim, and as a part of the methodological design, we propose the use of an architectural technical specification card, intended to organize the data generated by the archaeological investigation and that will allow us to point out (or emphasize) the changes that present the features that conform the buildings, both at a diachronic and synchronic level, besides facilitating an easy access to specific aspects of the building technique, which allows to establish comparisons between the varied solutions employed by the pre-Hispanic architects.

For the present work, I shall make the comparison for the same period of time (Late Pre-Classic) of the characteristics presented by structures: Sub II c-1 at Calakmul, 5C-54 at Tikal and the acropolis of the South Complex of Group H at Uaxactún. First, I shall present an overall description of the sites and the investigations carried out in each one of them, and second, I shall present the information derived from field reports and the bibliography concerning the architectural cards, to characterize the similarities and differences used in their construction. One last section will include the observations and conclusions regarding the Petén architecture of the Late Pre-Classic period.

Case Studies

Calakmul

It is located in one of the largest ecological tropical forest reservations in México. With approximately 723 thousand hectares, it is situated in the region of Petén, Campeche, 30 kilometers away of the Mexico-Guatemala border. This region shares with the Guatemalan Petén not only similar characteristics of flora, fauna and orography, but also an architectural style characterized by buildings erected on large basal platforms, capped with vaulted precincts. The ornamentation of structures, based on modeled and polychrome stucco, visually forms a body with the basal platforms where the red color

dominates. A great number of sculpted monuments were built at Calakmul in the course of the Early and Late Classic periods, being one of the sites within the Maya area with the largest number of stelae: 120 have been reported so far.

Calakmul is located in the state of Campeche, at 18º 86" 31.856" latitude North and 89º 48" 17.949" longitude West, 240.51 meters above sea level. The main core of pre-Hispanic vestiges in the city of Calakmul is found on a natural dome of approximately 25 km^2. This is surrounded by aguadas used for storing water, taking advantage of the lower lands that are easily flooded during the rainy season. In the territorial space of the dome lies the settlement, with a rather disperse pattern formed by five large architectural groups organized around a Main Plaza, which occupies the central sector (Figure 2). The two large pyramids that dominate the jungle and from which the name of "Calakmul", which means *"Two Adjacent Mounds"*, derives, were built in this sector as of the Upper Pre-Classic.

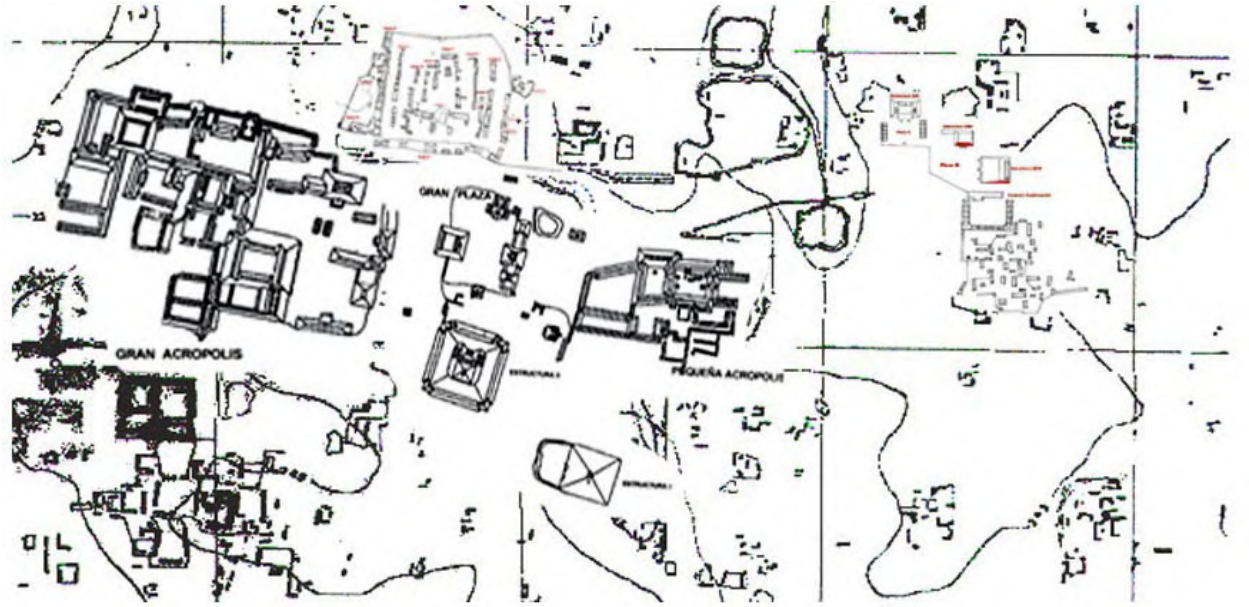


Figure 2. General plan of the ancient Maya city of Calakmul.

STRUCTURE II

The Middle Pre-Classic period is characterized by Substructure II c, the earliest complete building reported at the site, and so far, in the entire Maya area; temporally, it corresponds to the late Middle Pre-Classic period between 390 and 250 B.C. From its shape and structural design, this building was conceived as a mountain at the center of which the access to the cave was located, or in more appropriate words, to the portal

that allows the transit to the regions dominated by the rituals of death and rebirth: Xibalba. (Photo 4, below)

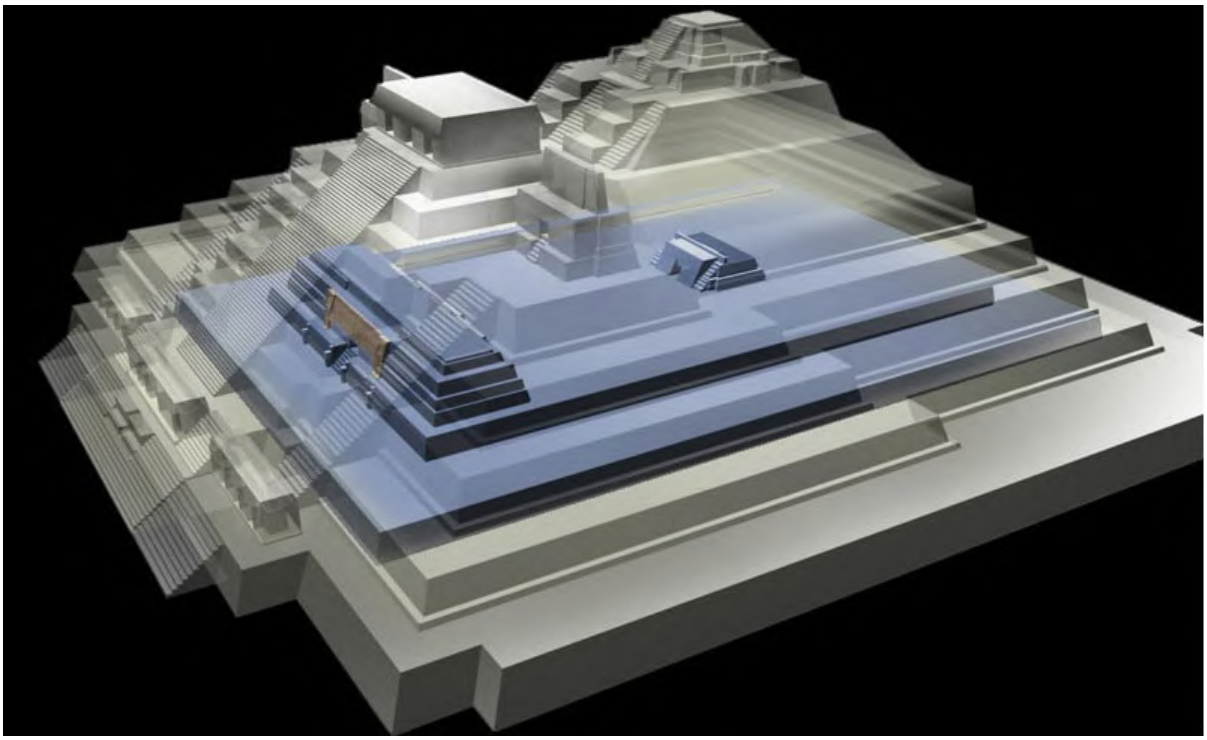


Photo 4. Digital reconstruction of Calakmul's Structure II, indicating the Late Classic and Middle/Late Preclassic periods.

Structure Sub II c-1 was spared of major mutilations at the time of being buried and covered by Structure Sub II b, and therefore maintained all its attributes regarding the structural part and the iconography. Up to the time of the 2003 research season, three buildings had been detected that integrate Substructure II c, conferring an aspect which could remind us, in terms of spatial distribution, of Group H at Uaxactún, although they are not identical; the first structure (Sub II c-1) placed at the north of the complex, presents an altar-building in its central part (Sub II c-2) and there is another building (Sub II c-3) that closes the space to the northeast.

The Late Pre-Classic period would be characterized by the building that buries Sub II c. This building (Sub II b) has been partially explored and presents a radical change in its morphology in regard to the previous period, as it is a building of roughly 48 m in height and with characteristics similar to those of Structure II along the Classic period. This could possibly be a triadic building, if it shares the behavioral pattern that prevails for the Late Pre-Classic period in the overall region of the central lowlands.

During the Early Classic period, between 250 and 600 B.C., Structure II was modified twice, and the volumetry of the basal platform of the previous period was changed. These modifications consisted in adding a covering in the frontal portion of the structure

and the construction of new buildings in the upper part (Structures II c and II d), which respond to a change not only in the structures of power, but also in the new stylistic concepts of Mayan architecture (Carrasco, 1999:4).

Archaeological explorations revealed the existence of a substructure which was practically demolished, placed at the beginning of the basal platform,. The materials recovered indicate that this early covering of the Pre-Classic basal platform presented a decoration of zoomorphic masks modeled in stucco, with polychrome paintings that flanked a stairway. We assume that the ruler who ordered the sculpting of stela 114, in the year 435 A.C., is the one who initiated this work and ordered that this stela be placed at the foot of the stairway as his commemorative monument (*Ibid*). (Photo 5, below)

Photo 5. Stela 114, Calakmul, Campeche.

The second modification of Structure II from the Early Classic period, corresponds to the cover put in place in the V century A.C., which was demolished between the years 500 and 650 A.C. to be replaced by another one of similar characteristics. The remodeling consisted in the construction of a monumental stairway flanked by three stepped structures decorated with imposing zoomorphic masks. Four of these masks, which in their original state presented the facial details in modeled and polychrome stucco, may be presently observed in the middle portion of the basement. The only evidence that may have offered us some information about the ruler who ordered this change was destroyed when his tomb was looted in pre-Hispanic times, probably by the end of the VII century A.C. The presence, between the first chamber and the access to the second, of a double funerary chamber complex located in Structure II b (Tombs 3 and 5), would corroborate what we have stated elsewhere in this report. Because of its location and structural characteristics, this funerary complex was probably built during the process of modification of the basal platform and prior to concluding the construction of the precinct that would cover it. After the tombs were looted, the upper chamber (Tomb 3), which must have corresponded to someone accompanying the main personage buried in the lower chamber (Tomb 5), the offering of an adolescent was put in place (apparently, to appease the ancestors) together with four ceramic pieces from the end of the Early Classic period. If what we have just said is valid, we may assume that the ruler who ordered the remodeling of Structure II by the end of the Early Classic period, was probably *Coiled Serpent*, who ruled between 579 and 611 A.C.

Photo 6. Aerial view of Structure II at Calakmul.

By the Late Classic period, towards the beginning of the VIII century A.C., the last major modification of Structure II took place. The changes consisted in covering the masks and decorations of the Early Classic period with stepped bodies of plain faces, raising the frontal part of the basal platform to a height of 30 m. In the new design of Structure II, in the first level, a monumental stairway divided in three sections was built, the central one preceded by a group of five stelae dating to the year 702 A.C. In this first level, and coincident with the sections of the stairway, three buildings were erected. In the eastern edge, stela 43, dating to 514 A.C. remains enclosed in the building. Of the building located at the west edge, only the remains of the rear wall and one fragment of the stela located in the inside were preserved. In the rear part of the main building, a new stairway was placed, providing access to the summit of the basal platform where Structure II b was built (Photo 6, above).

Substructure II c-1

Dated around the end of the Middle Preclassic period and the beginning of the Late Preclassic period, 390 B.C. (2205 ± 50 years, 13c: -24,45%, confidence interval 95% 2 sigma) (M. Fontugne, 2000:2), Substructure II c is described as a series of buildings placed on a basal platform approximately 8 m high, possibly with two or three structural bodies, although to this date only one has been identified, with a total height of 2.68 m, formed by two sloping faces divided by one flange; the first face is 0.43 m high with an inclination of 0.13 m; dividing it from the second face, there is a flange measuring 0.29 m, with a bevel of 0.09 m; the second face is 2.16 m high with a slope of 0.71 m. This basal platform presents overall dimensions of 107 m in its north-south axis and 75 m in its east-west axis; it should be noted that these measurements correspond to the data gathered up to the research season of 2003, and that they will be refined as explorations progress.

Substructure II c-1, with a length of 48 m, a width of 13.70 m and a height of 6 m, has its main façade oriented to the north, with inset stairways in its central part, and with a decoration of two zoomorphic masks at both sides of the stairways. For its description it was divided in two clearly defined areas: the central one, 20 m long, protrudes from the general line of the building formed by two slanting faces; the lower one which is plain with remains of a red stucco finish, is 1.5 m high and shows a 0.30 m incline. Dividing the upper face from the lower one, there is a flange measuring 0.25 m, where the frieze or upper face begins, with a height of 3 m (Figure 3, below).

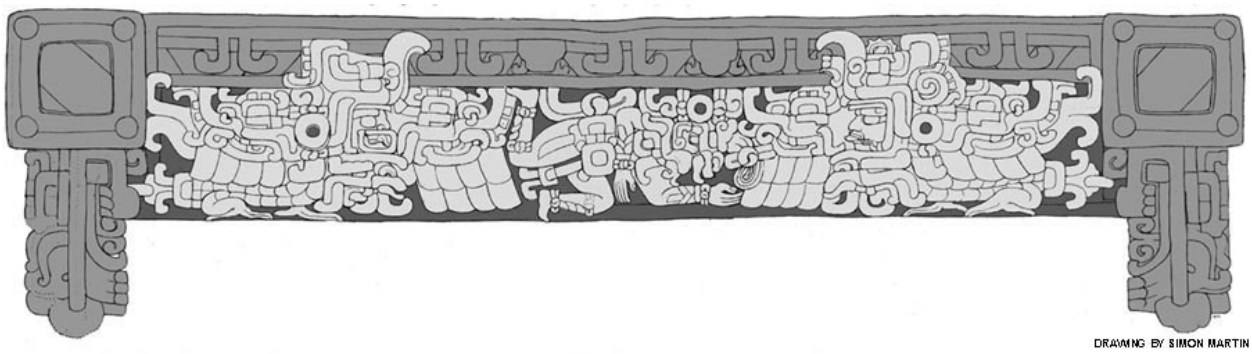


Figure 3. Drawing of the frieze located in the north façade of Substructure II c-1. Drawing by Simon Martin.

The second area corresponds to the lateral faces that run in an east-west direction and they present a height of 4.46 m and a maximum length of 13 m from the central area to the extremes. These faces are divided into three horizontal sections; the first with a slanting face 0.31 m high and with a 0.10 m incline, followed by a 0.14 m flange where the second face begins, measuring 1.23 m in height and with an inclination of 0.36 m; dividing the first section from the second, there is terrace of 0.36 m. The second section is composed of a first face 0.18 m high with a 0.08 m incline and a 0.16 m flange and a second face of 1.18 m, with an incline of 0.36 m; dividing the second section from the third, there is a terrace measuring 0.49 m. The third section is integrated by a surface 0.18 m high, and a 0.10 m incline, with a 0.16 m flange; the second surface is 1.80 m high, with a 0.35 m incline (Photo 7)

Photo 7. Aspect of bodies, Second Section, North Façade, Sub II c-1, Calakmul.

Finally, there is a terrace measuring 1.25 m, from which a feature rises which could serve as a roof comb or upper platform, measuring 1.5 m high, and which shows a set of insets of plain faces.

In the central section, the frieze was decorated with a scene whose iconography remits us to the concepts of the mountains and their role as portals to the region of *Xibalba,* sacred space that concentrates the forces that governed the cosmovision of the ancient Maya, and which legitimized the power of the city rulers.

This basal platform-mountain, temple-cave symbiosis, is verified by the architectural solutions implemented by the builders to recreate their sacred spaces, and the most important one consists of a passageway built with a circular depressed vault, unique in its type, a space that presents a roofed surface of 22.68 m^2 (8.10 m by 2.80 m). (Photo 8)

Photo 8. View of circular depressed vault, Sub II c-2, Calakmul.

Tikal

Tikal's central area is strategically located in a series of low hills (250 m average height), that rise 50 m above two swampy depressions (bajos), located to the east and to the west (Sharer, 1998:158). (Figure 4)

Its official discovery was made by an expedition of the Guatemalan government organized by Modesto Méndez and Ambrosio Tut, who arrived in Tikal in 1848. Later,

an expedition conducted by Gustav Bernoulli moved the wooden lintels of temples I and IV to the Museum f¨r Völkerkunde in Basil, Switzerland. Alfred Maudslay visited the site in 1881, 1882, 1885 and 1904; Teobert Maler did the same, sponsored by the Peabody Museum of Harvard University. Maler's work was concluded by Alfred Tozzer and R.E. Merwin, of the same institution, who drew up the first site map published in 1911. Later, Sylvanus Morley visited the site in 1914, 1921, 1922, and 1928, as a part of a study of monuments and hieroglyphic inscriptions (Sharer, 1998: 154-155).

Figure 4. General plan of the city of Tikal, Guatemala.

As of 1956, the Tikal Archaeological Project was initiated by the University of Pennsylvania, U.S., with a specific planned excavations program for formulating and contrasting hypothesis, using to that purpose the most developed archaeological techniques and methods available in those times; parallel to this, full ecological studies of the flora and fauna were conducted, as well as of the soils in that area (Coe and Haviland, 1982).

This project has yielded the following achievements:

- The topographic plan of the site that comprises 16 km^2 around the central area of Tikal (Carr and Hazard, 1961, Fig. 3).
- The integral intervention of the space known as the North Acropolis.
- The fulfillment of a recording and photographing program of the site monuments.
- The fulfillment of a program for the analysis of settlement patterns (Laporte and Valdés, 1993:4).

Later, in 1979, the National Tikal Project is created, in charge of the Instituto de Antropología e Historia de Guatemala (IDAEH), with the following objectives:

- The intervention of the southwestern sector of the ceremonial center known as the Lost World.
- To develop the Petén master plan, including the water supply system, the construction of different buildings for the park, the Flores - Tikal road and the airport of Santa Elena *(Ibid).* (Figure 5)

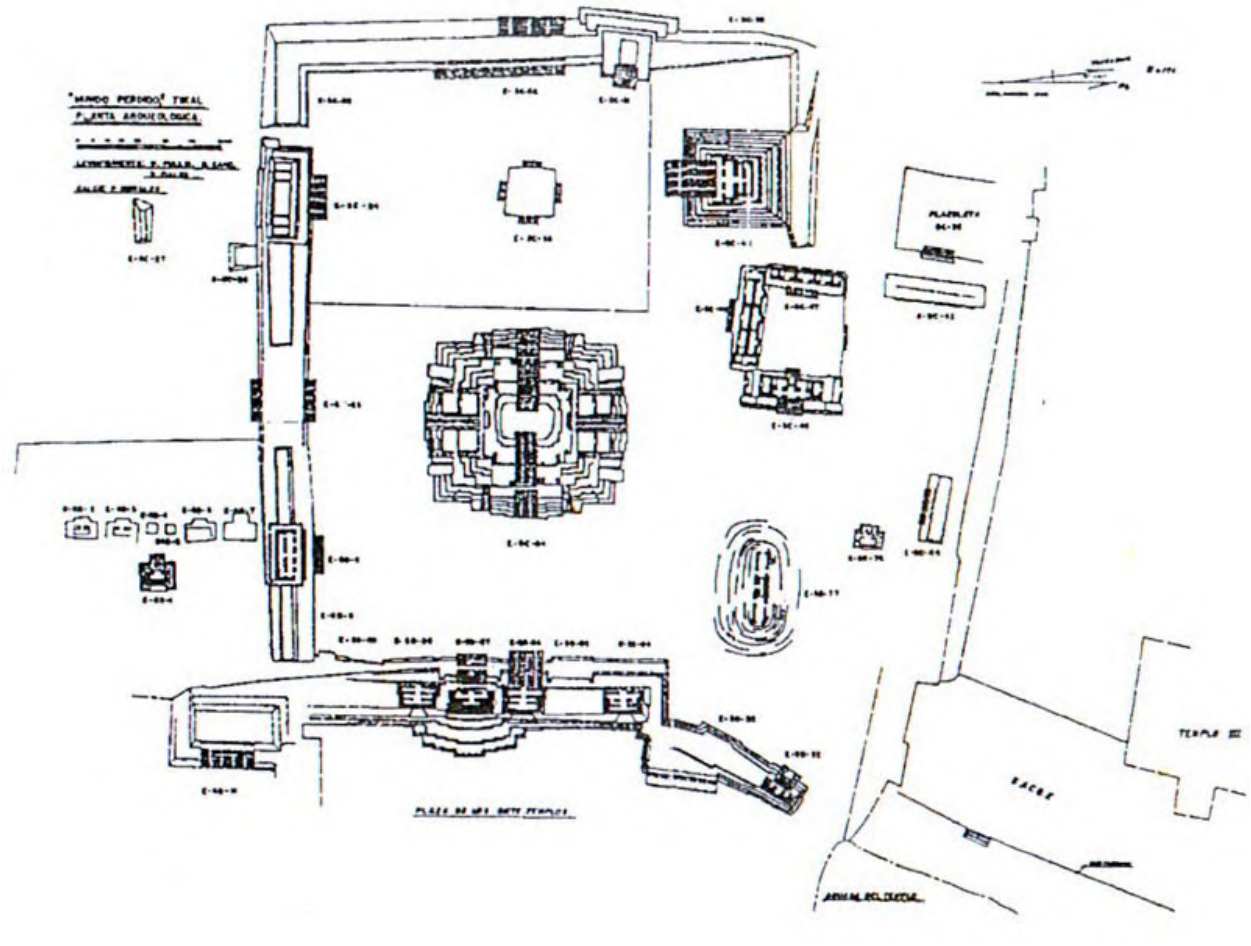


Figure 5. General plan of southwestern sector, Tikal (the Lost World).

