

**The Royal Palace of Cancuen: The Structure of Lowland Maya Architecture
and Politics at the end of the Late Classic Period**

By

Tomás José Barrientos Quezada

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Approved:

Arthur Demarest, Ph.D.

William Fowler, Ph.D.

Edward Fischer, Ph.D.

Héctor Escobedo, Ph.D.

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To those ones who believe and follow their vocation...

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LIST OF ABBREVIATIONS

CONACULTA	Consejo Nacional para la Cultura y las Artes (Mexico)
DGPCN	Dirección General del Patrimonio Cultural y Natural (Guatemala)
IDAEH	Instituto de Antropología e Historia (Guatemala)
INAH	Instituto Nacional de Antropología e Historia (Mexico)
MUNAE	Museo Nacional de Arqueología y Etnología (Guatemala)
SEEM	Sociedad Española de Estudios Mayas
USAC	Universidad de San Carlos de Guatemala
VCAP	Vanderbilt Cancun Archaeological Project

CHAPTER I

INTRODUCTION

At the beginning of the twenty first century, the knowledge of Classic Maya Civilization is still very incomplete, largely due to the lack of research in many sites located in Guatemala and the rest of the Maya region. Instead of focusing in these unknown zones, many projects keep investigating the best known sites and regions.

For this particular reason there is no doubt that the more sites we excavate, the more complete and diverse will be our understanding of politics, economy and ideology of Classic Maya Civilization. Is in this context where the research at Cancuen becomes relevant as an important contribution to various problems in Maya archaeology, such as the interpretation of royal courts and palaces. This topic acquired relevance just a decade ago, since no formal discussions were carried out until recently.

Mapping, excavation and restoration of the royal palace of Cancuen has been one of the most important achievements of the Vanderbilt Cancuen Archaeological Project. For the last ten years, these investigations have provided a substantial amount of data relevant not only for the site's history and internal interpretation, but also for the study on Lowland Maya architecture and politics. This dissertation represents the result of six years of research in one of the most impressive structures built by the Maya. Its analysis pertains to chronological matters in the southwestern Peten, as well as to understand the structure of politics in regional capitals during the end of the Classic period. It is hoped that this would be an important contribution for our understanding about the function of architecture and space in ancient societies, and as an example of how to interpret ideology and politics through material fragments of human action.

Interpretation of the royal palace architecture and layout will be carried out with the aid of previous studies on Maya courts and palaces, whether epigraphic, iconographic or architectural. However, this dissertation will go further into the theoretical basis of spatial analysis and reconstruction of political models, which has developed from the structural traditions in anthropology and sociology.

This particular approach responds to the limitations of archaeological interpretation, as been exemplified in Cancuen and other Lowland Maya sites. Given that material evidence of social behavior is always fragmentary, this dissertation supports the use of structure oriented studies as means to reconstruct the social and politic systems that not only created these architectural spaces, but also guided all aspects of ancient life. Only after defining these broad structures, we can proceed to interpret individual agency and other cultural problems of the past societies studied by archaeologists.

I expect that this dissertation has the necessary elements to be an important contribution to the understanding of Classic Maya courts. The uniqueness of Cancuen's data makes this study relevant and complementary to the ones published up till now. David Webster, in relation to the existing gaps on data relating to Maya palaces, has said:

“[Maya] palace complexes...are products of the contingent decisions of many generations of builders acting on the dictates of their particular elite patrons. Such aggregations are not the result of any sort of master plan involving predetermined final forms... What we are left with is simply what existed when the builders finally stopped, rather than the original form. One fruitful line of research would be to investigate elite residences or palace complexes that retain the stamp of original intention as much as possible... [and] shift our attention from the most celebrated Classic court centers to those with unique characteristics (Webster 2001: 159).

Well, we now have that at Cancuen. Unfortunately, while he and other archaeologists were publishing on these problems, we were just starting to decipher the

importance of the royal palace of Cancuen. It is time then to apply our data to the ongoing discussion about Maya palaces through this particular contribution.

CHAPTER II

THEORETICAL AND CULTURE HISTORICAL OBJECTIVES AND RESEARCH QUESTIONS

The objectives of this dissertation relate to general themes concerning Lowland Classic Maya Civilization and the ancient Maya city of Cancuen. However, the intent of this research has been to improve our understanding of more general issues related to Maya architecture and political structure, as being exemplified by the construction and use of the royal palace of Cancuen during the end of the eighth century C.E.

In order to make a significant contribution to Maya archaeology, as well as the anthropological interpretations of architecture, this dissertation focuses on a monumental palace structure, which represents the power exercised by the ruler and his court in Cancuen. Palace architecture has been useful to interpret royal court behavior in ancient complex societies, and the Maya are no exception. Therefore, in order to define a general working hypothesis, it is proposed that research of palace architecture at Cancuen not only reconstructs the site's cultural history and interprets building functions, but more importantly, it helps to understand the particular social structure and political system that made possible such monumental construction. The study of Cancuen's political system has thus been focused on the reign of ruler *Taj Chan Ahk* (757-799 C.E.), given that his royal palace, among the best evidence of palace architecture in the entire Maya region, was built under the guidance of this one ruler over a short period of time. It is argued then, that a building complex of this nature represents a set of texts and images that can be read and interpreted to understand the particular structures that governed Cancuen at the end of the Late Classic period.

Hence, the study of Cancuen's royal palace gives new data from different perspectives and new insights into Maya rulership and political power. It represents an excellent case for interpreting architectural planning and design in Classic Maya royal courts, and a test for various models concerning the function of Maya palaces, as well as the sociopolitical structures of the polities that created them.

From this general background, the investigations of this palace have been based on concrete archaeological problems and research questions, which are the following:

2.1 Cultural historical objectives

2.1.1. Architectural Chronology and the Internal Nature of the Palace

Archaeological and epigraphic evidence recovered in Cancuen has defined a short historical record for the site, covering less than two centuries. Therefore, the accuracy of the ceramic sequence falls short for dividing its chronology into clearly defined phases. For this reason, identifying architectural stages at the site's main buildings provides an important source of chronological data. Among the structures of the site, the royal palace has the best defined chronological sequence, with a construction record that spans from its origins in the mid-7th century C.E. until its abandonment during the beginning of the 9th century C.E.

The first level of interpretation and the first objective of this dissertation is a single-case analysis of a Maya palace. Construction techniques, materials and other features alike have been used to define the short spaced architectural sequence for the royal palace at Cancuen. Its construction phases have also been correlated to long count dates and some clear ceramic changes, in order to create a subdivision of the chronology

of the site's half century apogee. With this approach, the royal palace architectural micro-chronology may reflect the main historical events found in inscriptions, as well as the social and political changes interpreted from settlement patterns, ceramics, bone remains and lithics found at Cancuen. In other words, reconstructing the history of the royal palace will be a keystone for defining the cultural history of Cancuen itself.

2.1.2. Concept and Function of Maya Palaces

In addition to the chronological data, the royal palace of Cancuén also offers a unique synchronic perspective for interpreting Classic Maya palaces and court life. Due to the sudden rise of Cancuen as a regional capital in the mid-8th century C.E., its palace, ballcourts and other related buildings were constructed rapidly, in an uncommon manner for Maya architecture. Most monumental acropolises were the result of various centuries of additions and remodeling, where later buildings covered earlier ones (Harrison 2003a). In Cancuen, the royal palace was not constructed in this accretional form, since most of the platforms, plazas and structures were built at once, in an amazing display of human labor and organization.

This situation gives an interesting glimpse on the design and function of Maya palaces. As stated above, most palaces show a combination of earlier buildings and later additions, thus not providing much information about the original architectural planning (Webster 2001:159, Kowalski 1987:81, Miller 1988:153, Andrews 1995:91). Because Cancuen's palace was not covered with later buildings, its predominantly single period construction offers a unique synchronic view of its planning.

The study of palaces is fairly recent within the development of Maya archaeology, since there was no agreement on the nature of royal courts until recent years (Inomata and Houston 2001a, Christie 2003a). For a long time, Maya cities were envisioned as vacant ceremonial centers, given the lack of concrete evidence on royal residences or palace functions. Now, with more palaces being excavated, it has been possible to visualize them as one of the central elements of Classic Maya society.

Therefore, data recovered in the royal palace of Cancuén has been used to test and complement previous models that have been recently defined to explain the function of palace structures throughout the Maya region. A specific problem covered in this dissertation is the definition of Classic Maya palaces as multifunctional architectural complexes. This second or mid-level of analysis requires a comparative study on palace structures across the Maya region, Mesoamerica, South America and Old World civilizations, with special attention to the Mycenae and Minoan palaces of Ancient Greece. This has allowed the revision of the various interpretations of archaeological contexts, in order to define palaces on a functional level.

Functional analyses will take into account that palaces not only served as royal residences, but also as an arena for diplomatic activities, as they surely played a significant part in public religious rituals, economic activities and other types of performances that involved different sectors of the population. At the same time, the design of the palace could have set the nature of relations between rulers and other important nobles or secondary elites that probably resided in minor palaces throughout the settlement in Cancuen.

2.2 Theoretical Perspectives and Goals

2.2.1. Structural Paradigms and Architectural Analysis

In a higher level of analysis, this dissertation includes a discussion about various theories on political and social structure, as being interpreted through architectural remains. The incorporation of structural models is based on the premise that spatial analysis of buildings reflects the political and power structures of the society, as envisioned by their leaders.

As a starting point, it is important to recognize that any application of anthropological models to past societies is always incomplete, given the fragmentary evidence of human action. Therefore, in archaeological contexts such as the royal palace of Cancuén, there is limited evidence of individual human agency, besides the ruler and the artists responsible for its construction. Though we know that this mosaic of empty open and closed spaces was once alive, little is left that could give us information about the other persons that contributed to its creation and use.

Nevertheless, planning and construction of this building was the result of human action, thus representing a concrete evidence of human behavior. Hence, instead of a bottom-up perspective, it is considered appropriate that archaeological interpretation of a building such as the royal palace at Cancuén has to be constrained and defined by the political system that created these spaces. In other words, royal architecture planning throws light into the general social templates that directed its creation and use by the ruler of Cancuen and his vassals.

Structural analyses have been used to discern the layout and function of the built environment, explaining the meaning of space in terms of particular political systems. This “architectural anthropology” defines spatial arrangements as some type of language, text or set of symbols that can be read.

For this reason, a structural approach is a useful tool to interpret the palace of Cancuen in terms of its design and function as a political instrument. However, the use of such synchronic analysis is only allowed by the fact that unlike other Maya palaces, the whole palace complex at Cancuen represents a particular narrow range of time and a well defined context, the reign of ruler *Taj Chan Ahk*.

In order to define the semiotics behind architectural design, I think is important to start with the structural roots of Durkheim, Levi-Strauss and Radcliffe Brown, as the basis for applying later developments of structuralism, as well as theory of practice and concepts of agency. In addition, I will define other recent forms of structuralism like relational structuralism (Rossi 1982), and neo-functionalism theories, such as collectivist theory in functional analysis (Kontopoulos 1993). Nevertheless, structural sociology is of particular importance, because it approaches group behavior, instead of individual mind structures. Other more specific anthropological and spatial models will be useful to define the royal palace as a stage for public presentations and interaction between groups.

These structural and functional models will be revised and discussed, as means to understand what led to the development and design of this palace. The building itself, as a conglomerate of materials and labor, is then considered as a reflection of human practice, implementing a particular political structure (present in other Maya palaces), but at the same time, responding to the particular circumstances at Cancuen.

2.2.2. Lowland Maya Political Structure

Although structuralism has already been applied to Maya archaeology in order to interpret political organization, it has been limited to settlement pattern analysis. Therefore, this dissertation attempts to demonstrate that a minor-scale spatial analysis, such as this detailed study of the royal palace of Cancuen, is also an important means to infer the nature of the political systems that existed in ancient cities.

In that case, the major and ultimate objective of this dissertation is to contribute to the general knowledge of ancient Maya civilization. It is asserted then, that all data gathered in this research not only provide a synchronic and diachronic interpretation of the royal palace and the site of Cancuen itself, but also a better look at the dynamics behind the overall political structure of Maya civilization during the Late Classic period.

Within this framework, it is argued that the political structure exemplified by Cancuen and its palace support models that emphasize the role of ideology as the basis of centralized power in the Maya Lowlands. To support this hypothesis, different spatial arrangements have been compared between Maya sites, in order to prove that diverse architectural languages reflect similar political and ideological functions.

2.2.3. Political Dynamics at the End of the Late Classic Period

Furthermore, I consider that Cancuen could be paired with other sites that share similar culture history and architecture, thus defining a specific political structure, and discourse for analysis in those secondary centers that later became regional capitals towards the end of the Late Classic period.

Different archaeological and epigraphic data have defined that Cancuen rose as an independent regional capital during the latter half of the eighth century C.E., after being subordinated to some of the major polities in the Maya Lowlands. Therefore, Cancuen's short but exceptional apogee could represent a particular form of power display that might be related to the rise of other secondary centers at the same time in different parts of the Maya Lowlands.

Based on a diachronic interpretation, the identification of different segments and different functions of the royal palace have defined the diverse political scenarios that occurred in Cancuen, and that reflect the processes in the Pasión River Valley and the Maya Lowlands in general. Hence, the spatial-functional analysis of the royal palace will be an attempt to understand the political strategies implemented before and after Cancuen became capital of the whole Upper Pasión Valley. This approach also could offer an interesting contrast between the conceived structure and actual practice, if we can define aspects of the variability in semiotics systems found in the architecture.

Consequently and for analytical purposes, Cancuen will be defined here as a specific type of polity that was common during the last decades of the Classic Period. As the royal palace architecture testifies, Cancuen suddenly rose as a powerful regional capital in the Upper Pasión Valley, contrasting with its humble origins and previous political subordination. This widespread pattern was part of a process of "balkanization" at the end of the Late Classic, reflected in the increase of emblem glyphs (symbols of each ruling dynasty and their capital) as well as other signs of authority and political independence throughout the lowland Maya region.

Comparison with other royal courts at sites like Quirigua, Nakum, La Milpa, Xunantunich, Machaquila and La Blanca provide important data to test the hypothesis of secondary centers going through a process of gaining political independence. Once vassals to major polities, smaller kingdoms like these became prosperous cities for a short period of time, usually exhibiting monumental buildings and sculptures that sometimes rival or even exceed the epicenters of their former lords.

Furthermore, the rise of secondary centers as regional capitals is analyzed in relation to the general weakening of the regional political system in the Maya lowlands at the end of the eighth century C.E., when the large centers were slowly losing their power due to conflicts, resource deterioration and changes in trade patterns. Subordinate, and sometimes young, leaders could take advantage of the situation, gaining control of rivers, land routes and access to raw materials. It seems that in Cancuen, new artists produced an almost exaggerated display of public art, whether in the form of stone monuments or buildings. In addition, demands on exotic goods increased as more kings and princes populated every corner of the Peten lowlands, each with his own patronage networks and their expectations.

Nevertheless, it seems that the prosperity didn't last very long, because the same factors that drove Cancuen and these other centers to the top also caused their demise. Although striving to be autonomous, these late regional capitals and their rulers never ceased to be dependent on the overall political and economic system that held together the lowland Maya civilization for more than eight centuries.

As the system was breaking apart, war, migrations and lack of resources affected these small cities. Cancuen depended largely on supplying other sites, but these allied centers slowly became isolated and ultimately the populations began leaving them.

Although there is a long debate and disagreement over the causes and circumstances of the so-called “collapse” of Classic Maya Lowland civilization, the evidence at Cancuen is again unique when compared to other contemporaneous sites. Just as the palace mirrors the rise of Cancuen, it also holds the best information concerning its abandonment. Evidence found in the royal palace provides clue information for interpreting a sudden and disastrous end for Cancuen, allowing a complete interpretation of the site until its final days.

Although this by no means will clarify the overall problem of the Classic Maya Collapse, it definitely adds crucial information about the ways that regional capitals like Cancuen were affected by the complex arrangement of economic and political factors at the beginning of the ninth century, and their possible causes in the preceding century or more.

CHAPTER III

GENERAL BACKGROUND AND ANTECEDENTS

Before describing the results of thirteen years of research in the royal palace of Cancuen, it is necessary to present the geographical setting of the region, the general characteristics of the archaeological site, and the previous studies carried out in Cancuen and its surrounding areas. Finally, I will discuss some aspects of the definition and development of Lowland Maya cities, and the political history of the Pasion region, to give a chronological framework to this study.

3.1 Geographic Background: The Upper Pasion River Region

The archaeological site of Cancuen is located in the southern portion of the *municipio* of Sayaxche, department of Peten, Guatemala (UTM coordinates 16°00'25" north, 90°02'26" west), with an altitude of 127 m above sea level. The site was settled on the shore of the Pasion river, just in the actual limits of the Peten and Alta Verapaz departments of Guatemala. This southern part of the Pasion river is known as the Upper Pasion Valley, located in the northern limit of the Maya highlands, where the Sebol and Santa Isabel rivers converge to form the Pasion river. Far to the northwest, the Pasion and Salinas rivers also join to form the Usumacinta river. Besides Cancuen, other sites are located in this region, such as Tres Islas and Machaquilá in the lowlands, and Sebol and Raxruja, at the base of the Alta Verapaz northern highlands (Figure 3.1).

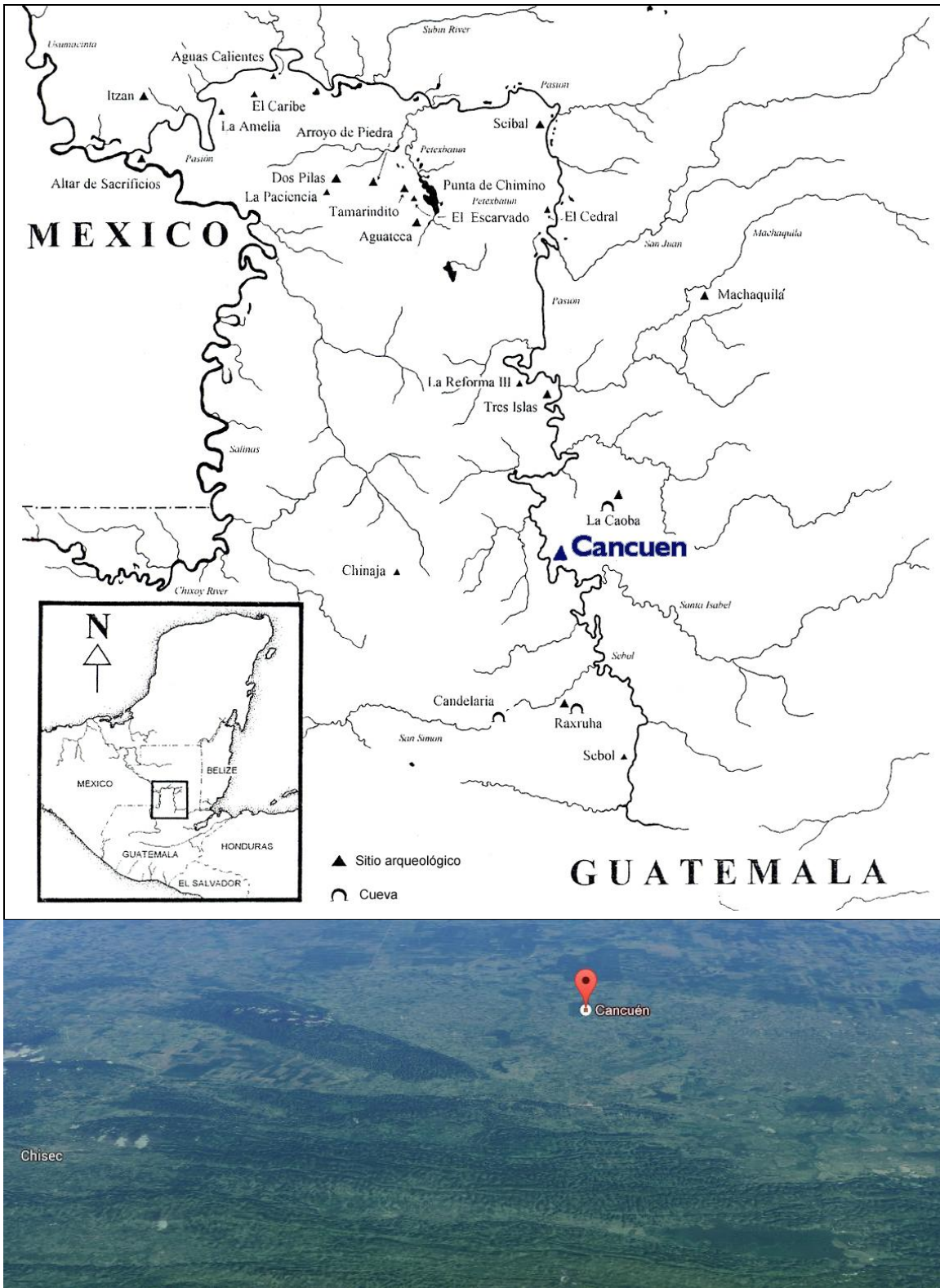


Figure 3.1 Location of Cancuen in map of the Pasión River Zone (Drawing by L. Luin, VCAP) and satellite photo showing the northern edge of the Maya highlands (Google Maps)

This region, and the whole Pasion and Usumacinta river system was one of the main communication and trade routes of the Classic Maya civilization. It not only connected a series of cities and minor sites along the river, but also functioned as a route that linked the Maya lowlands and northern highlands (Figure 3.2).

The interface between these two regions provided a unique landscape, characterized by a karstic geology that is different from other parts of the Maya Lowlands. One of the main geological features in this region is the strata on the river sides, formed by different types of limestone and sandstone. Some areas north of Cancuen are also abundant in sand. To the south, diverse types and sizes of pebbles can be found in shallow areas. There is evidence that all these materials were transported to Cancuen and used as architectural fills, although we have not found yet all sources of rocks, especially the hard limestone used in masonry buildings and a soft yellowish sandstone. Soft grey sandstone and irregular white limestone was used for simple houses, and they can be easily seen on the river banks, usually broken in rectangular shapes.

South of Cancuen, the Pasion, Sebol and Santa Isabel rivers present a series of rapids, distributed regularly among the numerous river curves. This made canoe traveling less efficient, thus suggesting that land routes were preferred. However, north of Cancuen, the rapids decrease greatly in size and frequency, making it more navigable.

Given its close location from the Chinaja and Chama Sierras, and the Maya Mountains, the Upper Pasion Valley is full of dramatic karstic formations, creating an interesting landscape. The relief is constituted mainly by tall, narrow, and almost vertical hills, called karstic towers or “mogotes”. These are filled with caves, that can measure several kilometers long, like the Candelaria system.

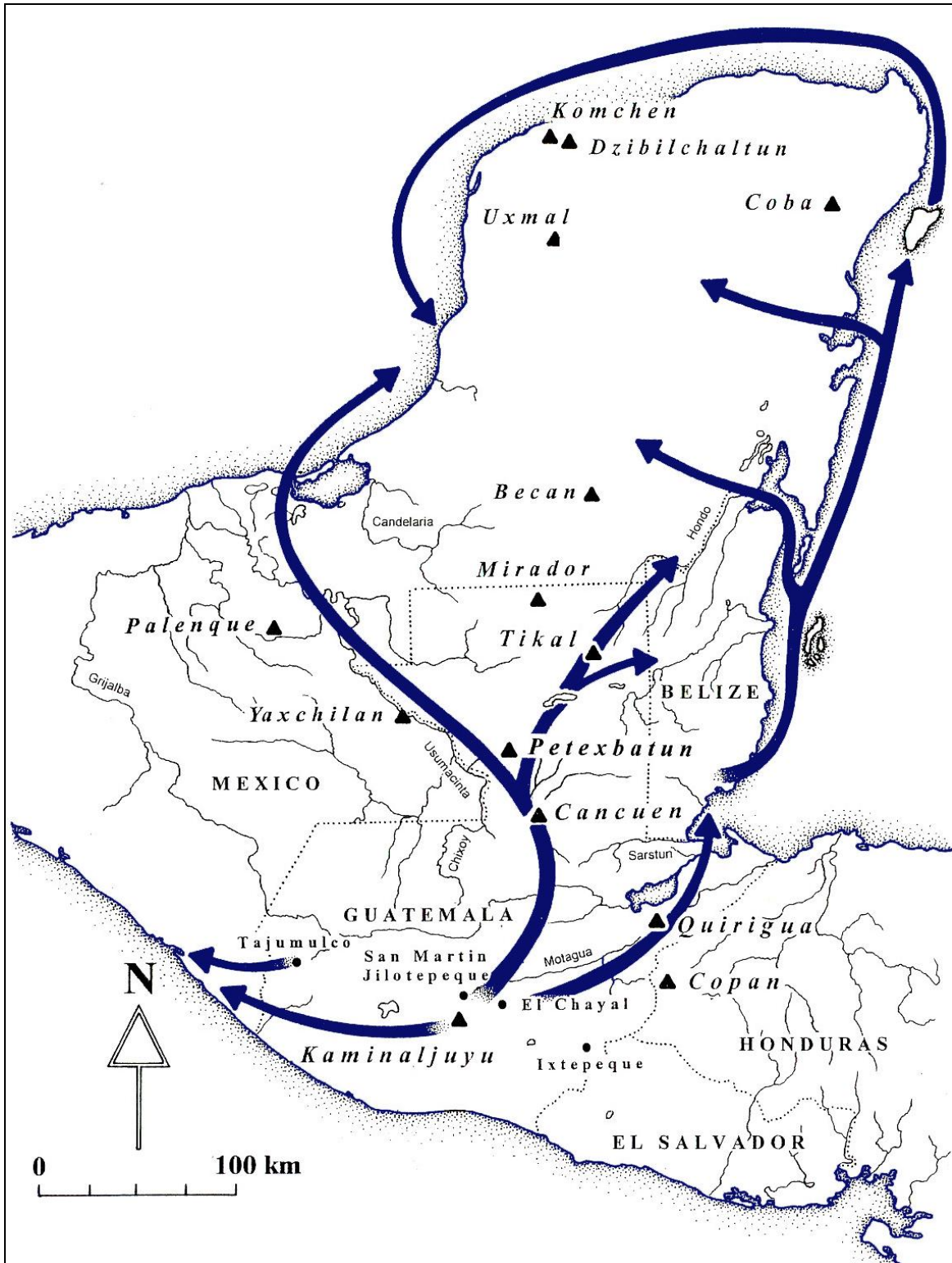


Figure 3.2 Map of the Maya Area, showing the main trade routes (Drawing by L. Luin, VCAP)

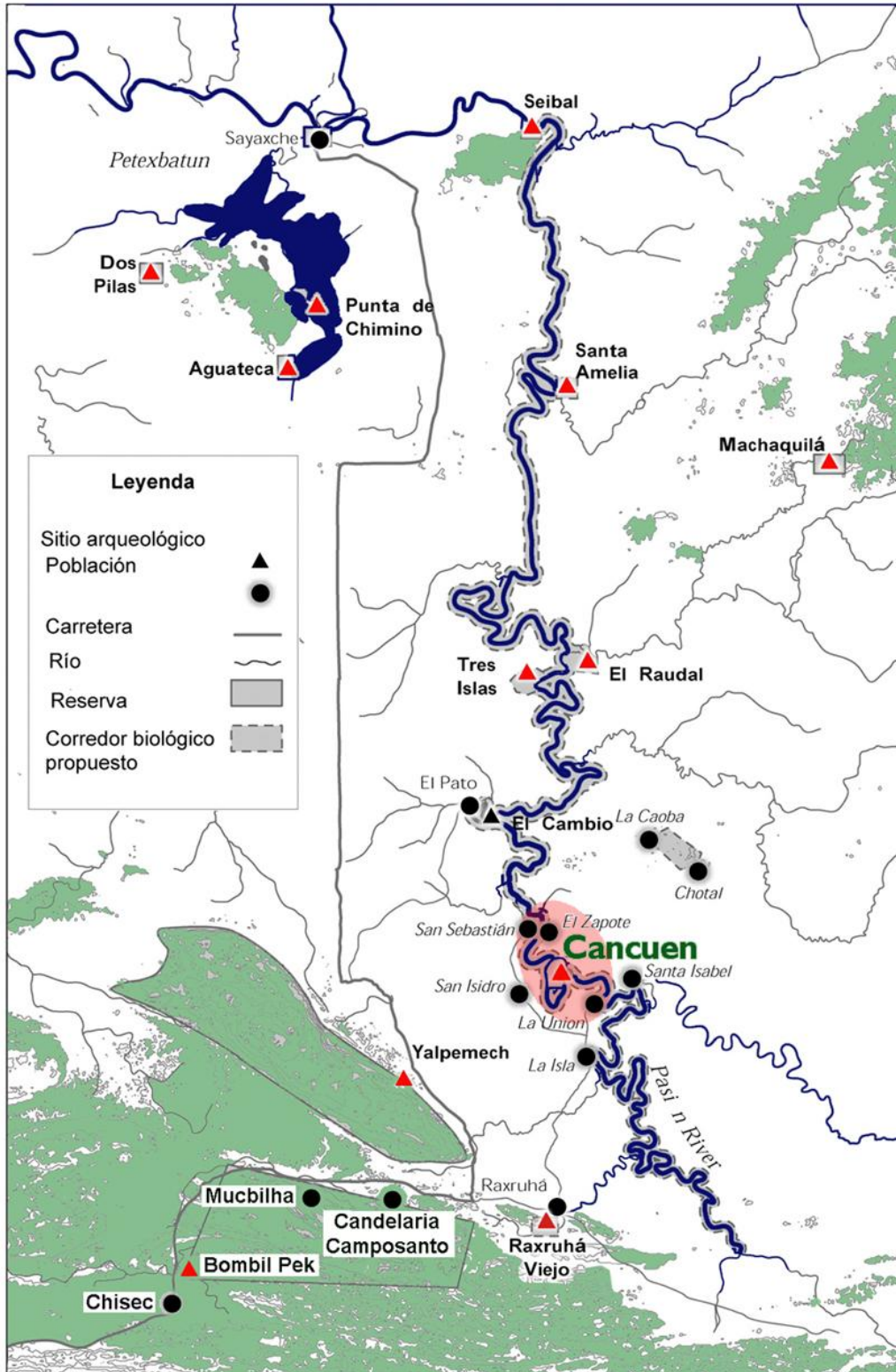


Figure 3.3 Map of the Upper Pasión Valley region, locating Cancuen and its settlement limits or sustaining area (Drawing by L. Luin and T. Barrientos, VCAP)

3.2 The Site of Cancuen

Cancuen is a site whose epicenter covers around 3 km², and was initially settled in a peninsula formed by a sharp curve of the Pasion river (Figure 3.4). Its existence was deeply related to the river from its very beginnings, as this spot is strategic for linking land and river routes. Near Cancuen, the Pasion river has an average fluctuation of 8 m, though it can get up to 9 m or more during some years with heavy rains (observed 3 times in the last 15 years). During the dry season, the river has a width of 15 to 20 m in its narrowest areas, and a minimal depth of 1 m. In contrast, during the late weeks of the rainy season (October and November), the river floods the lower areas, extending up to 300 m in width. The river usually has a high ridge in one side, which remains dry throughout the year, while the opposite shore is conformed by low and almost flat terrain that becomes swampy, almost as a lake, for at least half of the year. Vegetation variation in this zone corresponds to this landscape, having tropical rainforest in the high areas, and low scrub and spiny vegetation in the “bajio” zones.