Structure 5C-54

Structure 5C-54 is located in the area known as the Lost World, a space that represents an occupation that spans from the Middle Preclassic to the Terminal Classic periods, with no evidence of Postclassic activity (Laporte and Valdés, 1993:9).

The earliest references were provided by Teobert Maler, who in 1911 designated the southwestern sector of the city as the Plaza of the Five Temples and of the Sepulchral Pyramid; Alfred Tozzer identifies this complex as southwestern sector, and assigns the great pyramid the number 66 (Laporte and Fialko, n/d:5). Later, the University of Pennsylvania conducts minor excavations with the purpose of completing the topographic survey of the site. At that time, no restoration works or other forms of appraising the site were undertaken (*Ibid:*6).

The excavations of the University of Pennsylvania consisted in the opening of two tunnels in the Great Pyramid along its east-west axis, with a total 43 m in length. Apparently, these undertakings were supervised by Christopher Jones, who gave the Tikal National Project access to sections of those tunnels. As a result of the

investigations, samples of the material that corresponded to Tikal's Middle Pre-Classic period were detected.

By 1980, the researchers of the Tikal National Project (TNP) noted that the area of the Lost World presented two characteristics that marked its intervention:

1. Because the settlement was subject to partial remodeling, there are architectural features that correspond to the stages of the Early Classic period still present in the occupation during the Late Classic.

2. The severe deterioration of the latest stages only allows to identify architectural features of the substructures, that is to say, of the best preserved stages (Laporte and Fialko, n/d: 8). (Figure 6, below).

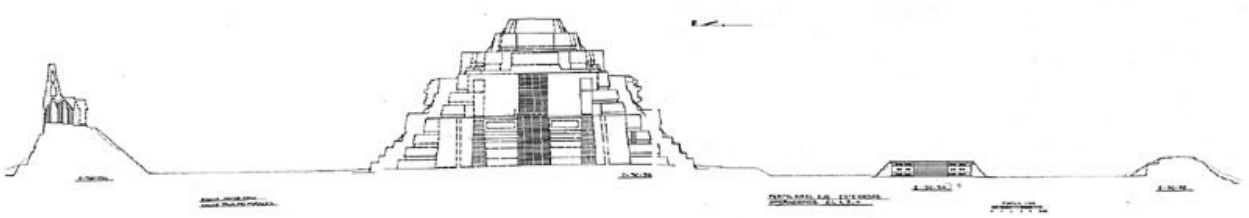


Figure 6. Profile of the east-west axis of the Lost World, Tikal.

Early EB Phase (900-600 B.C.)

The characteristics that the researchers of the University of Pennsylvania's Tikal Project define for the occupation of the Early Eb phase are circumscribed to the settlements located in the upper part of the natural elevations, which mainly occupy the well drained terrains; besides, they suggest that the sociopolitical authority and the social differentiation were already characteristic in the ancient populations of Petén (Rice and Puleston, 1981; in Laporte and Valdés, 1993:11).

In the particular case of the Lost World, this epoch is characterized by two debris concentrations that were not associated to construction traits (problematic deposits TNP-012 and TNP-006), located nearby the southeast corner of structure 5D-88 and in the southeastern area of structure 5D-87, respectively (Laporte and Valdés, 1993: 11-15).

Late EB Phase (600-500 B.C.)

For this phase there is a record of the first substructure, mutilated as a consequence of the modifications made in the *Cauac*, phase that altered the physiognomy of all the

previous substructures. Of the Late *Eb* phase, the evidence is restricted to wall remains in the west façade, and portions of the north and south sides.

The major architectural features for this phase are described as follows:

"…*happen to be the beams that delimited its stairways; on the west side, there are still indications of a type of irregular beam that tends to curve in its upper and lower ends*…". The stairway was 3.10 m wide, and was integrated by steps with treads of 0.25 m and risers (stilts) of 0.30 m (Laporte and Valdés, 1993:16).

Apparently, sufficient features were detected to consider that the plan of this building was of the radial type.

In association with this, the remains of a building on the east side of structure 5C-54 were found; we are referring to structure 5D-84/88, which could be identified for the following data:

"…*a mutilated wall was identified, which might have been the east face of a building. Said wall appeared intermittently along the structures mentioned, maintaining a height that varied between 0.20 and 0.50 m; as of its southern edge, it extends in a continued way along 42 m in a northern direction, it appears again below 5D-84, and marks the limits of its northern edge. Based on some remains of what could have been the west front of that platform, detected in a tunnel below 5D-88, a width of 10.75 m may be estimated*…" (*Ibid*:16-17).

The outstanding fact has to do with the spatial organization of both architectural features, as substructure 5C-54-1, together with the remains located below structures 5D-84/88, would apparently form a complex of astronomical commemoration or Complex E, previously reported at sites like Uaxactún (Figure 7, below).

Figure 7. Southeastern perspective of the Late Eb Phase from the Lost World, Tikal.

TZEC Phase (500-250 B.C.)

This period presented a poor state of preservation, and therefore only a limited exploration was conducted (Laporte and Valdés, 1993:21). Apparently, this substructure

presents a better structural finishing compared to the previous phase, maintaining its relation with structure 5D-84/88.

At that time, structure 5C-54-2 showed the following characteristics: an eight meters high basal platform with four stepped structural bodies; the lower and upper bodies were smaller and were the only ones with aprons, with a conspicuous, remarkable deviation of the upper body with respect to the lower ones (Laporte and Valdés, 1993:19). Other features that remain a constant are the stairs on its four sides, maintaining its radial aspect.

On the other hand, structure 5D-84/88 has a length of 93.85 m, with a 7º orientation and a height of 3.75 m, divided in four bodies, proportional to one another. In its central part, the platform featured two inset stairways on its east and west sides.

Corresponding to this phase, Substructure 5C Sub-1 was located inside the filling of the southwest sector of the Lost World's high plaza, a rectangular platform oriented to the south, built directly on the bedrock (Figure 8, below).

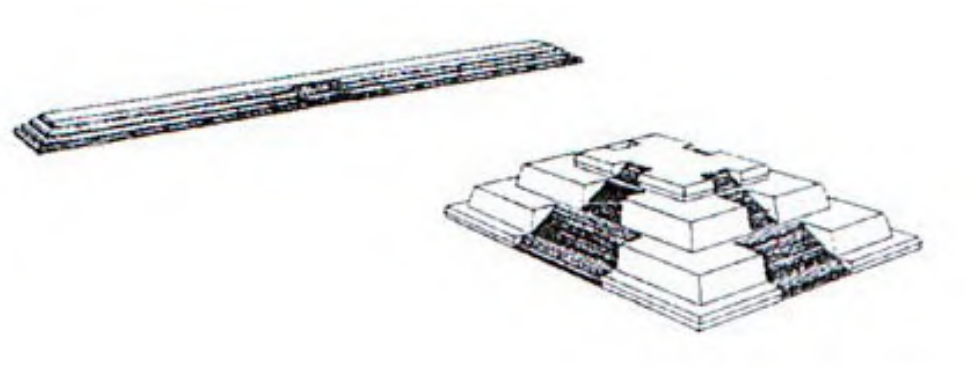


Figure 8. Southeastern perspective of the Tzec Phase from the Lost World, Tikal.

CHUEN Phase (250-100 B.C.)

Structure 5C-54-3 was associated through the ceramic materials found in the filling and through the associated burials (TNP-014 and TNP -004). The exploration of this phase was carried out by means of tunnels with which the west side was explored, and partially, the south and north sides (Laporte and Valdés, 1993:28).

This phase consists of a basal platform 9.66 m high divided in six stepped structural bodies with a proportional uniformity with the lower bodies that support a horizontal rectangular panel, or tablero, whose terrace or platform gives way to masks of massive proportions, unfortunately mutilated as a result of the following constructive phase (*Cauac*). This building has central stairways reaching the height of the upper platform in the east and west sides, while in the north and south sides they only grow to the height

of the platforms that support the masks. This phase presents, as a novelty, the inclusion of lateral stairways that delimit the tableros and masks.

During the exploration of the south side, a clear architectural feature was identified in a protruding, sloping wall (talud) that began at the foot of the pyramid and ended as far up as the platform of the fourth body, to finish with a frame or upper apron, a trait that would persist along the subsequent versions of the building.

In general terms, the *Chuen* phase of structure 5C-54-3 presents a coarse construction with deviations in the walls and a lack of regularity in the stairways, mainly in the auxiliary ones; besides, the use of a stucco finish is characterized for attempting to mask the constructive irregularities.

As for structure 5D-84/88, it maintains the patterns present in the Tzec, phase, that is, it still is a platform 97.9 m long, with four stepped structural bodies, while at the south and north ends, two protruding bodies in a talud shape are joined together (Laporte and Valdés, 1993:28).

All the structural bodies presented moldings and regular proportions between one another, except for the fourth body, with a height that exceeded that of the others (Figure 9, below).

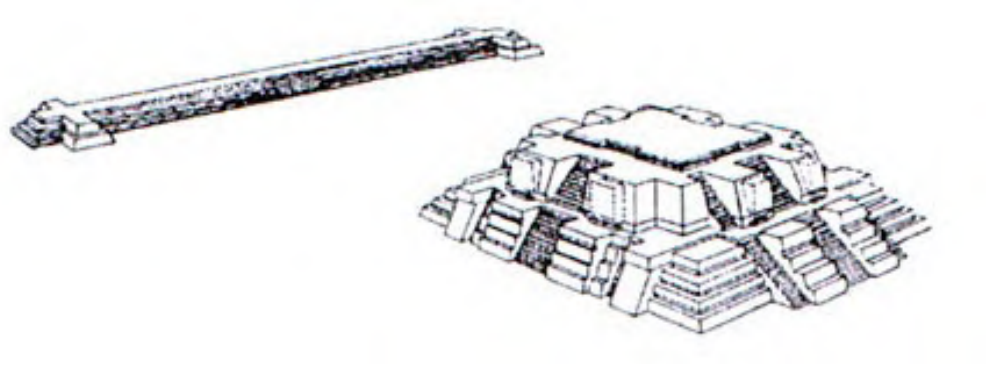


Figure 9. Southeastern perspective of the Chuen Phase of the Lost World, Tikal.

Uaxactún

The site is located at the northeastern portion of the department of Petén, 40 km north of Tikal, within the area known as the Maya lowlands of Central Petén, at an altitude of 180 m above sea level. The environment includes a number of calcareous hills that gently slope down to the east, and disappear completely, giving way to a flat terrain approximately one kilometer before it reaches the huge bajo of Juventud, which represents the limit of the pre-Hispanic occupation to the east (Valdés, 1986: 1-2).

The site consists of eight major architectural groups denominated with the letters A to H, situated on top of five low hills divided by a flat section located between groups A, D, and E. Residential households were located all around them, and the research conducted by Oliver Ricketson on these platforms assumed a high occupational density (Sharer, 1998: 184) (Figure 10).

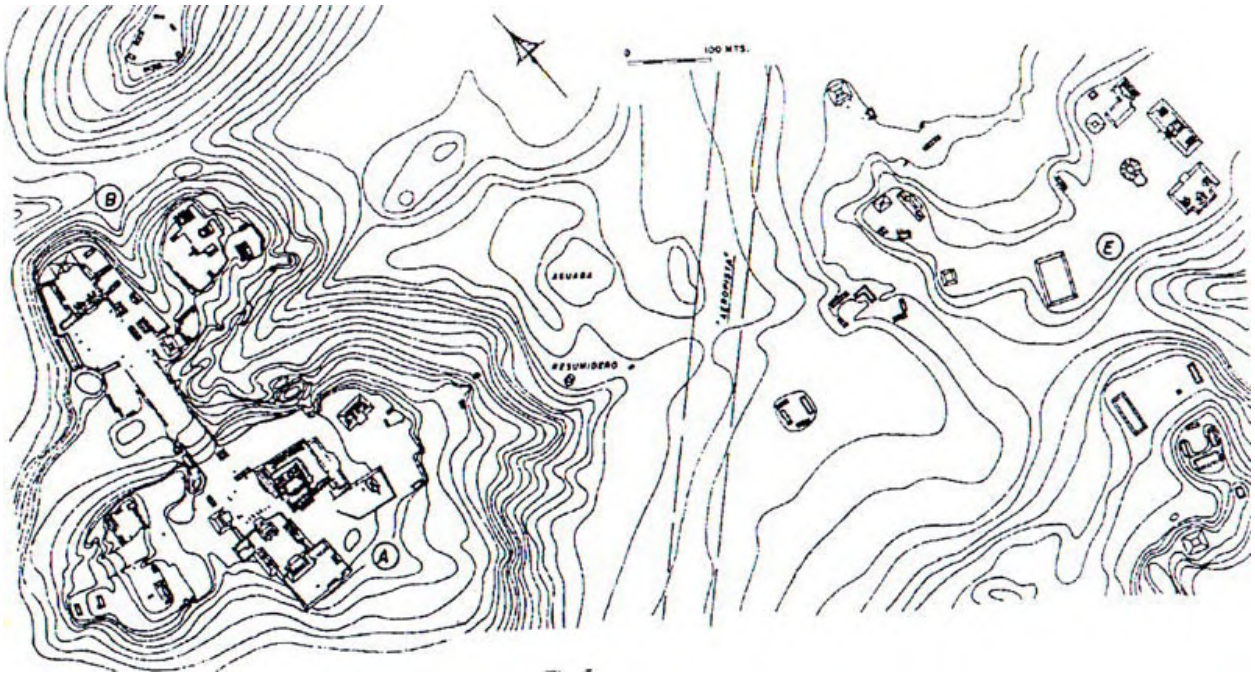


Figure 10. General plan of Uaxactún, Guatemala.

The earliest evidence of population reported at the site corresponds to ceramic fragments of the *Pre-Mamom* period found in group E. The earliest architectural evidence corresponds to low circular and rectangular platforms built with carved stone and dating to the *Mamom* phase, placed between 600 and 300 B.C. (Laporte and Valdés, 1993:70). Among their characteristics, researchers report the use of small limestone *"ashlar"* stones and hints of stucco use (*Ibid:*72); for this historic moment, the buildings that rested on these platforms were elaborated with perishable materials, although:

"…evidence of postholes which may have allowed the design of residential models to help create a distributive pattern of the occupied areas was not found…" (Ibid).

The archaeological investigations go back to 1926-1937, when the Carnegie Institute in Washington conducted exploration and excavation works at the site, with the discovery of eight architectural groups that were progressively denominated with letters A to H. Later, in 1960, Puleston conducted a study of the settlement patterns as a part of the Tikal Project of the University of Pennsylvania, through a transect between both sites,

aimed at identifying the occupational indexes. In 1974, architectural consolidation works were already underway in structure E VII Sub, discovered by Oliver Ricketson in 1930, conducted by Edwin Shook. As a consequence of the meteorological phenomena that affected this area in 1979, the Tikal National Project, in charge of the IDAEH, conducted an intervention of the site in 1983, with the specific objective of salvaging buildings E- X and A - XVIII. Subsequently, the works were extended towards groups A, B, E, H, and towards the residential areas that surrounded the elite groups, and were concluded in 1985. In addition to the conservation program, the IDAEH researchers intended to pursue the following lines of investigation:

- the search for Pre-Classic architectural and sculptural evidence.
- the corroboration of the use of sequences based on architecture.
- to gain knowledge on the traits that conform the residential area (Laporte and Valdés, 1993:7).

For the Early *Chicanel* period (300 to 100 B.C.), the architecture explored corresponds to the designs considered as diagnostic for this period and that one way or the other will last and characterize the Petén architecture; we are referring to the inset stairways, the use of basal moldings, the rounded corners, the complexes for astronomic commemoration, while just like in Calakmul, the use of access ramps in the sunken plaza of Group E is reported (Valdés, 1992:16 and Laporte and Valdés, 1993:72) (Photo 9, below).

Photo 9. Detail of wall refills from the buildings of Group A, Uaxactún.

Group H

This group was reported in 1935 by the researchers of the Carnegie Institute, who conducted no excavations at that time. Group H consists of two architectural complexes, one located to the north, and the other one to the south, separated both by a 90 m long ravine. The north architectural compound is composed of nine buildings, seven of which are located at a higher level, forming an enclosed space; the southern architectural complex displays a design similar to the northern one, showing a building of larger dimensions in the east side, and stairways to the west (Figure 11).

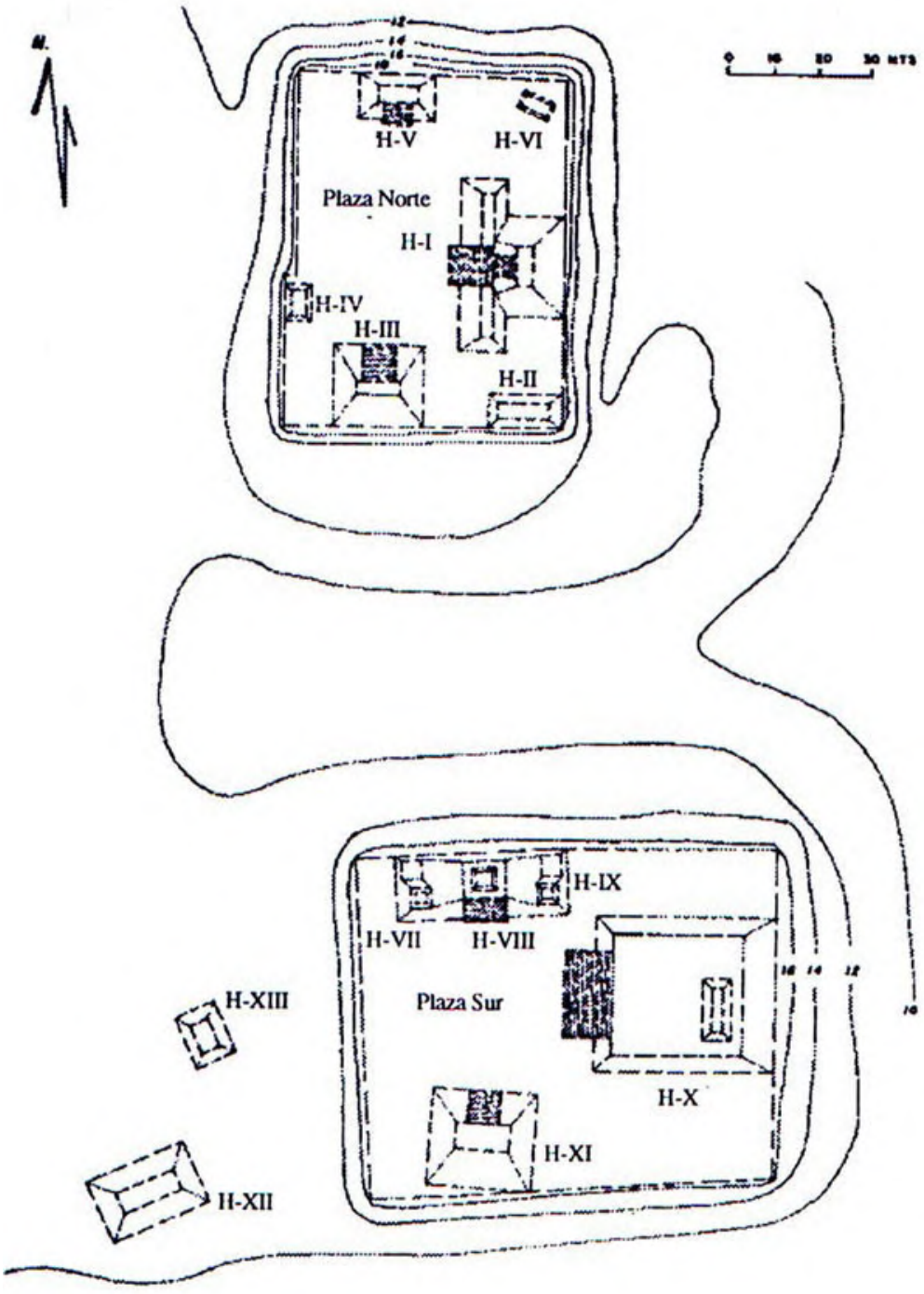


Figure 11. General plan of Group H, Uaxactún.

By 1985, with the works of the Tikal National Project conducted by Dr. Juan Antonio Valdés, several stratigraphic test pits were opened in the south complex, with the finding of ceramic materials that corresponded to the Late Preclassic period, together with the remarkable absence of materials from later epochs. With this material, the

presence of architecture associated with sculptural features such as masks and friezes was noted, causing the expansion of the investigations by means of a tunnel system. As a result of this work, seven construction phases corresponding to the *Chicanel* period were identified, with both the buildings and the decorative features in an acceptable state of preservation, and therefore no consolidation was performed with them; instead, the masks and friezes were applied a solution at 5% of a countertype acrylic Paraloid 72 resin 60-28, of Rohm and Haas (Valdés, 1986:1 and 1993:98).

On the other hand, there are reports of six vaulted buildings, though it is assumed that a total of ten must have existed (Valdés, 1992:21). The building's function and the accuracy of denominating it a palace remain uncertain, due to the formal and semiotic characteristics that would be required to define them.

Besides, it should be noted that the differentiations of the constructive phases were made taking as a parameter the laying of stucco floors over the plaza, while the subdivision took into consideration the occurrence of new structures on top of already existing or in use plaza floors (Valdés, 1986:3).

For the purposes of this investigation, it is my belief that if the seven phases in fact correspond to the same period of time (Late Pre-Classic), the phases three to six are the ones that clearly characterize the architecture of the entire complex, and this is what Valdés notes (1992:25) *"…The sculptural element associated to the earliest architecture corresponds to the upper frieze of the building H Sub-2 which corresponds to the third stage* (phase)…"

I shall briefly characterize the phases one and two: the first one was identified through a stratigraphic pit opened in the central part of the plaza that bears a stucco floor 0.06 m thick, with no established type of associated construction so far (Laporte and Valdés, 1993:98; Valdés, 1986: 5-6) (Figure 12).

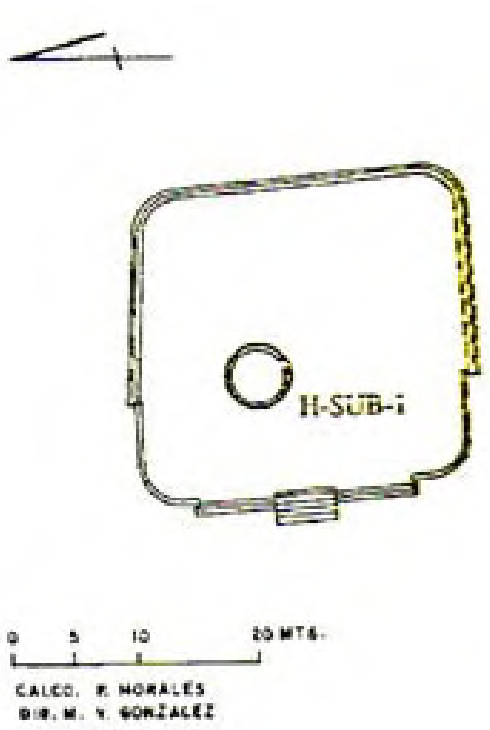


Figure 12. Architectural plan of Construction Phase One, South Complex Acropolis, Group H, Uaxactún.

The second constructive phase corresponds to the quadrangular plan platform that averages 27.50 m in its east-west axis, and 28.10 m in its north-south axis, with rounded corners and a height of walls that range from 1.98 to 2.25 m, depending on the ground level. This platform presents an access outset stairway oriented to the west, with five possible steps with treads of 0.40 m and risers (stilts) of 0.25 m.

Associated with this phase, structure H-Sub-1 was found, presenting a circular plan with a basal platform 0.45 m high, and a diameter of 5.35 m, with a 0.10 m incline, and with remains of a stucco finish. In its upper portion the remains of the building that crowned this basal platform were identified, it also featured a circular plan, a wall 0.30 m thick and 0.30 m high was found, and the access was detected at its southeast end with an approximate width of 0.70 m (Laporte and Valdés, 1993: 101-102; Valdés, 1986: 6-7).

Construction Phase Three

The first vaulted building found at the site, in structure H Sub-2 corresponds to this phase, as also the first stucco modeled figures associated with the architecture.

In regard to H Sub-1, its use continued and only presented the reduction of its original height to leave the upper building at the level of the plaza floor.

The façade of H Sub-2 is oriented towards the west, where the access is located. This building exhibited the partial mutilation of its frontal façade though the side parts and the entire rear part were preserved, allowing the overall interpretation of the building. The height of the basal platform is of 2.34 m, and it is apparently divided into a double face; the first is 0.38 m high, and the second is 1.96 m high, with a 1.30 m incline divided by a 0.15 m flange (Figure 13).

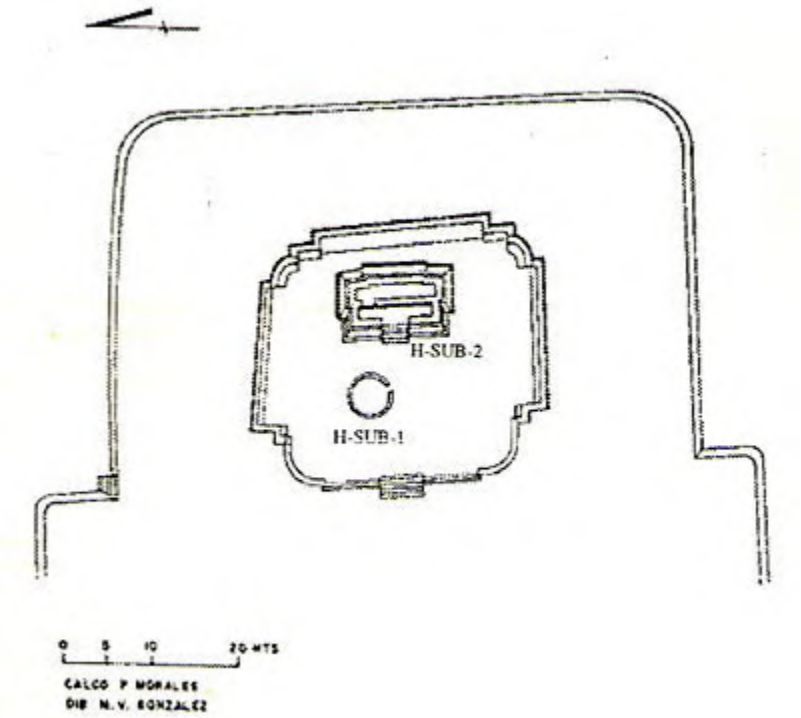


Figure 13. Architectural plan of Construction Phase Two, South Complex Acropolis, Group H, Uaxactún.

The building had two bays (longitudinal chambers), with the floor level of the second bay more elevated than that of the first by a 0.30 m step, which divided them. The communication between both spaces was made through a 1.30 m wide door which was found displaced to the north of the central axis.

As to the decoration, a frieze that extended 10.70 m along the outer wall was discovered at the rear part of the building, divided in three sections. The central area shows the figures of two individuals placed in a horizontal position with their faces in profile and looking towards each other; both individuals are wearing identical garments: headdresses on their heads, ear flares, anklets, loincloths *(ex).* The sole difference observed has to do with the face traits, as the individual located south presents polymorphic traits, and those of the individual located north are anthropomorphic (Laporte and Valdés, 1993:102) (Figure 14, below).

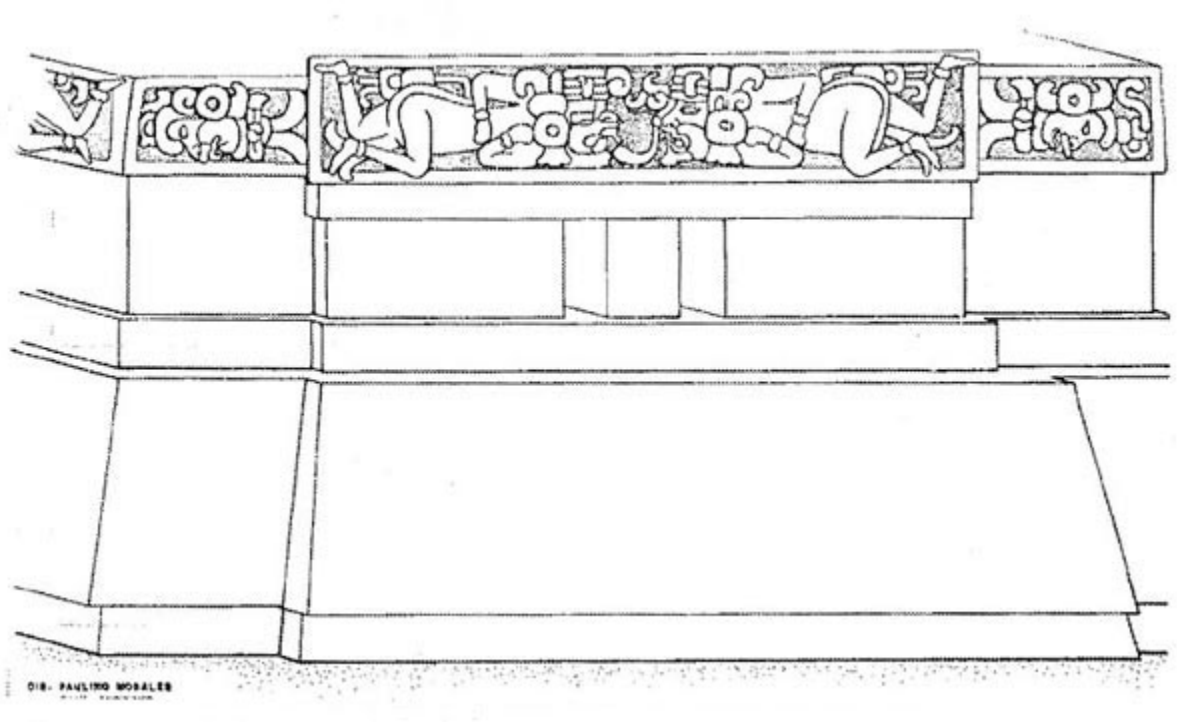


Figure 14. Drawing of rear façade of Structure H Sub-2, Uaxactún.

At the lateral sections, two modeled faces with similar characteristics are displayed in profile, with their eyes looking down, while both display features such as ear flares, a circular bead with hanging feathers, nose plugs, and a headdress over their heads (Laporte and Valdés, 1993:105). During the explorations we identified the presence of a red stucco finish in all walls, and some of the modeled figures showed remains of a black color.

At this point, the general platform of the complex expands 15 m in each of its sides, and the space is divided into two areas: a basal platform on which the structures described here were placed, and the general platform that supports them, on which other buildings would be erected (H - XI, H - VII, VIII and IX); at the north side of the general platform there was a 2.50 m long abutted stairway which led to the external part of the complex, possibly for communicating it with the northern architectural complex *(Ibid)*.

Construction Phase Four

This phase comprises a full remodeling of the basal platform, both of its platform and the integrating buildings, while the general platform remained untouched.

Changes in the platform consisted in the addition of angular corners (mainly at the west side), alternating with the rounded corners; the bench with moldings was still used on the platform, following the pattern of the previous phase

The major change took place at the basal platform, occupied by a single building of pyramidal type which is structure H Sub-3, with 24 m in its north-south axis, and 20 m in the east-west axis. Its basal platform is composed of three bodies with a stairway divided into two sections and oriented towards the west, with a height of 6.50 m, although as of the evidence, we came to the conclusion that its original height might have been 7.10 m. (Figure 15).

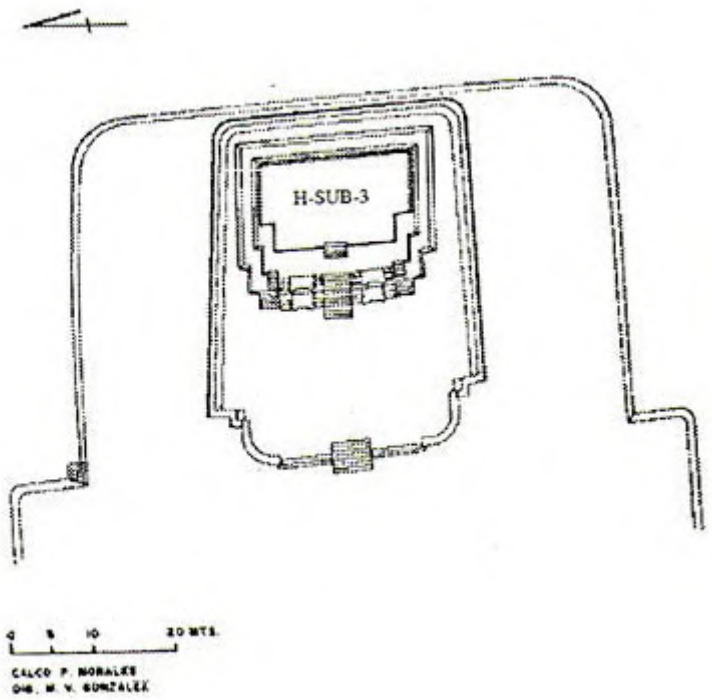


Figure 15. Architectural plan of Construction Phase Three, South Complex Acropolis, Group H, Uaxactún.

The building presents two clearly defined areas: the first is composed of the first two structural bodies of the basal platform which at the side of the central stairway display two zoomorphic masks on each side, together with auxiliary or lateral stairways that end where the third body begins. These stairways are similar to those reported in structure A - I, and at Tikal, in structure 5C-54 of the Lost World (Laporte and Valdés, 1993:105).

Construction Phase Four A

This phase is typified by the occurrence of buildings H Sub-4 and H Sub-5, although neither the basal platform nor the E Sub-3 structure underwent modifications. At that time, the aspect of the group probably corresponded to that of a triadic arrangement. During this phase the single burial in Group H (TNP-233) is recorded, this burial was placed when H Sub-4 was built on top of the plaza floor. The burial pertains to an infant placed in his right lateral decubitus, with the skull oriented north, and furnished with a

plate (placed over his head) of the Sierra Red type and a small, gray, obsidian blade near his mouth (Laporte and Valdés, 1993:110) (Figure 16).

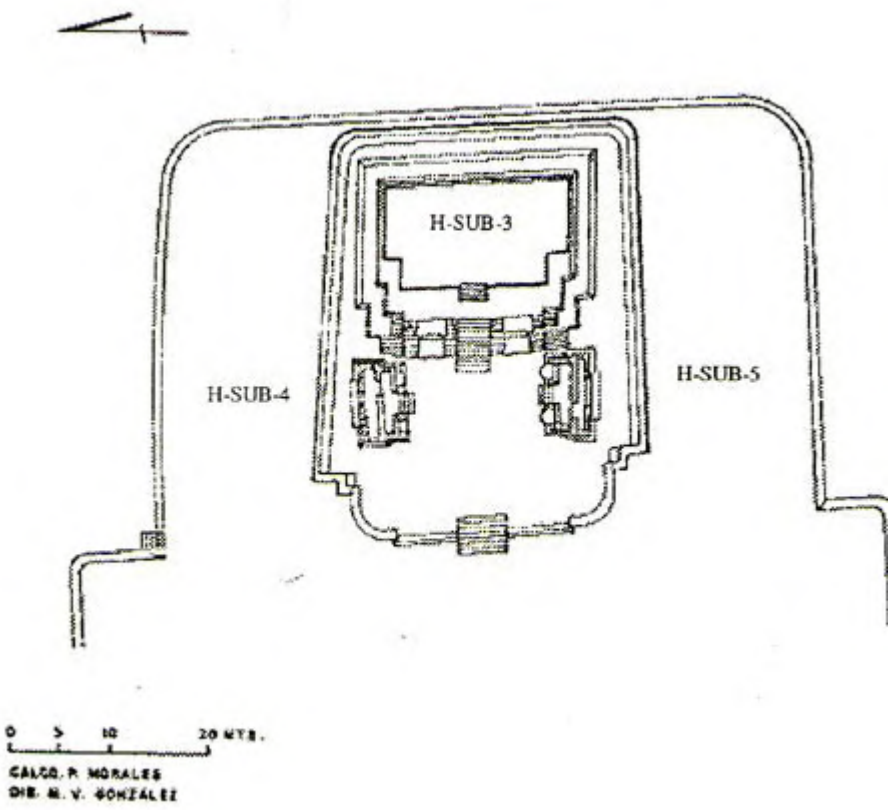


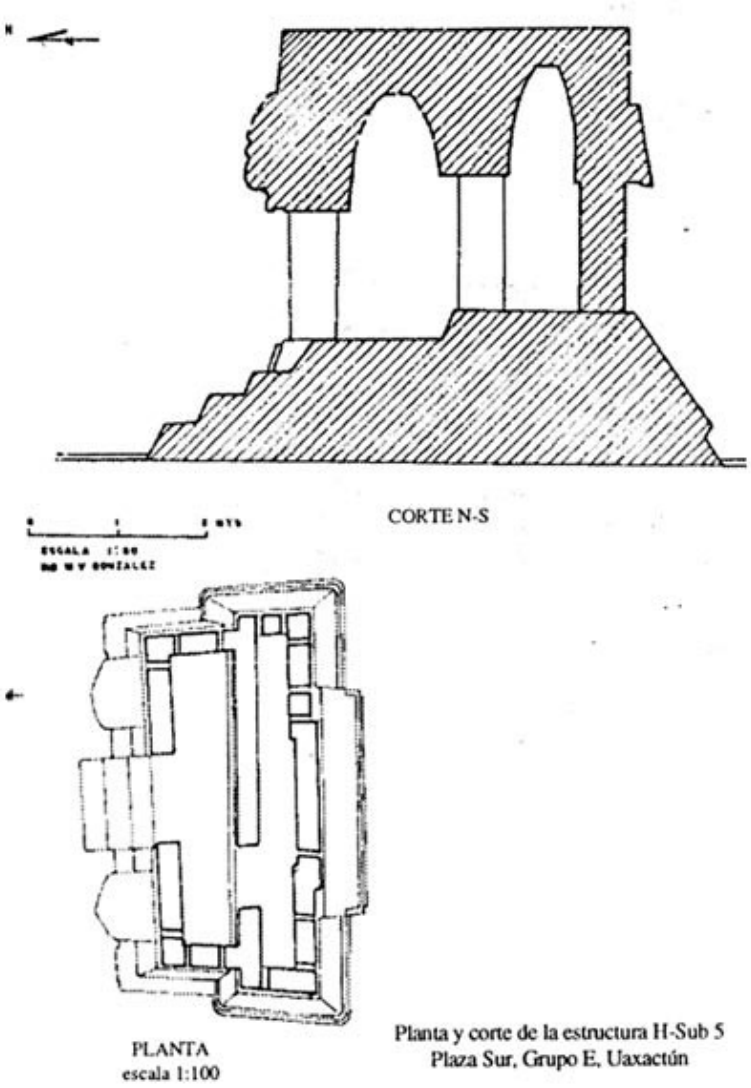
Figure 16. Architectural plan of Constructive Phase Four, South Complex Acropolis, Group H, Uaxactún.

The building H Sub-5 occupies the southern section of the plaza while its main façade is oriented north; the basal platform presents side moldings, and an apron molding in its rear, central part; the east-west axis measures 9.75 m, and the north-south axis measures 5.60 m. Also, the accessing stairway is 2.00 m wide, and has four stairs with treads of 0.40 m, risers of 0.35 m, and a 0.20 m incline.

This structure was found almost complete during the investigations (95%), and therefore there is available information on its walls, basal platform and vaults. The building has two bays with a different height between the second one and the first, due to the presence of a dividing stair; the communication between them takes place through a displaced access, west of the central axis. The walls average 0.50 m in thickness, and present remains of a red stucco finish, and also ventilation holes located at different heights from the floor level. Concerning the vaults, they are 2.70 m high and show an irregular finish due to the use of small stones in its elaboration; the total height of the building is of 4.80 m. (Figure 17).

The decoration associated with the building is characterized by the presence at the sides of the accessing stairway of two 2.95 m long and 1.30 m high stucco masks, which present a red paint and a black delineation.

On the other hand, structure H Sub-4 occupies the northern section of the complex with its main façade oriented towards the south and with architectural dimensions and characteristics similar to those of the structure described above. The differences may be summarized in two: in the first place, the dimensions of the first bay are of a lesser width than those of the second, and in the second, the decorating masks exhibit different traits than those of H Sub-5[a].



Planta y corte de la estructura H-Sub 5
Plaza Sur, Grupo E, Uaxactún

[a] In their work of 1993:110, Laporte and Valdés state that the masks of H Sub-5 are representations of the god GI, and those of H Sub-4 are representations of god GIII; the description of the decorated features is to be found in the architectural cards that accompany this work

Figure 17. Section and plan view of Structure H Sub-5, Uaxactún.

Construction Phase Five

This phase represents an overall expansion of the complex, as the dimensions of the platform that supports the complex were enlarged and new buildings were built on top of it, as also on top of the general platform.

The modifications carried out in the platform mainly consist of the broadening of the space to 45 m on the east-west axis, and to 33.50 m on the north-south axis, while access is maintained in the west side by means of a stairway at each side of which two stucco masks were built, measuring 7.50 m wide and 4.00 m high (Figure 18).