3.2.1 Settlement Pattern

Examination of flooding areas in relation to the topographic maps has helped to understanding the settlement pattern in and around Cancuen. The epicenter is located in the peninsula, where the royal palace and its surrounding public architecture were built on a high elevated and well drained area (Figures 3.4, 3.5). The elite and non-elite residences, and some minor public architecture, are mostly located to the north and northeast, occupying a landscape filled with creeks and leveled small hills (Demarest *et al.* 2011b). The north portion of the peninsula becomes a narrow corridor when the water

level is high, giving protection and a sense of enclosure, ideal for communicating social distance for the rest of the population. Although not entirely surveyed yet, the site settlement continues northwest and northeast for at least 4 km, following the irregular high areas on both sides of the river (Wolf and Bracken 2013) (Figure 3.7).



Figure 3.4 Map of Cancuen peninsular epicenter during the dry season
(Map by M. Wolf, L. Luin, and T. Barrientos, VCAP)

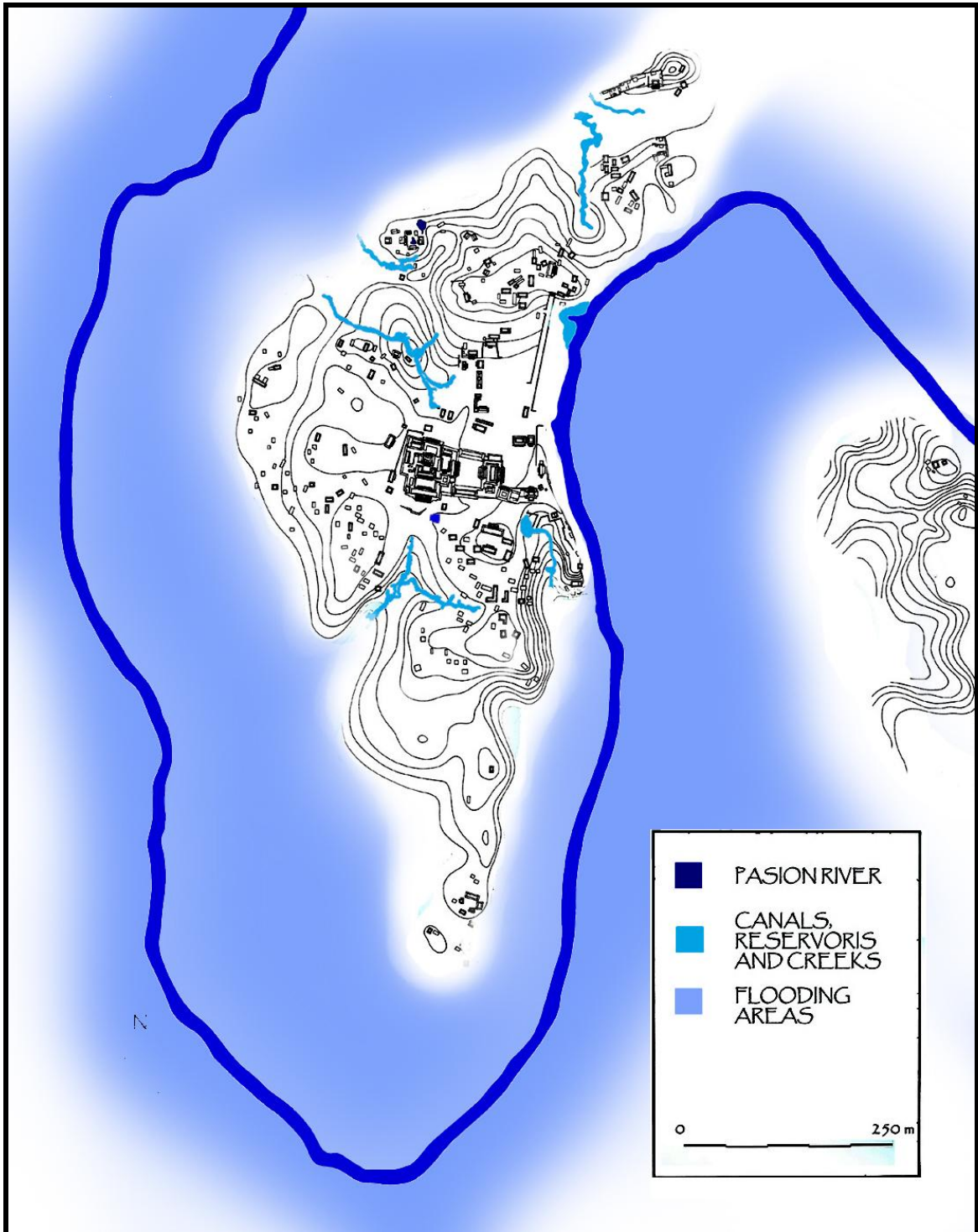


Figure 3.5 Map of Cancuen peninsular epicenter during the rainy season
 (Map by M. Wolf, L. Luin, and T. Barrientos, VCAP)

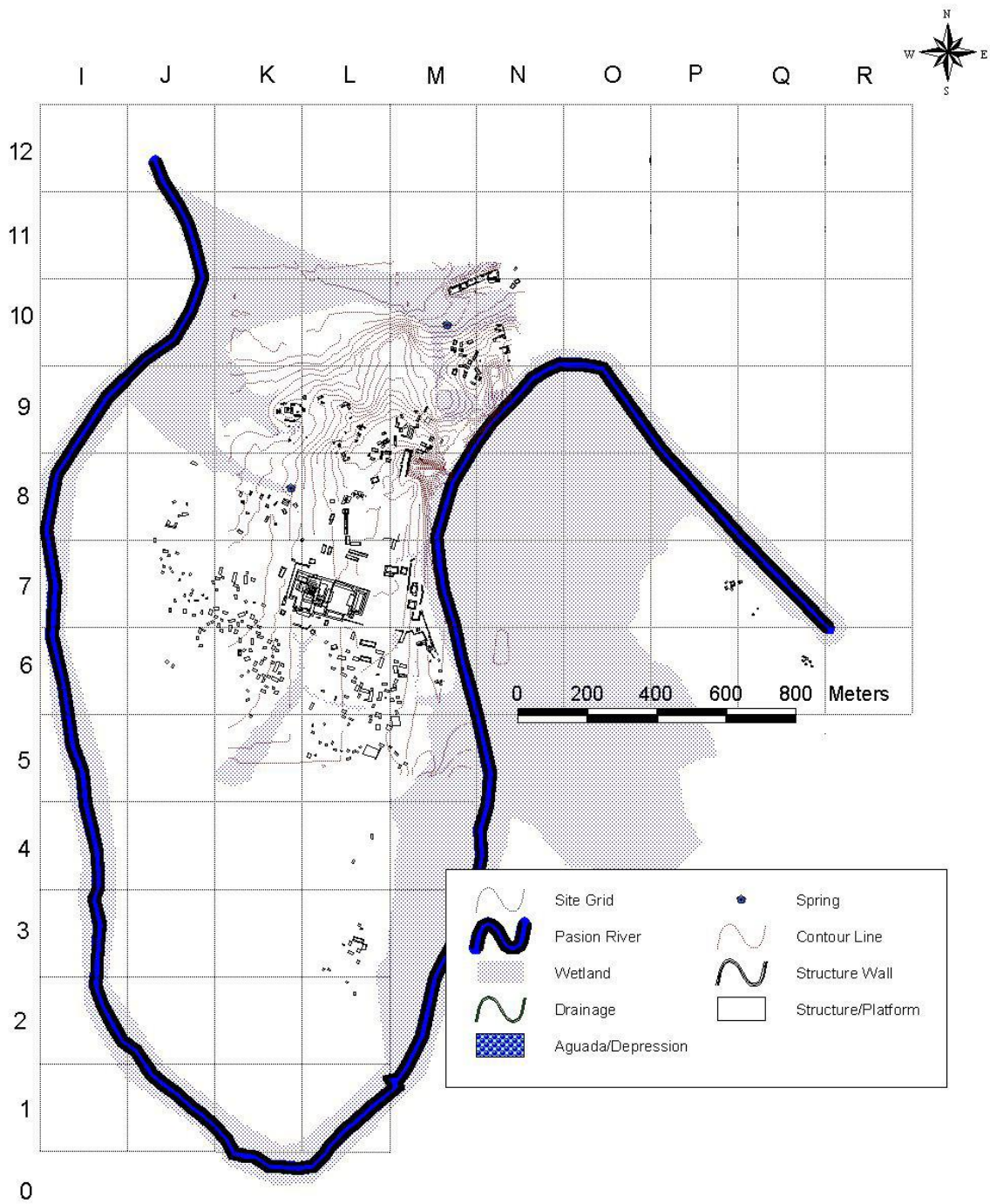


Figure 3.6 Gridded map of Cancuen peninsular epicenter, divided into 250 x 250 m quadrants (Map by M. Wolf, VCAP)

Regional surveys around the Cancuen epicenter have located continuous occupation to about 4 km to the northeast (Finca El Achiote), previously thought to be a secondary site (Woodfill *et al.* 2001, Bauer, *et al.* 2003) (Figure 3.7).

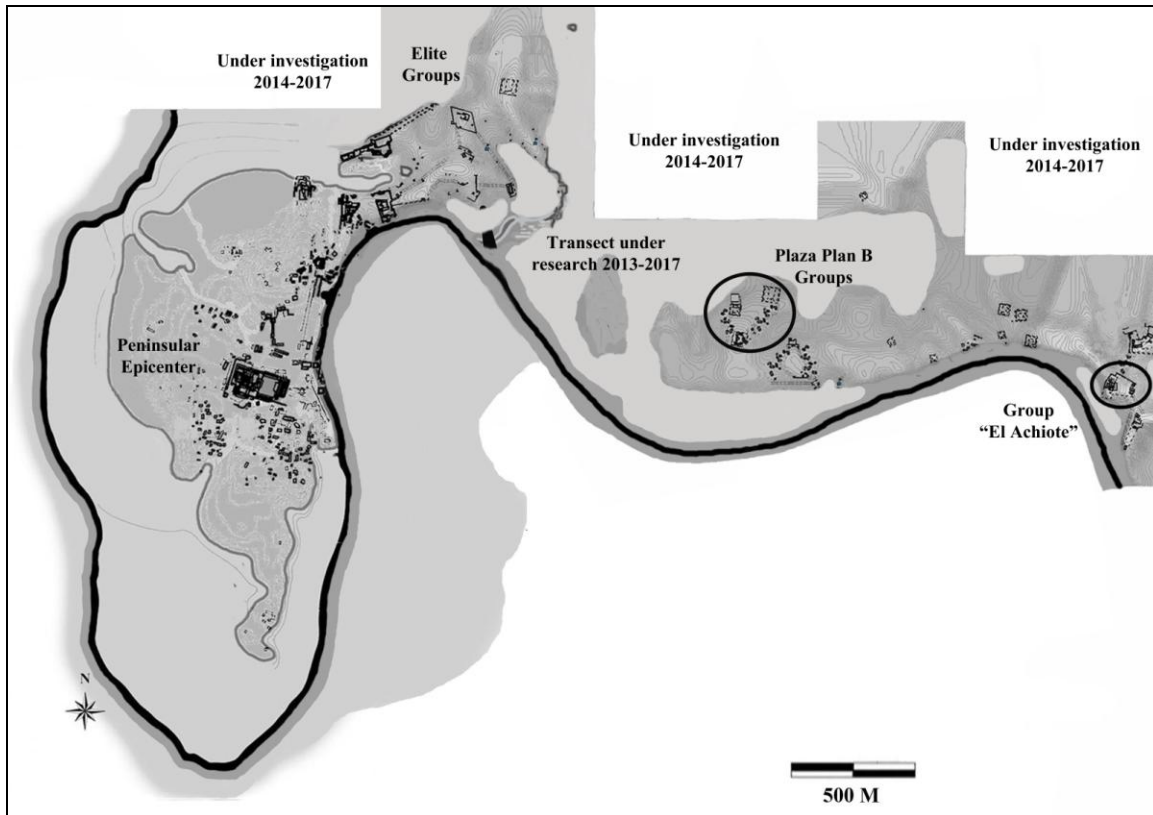


Figure 3.7 Complete map of Cancuen, defining the settlement limits mapped thus far (Map by Luis Luin, and T. Barrientos, VCAP)

Several mound groups in this area include formal patios with masonry structures, including a couple of possible “Plaza Plan 2” arrangements (Demarest *et al.* in press, Wolf and Bracken 2103). Near the eastern end of the survey, a settlement cluster stands out by the presence of a 4 m structure located in a terraced natural hill, and a plain stela/altar was placed in front of it. According to the latest investigations, the Cancuen leaders placed these monuments in association with an enormous cache of 851 exhausted

obsidian polyhedral cores, which probably marked the eastern boundary of the site (Demarest *et al.* 2013b, Demarest *et al.* in press; Demarest and Martínez 2013).

To the northwest, the survey is still incomplete, but one settlement cluster in Finca El Guarani is found near the actual village of El Zapote. This area has a large pyramidal structure, measuring 30 x 30 m at its base and rising 3 m in height, surrounded by residential mound groups without any clear arrangement (Castellanos *et al.* 2003). In any case, the settlement of El Achiote and El Guarani groups is part of a particular combination of architectural styles found in the greater Cancuen area (Wolf and Bracket 2013, Demarest *et al.* 2013b, Demarest *et al.* in press). The most recent surveys (Wolf and Bracket 2013, Demarest *et al.* 2013b, Demarest *et al.* in press) have located many mound groups in the east, north and west limit areas, showing a continuous settlement based on drained natural elevations that border the flooding areas of the Pasion River. The irregular landscape did not allow a dense pattern, and surely favored the existence of individual households near cultivation fields, given the numerous water springs scattered in the low areas (Demarest *et al.* 2011).

Another important aspect of Cancuen's topography is the existence of seven natural bays that could have been used as ports (Demarest *et al.* 2013a) (Figure 3.8). Hence, these were the entrances to different parts of the site, and points that controlled the flow of merchants and the goods brought from the highlands. Given that three of these ports have been excavated, and some important structures and mound groups are directly or indirectly associated, some specific functions can be suggested:

- The Northeast Port (and possible Northwest Port), associated with Structure N10-1 and its surrounding settlement clusters that include the jade working area (Cajas *et al.* 2008, Macario *et al.* 2008, Torres and Fidel 2011, Torres 2012).
- The Southeast Port could have been an important entrance to the site, especially for high rank visitors that came from the highlands. This port is currently used for logistic purposes and entrance to the project camp.
- The East Port, directly associated with Structure M9-1 and its residential complexes, might have controlled the access to the central ceremonial zone through the causeway leading to the East and Northeast plazas (Alvarado *et al.* 2002, Alvarado 2003, Alvarado *et al.* 2006).
- A possible Southwest Port could have been a direct south entrance to the royal palace for visitors coming from the northern lowlands, given its location in the main southern drainage of the site. However, this area is still unexcavated.
- A probable West Port is not well defined, but it could be associated to the K9 or “Patos” residential complex (Tomasic 2002, Ohnstad *et al.* 2003) and the main western drainage of the site.
- There are other potential ports in the settlement along the river, which functioned as small ports for residential clusters, very much as they are used today by farm owners. One of these is the natural bay on the left side of the river, located next to a small mound group in quadrants Q6 and P7 (Seijas and Pereira 2001).