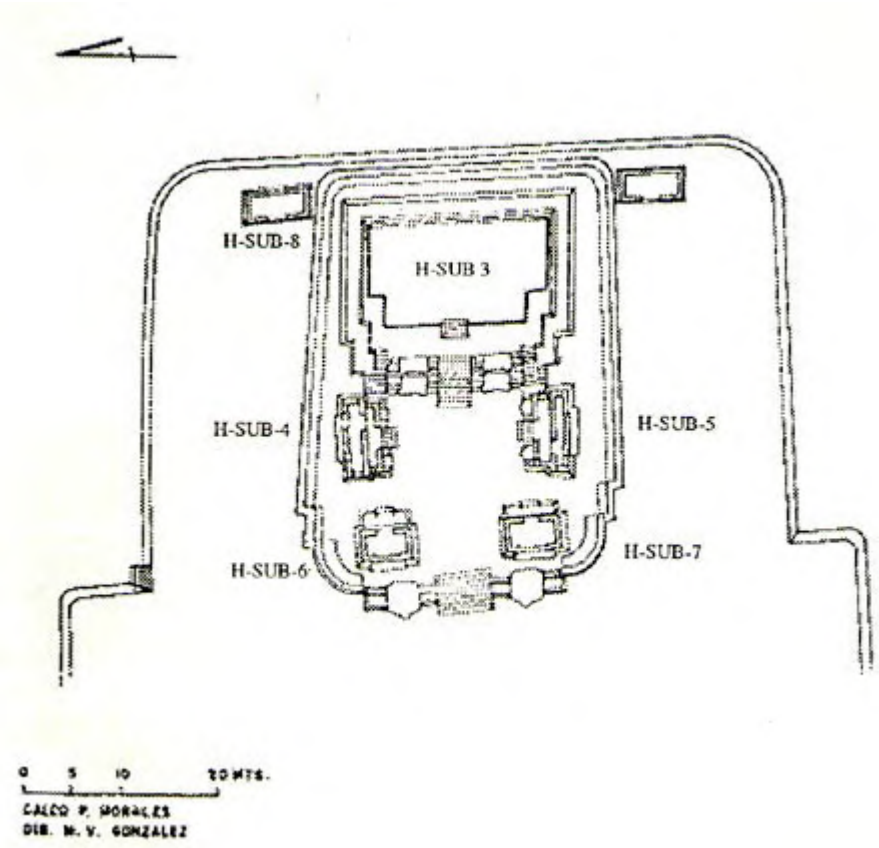


Figure 18. Architectural plan of Construction Phase Four A, South Complex Acropolis, Group H, Uaxactún.

The additions to the basal platform are structures H Sub-6 and H Sub-7, placed on the west side, with the main façade oriented to the east. These buildings reveal very similar characteristics: the base has a quadrangular plan that measures 6.60 m in its north-south axis, and 6.20 m in its east-west axis, with a height of 1.20 m, while the building has just one single bay that is 4.20 m long and 2.05 m wide, with a 1.55 m wide access and 0.50 m thick walls.

The modifications completed in the general platform consisted in the erection of Structures H Sub-8 and H Sub-9, as also H-VII, H-VIII, H-IX, and H-XI. Of the first two buildings little information was recovered, as they had been mutilated by the modifications of the construction phase seven; the other buildings are a part of one single basal platform with triadic characteristics (H-VII to IX), and only one structure, H-XI. These buildings were not explored, only several stratigraphic pits were opened and some explorations of the basal platform were done (Valdés, 1986:25).

Finally, this time of construction is associated with the human sculpture located inside a stratigraphic pit opened in front of structure H-XI, as a part of the construction refill. The sculpture represents an individual in a sitting position with mutilated head and hands (Laporte and Valdés, 1993:115); it is considered that its possible original place might have been located in the upper portion of H-Sub-3, thus complementing the cosmogonical series exhibited in the masks of this structure.

Construction Phase Six

During this phase, the look of Group H's base was finally defined, as all the buildings of the former phase were still in use but structure H Sub-10 was included in the west side of that plaza, between H Sub-6 and H Sub-7. This building features very interesting traits in regard to its functionality, as it has no roofing or vault, it has a double access with stairways at both sides and a rich decoration (Figure 19).

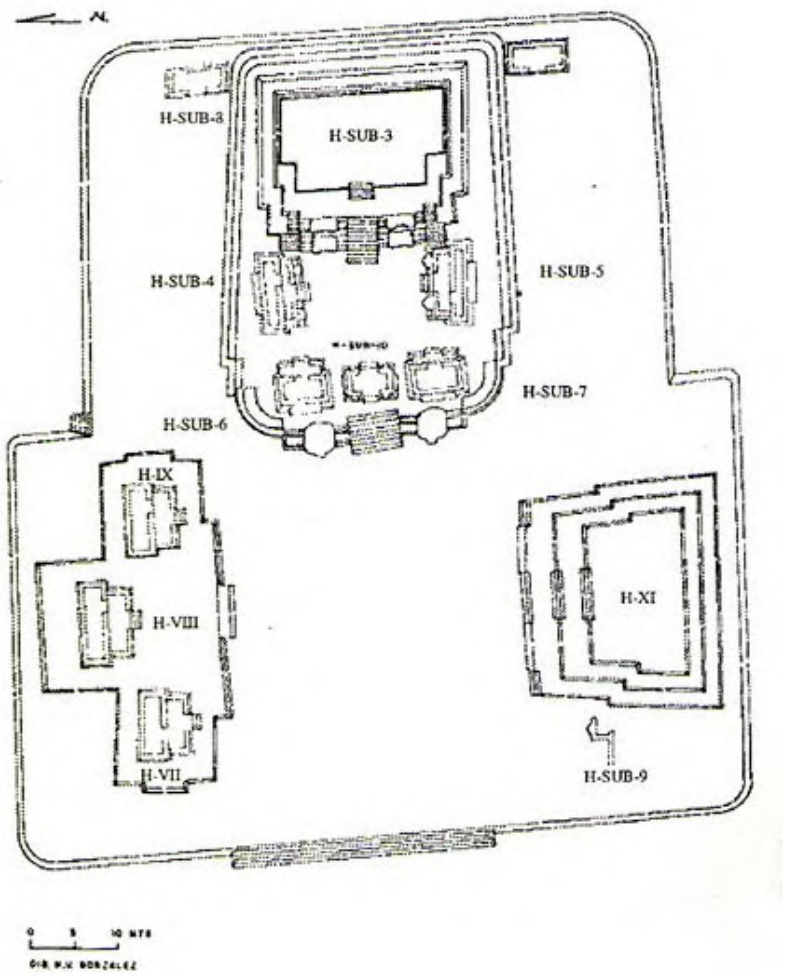


Figure 19. Architectural plan of Construction Phase Six, South Complex Acropolis, Group H, Uaxactún.

The structure has a rectangular plan, measuring 6.18 m in the north-south axis, and 4.00 m in the east-west axis, with two stairways on this same axis, composed by two stairs with treads of 0.55 m, and risers of 0.45 m; at both sides of the stairways, and both in the east and west façades, there are two stucco masks of a height of 0.90 m.

The compound is formed by 1.20 m high and 0.30 m thick walls, and is 4.05 m long and 1.75 m wide. The walls have openings that allow the wind to pass through; this is because the decoration is intertwined, giving shape to, or referring to, the concept of a mat or *Pop* (Valdés, 1986:28-29). (Figure 20, below)

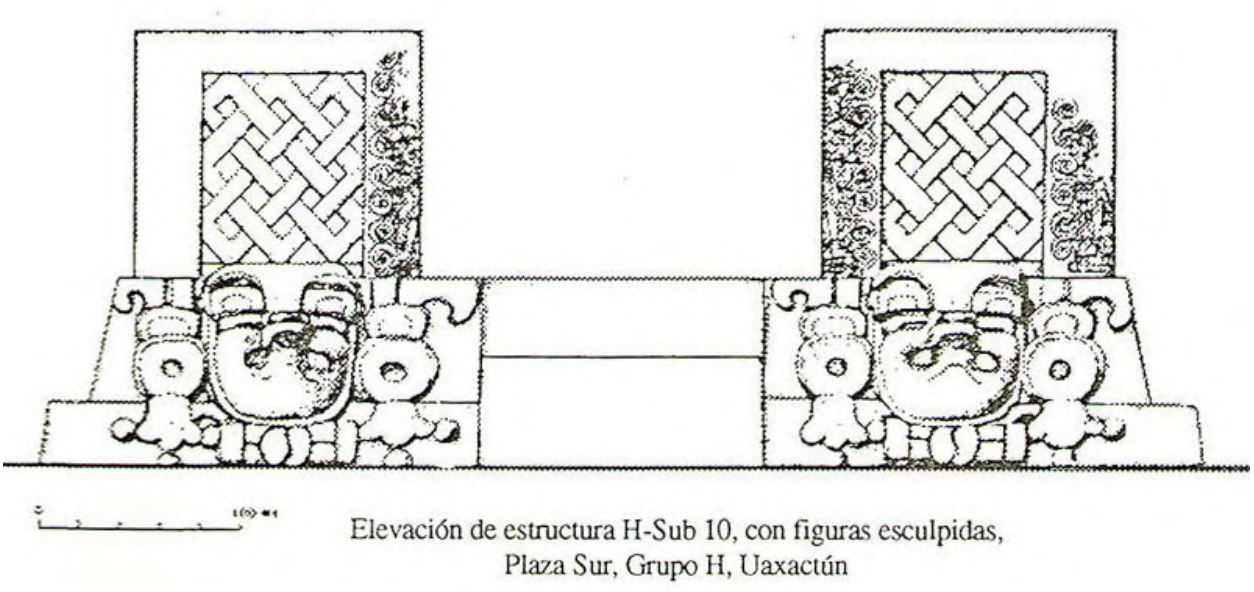


Figure 20. Architectural elevation of Structure H Sub-10, Uaxactún.

The four jambs, as also the four corners, are decorated with full length figures of individuals painted in black, yellow, and red. These individuals were similarly dressed and framed by spirals (Laporte and Valdés, 1993:116).

Architectural Technical Specifications Card

Structure II / Sub II c-1

Overall Characteristics

Plan

Shape

It consists of a platform of the rectangular type with an access to the north and masks flanking the stairways. On top of it, and for the moment, there are three rectangular buildings: one to the north (Sub II c-1), one at the center (Sub II c-2) and one on the east side (Sub II c-3), though the existence of at least four other buildings is anticipated.

Dimensions

The platform measures approximately 107 m in its north-south axis, and 75 m in its east-west axis.

Structure Sub II c-1 is of approximately 48 m in its east-west axis, and 13.70 m in its north-south axis, with a height of 6 m.

Basal platform

Characteristics of the Bodies

The basal platform of Sub II c is composed of at least two bodies, though they could probably be three; to date, only the second body of the platform has been explored, which is formed by to inclined walls divided by a flange. At a distance of 1.20 m from the central stairways are the masks that decorate the building.

Dimensions

The body presents a height of 2.68 m with two sloping walls divided by a flange. The first panel is 0.43 m high with an incline of 0.13 m, and dividing it from the second panel there is a flange of 0.29 m, with a bevel of 0.09 m; the second panel is 2.16 m high and has a 0.71 m slope. (Photo 10, below).

Photo 10. Detail of moldings, bodies of basal platform, Sub II c, Calakmul.

The total height of the platform is estimated in 8 m.

Stairways

Overall Characteristics

The stairway of the platform is of the inset type, and the last step ends up at the same level than the jamb lines of the building. (Photo 11, below).

Photo 11. Detail of the two last steps of the stairway that leads to Structure Sub II c-1, Calakmul.

Dimensions

The stairway corresponding to the second body of the platform is 4.30 m wide, and has seven steps with treads of 0.20 m, risers of 0.35 m, and an incline of 0.20 m each.

Building

Overall Characteristics

This building has been partially explored, and therefore the overall characteristics of the southern, eastern and western façades are still to be determined.

The huge building exemplified by Substructure II c-1 contains one single space that serves as an access to the inner space of the complex and is formed by a circular inset vault. The walls are straight and were covered by some light gray stucco finish, on which anthropomorphic figures and hand imprints were drawn.

Regarding the surfaces that give shape to the north façade, they are divided into two sections: the central one, outsets from the overall line of the building and is formed by two sloping faces divided by a flange. The lower wall is plain with remains of some red stucco finish, while in the upper face or frieze the stucco modeled decoration is visible.

The second section corresponds to the lateral facings which extend in an east-west direction from the central section; they are divided into three plain bodies with moldings and separated by small terraces. They do not show any type of decoration.

A last body was built on top of the previous ones, showing a set of inset plain surfaces that probably served as an upper platform, but for now we do not have information enough to give a final statement.

Dimensions

The vault exhibits a roofed surface of 22.68 m^2. It is 8.10 m long, 2.80 m wide and 2.60 m tall.

The exterior surfaces are divided into two sections: the central section is 20 m long, and is formed by two slanting surfaces: the lower one is 1.5 m tall with a 0.30 m incline. There is a flange of 0.25 m that divides the upper surface from the lower one, wherefrom the frieze or upper surface begins, with a height of 3 m.

The second section is formed by the lateral surfaces that extend in an east-west direction, with a height of 4.46 m and a maximum length of 13 m from the central area and towards the edges. These surfaces are divided into three bodies: the first, with a slanting face 0.31 m high and a 0.10 m incline, followed by a flange of 0.14 m wherefrom a second face was built with a height of 1.23 m and a 0.36 m incline; dividing the first body from the second, there is a terrace 0.36 m wide; the second body is integrated by a first panel 0.18 m high and with a 0.08 m incline, with a flange of 0.16 m and a second surface of 1.18 m with an incline of 0.36 m: dividing the second body from the third, there is a terrace, with a width of 0.49 m.

The third body is integrated by a face 0.18 m high and with a 0.10 m incline, and a 0.16 m flange; the second face is 1.80 m high and presents a 0.35 m incline.

Finally, a terrace 1.25 m wide divides the bodies described from a last body that might have served as the upper platform, with 1.5 m in height and a width of 6 m, and an approximate length of 42 m.

Syntactic Elements

Construction Time

This building corresponds to the end of the Middle Preclassic period (400 B.C.).

Type of Construction

Altogether, Substructure II c corresponds to a ritual space with a remarkably restricted access and an acropolis-type configuration.

Architectural Plan

Distribution of Features

It consists of a platform whose access is oriented north, on top of which probably seven buildings were built around an open space or patio. To this date three buildings have been identified: one to the north (Sub II c-1), one to the northeastern edge (Sub II c-3), and one central building (Sub II c-2).

Basal Platform

Characteristics of the Bodies

The platform bodies feature the typical molding design that corresponds to the Petén architectural style, and besides, it exhibits an associated decoration represented by zoomorphic masks.

Characteristics of the Finishing

The walls, both of the platform and the buildings, show quality stucco finish with thicknesses that range from 0.01 to 0.03 m.

Characteristics of the Refill

The refill of the basal platform is compact and consists of large and medium size stones mixed with akalché mud, while the use of refilling panels has been identified. (Photo 12, below).

Photo 12. Detail of refills, Calakmul.

Characteristics of the Ashlar Stones

The ashlar stones used in the construction of the basal platform walls consist of rectangular, well cut limestone, with dimensions averaging 0.30 to 0.40 m long, by 0.25 to 0.30 m tall.

Type of Mix

The use of mortar has been detected for the consolidation of the ashlar stones, although due to the state of deterioration typical of the materials, this mortar has degraded to such a degree that its identification was not possible.

Stairways

Characteristics of the Ashlar Stones

The ashlar stones forming the stairways consist of a single, carved block, with dimensions that average 0.30 m to 0.45 m long, by 0.30 m to 0.45 m high.

Measures of Risers and Treads

The stairways reveal steps with treads of 0.20 m to 0.25 m, and risers of 0.35 m to 0.45 m, with an incline that varies from 0.10 to 0.20 m.

Morphology

For this time, the stairways identified are of the inset type.

Building

Characteristics of the Walls

Exterior walls are slanting, while at the interior of the access they are straight.

Characteristics of Lintels

Substructure II c-1 presented evidence of the use of wooden lintels of roughly 3.50 m to 3.70 m long, with a height that could vary between 0.15 m and 0.25 m, covering a 3 m skylight.

Characteristics of the Finishing

The inner walls were covered with a thin light gray stucco layer ranging from 0.008 m and 0.1 m.

The outer walls were covered with a red stucco finish that ranged in thickness from 0.01 m to 0.025 m.

Characteristics of the Refill

The walls refill consisted of small and medium size stone, mixed with light gray earth, while ceramic fragments have also been found.

Characteristics of the Ashlar Stones

The walls were built with carved ashlar limestone, rectangular in shape and with dimensions that average 0.20 to 0.40 m long, and 0.25 to 0.30 m tall.

In the flange of moldings, the ashlar stones are beveled and the dimensions vary between 0.45 and 0.50 m wide, 0.20 m to 0.35 m tall, and 0.60 to 0.90 m long.

Type of Mix

The use of mortar was detected for the consolidation of the ashlar stones, although due to the deterioration typical of the materials, the mortar is so much degraded that its identification was uncertain.

Vaults

Characteristics of the Ashlar Stones

The stones used for the construction of Substructure II c-1's vault are rustic and their length exceeds their thickness.

Characteristics of the Soffit

The stones were laid in three sections, so that they could form an arch and the ashlar stones could work by compression.

Length and Width (area to be covered)

The space covered by the vault is of 22.68 m^2.

Type of Mix

The use of mortar for the consolidation of the ashlar stones was detected, although due to the deterioration typical of the materials, the mortar is so degraded that its identification was uncertain.

Type of Refill

For the moment there is no evidence concerning the refill of vaults, though probably it is similar to the refill used in walls.

Type of Cornices

The cornice of the frieze in the northern façade is composed of lime stone ashlars. The dimensions fluctuate from 0.25 m to 0.30 m wide, from 0.20 m to 0.35 m high, and from 0.60 to 0.90 m long, protruding 0.25 m from the lower panel.

Characteristics of the Extrados

The upper face of the building in its central portion shows a 1.10 m incline.

Decorating Features

Friezes

General Dimensions

The frieze has a length of 20 m and is 3.5 m high, showing an incline of 1.10 m.

General Description

The frieze is composed of three major sections which show a series of interplays of perspectives in three planes of representation.

The first section, located in the first third of the frieze's surface, both in its upper portion and sides, is integrated by an upper band that we have denominated terrestrial band, composed of five pairs of elements in the shape of hooks that simulate fangs, and that were located in the foreground. Intercalated between these features and within a second plane, there are two inclined, converging bands situated between each pair of fangs. Then, between each pair of fangs and bands there is one trilobal-shaped feature

wherefrom, at the end of its lower portion, two spirals emerge. This feature has been reported from other cities and contexts, and is related to the sign of the Witz.

The second section is located below this band and at the sides of the ear flares. Here, there are two individuals that integrate feline, bird and serpent traits. The individuals wear a helmet in the shape of a bird's head, at the back they exhibit an ear flare framed by two knots, from the upper part emerges a helical figure similar to a scroll, and from the lower knot it also emerges a hook-shaped feature similar to the ornamental pendant. The torso of this individual is composed by the schematized head of a serpent and at the sides of the torso there is a pair of open winds composed by two serpent heads with two rows of feathers that hang from one of the sides, and only one row hanging from the opposite side. This is motivated by the interplay of planes used by the constructors to highlight the volumes, as this part overlaps the bird's tail, which presents scales and ends in a semicircular feature with two scrolls. Finally, and below, the claws of the bird are observed.

In general, both individuals resemble very much, though there are slight differences worth mentioning in a more detailed interpretation of the general iconography observed in this frieze.

The third section is framed by these two winged beings, and consists of one anthropomorphic character in a descending position; the extremities of this individual show one pair of knots located in his legs, ankles and knees, and between them, there is a representation of a cloth braid similar to a shin pad; his arms show one single knot near his the wrist, with a braid that climbs to his forearm.

In the waist he is wearing a loincloth with a large knot at the back, and he exhibits a feature in the central part similar to a square-shaped buckle with circles at the corners; detaching from this element hang the tips of the loincloth that end in a semicircular feature with two scrolls that resemble the one described for the tip of the tail of the winged characters. On his right thigh, held in place by the loincloth, there is an object in the form of a knife.

The torso of this individual as those of the characters in section two, is formed by a schematized serpent head; his face presents features similar to those of a reptile, the lower mandible has no flesh, it shows a bulky upper lip, a protruding nose, and the eye presents an eyebrow and a scroll. The hair is fastened at the forehead with a knot.

As an ornament, the back of his head presents an ear flare made of three features separated by knots at the center of the ear flare, with scrolls in the extremes.

Masks

General Dimensions

The face of the mask presents a preliminary height of 1.08 m and is 0.58 m wide. The ear flare measures 2.60 m and is 1 m wide.

General Description

This is a high-relief modeled in polychromed stucco with incised decoration and located on the east side of the north façade of the basal platform of Substructure II c. So far, half of its total surface has been explored and liberated, and it is now possible to appreciate a portion of the face of this individual, and his left ear flare. (Photo 13, below).

Photo 13. Detail of mask's face located in the body of the basal platform of Sub II c, Calakmul.

The ear flare comprises three square-shaped features in its central part, with rounded corners made with four incised circles. The ear flare was placed in its extremes; its inner part presents a diagonal band. On the upper part of the square there is an emerging feature in the shape of a flower containing a symbol similar to the band worn by the Jester God.

The upper part shows a snail cut in sections, which in its upper portion presents three geometric features: two squares and one triangle.

In the lower section of the poorly preserved ear flare, the remains of a three-tipped feature similar to a pendant were found.

The mask combines anthropomorphic and zoomorphic traits, and was placed inside a helmet that exhibits the open jaw with its fangs. This feature is similar to the helmets of the winged characters of the second section of the frieze. (Photo 14, below).

Photo 14. View of ear flare of the mask located in the body of the basal platform of Sub II c, Calakmul.

Architectural Technical Specification Card

Structure 5C-54

Teobert Maler has called it “Sepulchral Pyramid”, while Alfred Tozzer referred to it as “Building 66”.