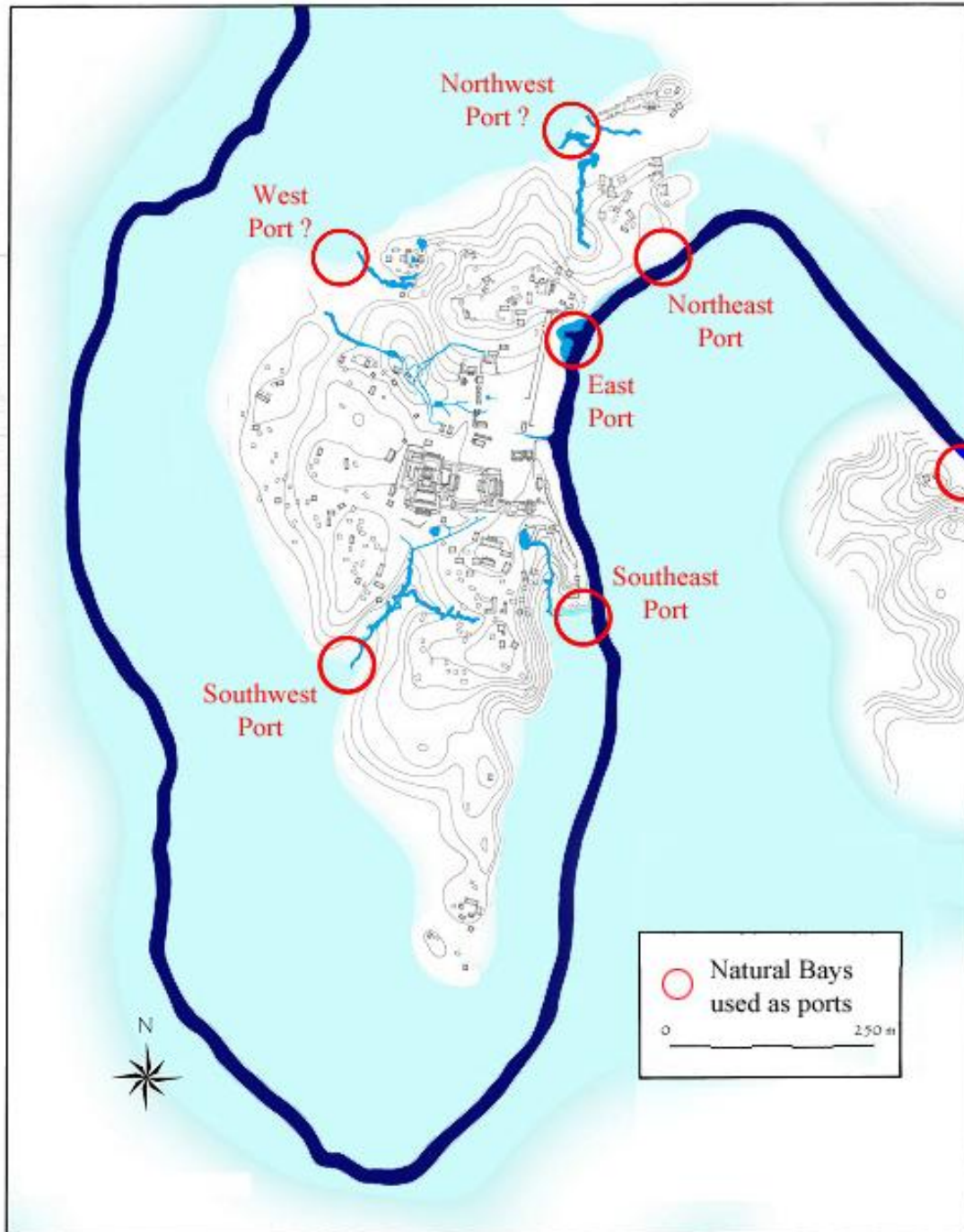


Figure 3.8 Location of natural bays and possible ports in Cancun
 (Map by M. Wolf, Luis Luin, and T. Barrientos, VCAP)

3.2.2 Peninsular Epicenter

Cancuen's peninsular epicenter is located in the well-drained and elevated habitable terrain of the peninsula, which is limited to almost 50% of the area, especially during the rainy season. The royal palace and its surrounding plaza groups are located on top of a large leveled terrace platform, named Central Epicenter Zone (Figure 3.9). Most stone masonry buildings were constructed within the central zone, arranged within the site's two main plazas (East and North plazas), and others located loosely near the palace limits (e.g. K7-1, K7-2, K7-3) or in the epicenter periphery (structures L6-1, M9-1, and Group L9).

Within the peninsular epicenter of Cancuen, some individual structures and structure groups have been investigated:

- a) *East Plaza*: It is located directly east of the royal palace and it holds the only visible pyramidal temple of the site, Structure L7-38, which rises 7 m from the plaza floor (a relatively small size compared with other Maya sites) (Martínez 2005). Structure M7-5 is a smaller shrine that was decorated with slope walls and plaster masks, and is located next to Structure L7-38, marking the south end of the plaza (Pereira 2005). Another set of two small buildings is located on the northern limit of the plaza, corresponding to another shrine (L7-28) and probably a small reception or presentation building (M7-8) (Demarest 2006b, Quintanilla and Mencos 2007, Tejeda 2007, Martínez 2008, Cotom and Quintanilla 2011, Martínez *et al.* 2012). The most important building on the East Plaza is the East Ballcourt, or *Taj Chan Ahk's* Ballcourt, which constitutes a small building with a playing alley added in its rear side (Torres 2011, Alvarado 2007, Coronado 2006). Four plain stelae and altars were

located in its west façade, and three carved altars were also placed in the playing alley floor, as markers. Stela 18 (now looted) and Altar 4 stood at the center of the Plaza. There is enough evidence to suggest that this was an important place for rituals, probably performed by the ruler itself. This argument is supported by the scene carved in Panel 3, also found in this royal Ballcourt's west façade.

- b) *North and Northeast plazas*: The northern part of the Central Epicenter Zone is divided by an alignment of small and long structures. The east half of this area is called the Northeast Plaza, which is the largest open area of the Epicenter, and it is directly associated with the Causeway. In its northern end, Structure L8-2 faces a small enclosed patio with two carved stelae (Stela 1 and 2) (Arriaza 2012). The North plaza is directly north of the Palace, with the Palace Ballcourt at its center (Arriaza 2007), and an elite residence group on its northern limit, dominated by Structure L8-1, made with fine stone masonry (Arriaza *et al.* 2006). This plaza is crossed by various fine masonry water canals that drain the Northeast Plaza and a spring that comes out beneath the Palace Ballcourt western structure (Barrientos 2008, Barrientos *et al.* 2006). The canals feed a stone masonry reservoir (North Cistern), which also drains through a check dam controlled canal that runs west, towards Group K8 (Alvarado and Mencos 2007, Alvarado 2010, 2011).
- c) *Causeway*: This is the only formal causeway that existed at the site, connecting the Northeast plaza with the East Port and Structure M9-1 (Manahan 2001, Bauer 2002, Barrientos and Alvarado 2006). Although its northern half was elevated, as most known Maya causeways, its southern east side is located below the river bank level.

Two plain stelae (Stela 14 and Stela 15) were placed near its northern end, probably marking the entrance to the epicenter.

- d) *Structure M9-1*: Consists of a fine masonry building, probably the administrative seat of a sub-royal elite group that lived in the residential cluster located on its east side (Jackson 2001, 2002, 2005). Its location directly above the East Port suggests some role in the control of goods coming from the river.
- e) *North Ballcourt*: Located west of Structure M9-1, this Ballcourt was built with highland style architecture and materials, and it forms part of a residential cluster that had ceramic affiliations with the northern highlands (Torres and Mullane 2006, Torres *et al.* 2008, Torres 2011).
- f) *Structure N10-1 and jade workshop area*: Structure N10-1 is another fine masonry building, located on the northeastern limit of the peninsula and could have had an analogous function to Structure M9-1 (Kovacevich *et al.* 2003). Its location near the Northeast Port and the jade workshop area suggests that it was another administrative seat of sub-royal elites, who not only controlled the production of jade preforms, but the flow of raw materials and commodities through this entrance. More than 30 structures of different sizes and styles surround Structure N10-1 and the jade workshop area, indicating specialized functions of residential, economic and administrative nature (Cajas *et al.* 2008, Macario *et al.* 2008, Torres 2012).
- g) *Structures K8-1 and K9-1*: These are other two stone masonry buildings that point to non-royal elite residential clusters known as groups K8 and K9 (“Los Patos”), located close to other probable ports (Tomasich 2002, Ohnstad *et al.* 2003, Kovacevich *et al.* 2003).

h) *Group L6*: Directly southeast of the royal palace, Group L6 contain a large food preparation area in Structure L6-2, which could have been related with food consumption in banquets and feasts carried out in the royal palace and/or East Plaza (Morán 2003, 2004).

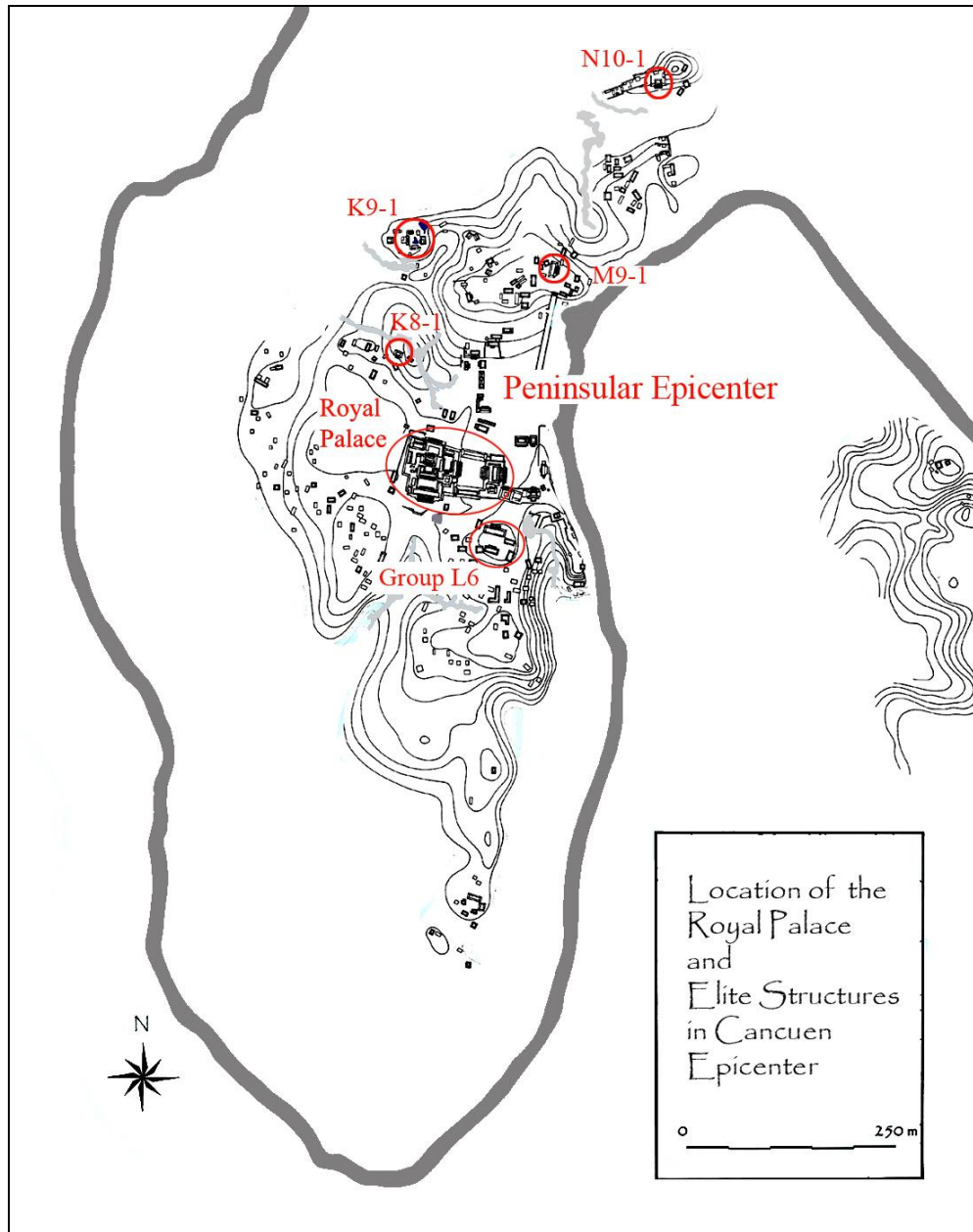


Figure 3.9 Cancuen Peninsular Epicenter (Map by M. Wolf, L. Luin, and T. Barrientos, VCAP)

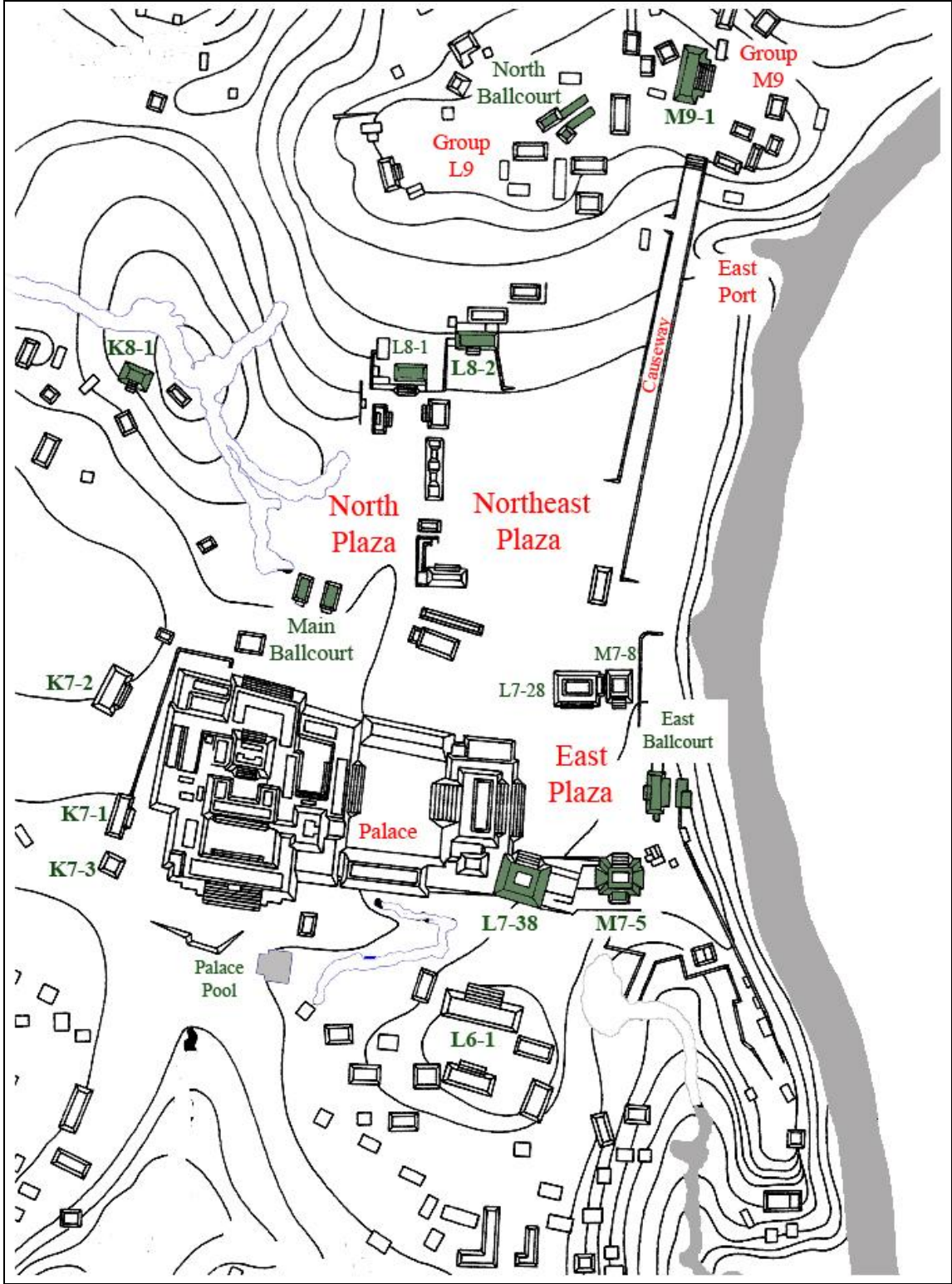


Figure 3.10 Detail of Cancuen Peninsular Epicenter (Map by M. Wolf, L. Luin, and T. Barrientos, VCAP)

3.3. Previous Research

The Vanderbilt Cancuen Archaeological Project (VCAP) was initially conceived in 1999 to explore an unknown region of the Mayan Area, known as the Upper Pasión River Valley. Although it was one of the less investigated zones of the region, it was recognized for its great potential for contributing to our understanding of Maya Civilization.