General Characteristics

Plan

Shape

Four cornered, with stairways at the four sides and a resulting radial aspect.

Dimensions

It is 61.30 m long from its northwest to its southwest corner, and 56.25 m long from the same corner and to the southeastern end. The estimated length of the north-south axis is of 72 m, and the estimated length of its east-west axis is of 66.50 m. The structure is 30.70 m tall.

Basal platforms

Characteristics of the Bodies

It is divided in ten bodies with different measures, and combine bodies with *talud/tablero* characteristics and bodies of double slanting faces divided by a flange.

In addition, there are “niches” and inset walls located at the floor level that repeat themselves in a straight, ascending line but with different dimensions up to the fourth level. The “niches” are close to the corners of both the eastern and western extremes. (Photo 15, below).

Photo 15. Present view of Structure 5C-54, Tikal.

Stairways

General Characteristics

It has stairways on the four sides, but only those of the western and eastern façade culminate in the upper platform; the stairways of the north and south sides climb only to the eighth body.

Besides, this structure presents auxiliary stairways.

Dimensions

The better preserved example corresponds to the west façade, whose central stairway presents 86 steps, a 45º incline, and a width of roughly 8.30 m.

Building

General Characteristics

This building has no construction on its upper platform.

Previous Interventions

The earliest references correspond to Teobert Maler, who in 1911 designated the southwestern area of the city as the Plaza of the Five Temples and of the Sepulchral Pyramid; later, Alfred Tozzer identified the complex as the Southwest Sector, and assigned to the Great Pyramid the number 66 (Laporte and Fialko, n/d:5).

The University of Pennsylvania conducted minor excavations with the purpose of completing the topographic survey of the site. At that time no restoration works were undertaken, nor any other form of revaluating the site (*Idem*: 6).The excavations included two tunnels 43 m long in an east-west direction, conducted by Christopher Jones, who later provided the Tikal National Project with sections of those tunnels.

By 1980, the researchers involved in the Tikal National Project (TNP) noted that the area of the Lost World presented two characteristics that made their intervention necessary: first, the settlement underwent partial modifications, and therefore there are architectural features that date to the Early Preclassic stages still in force in the Late Classic occupation; second, the severe deterioration of the later stages only allows for the identification of the architectural features that correspond to the substructures, in other words, the better preserved stages (Laporte and Fialko, n/d:8).

5C-54-1 (Late Eb Phase)

General Characteristics

Plan

Shape

This is a building with a quadrangular plan, apparently with stairways on its four sides (Figure 21).

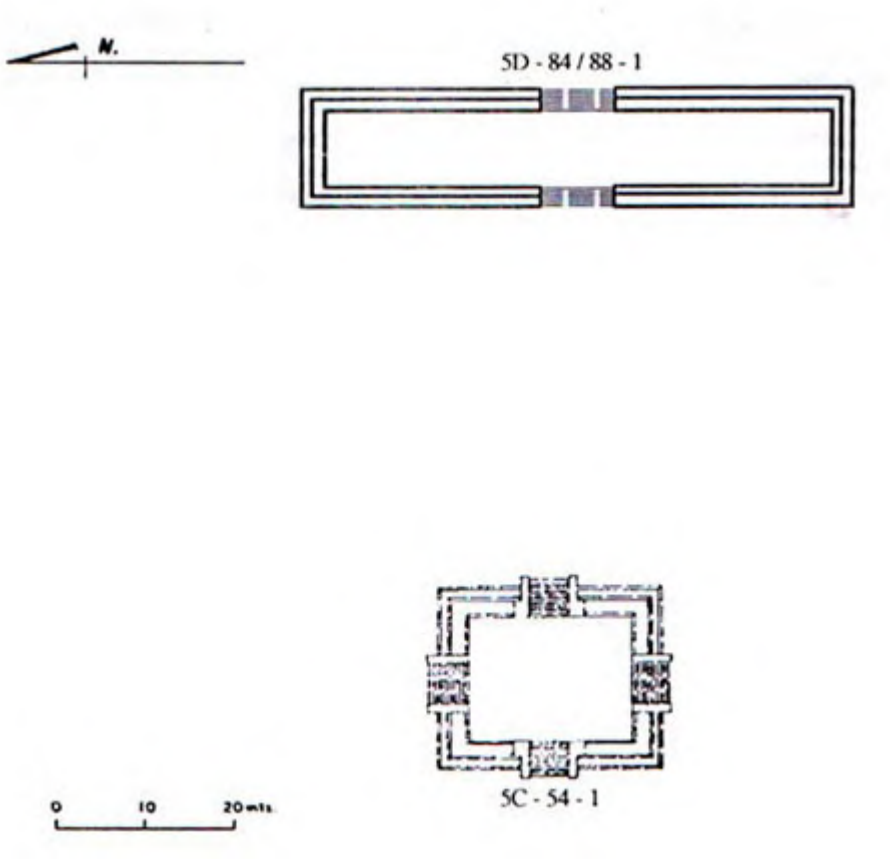


Figure 21. Plan view of the Late Eb Phase of the Lost World, Tikal.

Dimensions

The dimensions are of 23.46 m in its north-south axis, and a height of 2.94 m.

Basal Platform

Characteristics of the Bodies

It is a stepped basal platform that comprises three inclined bodies; possibly, other bodies existed, but as a consequence of the severe destruction, this cannot be confirmed.

The bodies are made of stones slightly cut, though not carved, with a mud mortar.

Dimensions

The first body measures 0.85 m in height and it has a 10º incline, and dividing the second body there is a terrace 0.72 m wide; the second body is 1.04 m tall, with a 14º incline, and the terrace that divides the second body from the third, measures 1.88 m.

The last body is 0.90 m tall, with an incline of 8.5º, and it should be noted that this body was shaved by the subsequent modifications.

Stairways

General Characteristics

Apparently, there were four stairways and those of the west and east sides included beams that delimited them; on the west side there are traces of an irregular beam which tends to widen in its upper and lower ends.

Dimensions

The stairways have a width of 3.10 m, and are composed of steps with treads of 0.20 to 0.30 m, and risers of average 0.20 to 0.40 m; these steps present a thick stucco cover.

The beams are 1.00 m wide.

5C-54-2 (Tzec Phase)

General Characteristics

Plan

Shape

The building maintains its rectangular plan with stairways on the four sides (Figure 22).

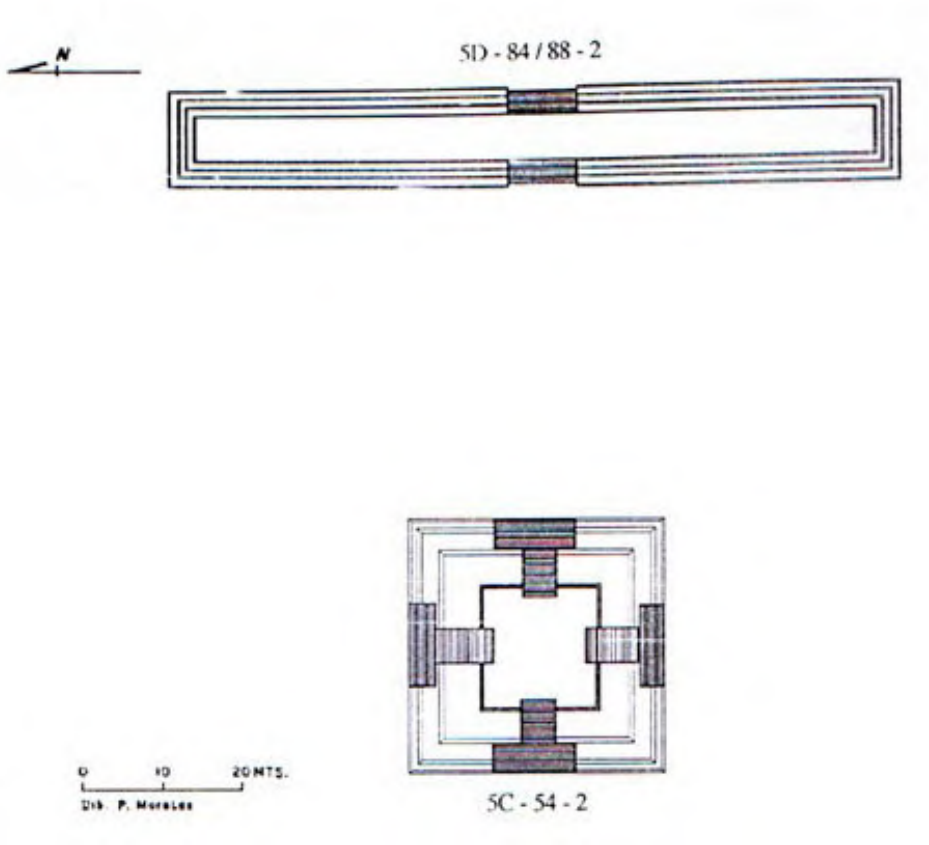


Figure 22. Plan view of the Tzec Phase of the Lost World, Tikal.

Dimensions

The north-south axis is 32.35 m long, and the height is of 7.80 m.

Basal Platform

Characteristics of the Bodies

It presents four stepped bodies; the lower and upper ones are of smaller dimensions and have moldings. There is a remarkable deviation of the upper body with respect to the lower ones, and the intermediate bodies are plain and inclined.

Dimensions

The building has an approximate height of 8.00 m.

The first body is 1.24 m high, with a molding that starts at a height of 0.80 m, a flange of 0.05 m with a terrace of 0.24 m that separates it from the second body.

The second body was found partially destroyed, being its present height of 1.04 m, with an incline of 10.5º; the third body is 2.70 m high, and has an incline of 11.5º.

The fourth body is 1.34 m tall, and includes a 0.05 m flange at 0.46 m from the ground level.

Stairways

General Characteristics

The stairways are of the outset type for bodies one and two, and of the inset type (integrated) for bodies three and four, with decreasing dimensions as the bodies gradually ascend.

Dimensions

The west stairway presents a width of 4.10 m, five steps with treads of 0.30 m, and risers that climb to the second body. Apparently, there are other two flights of stairs that would correspond to the other two bodies, but due to the severe degree of deterioration, they cannot be properly characterized.

5C-54-3 (Chuen Phase)

General Characteristics

Plan

Shape

The building maintains its radial aspect, with stairways on the four sides (Figure 23).

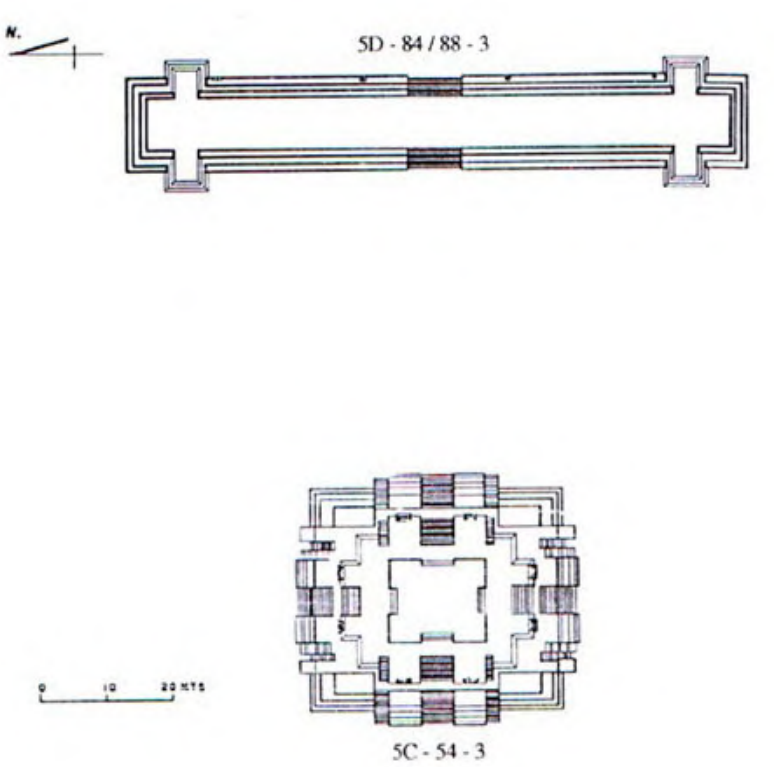


Figure 23. Plan view of the Chuen Phase of the Lost World, Tikal.

Dimensions

Roughly, 37.67 m long in its north-south axis, with a height of 9.46 m.

Basal Platform

Characteristics of the Bodies

It is a stepped basal platform with five bodies and an upper platform. The first four bodies are of regular dimensions, while the fifth broke this parameter as a consequence of the decorative masks that were placed at each side of the central stairways.

Most of the information about this moment of construction was recovered from the west side; the first three bodies present a *talud* (sloping panel) shape, while the shape of the fourth is that of a *tablero* (horizontal panel).

Dimensions

The first body is 0.88 m high and presents an incline of 23º, and there is a terrace of 0.75 m that separates it from the second body, which is formed by a first surface 0.24 m tall, with a 0.05 m flange. The height of the second surface could not be defined due to its severe deterioration, but as of the evidence present in other sectors, it probably was of 0.60 to 0.80 m, with a 42º incline.

The third body is 1.10 m tall with a 20º incline and a terrace of 1.50 m; the fourth body consists of a *tablero* with an inset to the east 0.63 m high which forms a 0.07 m flange that climbs 1.62 m to further give way to the 2.50 m platform where the fifth body begins.

The fifth body is 1.10 m high, and has an incline of 22º; the sixth body is 0.78 m tall and has an incline of 34º.

Stairways

General Characteristics

This building features main stairways in its four sides, as also auxiliary stairways up to the fifth body; as of this level, only the east and west sides present auxiliary stairways up to the upper platform.

Dimensions

The first flight of the central stairway located at the west side is 4.93 m wide, while 13 steps with average treads and risers of 0.35 m have been preserved. The second flight measures 4.45 m, it has 13 preserved steps with treads of 0.30 m and risers of 0.45 m.

The first flight of the auxiliary staircases located on the west side is 2.08 and 2.23 m wide, and the treads are of 0.30 m, with risers of 0.35 m. The second flight is 1.30 m wide, and the treads and risers of the steps go from 0.30 to 0.40 m. In-between both flights there is a displacement of roughly 1 m.

5C-54-4 (Cauac Phase)

General Characteristics

Plan

Shape

The building maintains its radial aspect (Figure 24).

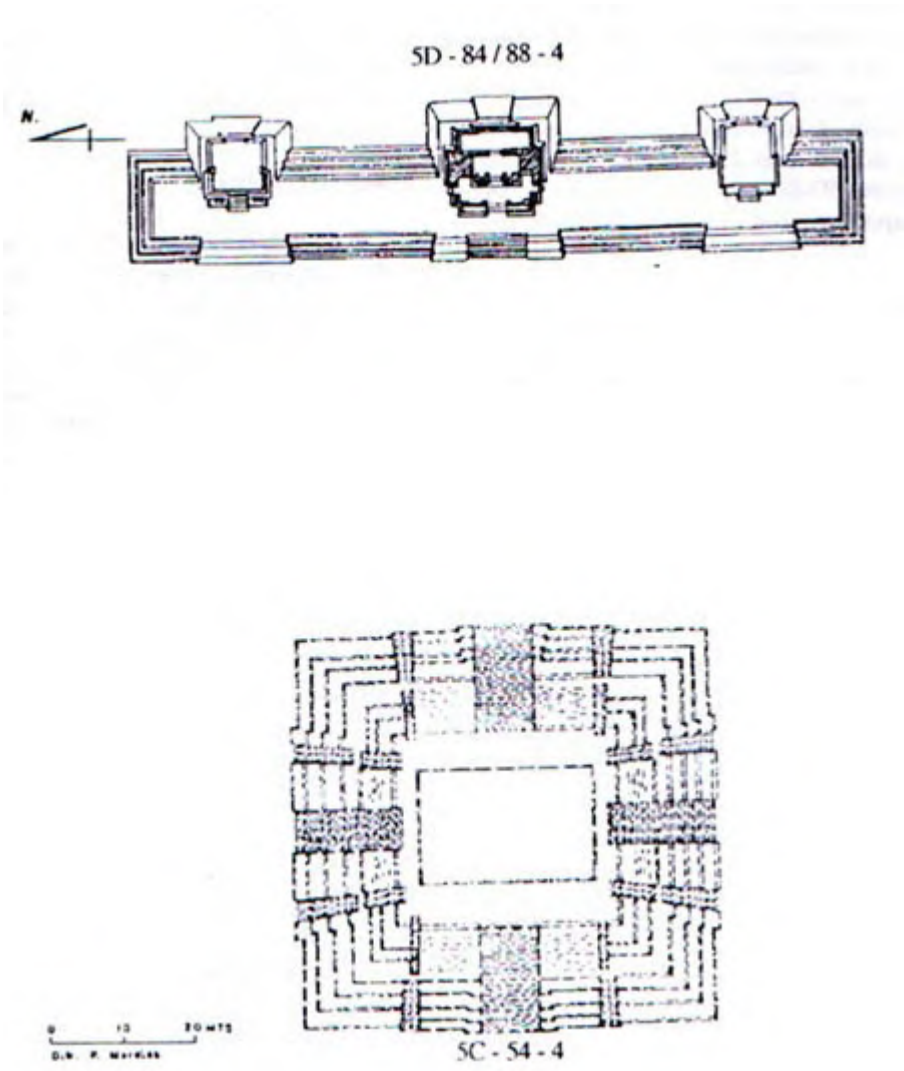


Figure 24. Plan view of the Cauac Phase of the Lost World, Tikal.

Dimensions

Measurements are of 59.60 m in the north-south axis, with a height of 17.50 m.

Basal Platform

Characteristics of the Bodies

It is a stepped basal platform with six bodies and decorative masks in association with the fifth body.

Dimensions

The first four bodies are 2.60 m high, with a first face 0.70 m high (average), a flange of 0.15 m, and a final face of 1.90 m; the separating terraces are 1.55 to 2.00 m wide.

Stairways

General Characteristics

The central stairway revealed remains of the steps corresponding to this period, which consisted in two stone courses: the first course was laid facewise, and the second was laid on end and then covered with a stucco finish.

This stairway showed a poor preservation, however, it was possible to define about 83 steps.

Dimensions

This central stairway is 7.90 m wide and the tread of the steps are of 0.40 m, with risers of 0.35 m.

Syntactic Features

Construction Time

The structure 5C-54 presents a construction process that goes from the Late *Eb* Phase (600-500 B.C.) to the *Imix* Phase (690-830 B.C.), with nine constructive epochs.

Type of Construction

This building, together with structure 5D-84/88, represents an astronomical commemoration complex. This kind of arrangement was reported in 1924 by Franz Blom at Uaxactún, and in his view, they were intended to mark the solstices and the equinoxes. Structurally and functionally, they consist of a pyramidal basal platform placed to the west, and an extended platform placed to the east. Some authors like Chase and Rathje have named them Complexes of the E-Group Type, Aveni and Hartung have named them observatories, Laporte and Morales public ritual complexes, and Fialko, astronomical commemoration complexes (Laporte: 141, in: Ciudad Ruiz e Iglesias, Ponce de León, n/d). For the present architectural card, we have followed Fialko's concept.

Two major moments are appreciated: the first corresponds to the Preclassic period and involves the central building (5C-54), and those that delimit the east border of the plaza (5D-84/88). The second moment probably took place by the Late Classic period, when due to the many modifications suffered both by the buildings and the urban environment, the original function of the group was abandoned or changed.

Architectural Plan

Distribution of Features

The main plaza of the southwest sector at Tikal (the Lost World) is composed of eight large structures built on top of a platform: structure 5C-54 rests in a central position, and structure 5D-84/88 lies on the east side.

Basal Platform

Characteristics of the Bodies

The bodies that integrate the basal platform of structure 5C-54 for the Late *Eb* Phase are extremely simple, as they are plain and uniform and were elaborated with slightly worked stones. For the following phase (*Tzec*), the bodies increase in size and are differentiated in shape in their lower and upper bodies with respect to the central ones, while for this timeframe moldings were also present.

The *Chuen* period features an innovation, with the occurrence of masks associated with the architecture and the use of lateral (auxiliary) stairways similar to those reported at Uaxactún in structure E VII Sub. (Photo 16, below).

Photo 16. View of bodies of basal platform, Structure 5C-54, Tikal.

By now, there is a clear distinction between the first four bodies which form a unit and the fifth one, whose dimensions were modified to integrate the decoration.

For the *Cauac* phase, the overall configuration of the structure turns uniform, although the decoration is maintained. It is important to note that throughout its history, this structure has never changed its radial look, thus pointing to a constant use or function and to the absence of any ideological change.

Characteristics of the Finishing

The finishing corresponding to the first epoch are thick and yellowish; the hue was probably caused by the degradation of the organic components or the type of material (sascab) used in the elaboration rather than by pigmentation, though at this time we cannot assert one thing or the other. The second epoch records the presence of stucco dressings in different areas of the building, with no references to coloration, and the fourth body reveals a finish of calcined mud 0.02 m thick.

For the third epoch, the use of a finish achieves a relevant character, as because of how surfaces were made and the unevenness of walls, it was necessary to cover the surfaces with thick stucco dressings, while the presence of red and blue pigments was reported. There are no reports on dressings in regard to the *Cauac* phase.

Characteristics of the Refill

The refill used in 5C-54-1 is compact, and consists of gray earth with an abundance of small and large stones, and the use of refilling cells arranged in a stepped manner. The refills found in the second version present an abundance of small stones, with little dark earth arranged in oblique layers. These are loose refills that tend to settle down; this refill is covered by another one made of dark earth with medium and large stones using refilling cells elaborated with coarse stones joined together with a mud mortar that extends along the contour of the building.