In the late decades of the twentieth century, some short investigations were carried out in the Northern Highlands, though only south of Coban (Arnauld 1980, 1986, 1987). Nevertheless some investigations focused on the cave systems located in Chinaja and Candelaria (Carot 1982, 1989, Pope and Sibberensen 1981) and the site of Salinas de los Nueve Cerros (Dillon 1977, 1978; Dillon et al 1988). Other surveys were made in the Chixoy River region, (Smith 1955, Wolley 2003, Arroyo 1994), but most of the zone between Ceibal and Coban was almost unknown.

3.3.1 *Discovery and Initial Studies at Cancuen*

Initial discovery of Cancuén was made in Sunday July 23rd of 1905 by Austrian explorer Teobert Maler, in one of his explorations sponsored by the Harvard University Peabody Museum, which was entitled *Explorations of the Upper Usumatsintla and Adjacent Region: Altar de Sacrificios; Seibal; Itsimté-Sácluk; Cankuen* (Maler 1908) (Figure 3.11). Maler made short visits to the site, publishing photos of two carved stelae and a sketch of the mound group related to them (Structures L8-1 and L8-2). Given that his only interest was to record carved monuments, he did not mention other aspects of the site, besides “the numerous mounds of ruins and certain plain stelae” (Maler, 1908:42), suggesting that he indeed walked through the site, and even passed by the royal palace.

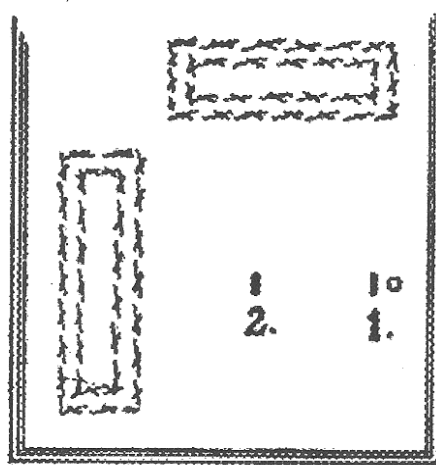


Figure 3.11 Map of Cancuen by Maler (1908: 43)

Ten years later, Sylvanus Morley visited the site as part of his explorations under the Carnegie Institution of Washington. However, he published his data on Cancuen until 1937, as part of third volume of the monumental work *The Inscriptions of Peten* (Morley 1937). Like his predecessor, he was interested in recording inscriptions, therefore taking pictures of the stelae (Morley's Group A). He added a second group (Group B), where he found a Ball Court marker (now Altar/Marker 1). However, his map shows a blank space between both groups, giving no idea of the site's size (Figure 3.12). That is why in his later publication *The Ancient Maya*, Morley classifies Cancuen as a "small site" (Morley 1947:79) and a "Class 4" center (*Ibid*, 352).

Based only on its few monuments and incomplete map, Cancuén was known for a long time as a small and non-important site. It was not until 1967, when a team of the Harvard University Seibal Project was able to do some formal research at the site (Tourtellot III, *et al.* 1978).

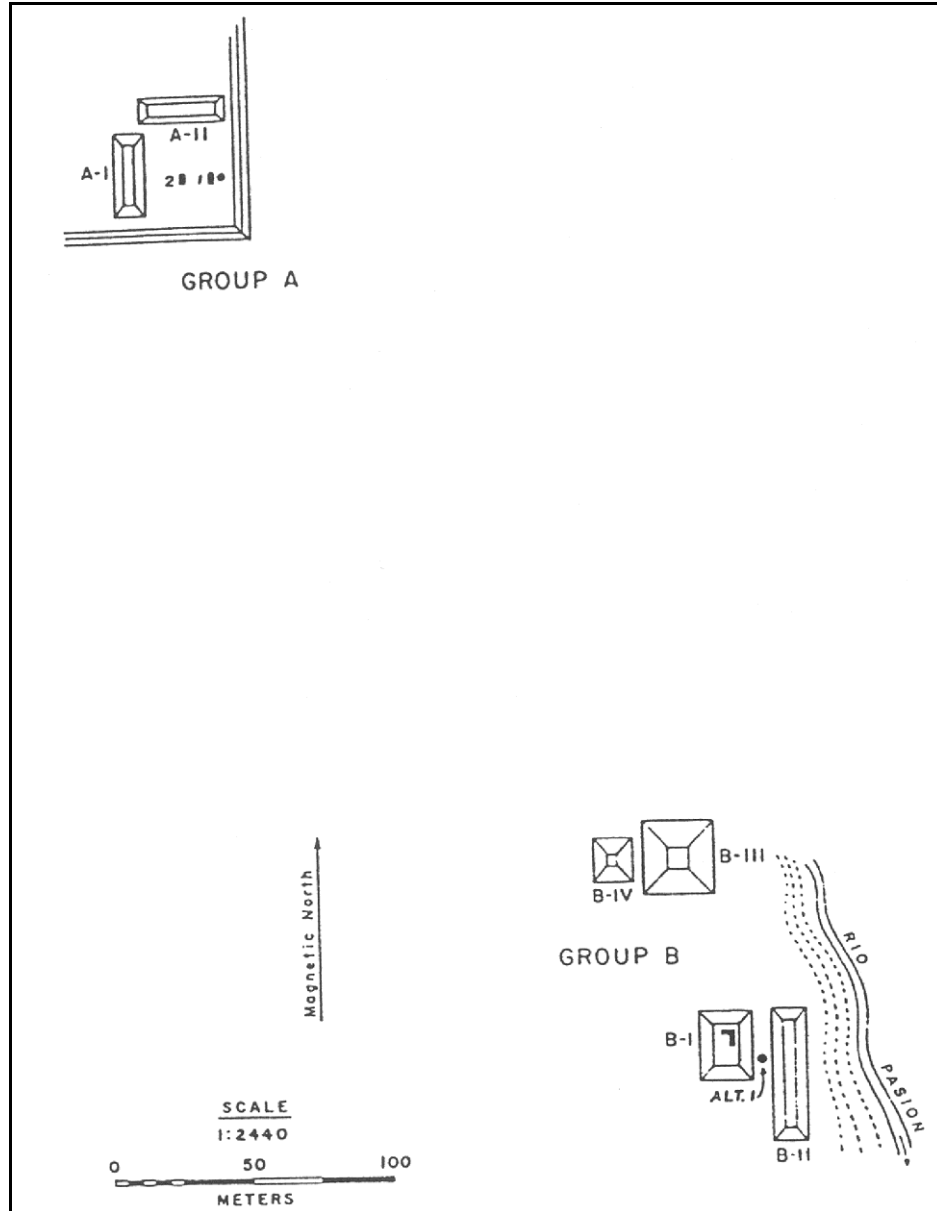


Figure 3.12 Map of Cancun by Morley (1937: Plate 196)

The team of Harvard archaeologists partially mapped the palace and a major part of the ceremonial center (Figure 3.13). They also recorded the existence of the hieroglyphic stairway and recognized the high quality of architecture of the Palace and its good state of conservation.

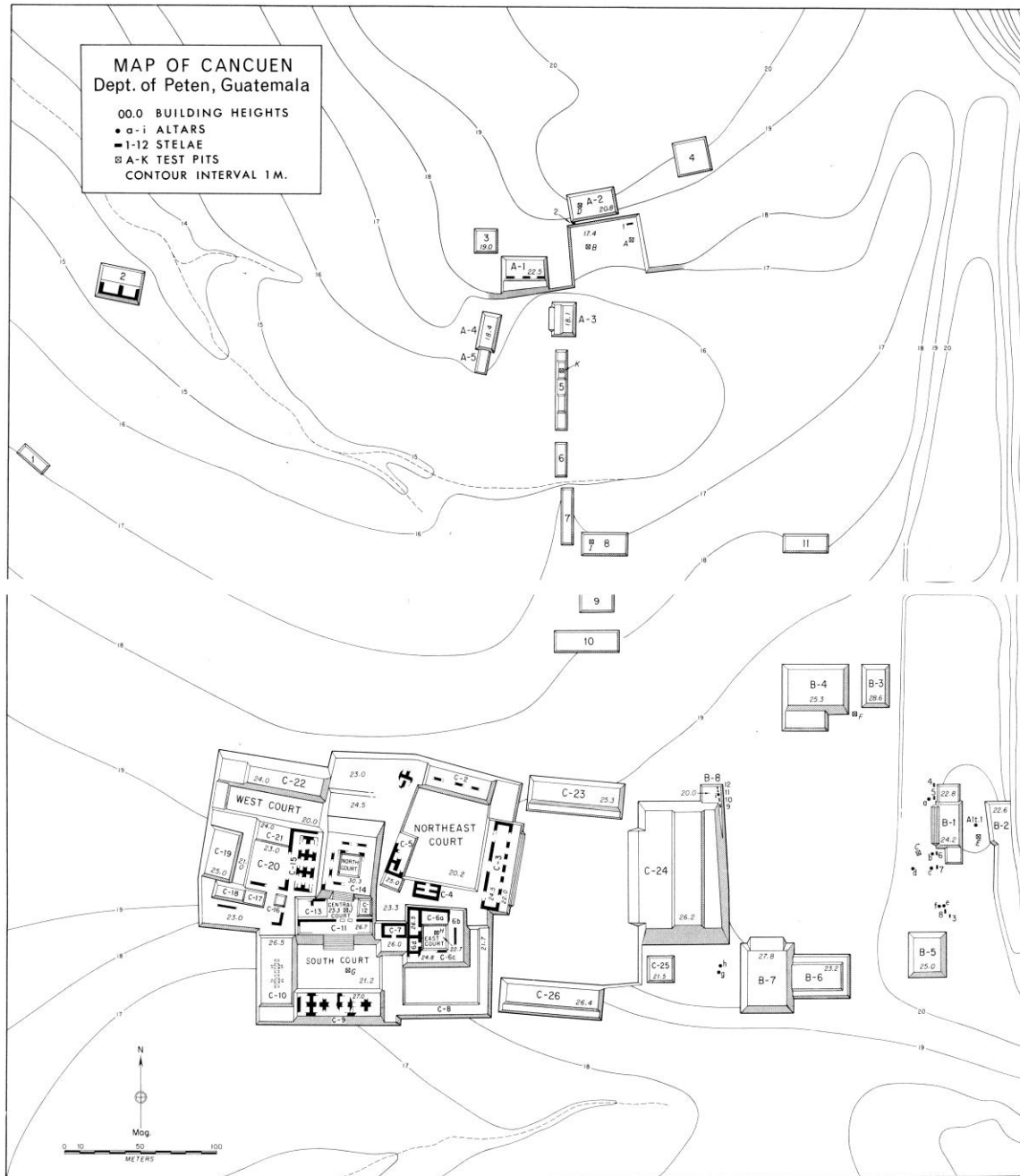


Figure 3.13 Map of Cancuen by the Harvard Seibal Project (Tourtellot III, *et al.* 1978: 200-1)

During the Vanderbilt Petexbatun Archaeological Project in the late nineties, Cancuen figured again in Maya Archaeology. Vanderbilt investigations discovered Dos Pilas Panel 19, which portrays the “Lady of Cancuén”, wife of Dos Pilas Ruler 3, *Toh K’in K’awiil* (Demarest 1997, Houston and Stuart 1990, Martin and Grube 2008: 60-1). Other archaeological evidence linked both sites, especially the discovery of the Palace, Funerary Throne and Tomb of the “Lady of Cancuén” (Wolley and Wright 1990).

Nevertheless, at the end of the twentieth century, the information about Cancuen was scarce, mostly relegated to its carved monuments. More data was needed to interpret the relation between Dos Pilas and this unknown but important site (Demarest *et al.* 1991; Mathews and Willey 1991: 44-5, 57).

3.3.2 The Vanderbilt Cancuen Archaeological Project

Investigations at Cancuen were initially aimed to reveal the details of its connections with the Petexbatun kingdoms. In addition, given its prominent location as a trade center between the highland and lowland regions, the project was also designed to provide a substantial complement to the study of Classic Maya economy and trade. Previous studies had focused on the Maya Lowlands natural routes and resources (Thompson 1964, Hammond 1972a, Adams 1978, Andrews 1983, Arnauld 1990), and the importance of trade in the rise and collapse of Maya civilization (Rathje 1971, 1972, 1973; Tourtellot and Sabloff 1972, Webb 1975, Sanders 1977, Drennan 1984a, 1984b, 1984c, Blanton and Finman 1984, Lowe 1985, Zeitlin 1991, McAnany 1993).

The multidisciplinary studies at Cancuén and the Upper Pasión region were planned after some short visits in 1996 and 1998 (Demarest, pers. com.). In 1999, the

project started with mapping, reconnaissance and test excavations (Demarest and Barrientos 1999, 2000), and has continued uninterrupted until now (Barrientos and Demarest 2007, Barrientos *et al.* 2001, Demarest and Barrientos 2001, 2002a, 2002b, 2003, 2004; Demarest and Martínez 2006, 2010, 2013; Demarest *et al.* 2003a, 2006a, 2006b, 2007a, 2007b, 2008a, 2008b, 2011a, 2011b, 2012a, 2012b; Martínez and Demarest 2007, 2008, 2010, 2011, 2012, 2013).