In structure 5C-54-3, refills were uniformly made with packed earth and stones of different sizes; the use of refilling cells was detected, as well as a number of areas with loose material.

In 5C-54-4, the refills were solid and formed by brown earth and large stones, though construction areas with loose refills of light brown and gray earth with small and large stones have also been reported.

Characteristics of the Ashlar Stones

In structure 5C-54-1, the stone was slightly cut in an attempt to define the edges; for structure 5C-54-2, the walls were built with blocks of cut stone averaging 0.50 x 0.30 m.

The structure 5C-54-3 revealed a poorer stone than the one used by its predecessor, with a coarse (rustic) finish, deviation of walls, and asymmetry in the decorative features.

Besides, structure 5C-54-4 used large stone blocks of 0.40 to 0.80 m long, with varying widths and heights that overlap the ashlars and joined together with mortar.

Type of Mix

The mix used in the first version of the building is composed of akalché mud from the area of the *aguada* or *bajo*. The second version shows the use of daub instead of mud to join together the surfaces.

For the last two phases the use of daub was recorded, as well as the use of wedges between the ashlar stones.

Stairways

Characteristics of the Ashlar Stones

The *Cauac* phase reveals a modification in regard to the arrangement of the ashlars that form the central stairways, as steps are composed of two stone courses: the first was laid facewise, and the second end up, as opposed to the three previous phases where one single block (although of different dimensions) constituted the step.

Measures of Treads and Risers

For the first phase (Late *Eb*), the steps show treads and risers with average measures of 0.20 to 0.30 m, and 0.20 to 0.40 m, respectively. The following period (*Tzec* phase) shows uniformed steps with treads and risers of 0.30 m.

For the *Chuen* phase, the main stairways present treads of 0.30 m, with risers of 0.45 m; the auxiliary stairways have treads of 0.30 m, and risers of 0.35 m.

In the *Cauac* period, these measures are inverted, so that the steps show treads of 0.40 m, and the risers are of 0.35 m.

Morphology

The primary characteristic of structure 5C-54 all along its constructive history remits us to its stairways, present on the four sides; initially, they were of the outset type with delimiting beams. For the *Tzec* phase they changed to the inset or integrated type, as the scholars of the Tikal National Project named them, with differences in width in the two component flights. For the *Chuen* phase a new feature was observed, which was the use of auxiliary stairways placed at the laterals of the main stairways, showing a differentiation between the façades of the east-west axis with respect to those of the

north-south axis, as only the first stairways reached the upper platform. The auxiliary stairways were used to provide a frame for the building's decoration, characterized by large masks that emphasized the volumes.

The *Cauac* phase shows no morphological modifications in the structure's stairways.

Rooms and/or Bays

This structure has no upper building.

Vaults

This building presents no evidence of the use of vaults.

Decorative Features

Friezes

This building has no friezes.

Masks

General Dimensions

They are located at a height of 0.95 m from the ground level of the fifth body of the *Chuen* phase (5C-54-3), and their measures are of 2.60 m in height, and of 1.70 m in width.

General Description

There are two masks located in the fifth body of the *Chuen* phase. They are in a very bad state of preservation, which makes their characterization almost impossible, although because of the arrangement of the component parts and the temporality, they could be similar to the examples found in Group H at Uaxactún (structures H Sub-4 and 5), or in structure I at Calakmul.

The supporting wall shows an incline of 12.5º; at its base, on its north-south axis there is a bench 0.18 m high and 2.10 m long.

The mask is formed by three stone courses that jut out from the vertical plane of the body; the lower course projects itself 0.30 m, the one in the middle 0.54 m, and the upper one 0.96 m, and the stones are placed end up.

ARCHITECTURAL SPECIFICTION CARD

ACROPOLIS OF THE SOUTH COMPLEX, GROUP H

General Characteristics

Group H is formed by two architectural complexes, one located to the north and the other one located to the south, separated by a ravine 90 m long. The architectural complex includes nine buildings, seven of which are located in an acropolis and create an enclosed space: the southern architectural complex displays a design similar to that of the northern complex, with an acropolis of larger dimensions on the east side, and stairways to the west.

Plan

Shape

The general platform of the southern architectural complex features a rectangular plan.

Dimensions

The general platform of the southern architectural complex is of approximately 90 m on its east-west axis, and of 70 m on its north-south axis.

Basal Platform

Characteristics of the Bodies

There are no reports regarding the characteristics of the basal platform.

Stairways

General Characteristics

There are no reports regarding the characteristics of the stairways.

Buildings

General Characteristics

For its final phase of construction, three structures were identified, located on the general platform: structure H Sub-XI placed on the south side; the complex of structures H Sub-VII, VIII, and IX on the north side, and structure H Sub-X at east (Figure 25).

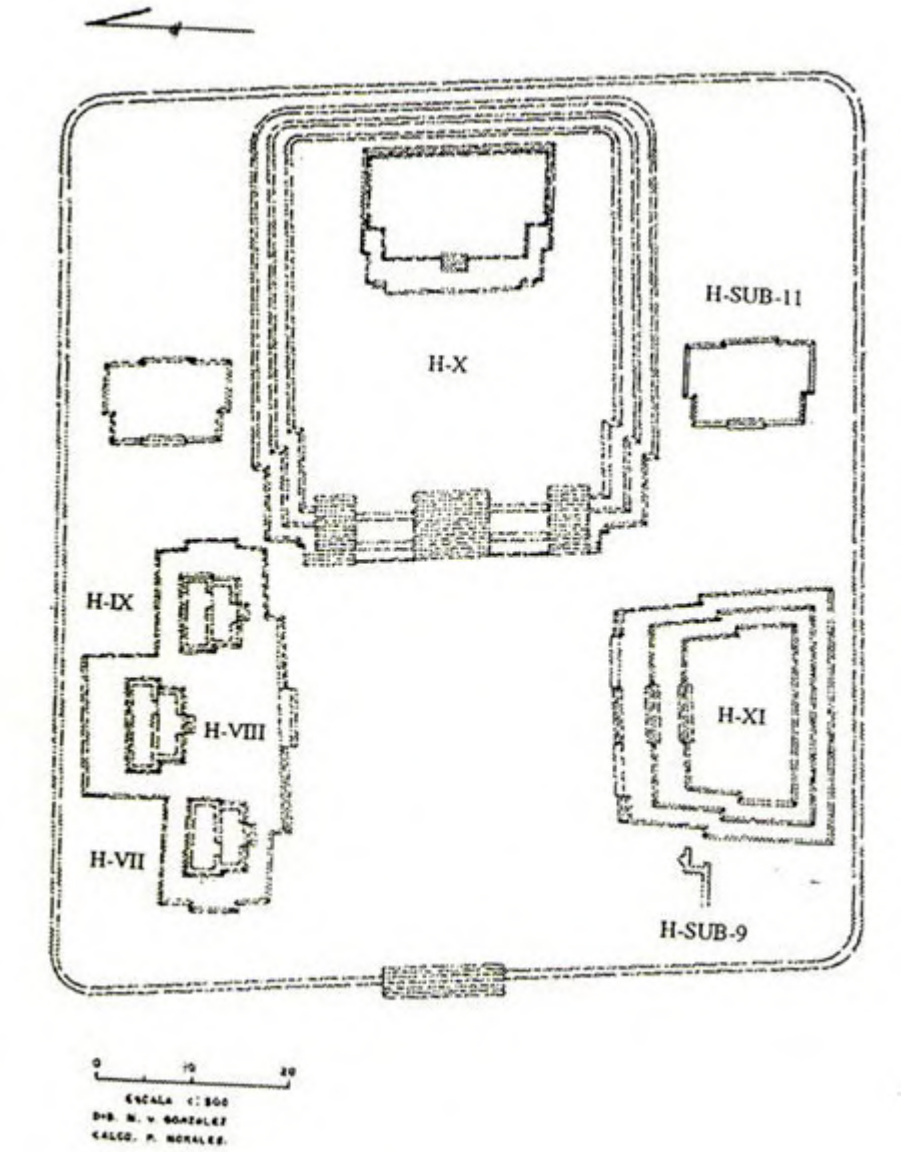


Figure 25. Architectural plan of Construction Phase Seven, South Complex Acropolis, Group H, Uaxactún.

Previous Interventions

This group was reported in 1935 by the researchers of the Carnegie Institution of Washington, who did not conduct excavations at that time.

By 1985, during the works of the Tikal National Project conducted by Dr. Juan Antonio Valdés, several stratigraphic test pits were opened in the south plaza which led to the finding of ceramic materials corresponding to the Late Preclassic period, and revealed as well the notable absence of materials from later times. Together with this material, the researchers detected the presence of architecture in association with sculptural

features such as masks and friezes, which urged the expansion of the investigations through a tunnel system. As a result of this work, seven construction phases of the *Chicanel* phase were located, with fairly well preserved buildings and decorative features.

ACROPOLIS OF THE SOUTH COMPLEX, GROUP H

CONSTRUCTION PHASE 3

General Characteristics

Plan

Shape

It consists of a platform of the rectangular type with rounded and inset corners and with an access on the west; two buildings rest on top of it, structure H Sub-1 with a rectangular plan and an access oriented southeast, and H Sub-2, a structure with a rectangular platform with a double bay building on its summit and a main façade oriented to the west.

Dimensions

The platform is 33.30 m long in its north-south axis, and 30 m long in its east-west axis.

Structure H Sub-1 presents a diameter of 5.35 m with a 0.10 m incline. On top of it, the remains of a circular plan building that crowned this basal platform were found, while a wall 0.30 m thick with a present height of 0.30 m and an access located at the southeast edge with a width of approximately 0.70 m, were detected.

Due to the mutilation it suffered in its front, the general measures of the building could not be defined, but the researchers of the Tikal National Project assumed that the dimensions were similar to those of buildings H Sub-5 and 4.

Basal Platform

Characteristics of the Bodies

The body of the platform features a lower bench, a sub apron and a molding that give way to the upper portion of the wall.

Structure H Sub-2 has a one-body basal platform composed of a double face divided by a flange.

Dimensions

The platform is 0.60 m high at the base of the bench, and is 0.70 m wide, the sub apron is 0.35 m high, and the flange measures 0.10 m; the face measures 2.00 m.

The dimensions of the basal platform walls of H Sub-2 include a first face 0.38 m high with a 0.15 m flange, and a second sloping face of 1.96 m with an incline of 1.30 m.

Stairways

General Characteristics

The platform stairway is of the outset type.

The stairways to access the building H Sub-2 have been totally mutilated.

Dimensions

The dimensions of the platform's stairway are 1.45 m high with roughly four or five steps, treads of 0.40 m and risers of 0.25 m.

Building

General Characteristics

The building is composed of two bays oriented in a north-south direction and communicated by a displaced access at the right of the central line of the structure (to the north). The bays are located at different heights because of a 0.30 m step that separates them.

Dimensions

The first bay is 8.40 m long and 1.45 m wide; the access between this one and the second bay is 1.30 m wide. The second bay is 9.10 m long and 1.58 m wide.

The thickness of the outer walls varies from 0.85 to 0.90 m, and the central wall that separates the bays is of 0.70 m.

Syntactic Features

Construction Epoch

This building corresponds to the *Chicanel* period of Uaxactún (300 B.C. to 250 A.C.)

Architectural Plan

Distribution of Features

It consists of a platform located at the east side of the south group of the complex, and on top of it, oriented to the west there is a circular building of smaller dimensions (H Sub-1).

Basal Platform

Characteristics of the Bodies

The bodies of both the platform and the H Sub-2 building present the typical mold design corresponding to the Petén architectural style, with no associated decoration.

Characteristics of the Finishing

Several sectors of the walls, both of the platform and the building, present a stucco finish.

Characteristics of the Refill

The refill inside the basal platform that supports the building consists of irregular stones with no mortar; therefore, the consistency is poor.

Characteristics of the Ashlar Stones

The characteristics of the ashlar stones are not reported.

Type of Mix

The characteristics of the mix are not reported.

Stairways

The stairways of building H Sub-2 were not preserved.

Characteristics of the Ashlar Stones

The characteristics of the ashlar stones are not reported.

Measures of Risers and Treads

The steps of the platform have treads of 0.40 m, and risers of 0.25 m.

Morphology

The stairway of the platform is of the outset type. The researchers of the Tikal National Project assume that by analogy, structure H Sub-2 had characteristics similar to those of the buildings of the following phase.

Building

Characteristics of the Walls

The walls of the building are straight, with a thickness that varies from 0.85 m to 0.90 m, while the central wall dividing the bays is 0.70 m wide.

The rear façade exhibits two ventilation holes at 0.55 m from the ground level.

Characteristics of the Lintels

Due to the mutilation of the building, no traces of the lintels were found.

Characteristics of the Finishing

Red stucco was found.

Characteristics of the Refill

The characteristics of the wall refills are not reported.

Characteristics of the Ashlar Stones

The characteristics of the ashlar stones are not reported.

Type of Mix

The characteristics of the mix are not specified.

Vaults

Characteristics of the Ashlar Stones

The characteristics of the ashlar stones are not reported.

Characteristics of the Soffit

The vault of the second bay showed a total height of 2.70 m and the spring line of the vault began at 1.50 m from the ground level.

Length and Width (area to cover)

The first bay occupies an area of 12.18 m^2; the second, an area of 14.37 m^2.

Type of Mix

The characteristics of the mix used are not reported.

Type of Refill

The characteristics of the vaults refill are not reported.

Type of Cornices

The cornices found in the rear façade jut out 0.30 m, and present a groove that the researchers of the Tikal National Project denominated “drip, or *cortagotera*”.

Characteristics of the Extrados

The lower face measures 1.50 m, and there, the cornice line may be seen jutting out 0.30 m and presenting some sort of canal known as “drip or *cortagotera*”.

Decorative Features

Friezes

General Dimensions

The frieze of the rear façade is 10.70 m long and is divided in three sectors, the central one measuring 6.75 m, and the lateral ones 1.90 m each, with an overall height of 1.30 m.

General Description

The central sector shows two stucco-modeled, full length individuals in a horizontal position, looking at each other and with similar features, such as a headdresses, ear flare complexes, and loincloths. The differences occur in the characteristics of their faces, as the individual at the south side has zoomorphic traits, while the individual at the north side shows polymorphic traits.

At each end there is a human face modeled in stucco, both figures are identical in shape and are represented in profile with the eyes looking down to the floor. Both heads are oriented towards the sides of the building. These figures wear ear flares, headdresses, and in the lower part, a knotted bow with two hanging features.

Masks

This building has no associated masks.

ACROPOLIS OF THE SOUTH COMPLEX, GROUP H
CONSTRUCTION PHASE 4

General Characteristics

Plan

Shape

It consists of a platform of the rectangular type with rounded, inset corners and an access on the west, and on top of it there is one single rectangular building (H Sub-3).

Dimensions

The platform measures 33.50 m in its north-south axis, and 41.90 m in its east-west axis.

The structure H Sub-3 is 24 m long on its north-south axis, and 20 m long on its east-west axis.

Basal Platform

Characteristics of the Bodies

The body of the platform presents a lower bench, a sub apron and a molding that give way to the upper portion of the wall.

The basal platform of structure H Sub-3 presents three bodies composed of a double face divided by a flange with inset corners. The west façade is an exception, as there are masks on the two first bodies.

Dimensions

The platform is 0.60 m high at the base of the bench, and 0.70 m wide; the medial moulding is 0.35 m high, with a 0.10 m flange, while the face measures 2.00 m.

The dimensions of the first body of H Sub-3 are of 2.65 m in height, with a base of 20 x 24 m.

The second body is 2.65 m tall with 20 m in its north-south axis and 18 m in its east-west axis, with a terrace of 1.40 m that separates it from the previous body.

The third body measures 18.50 m in its north-south axis, and 10.90 m in its east-west axis, with a height of 1.20 m, though the original height probably was of 1.60 m.

Stairways

General Characteristics

The platform still maintains a stairway to the west, with several additional steps but with no modifications regarding width, treads and risers.

The building features three stairways in the first and second bodies, one central and two auxiliary ones. The central stairway is of the outset type, while the auxiliary ones are inset.

For the third body, the central stairway is of the outset type.

Dimensions

The dimensions of the platform's stairway are similar to those of the previous phases, with the aggregate of several steps.

The central stairway climbs to the second body and has a width of 3.50 m, and 12 steps with treads of 0.30 m and risers of 0.40 m, with an inclination of 0.20 m. The auxiliary stairways are 2.40 m wide and include 6 steps with risers of 0.50 m and treads of 0.20 m. In this case, the risers present an inclination of 0.20 m.

The auxiliary stairways of the second body are 1.40 m wide, and include seven steps with treads of 0.20 m, risers of 0.35 m and an incline of 0.10 m.

The stairway of the third body is 2.85 m wide, and has six steps with treads calculated in 0.30 m and risers calculated in 0.30 m.

Building

General Characteristics

This building presented no associated buildings or bays.

Syntactic Features

Construction Epoch

This building corresponds to the *Chicanel* period of Uaxactún (300 B.C. to 250 A.C.).

Architectural Plan

Distribution of Features

It consists of a platform located at the east side of the southern plaza of the group, and on top of it, oriented to the west, is structure H Sub-3.

Basal Platform

Characteristics of the Bodies

The bodies of both the platform and the building H Sub-3, feature the typical design of moldings corresponding to the Petén architectural style, with associated masks on the west façade.

Characteristics of the Finish

The walls in different areas, both of the platform and the building, present a stucco finish.

Characteristics of the Refill

The refill inside the basal platform is compact, made of stones of varied sizes mixed with mud and earth of a dark color originated in the floodable terrains (*bajos*).

Characteristics of the Ashlar Stones

The characteristics of the ashlar stones are not reported.

Type of Mix

The characteristics of the mix used are not reported.

Stairways

Characteristics of the Ashlar Stones

The characteristics of the ashlar stones included in the stairways are not reported.

Measures of Risers and Treads

There is a remarkable difference between the steps of the auxiliary stairways (0.50 m for the risers and 0.20 m for the treads) with respect to those of the central stairway (0.50 m for the treads and 0.40 m for the risers).

The steps of the platform present, roughly, 0.40 m for the treads and 0.25 m for the risers.

Morphology

There are two types of stairways for this period of time: inset and outset.

Building

This stage shows no buildings with bays.

Vaults

This stage shows no vaults.

Decorative Features

Friezes

This building has no friezes.

Masks

General Dimensions

There are four masks, each with measures of 5.50 m in width, and 2.65 m in height.

General Description

The central figure is a monster which combines traits of felines, carries over his head the symbol of the Witz (mountain), and exhibits his open jaws with two fangs and/or virgules that emerge from the mouth corners (Figure 26, below).

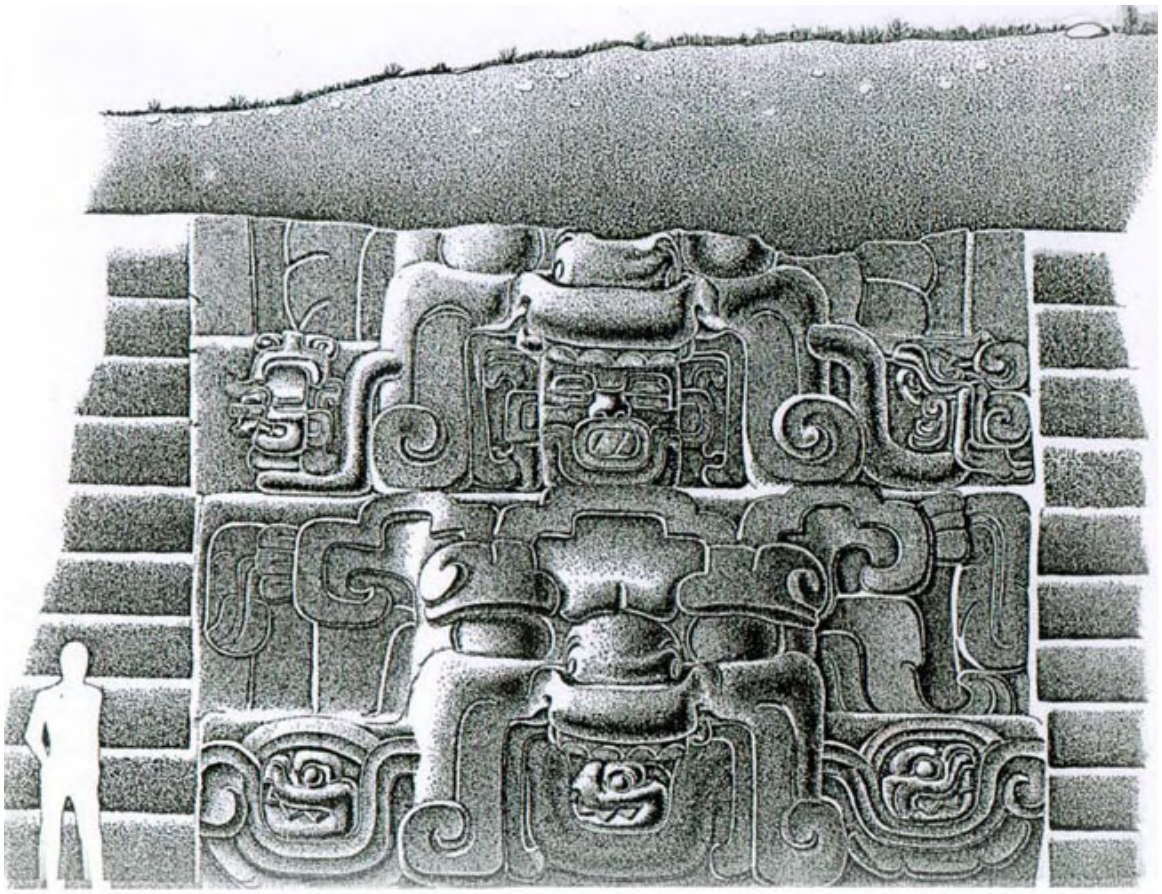


Figure 26. Drawing of the mask, Structure H Sub-3, Uaxactún.