During the thirteen field seasons carried out by now in Cancuen, detailed mapping and surveying has recorded a large settlement (O'Mansky 1999, 2000; Woodfill *et al.* 2001, Barrientos 2002; Wolf 2003, 2006, 2008), and intensive excavations in the residential areas of the site have provided a substantial sample of materials (Ajin 2010, Arriaza *et al.* 2007, Barrientos *et al.* 2000b; Belches 2008a, 2008, 2010; Callaghan and Alvarado 2001, Callaghan and Bill 2003; Díaz 2011, Higginbotham 1999; Jackson 2001, 2002; Kovacevich 2001, 2003; Kovacevich and Pereira 2002; Kovacevich *et al.* 1999, 2001, 2002, 2003a, 2003b, 2003c, 2004; Morán 2003, Morán and Pereira 2002, Ohnstad *et al.* 2002, 2003; Rodas and Quiñónez 2010, Saravia 2011, Tomasic 2002). At the same time, research at the site epicenter has focused in the main ceremonial buildings and plazas (Alvarado 2007, Arriaza 2012, Coronado 2006, Cotom and Quintanilla 2011; Martínez 2005, 2008; Martínez *et al.* 2012; Pereira 2005, Quintanilla and Mencos 2007, Tejada 2007, Torres 2011), as well as elite residences (Castellanos 2002, Sears 2002, Sears and Seijas 2001, Sears *et al.* 2000). Parallel to field research, epigraphic interpretations (Fahsen and Barrientos 2006, Fahsen and Demarest 2001, Fahsen and Jackson 2002, Fahsen *et al.* 2003, 2004) and ceramic analyses (Bill 2000, Bill and Callaghan 2001, Bill, *et al.* 2002; Castellanos *et al.* 2002, Callaghan *et al.* 2004, , Forné

and Torres 2010, Forné, *et al.* 2007a, 2007b, 2008a, 2008b, 2010, 2011) have been able to define a chronology for the site and its external connections and influences, both from the highlands and lowlands (Barrios *et al.* 2008, Castellanos *et al.* 2003, Demarest *et al.* 2007; 2013, Forné *et al.* 2013; Sears and Bishop 2002; Woodfill *et al.* 2006). Continuous analysis of lithic artifacts and production debitage has allowed a detailed interpretation of economic patterns, especially the acquisition of imported raw materials, local craft production, and export and redistribution patterns (Andrieu 2008, Andrieu and Forné 2010, Andrieu and Quiñonez 2010; Andrieu *et al.* 2011a, 2011b, 2012, in press; Kovacevich 2000, 2001a, 2002, 2006, 2007; Kovacevich *et al.* 2003d, 2004, 2006, 2007). Regional surveys have also given a wider picture of the Upper Pasión region, defining secondary sites, ritual use of the nearby caves, and trade routes (Barrios 2006, O'Mansky 2002; Spenard 2006a, 2006b; Woodfill 2010, Woodfill and Andrieu 2012, Woodfill and Monterroso 2006, Woodfill and Spenard 2001, Woodfill *et al.* 2002a, 2002b, 2003a, 2003b, 2006, 2012).

3.4 Chronological Background

Based on the multidisciplinary investigations carried out since 1999, Cancuen is no longer viewed as an unimportant small center, as Morley and other previous archaeologists thought. Instead of an interpretation based solely on few monuments and inscriptions, our knowledge of this important Maya city relies now on extensive research that includes excavations in residential and ritual contexts, new hieroglyphic texts and iconography, artifact analysis and regional surveys. However, to understand the role of the site and its royal palace, it is necessary to delineate the nature of Lowland Classic

Maya cities and some of the general events and political history of the Maya Lowlands during Cancuen's initial years and apogee.

3.4.1 Defining Lowland Maya Cities and States

Since the beginnings of Maya archaeology, several political models have been defined in order to explain the nature of their ancient cities. Initial speculations by 19th century explorers and travelers like John Stephens and Alfred Maudslay pointed to the existence of true cities and even empires, based on comparisons with Old World civilizations (Schavelzon 2004). Despite these suggestions, evolutionists like Morgan disclaimed the existence of true cities in Mesoamerica, although the first generation of field archaeologists, like Teobert Maler, Alfred Tozzer, Thomas Gann and Samuel Lothrop, among others, still believed in the idea of urban centers in the Maya region (*ibid*, 28-29). Nevertheless, the conception of *Ceremonial Centers* replaced the city, as published in 1927 by renowned Carnegie archaeologist Eric Thompson (*ibid*, 34). He derived his model from ethnographic observations in the Chiapas and Guatemalan highlands. According to this view, Maya sites were not truly cities, but empty ceremonial centers that occasionally were filled with populations residing in rural areas. However, this interpretation was only supported by a biased research design, focused only in excavating temples, palaces, and site epicenters. Only a few works by Robert Wauchope and Oliver Ricketson collected data on residential mounds that somehow contradicted the model (*ibid*, 42-3), but the concept of ceremonial center prevailed for various decades.

With the development of the processual archaeology in the early fifties, settlement studies started to question Thompson's model, given that it did not fit into the increasing

data recovered in the new regional investigations. Still, archaeologists like Gordon Willey defended the concept of ceremonial centers, based in Evon Vogt's *Vacant Ceremonial Center* model, developed during his ethnographic fieldwork in Chiapas (*ibid*, 63).

The final demise of the old ideas about ceremonial centers began with the work of William Bullard, Wyllys Andrews IV, and William Sanders, but mainly with the surveys and mapping of Tikal by Robert Carr, James Hazzard, Dennis Puleston and William Havilland. They showed large and dense populations surrounding the ceremonial cores, with evidence of domestic activities (Fox *et al.*, 1996: 795; Hammond 1991b: 11-3; Lacadena and Ciudad Ruiz 1998: 32; Marcus 1993: 113). Another breakthrough was the advances on Maya writing decipherment as means to understand political presence and relations between cities. The identification of Emblem Glyphs by Heinrich Berlin and the discovery of historical events by Tatiana Proskouriakoff were central to create the first political maps based on what the Maya rulers themselves left as their particular achievements.

It was then, during the seventies, when different political models started to emerge, in order to understand the nature of Maya cities. Among these, one of the more influential was the quadripartite-state division or *Four Capitals* model proposed by Thomas Barthel (1968) and Joyce Marcus (1983), which was based on Copan's Stela A and Ceibal's Stela 10 four emblem glyph arrangements. The other one was Richard Adams and Woodruff Smith (1981) model of *Feudal States*, very similar to Richard Adam's *Regional State* model (1986). Both models emphasized the presence of few large states dominating the lowlands (Chase and Chase 1996; 1998: 15).

On the other side, more decentralized views came out as some geographical models were applied to Maya archaeology, such as Central Place Theory (Flannery 1972), Thiessen polygons (Hammond 1972b, Mathews 1985) and Gravity Model (Laporte 1996b, 1998: 133). Also, the discovery of more emblem glyphs suggested and increasing number of sites showing signs of political independence, thus being interpreted as autonomous city-states (Chase and Chase 1998:12-13; Lacadena and Ciudad Ruiz 1998: 33). Some models imported from other cultures and civilizations include *Peer Polities* (Sabloff 1986, Freidel 1986), *Regal-ritual Cities* (Fox 1977), *Segmentary States* (Webster and Sanders 1988), Geertz's *Theater States* (Ball 1994, Inomata 2001b, Inomata and Coben 2006), and Tambiah's *Galactic polities* (as a regional and diachronic manifestation of the latter, Demarest (1984, 1992), all of which are characterized by highly unstable and vulnerable states that constantly integrated competing factions through ideological mechanisms (Hammond 1991a: 274).

Later on, and more recently, the debate has developed in defining a centralized-unitary or decentralized-segmentary aspect of Maya cities (Fox *et al* 1996; De Montmollin 1989, 1995). Given that the purpose of this introductory section is to give a general background on Maya political history, I am going to leave a more in-depth discussion of political models for later. However, it is important to note that until recently, there have been few agreements on the nature of Maya cities and no single model has been accepted by everyone. In my opinion, at the present time one of these agreements is that ideology played a central role in Maya politics (Culbert 1991: 338-9), thus supporting the ideology-based models like Theater State.

3.4.2 *Dynamism in Lowland Maya Politics*

As has been stated above, one of the fundamental arguments in discussing Maya politics is to define centralized or decentralized states (Marcus 1993: 164, Lacadena and Ciudad Ruiz 1998). Some authors have stated that it would be an almost impossible task to think of Lowland Maya cities in any of both categories, and it seems more viable to explain Lowland Maya politics in terms of degree of centralization, rather than a dichotomy of fixed typologies (Fox *et al.* 1996; Chase and Chase 1996; De Montmollin 1995) or even define Maya states as different than others in many ways, not just in centralization. Marcus (1993: 133) and Demarest (1992, 1996) note that most previous models have been static, and more dynamic ones are needed to explain political organization in a diachronic form.

In general, Lowland Maya states controlled relatively small areas (segmentary tendency), but in few cases they were also dominated by the more centralized ones, such as the Tikal and Calakmul kingdoms (unitary tendency). Instead of showing unitary characteristics, Maya states developed as large entities that did not have great control at the smallest regional and local levels. Their authority was hegemonic and hierarchical, instead of having a heterarchical nature, which is proper of large scale control managements.

Alfonso Lacadena and Andrés Ciudad Ruiz (1998: 38) also believe that both models can be mixed to explain Lowland Maya Classic politics and not necessarily being totally contradictory, because subordination between political units (*ajawlel*) was complex and multi-leveled. In regions such as the Southeastern Peten, the political

structure shows “multiple continuous variants”, thus defining a continuum between segmentary and unitary entities (Laporte 1998: 132).

This approach is particularly useful given that the development of Maya civilization was a lengthy process that extended for more than one millennium, thus giving political organization a more dynamic aspect, through defining differences in time that “led to gradients and contrasts in organizational forms” (Sharer 1993: 93). According to this view, Maya political history can be defined as a “political cycling” process that started with centralization and gradually led to more decentralized forms, or consolidation followed by dissolution (Marcus 1993: 133, 164-5, De Montmollin 1995:261). In any case, the segmentary or unitary tendencies of states are explanations of political structure, while the Theater State model explains the source of that power.

In the particular case of Cancuen, its late foundation and apogee represents the final stages of urban development during the Classic period. It is thus important to define its chronological antecedents and review the process of state formation in the Maya Lowlands.

3.4.3 The Rise of Classic Maya Dynastic States

Recent investigations in sites like Nakbe, El Mirador and Cival have demonstrated that during the Late Preclassic period (ca. 300-100 B.C.E.), archaic states and true cities first developed in the Lowland Maya area (Hansen 2000: 92-100). Joyce Marcus (1993: 115) defines an archaic state as “a stratified, highly centralized, internally specialized society with a professional ruling class...having more institutionalized power than the ranked but non-stratified societies that preceded it”. These interpretations for the

Late Preclassic cities are based mostly on the existence of monumental architecture and arts, which required complex social systems of labor procurement, derived from sacred leadership. Hansen (2000: 74) indicates that ideology not only legitimated authority, but ultimately *generated* it, indicating that the Theater State system could have typified Maya cities from their very beginning.

However, it was not until the end of the Preclassic period, (ca. 100 C.E.) that the first evidence of true dynastic states emerged in the Maya Lowlands (Martin and Grube 2008: 17), probably at the site of Tikal. This new generation of Maya cities exhibited a more dynamic use of art expressions, mainly the development of hieroglyphic writing and the stela-altar cult, which were means for praise the figure of a single ruler, who carried the title *K'uhul Ajaw*, or “holy lord”.

3.4.4 Maya Superstates: Lowland politics during the VI and VII centuries

During the Early Classic period (300-600 C.E.), newly and emerging cities and regional states started to control key resources and communication routes throughout the Lowlands and other parts of the Maya region. Tikal figured as the larger center of the time, with no rival for almost three centuries (Marcus 1993: 138). Epigraphic and archaeological data point to different politic and economic relations with nearby smaller sites like Uaxactun and Yaxha, but also define connections with more distant sites like Copan, Palenque, Rio Azul, Waka', Tres Islas and Caracol, thus suggesting a broad strategy for controlling access to key resources. Noticing this pattern, Eric Thompson defined a “uniformity” model at the beginning of Cycle 9 (514 C.E.), where monuments reached the widest regional distribution in all Maya history (Marcus 1993: 138). Later on,

Simon Martin and Nikolai Grube confirmed this observation, defining Early Classic Tikal as a highly centralized state that controlled a “Political sphere” (Martin and Grube 1994) or “Superstate” (Martin and Grube 1995). More recently, they have defined the existence of “Overkings” in such large cities (Martin and Grube 2008: 20).

Nonetheless, if Tikal defines the closer the Lowland Maya got to a centralized state, their integration and control of different small kingdoms did not resemble the mechanisms used by the later Aztec or Inca empires. Instead, control of resources and territories was achieved through a network of very weak political ties that were constantly reinforced by diplomatic moves, such as gift exchange, marriages and royal visits.

This “Superstate” pattern is also evidenced at the site of Calakmul, which grew in size and importance until it became Tikal’s main rival. Beginning at the mid sixth century, Tikal suffered various military defeats and for 130 years, no inscriptions or carved monuments were dedicated. Growing evidence points to the large city of Calakmul as the main perpetrator of these events, as it experienced a flourishing period during Tikal’s demise (Martin and Grube 2008: 40, 104-9).

Calakmul was the capital of *Kan*, the “Snake Kingdom”, and much like Tikal did it before, its rulers established a network of allies throughout the Maya Lowlands, but now covering a much larger area. Even some of Tikal’s previous allies, such as Waka’, and Caracol became vassals of Calakmul. It is clear now that by the beginning of the seventh century, the Calakmul kings expanded its conquests and alliances in order to isolate Tikal in all directions: Piedras Negras, Waka’ and La Corona to the west, Cancuen and Dos Pilas to the south, Caracol and Naranjo to the east, and probably Naachtun to the

north. There is also no doubt that the Snake Kingdom was also a high centralized state in its immediate region, but probably much weaker in its long distance alliances. However, by the reign of *Yuknoom Ch'een II* “The Great”, who ruled between 636 and 686 C.E., Calakmul dominated the largest territory in Maya history (Martin and Grube 2008: 56).

3.4.5 *The Rise of the Petexbatun Kingdoms*

For nearly four centuries, the “superstates” of Tikal and Calakmul dominated the political arena of the Lowland Maya region. During that time, almost each major site was direct or indirectly related to the political moves of each of these two cities.

Early in the seventh century, Calakmul had either conquered or allied most cities that controlled key resources and trade routes in the Maya Lowlands. Some years before the reign of *Yuknoom Ch'een II* “The Great”, the Tikal ruler *K'inich Muwaan Jol II*, founded the city of Dos Pilas near the Petexbatun lagoon, as a means to control the Pasion River trade. This was done through the establishment of a new dynasty, whose founder, *Bajlaj Chaan K'awiil*, was the son of the Tikal ruler (Guenter 2003). Fahsen suggests that he arrived at Dos Pilas in 632 C.E., at the age of seven, and was named king in 636 C.E., at the age of eleven (Fahsen 2002). Guenter (2003:7-8) argues that *Bajlaj Chaan K'awiil* performed a series of pre-accession rites between 632 and 657 C.E., indicated that he became ruler of Dos Pilas later on, well in his thirties.

Early in his reign, *Bajlaj Chaan K'awiil* dominated the main centers of the zone, likely Aguateca and Tamarindito. Other centers, like Itzan and Arroyo de Piedra, were controlled through marriage alliances. However, as part of the Kan kingdom expansion, *Yuknoom* “The Great” conquered Dos Pilas in 650 C.E., and its ruler *Bajlaj Chaan*

K'awiil ended as his vassal. By this time, Tikal was also attacked by Calakmul in 657 C.E. (Guenter 2003:18). Later on, under the Calakmul protection, *Bajlaj Chaan K'awiil* attacked nearer cities like Machaquila (664 C.E.) and even Tikal, now ruled by his own brother or half-brother, *Nuun Ujol Chaak*. However, he was defeated twice in 672 and 673 C.E., but Dos Pilas finally became victorious in 677 and 679 C.E., sacking the city of Tikal (Martin and Grube 2008: 57). Although there is no specific historical record, is very likely that Dos Pilas was aided by Calakmul in order to succeed in these military campaigns.

It was during this time that Calakmul also founded the site of Cancuen, becoming another strategic center to control the Pasion River trade route. The Upper Pasion Valley was previously controlled by Tikal, as evidenced by the three stelae at the site of Tres Islas, which dates to Tikal apogee around 455 C.E., and displays Teotihuacan imagery (Fahsen and Demarest 2001). Investigations carried out in Tres Islas suggest that it was a small ceremonial center without a residential area (Tomasic, *et al.* 2005; Barrios and Quintanilla 2007), and more recent researches in this zone possibly point to El Raudal as an earlier regional capital (Demarest et al. 2008).

The only epigraphic evidence of Cancuen's early years come from Panel 1, where it indicates the death of ruler *K'inich K'a Neel Ajk* in 652 C.E. at the site of Calakmul, and witnessed by *Yuknoom* "The Great" (Fahsen and Jackson 2001, 2002). This clearly indicates that at least this early Cancuen king ruled sometime in the first half of the seventh century, and that it was a vassal of the Kan Kingdom. Given that there is no previous significant settlement in Cancuen before the Late Classic period, it is assumed that the site itself was founded under the patronage of *Yuknoom* "The Great". Further

information on the panel supports this interpretation, given that the next Cancuen king, *K'ii' b Ajaw*, acceded four years later (December 9th 656 C.E.) at the site of Calakmul and in presence of *Yuknoom* “The Great” (*Ibid.*).

Lowland Maya political history during the Classic period changed dramatically in 695 C.E., when Tikal defeated its long time rival Calakmul, as part of a revitalization process led by ruler *Hasaw Chaan K'awiil*. Later on, his son *Yik'in Chaan K'awiil* defeated Calakmul again between 734 and 736 C.E. (Marcus 1993:152, Martin and Grube 2008:48,113).

As both “superstates” clashed in a series of direct confrontations, they lost their regional dominance and suddenly the Lowlands became filled with small kingdoms competing with each other for establishing new polities and controlling rivers and other key areas.

One of the cities that benefited from the Calakmul kingdom breakdown was Dos Pilas. During the first half of the eighth century, its rulers assured the control of the Petexbatun zone and expanded their dominion to the entire Pasion River. Dos Pilas third ruler, *Toh K'in K'awiil*, made two important political moves: first, he conquered the important center of Ceibal in 735 C.E., capturing his king *Yich'aak Bahlam* (Martin and Grube 2008: 61); second, around 727 C.E. he married a princess from the southern center of Cancuen, known as the “Lady of Cancuen”. Dos Pilas conquest of its major regional rival and the alliance with the most strategic trade center exemplifies how politics were handled by Maya rulers during the last half of the Late Classic period.

Dos Pilas rise in the Petexbatun zone depended heavily on military conquests, and as a result, local and older sites like Tamarindito and Arroyo de Piedra soon joined forces

to counterattack. The end of the short Dos Pilas hegemony was quick and violent, as the site was destroyed in 761 C.E., despite their last moment defensive efforts. Nevertheless, the royal family fled to the twin capital of Aguateca, residing for five more decades.

The small sites that were once dominated by Dos Pilas soon found themselves thriving as they controlled sections of the river. To the north, Itzan and La Amelia started to dedicate their own monuments (Martin and Grube 2008: 64), while Aguateca and later Punta de Chimino kept alive the Petexbatun dynasty with its latest rulers. Ceibal soon became the largest city of the Pasion River, flourishing for one more century.

To the south, Cancuen took advantage of its strategic location, developing not only a trade monopoly, but also engaging in craft production, mostly obsidian blades and other ritual objects made from raw materials coming from the highlands.

Taj Chaan Ahk was the successful ruler that established Cancuen as a regional capital for four decades, dedicating fine carved monuments and building his magnificent Royal Palace, Ballcourt and most of what we can see now at the site (Fahsen and Barrientos 2006). This particular moment is the central theme of this dissertation, because it is the context where the development of monumental architecture took place, mirroring the complexity of political strategies being implemented at Cancuen between 760 and 800 C.E.

Lowland Maya cities like Cancuen continued to develop a more decentralized system that kept centered on worshipping the *Kuhul* Ajaw, where the use of religion and ideology was the basis of political power. As stated above, this particular system originated at the end of the Late Preclassic and was responsible for most of the spectacular achievements of Maya Civilization. However, at the end of the eighth

century, the concept of the Maya city was in some aspects different from previous periods. The degree of centrality clearly diminished, if compared with the extensive dominions of Tikal and Calakmul. In addition there was more investment in architectural, sculptural and other artistic programs as means to support new leaders, meaning an increase in regional competition with other neighboring centers.

3.4.6 The Collapse of Classic Lowland Maya States

The process known as the Classic Maya Collapse would not have been so notorious and problematic if the population had not abandoned their cities forever. The term collapse should not be paired with end, given that most civilizations have experienced transformations after the failure of a particular political system. Nonetheless, the Lowland Maya did abandon their homes and ceremonial centers, and by the end of the ninth century, the population had decreased to less than 10%. Furthermore, this was not the final chapter of Maya civilization, given that northern sites like Uxmal, Chichen Itza and Mayapan flourished for four more centuries.

What makes the Maya Collapse so complex is that the process of political evolution did not happen at the same place, but in different regions through time. One important aspect of the Maya Collapse, if not the most important, is that it was a long and somehow slow process. The evidence shows a gradual abandonment that took between 100 to 150 years in each different region. Also, just like a domino effect, Lowland Maya cities fell one by one, and one after the other, not all at the same time. While the cities of the Usumacinta and Pasión rivers were the first ones to fall, the region around the Peten lakes and Belize coast were never totally abandoned.

Demarest and other authors indicate that the Maya Collapse did not start during the first decades of the ninth century (Demarest 2013b, in press; Demarest, *et. al.* 2004). Such a complex and pan-regional process began as the powerful superstates lost their hegemonies and the political organization broke into regional kingdoms, and finally divided into the small “petty states” or “micro states” of the late eighth century. This, also known as a “balkanization” process (Culbert 1991: 326; Hammond 1991a: 282), allowed sites like Cancuen to experience short and booming periods of intense political activities, conquests and artistic achievements.

In order to understand the apogee of Cancuen under the direction of *Taj Chaan Ahk*, it is important to note that its chronological context is precisely a period of increasing “political disorder” in the Maya Lowlands, which ultimately led to the referred “collapse”, as shown by Dos Pilas’ destruction in 761 C.E. at the hands of its former vassals. Even when cities like Cancuen took advantage of these early failures in the *K’uhul Ajaw* ideological system, their fate was already written, as they depended heavily upon the existence of other similar centers.

Finally, even when there have been significant advances in our understanding of the Lowland Maya Collapse, there is still much discussion about the primal causes for these “failures” and “political disorder”. Whether political or environmental, the general agreement now is that there was no single factor, but a combination of different causes. The question lies, in my opinion, in looking for internal or external explanations. If we define a collapse as a political transformation, then it is helpful to define internal causes that can be found intrinsically in the *K’uhul Ajaw* system, such as the heavy dependence in public performance and arts, which meant increasing investing in imported and exotic

goods, monumental architecture, carved monuments, military campaigns and prisoner takings.

Unlike most Lowland Maya sites, Cancuen presents good and direct evidence of its final days. *Kaan M'a'ax*, son of *Taj Chaan Ahk*, enjoyed a very short reign, as he, his family and the royal court were assassinated in one of the most violent events known in Maya history (Barrientos et al. 2005). This happened sometime around 800 C.E., probably perpetrated by a regional rival, just like it happened to their relatives at Dos Pilas forty years before. Evidence suggests that it could be the once vassal city of Machaquila, or one of the northern highland centers that were conquered by Cancuen during *Taj Chaan Ahk's* reign (Barrientos and Demarest 2007). Shortly after this shocking and tragic event, Cancuen was abandoned and never occupied again, leaving the last version of the Royal Palace unfinished. Consequently, Machaquila took over the control of the Upper Pasion Valley until around 870 C.E., and Ceibal and Altar de Sacrificios controlled most of the Pasion route until the early tenth century, being some the last Lowland cities to be abandoned.

CHAPTER IV

METHODOLOGY AND RESEARCH DESIGN

The discussions and analyses presented in this dissertation are based on field and laboratory data that were obtained from the investigations carried out in the royal palace of Cancuen. Most of the information was collected as part of the Vanderbilt Cancuen Archaeological Project, directed by Arthur Demarest and Tomas Barrientos between 1999 and 2005. Although in minor scale, research in the royal palace continued between 2007 and 2012.

Field research associated to the royal palace included mapping by Matt O'Mansky, Marc Wolf, Tomas Barrientos and Luis Fernando Luin. Excavation activities involved various archaeologists (Tomas Barrientos, Rudy Larios, Luis Fernando Luin, Michael Callaghan, Jeremy Bauer, Brigitte Kovacevich, Erin Sears, Jeanette Castellanos, Luis Romero, Claudia Quintanilla, Judith Valle, Edna Rodas, Paola Torres, and Mónica Urquizu) and students (Alejandro Seijas, Lucia Morán, Claudia Arriaza, Silvia Alvarado, Moisés Arriaza, Adriana Linares and Blanca Mijangos). Ceramics, lithics, bones and stucco recovered from these excavations was analyzed in the laboratory, by specialists like Cassandra Bill, Melanie Forne, Brigitte Kovacevich, Chloe Andrieu, Erin Sears, Erin Thornton, Claudia Quintanilla, Enrique Fernández, Amanda Winburn, Alan Robinson, and the team of the Fundación de Antropología Forense de Guatemala. Hieroglyphic inscriptions were analysed mostly by Federico Fahsen, though we have had important contributions by Marc Zender, David Stuart, Stanley Guenter, Sarah Jackson, and Dimitri Beliaev, among others.

4.1 Mapping

The royal palace of Cancuen constitutes a monumental building that is very prominent among the site's settlement. Nonetheless, it remained unnoticed until recently. The site maps produced by Maler and Morley only focused in the areas where they found monuments, and they did not include the palace (Maler 1908, Morley 1937-8). Perhaps, they did see it, but did not map it due to the lack of carved monuments.

The Harvard Seibal Project team produced the first map of the epicenter, though their short visit did not allow them to include many details, as well as the residential area around it (Tourtellot et al., 1978). For these reasons, Cancuen was defined as a small site, and its palace did not figure as a monumental construction.

The initial visits to Cancuen between 1996 and 1998 noticed the complexity and size of the palace, and its well preserved architecture. However, vegetation and other factors made difficult to completely understand its elaborated arrangement of structures and patios. In 1999, it required almost two months to clear paths that connected all areas of the Palace, and to identify its 11 patios, 23 structures, looters trenches and patches of exposed architecture. It was clear then that the Palace of Cancuen was one of the largest acropolis built by the Maya.

Formal mapping began in 2000 with the aid of a Total Station, and by the end of that year the first map of the royal palace was completed (O'Mansky 1999, 2000; Barrientos 2002). Patios were named according to their cardinal position and structures were numbered within the 250 x 250 m quadrants defined for the entire site (grid system coded with letters and numbers) (Figure 3.6). Vegetation clearing identified more than 100 corbel vaulted rooms in the different structures of the acropolis, and some spatial

patterns began to emerge as the map became more detailed. In the following seasons, mapping was focused on the external limits of the palace and its surrounding plazas and structures (Wolf 2003). The complete map of the site core also made possible to relate the palace with the ball courts, the causeway and other important structures. Mapping residential areas was also important, because it showed the centrality and monumentality of the royal palace, as the larger architectural group of the entire site.

The final version of the palace map was made by project artist Luis Fernando Luin, adding architectural details to the original map. Room size, stairs and other features were revealed as the excavation and restoration activities advanced. During the later stages of the restoration activities, Rudy Larios created elevation drawings for some structures, given his long experience with Maya architecture.

4.2 Excavation Design and Terminology

Palace excavations were carried out according to the Cancuen Project code system, defining “Operations” for each significant group or structure arrangement. Operations were numbered and suboperations (coded by letters) could be defined for specific areas of interest, such as individual structures or rooms. In each operation or suboperation, units (whether test pits or trenches) were defined by correlative numbers. To record the excavation contexts, lot numbers were defined, usually being correlated with level numbers. However, when a level had to be divided horizontally, the unit had more lots than stratigraphic levels. Within this code system, each lot was identified in the following manner: CAN 25C-3-2. CAN refers to the site name, 25 is the operation number, C is the suboperation number, 3 is the unit number, and 2 is the lot number

For the royal palace and its surroundings, a total of 25 operations, including 5 suboperations, were defined. Table 4.1 indicates operations and their units:

Table 4.1 Total of excavation units by operation, completed in the royal palace

Operation #	Location	Number of units
2	Structure L7-26, royal palace	38
3	Southeast Patio, royal palace	5
4	South Patio, royal palace	154
5	Main Plaza, royal palace	5
16	Structure K7-3	23
17	Structure K7-1	28
18	Structure K7-2	24
20	East Plaza drainage (surface material)	0
21	Northwest Patio, royal palace	2
23	Northeast Patio, royal palace	1
23A	East Corridor, royal palace	15
26	North Patio, royal palace	14
26A	North Lower Patio & Structure L7-1, royal palace	45
26B	North Façade & Structure L7-14, royal palace	11
26C	North Patio tunnels	4
27	Central Patio, royal palace	108
28	West Patio, royal palace	19
29	Structure K7-33, royal palace	23
31	East Patio, royal palace	23
33	West defensive wall	5
34A	South defensive wall	1
42	South drainage and pool, royal palace	22
43	Structure L7-27, East Façade, royal palace	64
59	Structure L7-22, royal palace	19

In total, 555 excavation units were excavated within the royal palace between 1999 and 2012. Most of these were 2 x 2 m stratigraphic or superficial pits, thus covering a rough area of 2,200 m² of excavation, which is approximately a 7% of the royal palace total area. Excavation in the surrounding areas of the palace included other 103 units located in structures K7-1, K7-2, and K7-3, as well as the exterior defensive walls, drainage canals and water cistern.

4.3 Excavations

4.3.1 Test Excavations

During the first four field seasons, test pits were placed in all palace courtyards, in order to identify architectural features like floors and fills, but mostly to obtain diagnostic ceramics that are the basis for our chronological objectives. Test pits were 2 x 2 m, sometimes going up to 10 m deep. The information gathered with these test pits included different types of clay and stone fills, as well as plaster floors and some burials (Kovacevich 1999, Barrientos *et al.* 2000a). Some test pits revealed fragments of plastered staircases and walls, thus suggesting the existence of various substructures (Callaghan and Bauer 2002).

In 2001, a more extensive test program was carried out with the aid of Rudy Larios (Barrientos and Luin 2001, Barrientos *et al.* 2002a). This second stage included the excavation of two trenches that crossed the palace at its central axis. One trench was dug in the west side and other one to the south. Later on, a third trench was excavated in the north section (Callaghan 2003) (Figure 4.1).

These non destructive trenches were 0.5 m wide, and its objective was to clean wall fall debris to expose floors, stairs and walls corresponding to the last construction stage. This innovative excavation method was created by Rudy Larios after many years of work in Maya architecture from numerous sites, and applied to Cancuen as a means to provide enough data for planning major extensive excavations. These trenches reduced the amount of architecture exposed by excavations, and were also done in a short period of time and with the least effort. Therefore, these trenches constituted a non-destructive way to approach a complex structure such as the Cancuen royal palace. The information gathered allowed to calculate time, resources, labor and other expenses for investigating the palace, through the selection of specific buildings to be excavated in more detail.

The test trenches provided important information concerning the variety of construction materials used in the palace (masonry types, variations in limestone sources, identification of sandstone and other types of rocks in construction fills, stucco floors, variations in clay fills, etc.) and the presence of modeled stucco decoration that had fallen from walls and cornices, as well as other architectural elements that laid on top of plastered plaza floors and staircases (Figures 4.2 and 4.3).