ACROPOLIS OF THE SOUTH COMPLEX, GROUP H

CONSTRUCTION PHASE 4A

General Characteristics

Ground Plan

Shape

This is a platform of the rectangular type with rounded and inset corners and with an access on the west. On top of it there are three rectangular buildings: one to the west (H Sub-3), and two others located at the north and south edges (H Sub-4 and H Sub-5).

Dimensions

The platform is 33.50 m long in its north-south axis, and 41.90 m long in its east-west axis.

The building H Sub-3 is 24 m long in its north-south axis, and 20 m long in its east-west axis.

The building H Sub-5 is 9.75 m long in its east-west axis, and 5.60 m long in the north-south axis. The building H Sub-4 presents similar dimensions.

Basal Platform

Characteristics of the Bodies

The body of the platform presents a lower bench, a sub apron and a molding that give way to the upper portion of the wall.

The structure H Sub-3 has a basal platform of three bodies composed of a double face divided by a flange with inset corners, with the exception of the west façade that shows masks on the first two bodies.

The basal platform that supports structures H Sub-5 and H Sub-4 has a molding that is present in all its sides, although at different levels; at the central part of the back side, there is an apron molding. This basal platform includes masks at the sides of the accessing stairway.

Dimensions

The platform is 0.60 m high at the base of the bench, and 0.70 m wide, the medial molding is 0.35 m tall, the flange measures 0.10 m, and the face is 2.00 m tall.

The dimensions of the first body of H Sub-3 are of 2.65 m in height, with a base of 20 x 24 m. The second body measures 2.65 m in height, with 20 m in its north-south axis and 18 m in its east-west axis, with a terrace of 1.40 m that separates it from the previous body.

The third body is 18.50 m long in its north-south axis, and 10.90 m in the east-west axis and a height of 1.20 m, although the original elevation might have been of 1.60 m.

The building H Sub-5 is located on a basal platform 1.71 m high, with 9.75 m in its east-west axis and 5.60 m in its north-south axis.

The structure H Sub-4 presents dimensions similar to those of H Sub-5.

Stairways

General Characteristics

The platform’s stairway presents no changes in regard to the previous stage.

The building includes three stairways: the first and second bodies have a central and two auxiliary stairways. The central one is of the outset type and the auxiliary ones are inset; for the third body, the central stairway is of the outset type.

The stairways of the basal platforms of structures H Sub-5 and H Sub-4 are of the outset type.

Dimensions

The dimensions of the platform's stairway are similar to those of the previous stages.

The central stairway of building H Sub-3 climbs to the second body which is 3.50 m wide and has 12 steps with treads of 0.30 m and risers of 0.40 m, which present a 0.20 m incline. The auxiliary stairways measure 2.40 m in width and include 6 steps with risers of 0.50 m and treads of 0.20 m. In this case, risers have a 0.20 m incline.

The auxiliary stairways of the second body are 1.40 m wide and include 7 steps with treads of 0.20 m, risers of 0.35 m, and a 0.10 m incline.

In the third body, the stairway measures 2.80 m in width and seems to have six steps with treads of 0.20 m and risers of 0.30 m.

The stairway of the basal platform of H Sub-5 is 2 m wide and includes four steps with treads of 0.40 m, and risers of 0.35 m; as to H Sub-4, it shows similar dimensions.

Building

General Characteristics

Both structures (H Sub-4 and H Sub-5) include a building with two bays oriented in an east-west direction, with an access towards the interior of the plaza.

The access between both spaces takes place through a door displaced to the west with respect to the central line of the building (Figure 27, below).

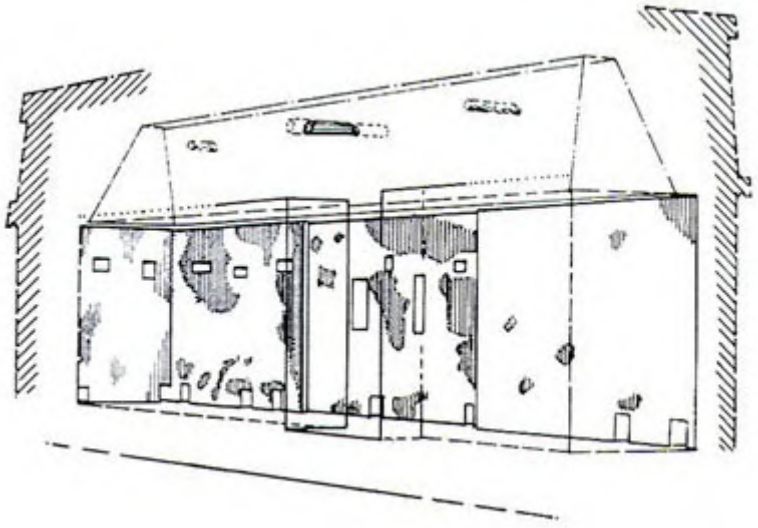


Figure 27. Southeast view of the second bay of Structure H Sub-5, Uaxactún.

Dimensions

The first bay of the H-Sub-5 building is 6.40 m long and 1.30 m wide, while the second is 7.25 m long and 0.82 m wide. The bays are at different heights as there is a 0.30 m step that separates them.

The bays of building H Sub-4 present similar dimensions to those of building H Sub-5, with the difference that the first bay is less wide than the second, although the specific measures are not reported.

Syntactic Elements

Construction Epoch

This building corresponds to the *Chicanel* period of Uaxactún (300 B.C. to 250 A.C.).

Architectural Plan

Distribution of Features

It consists of a platform located on the east side of the south plaza of the group, and on top of it, on the west side, structure H Sub-3 begins, while at the north and south edges structures H Sub-4 and 5, are located, respectively.

Basal platform

Characteristics of the Bodies

The bodies, both of the platform and the buildings, present the typical molding design that corresponds to the Petén architectural style, and they include associated decoration represented by zoomorphic masks, in association with the main façades of the structures.

Characteristics of the Finishing

The walls in different areas both of the platform and the buildings, presents a stucco finish.

Characteristics of the Refill

The refill of the basal platform is compact and is formed by stones of different sizes agglutinated with mud.

Characteristics of the Ashlar Stones

The characteristics of the ashlar stones are not reported.

Type of Mix

It was not possible to characterize the type of mix used in the bodies.

Stairways

Characteristics of the Ashlar Stones

The characteristics of the ashlar stones are not reported.

Measures of Risers and Treads

In structure H Sub-3 there is a neat difference between the steps of the auxiliary stairways (risers of 0.50 m and treads of 0.20 m) with respect to the central one (risers of 0.30 m and treads of 0.40 m).

As for structure H Sub-4 and 5, the basal platform stairways show measures of 0.40 m for the treads, and 0.35 m for the risers.

The steps of the platform present approximately, treads of 0.40 m and risers of 0.25 m.

Morphology

There are two types of stairways in this stage: inset and outset.

Building

Characteristics of the Walls

The walls of buildings H Sub-4 and 5 range from 0.45 to 0.50 m in thickness and were built with small, uncut ashlar stones.

Characteristics of the Lintels

In structures H Sub-4 and 5, the spaces of the lintels in the doorways were identified. It was assumed they were made of wood and that their dimensions were of 2.83 m long and 0.21 m thick for the first access, while the second lintel was 2.27 m long and 0.10 m thick.

Characteristics of the Finishing

The walls were covered with red stucco, both in the internal and external faces.

Characteristics of the Refill

The wall refills could not be characterized.

Characteristics of the Ashlar Stones

They were made of small, uncut ashlar stones.

Type of Mix

The type of mix used to join the ashlar stones together could not be characterized.

Vaults

Characteristics of the Ashlar Stones

The finishing is uneven, due to the type of small stones used.

Characteristics of the Soffit

They present an upright soffit.

Length and Width (area to cover)

The first bay of structure H Sub-5 covers an area of 8.32 m^2, while the second covers an area of 5.94 m^2.

The bays of structure H Sub-4 present similar dimensions.

Type of Mix

The characteristics of the mix used are not reported.

Type of Refill

The characteristics of the refill used in the vault are not reported.

Type of Cornices

The characteristics of the cornices are not reported.

Characteristics of the Extrados

The characteristics of the extrados are not reported.

Decorative Features

Friezes

No friezes were reported for these buildings.

Masks

General Dimensions

Structure H Sub-3 presents four zoomorphic masks, each 5.50 m wide and 2.65 m tall.

At the sides of the stairways that give access to buildings H Sub-4 and 5, two sculptural representations were found measuring 2.95 m long and 1.30 m high.

General Description

Regarding H Sub-3, the central figure is a monster that combines feline traits and exhibits on his head the symbol of the Witz (mountain). The jaws are opened with two fangs or virgules that emerge from the mouth corners.

In overall terms, the masks that flank the accessing stairways to buildings H Sub-4 and 5 are remarkably similar to one another, with a face that combines feline features and ear flares at the sides (Figure 28, below).

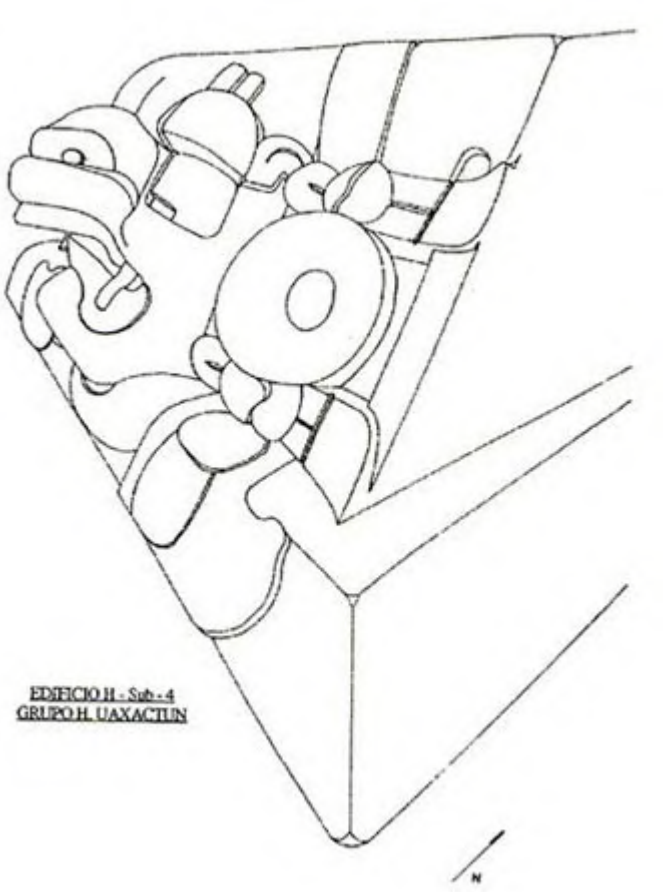


Figure 28. Perspective of the mask from the basal platform of Structure H Sub-4, Uaxactún.

ACROPOLIS OF THE SOUTH COMPLEX, GROUP H

CONSTRUCTION PHASE 5

General Characteristics

Plan

Shape

It consists of a platform of the rectangular type with rounded and inset corners, with a west access and masks that flank the stairways. On top of it there are five rectangular buildings: one to the west (H Sub-3), two at the north and south edges (H Sub-4 and H Sub-5), and two aligned on the east side (H Sub-6 and 7).

Dimensions

The platform measures 33.50 m in its north-south axis, and 45 m in its east-west axis.

The building H Sub-3 is 24 m long in its north-south axis and 20 m long in its east-west axis.

The building H Sub-5 is 9.75 m long in its east-west axis and 5.60 m long in its north-south axis. The building H Sub-4 is of identical dimensions.

The building H Sub-6 is 6.60 m long in its north-south axis and 6.20 m long in its east-west axis. The building H Sub-7 is 7 m long in its north-south axis and 5.75 m long in its east-west axis.

Basal Platform

Characteristics of the Bodies

The body of the platform presents a lower bench, a medial molding and molding that give way to the upper portion of the wall.

The structure of H Sub-3 has a basal platform of three bodies composed of a double face divided by a flange with inset corners, with the exception of the west façade which presents masks in its first two bodies.

The basal platform that supports structures H Sub-5 and H Sub-4 has a molding that appears in all of its sides although at different levels, while at the center of its rear part it shows an apron molding.

The structures H Sub-6 and 7 have basal platforms with moldings at the sides, as well as apron moldings at their rear part, similar to those of the other buildings.

Dimensions

The platform is 0.60 m high at the base of the bench, and 0.70 m wide, the sub apron is 0.35 m tall with a 0.10 m flange and the face measures 2.00 m.

The dimensions of the first body of H Sub-3 are 2.65 m tall with a base of 20 x 24 m. The second body is 2.65 m tall, 20 m long in its north-south axis and 18 m long in its east-west axis with a terrace of 1.40 m which separates it from the previous body.

The third body has a north-west axis of 18.50 m and an east-west axis of 10.90 m, and a height of 1.20 m, though its original height might have been of 1.60 m.

The building H Sub-5 is located on a basal platform 1.71 m high, with an east-west axis of 9.75 m, and a north-south axis of 5.60 m.

The structure H Sub-4 presents similar dimensions to those of H Sub-5.

The structures H Sub-6 and 7 have a basal platform 1.20 m high, with a low molding at 0.25 m from the ground level and a 0.10 m flange; a second face of 0.95 m presents an incline of 0.80 m.

Stairways

General Characteristics

The stairway of the platform is of the outset type.

The building H Sub-3 presents three stairways: the first and second bodies have one central and two auxiliary stairways. The central stairway is of the outset type while the auxiliary ones are inset; the third body has an outset central stairway.

The stairways of the basal platforms of buildings H Sub-5 and H Sub-4 are of the outset type.

The stairways of buildings H Sub-6 and 7 are of the outset type.

Dimensions

The platform stairway is 5.75 m wide and presents nine steps with treads of 0.35 m and risers of 0.30 m.

The central stairway of the building H Sub-3 climbs to the second body, it is 3.50 m wide and includes 12 steps with treads of 0.30 m and risers of 0.40 m, with an incline of 0.20 m. The auxiliary stairways are 2.40 m wide and are composed of 6 steps with risers of 0.50 m and treads of 0.20 m. In this case, the risers have a 0.20 m incline.

The auxiliary stairways of the second body are 1.40 m wide and include 7 steps with treads of 0.20 m and risers of 0.35 m and a 0.10 m incline.

The stairway of the third body is 2.85 m wide with approximately six steps with treads of 0.30 m and risers of 0.30 m.

The stairway of the basal platform of H Sub-5 is 2 m wide and is composed of four steps with treads of 0.40 m and risers of 0.35 m; structure H Sub-4 presents similar dimensions.

The stairways of the basal platforms of buildings H Sub-6 and 7 are 2 m wide, and include two steps with risers of 0.50 m and treads of 0.35 m, which give access to a platform 0.90 m wide and to a third step to access, at the bay level.

Building

General Characteristics

Both structures, H Sub-4 and H Sub-5, presented a building with two bays oriented in an east-west direction and with its access towards the interior of the plaza.

The access between both spaces takes place through a door displaced to the west with respect to the main line of the building.

The structure H Sub-6 and 7 present one single bay oriented in a north-south direction.

Dimensions

The first bay of building H Sub-5 is 6.40 m long and 1.30 m wide, while the second is 7.25 m long and 0.82 m wide. The bays are located at different heights due to a 0.30 m step that separates them.

The bays of structure H Sub-4 present similar dimensions to those of H Sub-5, with the difference that the first bay is less wide than the second, though the specific measures are not reported.

The bay of structure H Sub-6 is 4.20 m long and 2.05 m wide, with an access of 1.55 m in width.

The bay of structure H Sub-7 is 4.65 m long and 2.40 m wide, with an access of 1.55 m in width.

Syntactic Features

Construction Epoch

This building corresponds to the *Chicanel* period of Uaxactún (300 B.C. to 250 A.C.).

Architectural Plan

Distribution of Features

It consists of a platform located on the east side of the group's south plaza, and on top of it, placed on the west side is structure H Sub-3, while at the north and south edges structures H Sub-4 and 5 are located, respectively.

Closing the space to the east and at the north edge is building H Sub-6, while in the southern edge is the building H Sub.7.

Basal Platform

Characteristics of the Bodies

The bodies, both of the platform and the buildings, present the typical molding design that corresponds to the Petén architectural style and its associated decoration represented by zoomorphic masks associated with the main façades of the structures.

Characteristics of the Finishing

In several areas both of the platform and the buildings, the walls show a stucco finish.

Characteristics of the Refill

The refill of the basal platform is compact, and formed by stones of different sizes agglutinated with mud.

Characteristics of the Ashlar Stones

The characteristics of the ashlar stones are not reported.

Type of Mix

The type of mix used in the bodies could not be characterized.

Stairways

Characteristics of the Ashlar Stones

The characteristics of the ashlar stones are not reported.

Measures of Risers and Treads

The platform's stairway presents steps with treads of 0.35 m and risers of 0.30 m.

In structure H Sub-3 there is a clear difference between the steps of the auxiliary stairways (risers of 0.50 m and treads of 0.20 m) and those of the central one (treads of 0.30 m and risers of 0.40 m).

In structures H Sub-4 and 5, the stairways of the basal platform have measures of 0.40 m for the treads, and 0.35 m for the risers.

In structures H Sub-6 and 7, the stairways of the basal platforms have steps with risers of 0.50 m and treads of 0.35 m.

Morphology

There are two types of stairways at this stage: the inset and the outset types.

Building

Characteristics of Walls

The walls of the buildings H Sub-4 and 5 present a thickness that varies from 0.45 to 0.50 m, and were built with small, uncut ashlar stones.

The walls of the buildings H Sub-6 and 7 present a thickness of 0.50 m.

Characteristics of the Lintels

In structures H Sub-4 and 5 the spaces corresponding to the lintels in the doorways were identified. It is assumed that they were made of wood with dimensions of 2.83 m in length and 0.21 m in thickness for the first access; the second lintel was 2.27 m long and 0.10 m thick.

The characteristics of the lintels in buildings H Sub-6 and 7 are not reported.

Characteristics of the Finish

The walls were covered with stucco painted in red, both in the interior and exterior faces.

Characteristics of the Refill

The wall refill could not be characterized.

Characteristics of the Ashlar Stones

They were made of small, uncut ashlar stones.

Type of Mix

The type of mix used to agglutinate the ashlar stones could no be characterized.

Vaults

At this stage, we should point out that the buildings H sub-6 and 7 presented high walls on its front façade, but the rear façade was mutilated by the construction works of stage seven, and now, only the remains of figures that decorated the frieze of the building are visible, as an evidence to confirm the existence of vaults.

Characteristics of the Ashlar Stones

The finish is irregular due to the type of small stone used.

Characteristics of the Soffit

They show a straight soffit.

Length and Width (area to cover)

The first bay of structure H Sub-5 covers an area of 8.32 m^2, and the second covers an area of 5.94 m^2.

The bays of structure H Sub-4 are of similar dimensions.

The bay of structure H Sub-6 would apparently cover a space of 8.61 m^2.

The bay of structure H Sub-7 would apparently cover a space of 11.16 m^2.

Type of Mix

The characteristics of the mix used are not reported.

Type of Refill

The characteristics of the refill used in the vault are not reported.

Type of Cornices

The characteristics of the cornices are not reported.

Characteristics of the Extrados

The characteristics of the extrados are not reported.

Decorative Features

Friezes

General Description

For this stage, the presence of remains of stucco-modeled figures was noted on the front façade of buildings H Sub-6 and 7, which decorated the frieze of the structure, although due to a poor preservation they could not be characterized.

Masks

General Dimensions

Structure H Sub-3 presents four zoomorphic masks, each measuring 5.50 m in width and 2.65 m in height.

At the sides of the accessing stairway to structures H Sub-4 and 5, two sculptural representations were found, measuring 2.95 m in length and 1.30 m in height.

The general platform of the complex shows two masks at the sides, measuring 7.50 m in width and 4 m in height with a 42.5º incline (Figure 29, below).

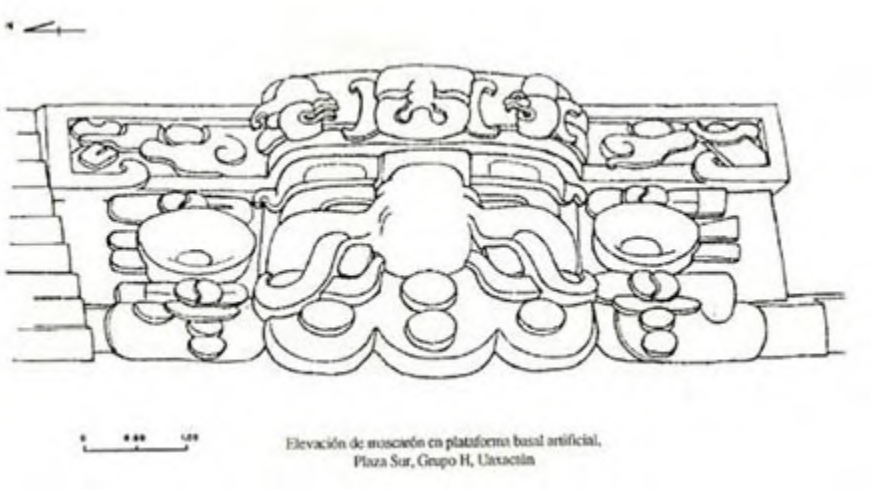


Figure 29. Perspective of the mask from the platform of Construction Phase Six of the South Complex, Group H, Uaxactún.

General Description

Regarding structure H Sub-3, the central figure is a monster that combines feline traits and displays on his head the symbol of the Witz (mountain). The jaws are opened and two fangs or virgules emerge from the mouth corners.

Overall, the masks that flank the stairways that provide access to structures H Sub-4 and 5 are remarkably similar to one another, with a face that combines feline traits and ear flares at the sides.

The platform masks show an anthropomorphic figure with two scrolls or virgules that emerge from the mouth, and are adorned with ear flares and some sort of diadem on their heads where three small images or masks appear, two in profile and one looking front.

ACROPOLIS OF THE SOUTH COMPLEX, GROUP H

CONSTRUCTION PHASE 6

General Characteristics

Architectural Plan

Shape

It consists of a platform of the rectangular type with rounded and inset corners, with an access from the west, masks that flank the stairways and six rectangular buildings on

top of it: one to the west (H Sub-3), two at the north and south edges (H Sub-4 and H Sub-5), and three aligned on the east side (H Sub-6, 7 and 10).

Dimensions

The platform measures 33.50 m on its north-south axis, and 45 m in its east-west axis.

The building H Sub-3 is 24 m long in its north-south axis, and 20 m long in its east-west axis.

The building H Sub-5 measures 9.75 m long in its east-west axis, and 5.60 m long in its north-south axis. The building H Sub-4 is of similar dimensions.

The building H Sub-6 is 6.60 m long in its north-south axis, and 6.20 m in its east-west axis. The building H Sub-7 is 7 m long its north-south axis, and 5.75 m long in its east-west axis.

The building H Sub-10 is 6.18 m long and 4 m wide.

Basal Platform

Characteristics of the Bodies

The body of the platform presents a lower bench, sub apron and molding, which give way to the upper portion of the wall.

The structure H Sub-3 has a basal platform of three bodies composed of a double face divided by a flange with inset corners, with the exception of the west façade which features masks on its first two bodies.

The basal platform that supports structures H Sub-5 and H Sub-4 has a molding that may be observed in all four sides, although at different levels; in the central area of its back side, it shows an apron molding.

The structures H Sub-6 and 7 have basal platforms with moldings at the sides as well as apron moldings at the rear side, similar to those present in the other buildings.

The body of the basal platform of structure H Sub-10 is composed of a low bench wherefrom a slanting wall springs up.

Dimensions

The platform is 0.60 m tall at the base of the bench, and 0.70 m wide; the sub apron is 0.35 m tall with a 0.10 m flange, and a face of 2.00 m.

The dimensions of the first body of H-Sub-3 are of 2.65 m in height with a base of 20 x 24 m. The second body is 2.65 m high; it is 20 m long in its north-south axis and 18 m

long in its east-west axis, with a terrace of 1.40 m that separates it from the previous body.

The third body is 18.50 m long in its north-south axis, and 10.90 m long in its east-west axis, with a height of 1.20 m, although the original height might have been of 1.60 m.

The building H Sub-5 rests on a basal platform 1.71 m high, with 9.75 m in its east-west axis and 5.60 m in its north-south axis.

The structure H Sub-4 presents the same dimensions than H Sub-5.

The structures H Sub-6 and 7 have a basal platform of 1.20 m in height, with a lower bench at 0.25 m from the ground level and a 0.10 m flange; it has a second face of 0.95 m with a 0.80 m incline.

The measures of the basal platform of structure H Sub-10 are approximate, as the precise description of its dimensions could not be found. The lower bench is 0.35 m high with a sub apron of 0.25 m, and a face of 0.55 m.

Stairways

General Characteristics

The platform stairway is of the outset type.

The building H Sub-3 presents three stairways: in the first and second bodies it includes a central and two auxiliary stairways. The central stairway is of the outset type, and the auxiliary ones are inset; for the third body, the central stairway is of the outset type.

The stairways of the basal platforms of buildings H Sub-5 and H Sub-4 are of the outset type.

The building H Sub-10 has stairways both on the east and west façades, and both are inset (integrated).

Dimensions

The stairway of the platform is 5.75 m wide and includes nine steps with treads of 0.35 m and risers of 0.30 m.

The central stairway of building H Sub-3 climbs to the second body, and it is 3.50 m wide, with 12 steps with risers of 0.30 m and treads of 0.40 m with a 0.20 m incline. The auxiliary stairways are 2.40 m wide and are composed of 6 steps with risers of 0.50 m and treads of 0.20 m. In this case the risers have a 0.20 m incline.

The auxiliary stairways of the second body are 1.40 m wide, and have 7 steps with treads of 0.20 m and risers of 0.35 m, with a 0.10 m incline.

The stairway of the third body has roughly six steps and is 2.85 m wide; the steps have treads of 0.30 m and risers of 0.30 m.

The stairway of the basal platform of H Sub-5 is 2 m wide, and includes four steps with treads of 0.40 m and risers of 0.35 m; as to H Sub-4, the dimensions are identical.

The stairways of the basal platforms of structures H Sub-6 and 7 are 2 m wide and include two steps with risers of 0.50 m and treads of 0.35 m, which provide access to a platform 0.90 m wide and a third access step at the bay level.

The stairways of H Sub-10 include two steps with treads of 0.55 m and average risers of 0.45 m, and are roughly 1.50 m wide.

Building

General Characteristics

Both buildings, H Sub-4 and H Sub-5 present two bays oriented in an east-west direction and with an access to the interior of the plaza.

The access between both spaces takes places through a doorway displaced towards the west with respect to the main line of the building.

Structures H Sub-6 and 7 present one single bay oriented in a north-south direction.

The building of structure H Sub-10 presents very special features as it lacks a vault and it was designed as a portal or passageway to access the interior of the complex, and therefore has two accesses on its east and west sides.

Dimensions

The first bay of the building H Sub-5 is 6.40 m long and 1.30 m wide, while the second is 7.25 m long and 0.82 m wide. The bays are located at different heights due to a step of 0.30 m that separates them.

The bays of the building H Sub-4 have similar dimensions to those of building H Sub-5, with the difference that the first bay is less wide than the second one, although the specific measures are not reported.

The bay of structure H Sub-6 is 4.20 m long and 2.05 m wide, with an access 1.55 m wide.

The bay of structure H Sub-7 is 4.65 m long and 2.40 m wide, with an access 1.55 m wide.

The bay of structure H Sub-10 is 4.05 m long and 1.75 m wide, with accesses of roughly 2 m.

Syntactic Features

Construction Time

This period corresponds to the *Chicanel* period of Uaxactún (300 B.C. to 250 A.C.).

Architectural Plan

Distribution of Features

It consists of a platform located at the east side of the south plaza of the group, and on top of it, on the west side, there is structure H Sub-3, while on the north and south edges are structures H Sub-4 and 5, respectively.

Closing the space to the east and on the north edge is building H Sub-6, while on the south edge rests building H Sub-7. Between the buildings mentioned above, there is Structure H Sub-10, which serves as the accessing point to the interior of the complex.

Basal Platform

Characteristics of the Bodies

The bodies of the platform and the buildings present the typical molding design that corresponds to the Petén architectural style, and it has associated decoration in the form of zoomorphic masks associated with the main façades of the structures.

Characteristics of the Finishing

The walls in several areas of both the platform and the buildings present a stucco finish.

Characteristics of the Refill

The refill inside the basal platform is compact and formed by stones of different sizes mixed with mud.

Characteristics of the Ashlar Stones

The characteristics of the Ashlar Stones are not reported.

Types of Mix

The type of mix used in the bodies could not be characterized.

Stairways

Characteristics of the Ashlar Stones

The characteristics of the ashlar stones are not reported.

Measures of Risers and Treads

The stairway of the platform has steps with treads of 0.35 m and risers of 0.30 m.

In structure H Sub-3 there is a clear difference between the steps of the auxiliary stairways (with risers of 0.50 m and treads of 0.20 m) with respect to those of the central stairway (with treads of 0.30 m and risers of 0.40 m).

In structures H Sub-4 and 5, the stairways of the basal platform present measures of 0.40 m for the treads, and 0.35 m for the risers.

In structures H Sub-6 and 7, the stairways of the basal platform have steps with risers of 0.50 m and treads of 0.35 m.

H Sub-10 presents steps with treads of 0.55 m and average risers of 0.45 m.

Morphology

For this period of time there are two types of stairways: outset and inset.

Building

Characteristics of the Walls

The walls of buildings H Sub-4 and 5 are 0.45 m to 0.50 m thick, and were built with small, uncut ashlar stones.

The walls of buildings H Sub-6 and 7 are 0.50 m thick.

The walls of building H Sub-10 present an average thickness of 0.50 m, with the exception of the central areas of the east and west façades which display a fretted decoration in the form of panels, 0.30 m thick. Said decoration exhibits an intertwined scheme which forms a mat or Pop, in Maya (Figure 30, below).

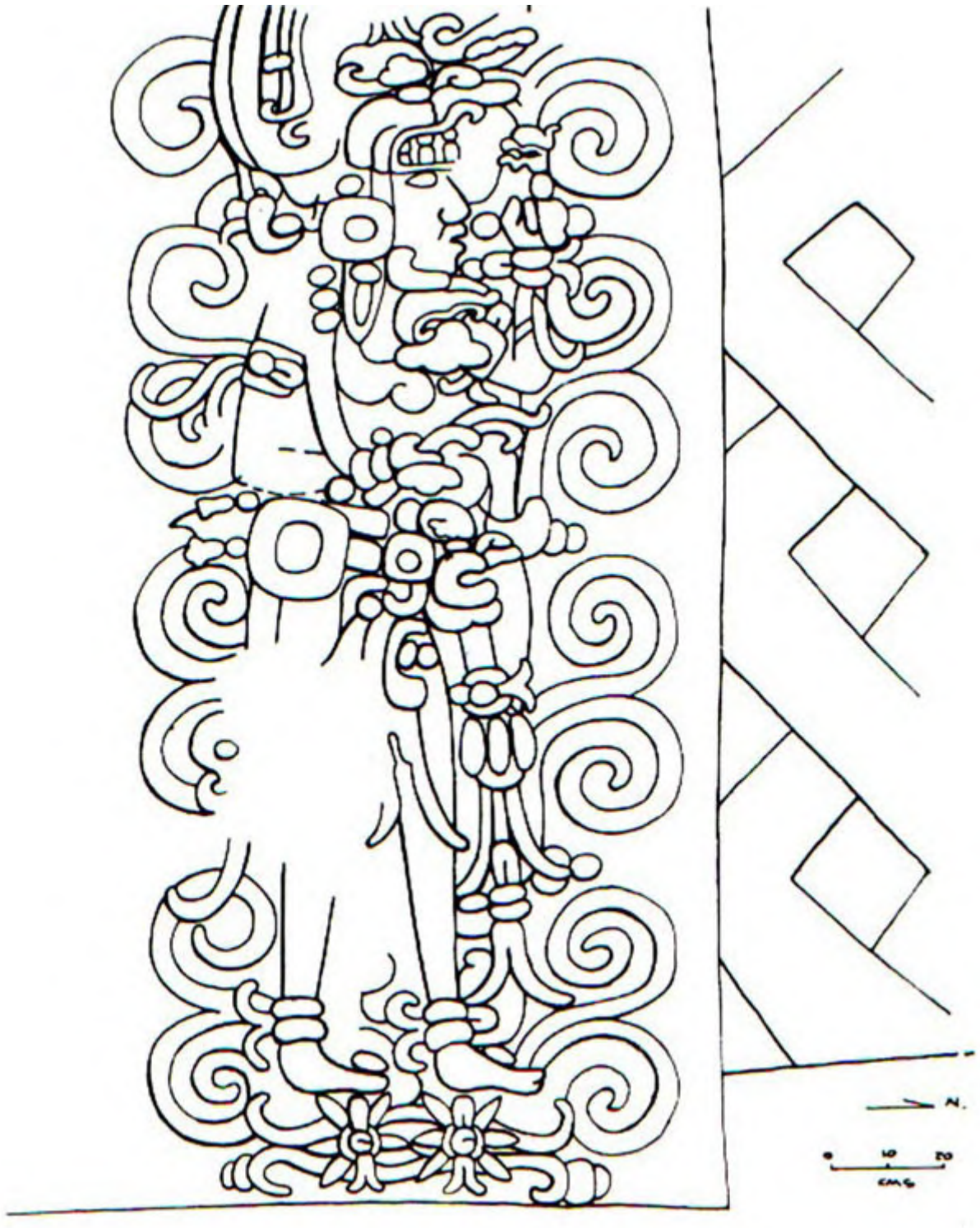


Figure 30. Drawing of the individual and the decoration of jambs, Structure H Sub-10, Uaxactún.

Characteristics of the Lintels

In structures H Sub-4 and 5 the spaces that correspond to the lintels of the doorways were identified; it is assumed they were made of wood, with dimensions of 2.83 m in length and 0,21 m in thickness for the first access. The second lintel was 2.27 m long and 0.10 m thick.

The characteristics of the lintels in buildings H Sub-6 and 7 are not reported.

Building H Sub-10 has no lintels in its doorways.

Characteristics of the Finishing

The walls were covered with red stucco both on its internal and external faces.

Characteristics of the Refill

The refill of the walls could not be characterized.

Characteristics of the Ashlar Stones

They were made of small, uncut ashlar stones; structure H Sub-10 shows carved and fretted ashlar stones in the panels of the east and west façades, forming a decoration similar to a mat that allows the wind to pass through.

Type of Mix

The type of mix used to agglutinate the ashlar stones could not be characterized.

Vaults

For this phase, we must point out that buildings H Sub-6 and 7 exhibited high walls in its front façade, though the rear façades were mutilated by the construction works of stage seven, and now, only the remains of the figures that decorated the frieze are visible, representing the evidence to confirm the presence of the vault.

The building H Sub-10 has no vault.

Characteristics of the Ashlar Stones

They show an irregular finishing due to the type of small stone used.

Characteristics of the Soffit

They present a straight soffit.

Length and Width (area to cover)

The first bay of structure H Sub-5 covers an area of 8.32 m^2, and the second bay covers an area of 5.94 m^2.

The bays of structure H Sub-4 show similar dimensions.

The bay of structure H Sub-6 would apparently cover a space of 8.61 m^2.

The bay of structure H Sub-7 would apparently cover a space of 11.16 m^2.

The bay of structure H Sub-10 shows a space of 7.08 m^2.

Type of Mix
The characteristics of the type of mix used are not reported.

Type of Refill

The characteristics of the refill used for the vaults are not reported.

Type of Cornices

The characteristics of the cornices are not reported.

Decoration Features

Friezes

General Description

For this stage, in the front façades of buildings H Sub-6 and 7, the presence of remains of stucco-modeled figures that decorated the frieze of the building was noticed, but due to their poor preservation they could not be characterized.

Masks

General Dimensions

The structure H Sub-3 shows four zoomorphic masks, measuring each one of them 5.50 m in width and 2.65 m in height.

At the sides of the stairway that provides access to buildings H Sub-4 and 5, two sculptural representations were located, 2.95 m long and 1.30 m high.

The general platform of the complex includes two masks at its sides, with measures of 7.50 m in width, 4 m in height, and with a 42.5º incline.

The structure H Sub-10 presents four masks, 0.90 m high and almost 2 m wide.

General Description

Regarding H Sub-3, the central figure is a monster which combines feline traits and carries on his head the symbol of the Witz (mountain). The jaws are opened, and two fangs or virgules emerge from the mouth corners.

Overall, the masks that flank the stairways that provide access to buildings H Sub-4 and 5 are remarkably similar to one another, and feature a face that combines feline traits with ear flares at the sides.

The masks of the platform show an anthropomorphic figure with two scrolls or virgules that emerge from the mouth, and wears ear flares and some sort of diadem on the head that shows three small images or masks, two in profile and one looking front.

The masks of the basal platform of building H Sub-10 represent anthropomorphic figures decorated with ear flares with hanging trilobal features with circles at the tips, while at the lower portion of the face there is a representation of a knotted bow.

Conclusions

As I have pointed out throughout this work, architecture must represent, for the archaeological investigation, a dynamic feature bound to add to the understanding of Mesoamerican cultures. This feature presents particular changes and solutions, which if not understood by means of a systematic process, may get to make no sense and relegate architecture to a category with which work is accomplished only as one more requisite among the many to comply with in an archaeological investigation.

This investigation presents several proposals worth outlining, first, we have attempted to achieve uniformity both regarding the technical and the theoretical concepts required to investigate architecture; among the theoretical concepts that must be revised, the use of units of analysis that will allow to define and characterize the different moments involved in buildings is crucial, and to this purpose, I favor the concepts established by Carrasco and Boucher in 1985, of “Construction Phase, “Architectural Phase” and “Architectural Style”.

The first concept includes the different stages of the building process of one architectural entity that goes from its foundations to its decoration, without ever achieving a functional unit (Carrasco and Boucher 1985: 57).

The second has to do with structural entities that function by themselves and that are integrated by the combination of the construction phases, being established as the minimum unit of the architectural phase of a building conceived from beginning to end (Idem). This phase may be manifested in two planes: the Vertical Plane, characterized by the presence of substructures always underlying the last architectural phase; and the Horizontal Plane, whose minimum unit appears like a partial substructure for having been created by aggregates that cover portions of an entirety.

Finally, we would have the “Architectural Style”, representing a synthesis of the two previous levels; we would only be able to distinguish the different architectural styles once the architectural phases that integrate it in its vertical plane have been analyzed (Carrasco and Boucher 1985:58).

Traditionally, the architectural style is characterized by the features of the last visible phase of a site or region, thus distorting the accurate appreciation of its characteristics, while traditionally the temporal placing of architecture is established by means of the ceramic chronology, which only rarely is connected with it, as they represent cultural processes independent from one another.

As an example of the above we have the case of the acropolis of the south complex of Group H at Uaxactún, where the term was changed from “stage” to “construction phase”, thus resulting in three architectural phases: the first would integrate phases 1 and 2: the second would involve phases 3 to 6, being this one our study object here. This architectural phase implies an acropolis-like space with characteristics similar to those of Sub II c from Calakmul, concerning the distribution of buildings and the use of one building to provide access to the complex with different attributes, both in decoration and morphology, in regard to that of others. For a precise interpretation, a profound analysis of its decorative features would be required, considering them as notions related to a myth of origin associated to the worship of mountains and caves, rather than linking them to the components of the Popol Vuh’s accounts.

The last architectural phase would correspond to the covering of this space by a building which adjusts rather than reproducing, the concept of a mountain; it should be pointed out that because of its characteristics, the analysis would involve an entirely separate study.

Another paramount issue has to do with the overall notions of the architecture of the Middle Preclassic period, and the proposed absence of associated sculptural art. Substructure II c from Calakmul is an evidence of the consolidation of both the manufacturing technique of friezes and masks, and the expression of the early Maya ideological concepts in this period. We should concentrate our efforts in understanding and reanalyzing the traditional interpretations of these features, and consequently, our proposal for this work is the use of the semiotic analysis, a heuristics that opens possibilities without censoring or leaving aside the already existing ones. Moreover, the occurrence of depressed circular vaults provides an entirely new dimension to our general notions on Maya architecture, and brings forth new lines of investigation oriented to explain why it was created and why it became absent in later periods of time, which exemplifies the difference in the conception of the functionality of objects in the different periods of Maya history, and our own insight regarding the men that created them.

After the analysis of the architectural cards, we may become aware of the similarities presented in overall terms by the architectural features of the three sites, which is not surprising, considering the extended common history they share. One feature that would contribute to appreciate the differences at the heart of the Petén Architectural

Style could be the characteristics of the refills that form both the basal platforms and the buildings. These refills are mainly made of akalché mud originated in the low floodable areas called *aguadas* or *bajos,* a feature that by being constant has become an indicator of the Preclassic period.

On the other hand, the vaulted buildings such as H Sub-2, H Sub-5 and 6 from Uaxactún present a displacement in the access of bays with respect to the central line of the building; this characteristic is visible in Calakmul's Sub II c-3, which in spite of not having been included in this analysis due to its incipient investigation, has begun to show similar particularities.

Tikal's Structure 5C-54 shows a major change in regard to the morphology of the stairways and the characteristics of the component ashlar stones, as during the Preclassic period the stairways from the three sites were composed of cut blocks with dimensions that varied from 0.25 m to 0.50 m in height, and 0.35 m to 0.55 m in width; for the Cauac phase of the Lost World, which corresponds to the Protoclassic period, the steps were made with two ashlar stones: the first one was placed facewise, and the second on end, with dimensions that vary from 0.15 m to 0.20 m in height, and from 0.35 m to 0.40 m in width.

Finally, I am aware that restating the analysis of architectural characteristics in the archaeological investigation implies a long term work, in fact, this paper is presented here as a beginning rather than a conclusion, and involves an exchange of knowledge and views with other members of the scientific community that will lead to our understanding of this expression of the Maya culture so that we may make it known to our society.

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