Excavation of staircases was also possible with these narrow trenches, making possible to define the ways that the different courtyards were connected to each other, and to speculate about the design and spatial arrangements of the palace. This was an important complement to the initial observations based in the preliminary maps and plans.

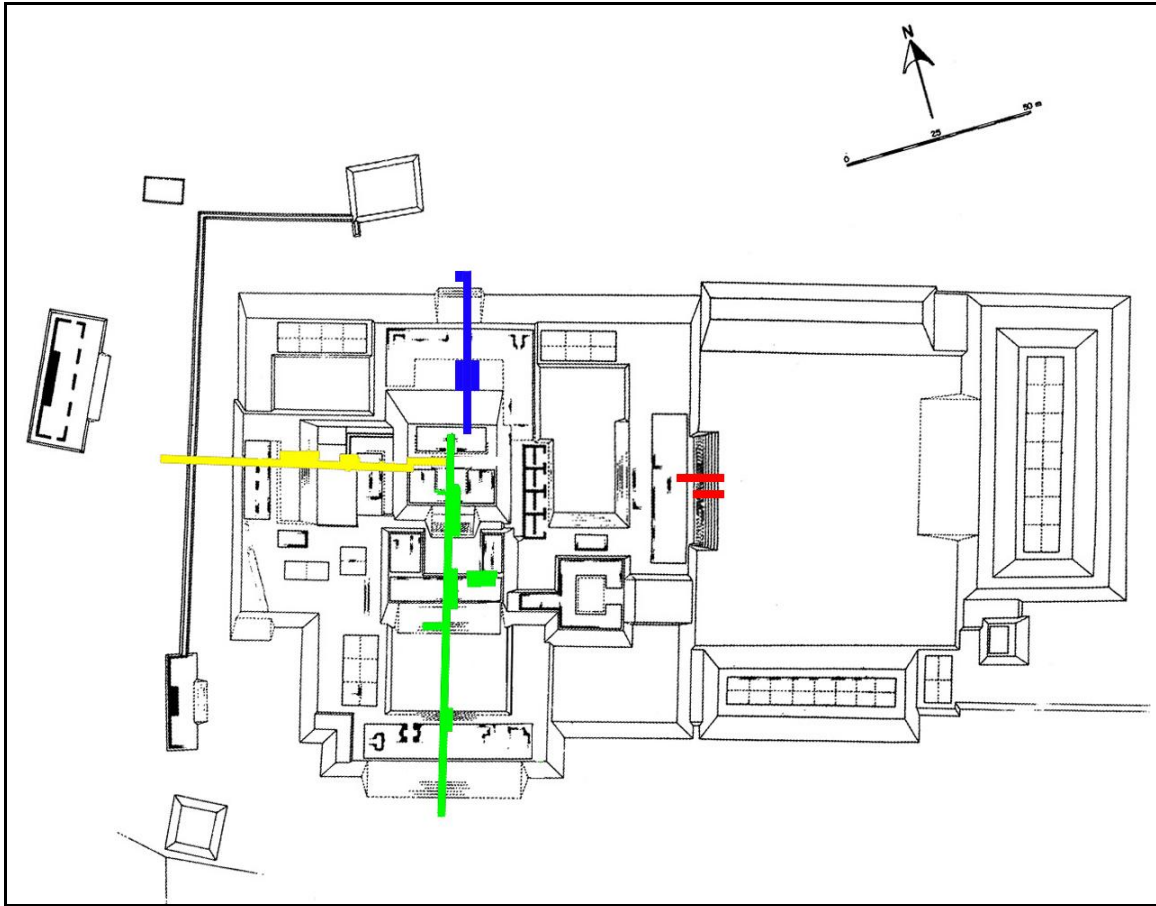


Figure 4.1 Map of the royal palace showing test trenches

4.3.2 Extensive Excavations

With the information gathered in test pits and trenches, it was possible to define the areas to be excavated in more detail. Beginning in 2002, the second phase of excavations included the South Patio, Southeast Corridor, North Patio, Lower North Patio, and Main Plaza. Restoration works focused in the South Patio. After 2005, excavations continued in the Central Patio, Northeast Patio, West Patio, and Main Plaza, with restoration in the Hieroglyphic Staircase and Palace Pool.

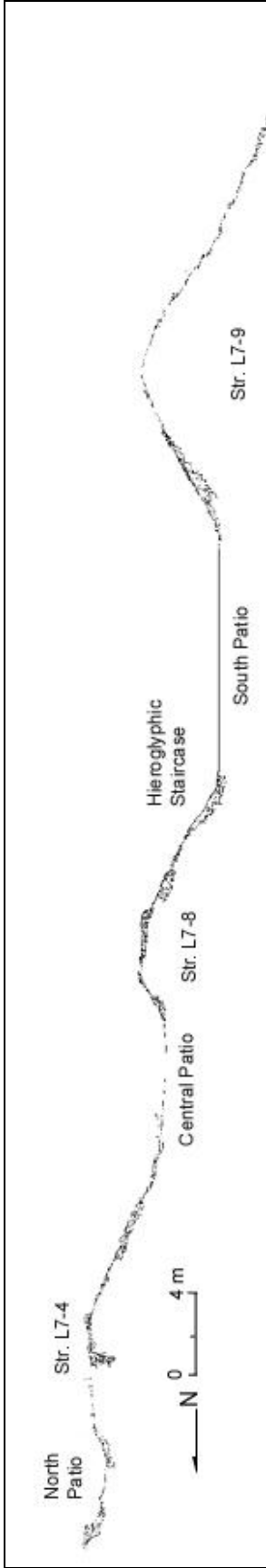


Figure 4.2 Profile of south trench

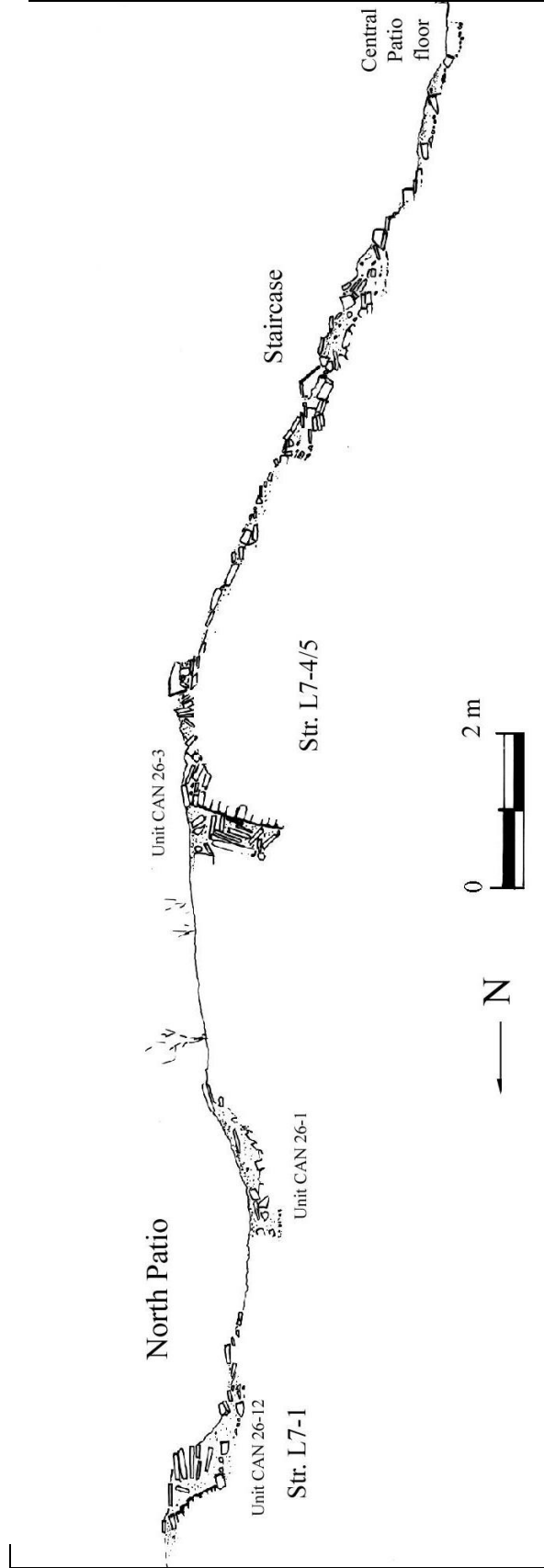


Figure 4.3 Detailed profile of South trench, showing sections of exposed walls, floors and staircases

Excavation of individual structures included: Structure L7-9 and substructures (Barrientos, *et al.* 2002b, Barrientos, *et al.* 2003); Structure L7-17-Sub-1 (Callaghan and Bauer 2002); Structure L7-1 and substructures (Callaghan 2004b); Structure L7-14 and substructures (Callaghan, 2004a); Structure L7-27 and substructures (Barrientos *et al.* 2005); Structure L7-8 (Romero *et al.* 2008); Structure K7-33 (Valle 2011, Rodas *et al.* 2012); Structure L7-22 (Quintanilla and Valle 2012); Structure L7-26 (Cambranes and Quintanilla 2013); and Structure L7-20 (Urquizu and Torres 2013). These excavations were mainly carried out through grids composed by 2 x 2 m units, which were laid out with the aid of a Total Station and tied to fixed datums. All archaeological materials were separated according to these units, and the majority of excavation units consisted in wall fall removal. The excavations also included looter trench cleaning, given that some rooms or chambers had its walls and other features exposed by these illegal excavations.

4.3.3 Stratigraphic Excavations

Some parts of the palace were investigated through deep excavations, in order to define the existence of substructures. The deepest pits were placed in the northern section of the palace, where it elevates more than 15 m. above the plaza floor. Other deep excavations were also needed in Structure L7-27 and in one room of Structure L7-9. All these units reached either sterile soil or architectural features. In addition to the stratigraphic pits, two tunnels were excavated in the central portion of the palace, as extension of 2 x 2 pits (Callaghan *et al.* 2004, Barrientos and Callaghan 2005). These tunnels followed floors and walls related to the earliest phase of the acropolis. Both pits

and tunnels exposed a series of floors and different types of construction fills, allowing a clear definition of at least three architectural phases.

4.3.4 Restoration works

Certain buildings of the royal palace were selected to be restored under the direction of expert Rudy Larios. The first one was Structure L7-9, which was partially restored between 2002 and 2004 (Larios and Barrientos 2003, Larios and Barrientos 2004; Barrientos *et al.* 2005). The Hieroglyphic Staircase and Palace Pool were restored in 2007 under the direction of Luis Luin and the local team of restoration workers and masons (Luin 2008, 2009)

4.4 Documentation and registry

All excavations were documented through photos and field drawings of profiles, plan views and other details such as *in situ* materials. Drawing scales were mostly 1:20 for general profiles and plan views, and 1:5 for detailed features. Profile drawings of large sections were tied to fixed datums, providing absolute coordinates and heights.

The excavation of single structures in this palace took more than one field seasons, mostly because the meticulous excavation and detailed registry of large amounts of fallen sculpture and stucco decoration found on top of floors and stairways, as well as beneath collapsed walls and roofs. The detailed registry of more than 5,000 fragments did not allow excavating large areas in short time, and forced the project to cover these areas in more than one season. This excavation methodology is very slow when is compared to the time standards defined by architecture excavation in other projects that are focused

only in restoration and reconstruction. In many cases, artifacts such as stucco fragments are not recorded in any detailed form and are taken out of their contexts, sometimes not even stored or just discarded. The benefits of the meticulous excavation carried out in Cancuen's palace is that it will allow specific studies about plaster composition, construction techniques, and the reconstruction of the original decoration of those facades and its symbolic interpretation.

Ceramics, obsidian, bone, figurines, shell and other lithic materials were stored in different size tyvek bags, and then shipped to the laboratory in Guatemala City. Modeled stucco required a more complex recovery and cataloguing method. Complete sculpture fragments were wrapped with materials like medical gauze, rice paper, aluminum foil, and inert synthetic fabrics and tissues like Tyvek, Geotex, Volara and Ethafoam. For larger fragment, casts were made of polyurethane foam, polynilic acetate, acrylic resin and dentist plaster. Storage and transportation required wooden boxes protected with Styrofoam (Larios 2002).

Individual stucco fragments were and photographed and catalogued with an individual code and number (e.g. CANE-57), applying the same system used for with complete vessels (e.g. CANV-78). Catalogued fragments were selected if they presented paint, recognizable iconographic elements, or were complete human heads, headdresses or other body parts such as hands or legs. Cleaning of these special stucco fragments required direct advice or intervention of conservationists Rudy Larios, Constantino Armendariz and Emily O'Brien, using acetone or deionized water, according to the case. Reconstruction was also conducted, using Acryloid B72 (acetone based) or Arcyloid WS-24 (water based) as adhesive and consolidant, given their reversible properties.

4.5 Laboratory Analysis

All materials coming from excavations were transported to the Cancuen Project laboratory in Guatemala City. Lithic, ceramic and bone experts analyzed the artifacts to define chronology, function, external links and other aspects. In some cases more than one opinion was gathered in order to obtain a better and more secure artifact interpretation, especially the identification of ceramic types or obsidian sources. Field drawings were also analyzed in order to correlate the different stratigraphic and extensive excavations.

Ceramic analysis in Cancuen has been carried out mostly by Melanie Forné, Paola Torres, and Cassandra Bill applying Type-variety and modal analyses; with the aid of Ronald Bishop, Michael Callaghan, and Jeanette Castellanos. Brent Woodfill and Mirza Monterroso's analysis of cave deposits in the northern highlands included identification of known lowland and highland types, and preliminary definition of new local ones as well. First, the use of type frequencies in excavation lots allowed building a preliminary chronology for the palace and the site (Bill 2001; Bill and Callaghan 2002; Bill *et al.* 2003; Callaghan and Bill 2004). Compositional analysis through Neutron Activation (INAA) also has helped to establish exchange and local production patterns (Bishop *et al.* 2005, Sears *et al.* 2005). Finally, the implementation of modal analysis allowed a better understanding of local and imported ceramics, defining different traditions that coexisted in Cancuen during most of its history (Forné *et al.* 2008, Forné *et al.* 2009, Forné *et al.* 2010, Forné and Torres 2011, Forné *et al.* 2011, Torres and Forné 2012).

4.6 Bibliographical Research

This dissertation contains an important comparative study of palaces around the Maya region and some other parts of the world, especially the Mycenae and Minoan civilizations of Ancient Greece. It also included the revision of diverse structural studies and models published by archaeologists, anthropologists, sociologists, historians and architects. Bibliographical research was carried out in Vanderbilt and Del Valle university libraries and the Cancuen Project Archive as well.

4.7 Final analyses and interpretations

This dissertation research has been based on a general inductive process since its beginning. Although chronological reconstructions have been based heavily on external data from other sites like Dos Pilas, Aguateca, Ceibal, Machaquila and Calakmul, the functional and structural interpretations originated primarily from field observations and empirical data.

Comparisons between palace designs and arrangements were avoided during the process of excavation and artifact analysis, in order to maintain objectivity and provide an independent perspective. The functional-comparative phase started only when data collection and analysis was already finished. Given that our knowledge of Maya palaces was very limited and incomplete at the beginning of the 21st century, it did not seem very helpful to try to apply previous interpretations in order to understand the palace at Cancuen. Also, given the high variability between Maya palaces, we were more cautious in preventing to fit Cancuen's data into models defined for other regions or sites. With

this in mind, we were headed to construct an original interpretation, though not necessarily unique.

As functional comparisons were made, some field observations have been confirmed as similar to other previous studies, sometimes matching with specific and general interpretations about Maya palaces use and function. Nevertheless, certain data recovered at Cancuen suggest different avenues in the way Maya palaces have been conceived, thus providing new contributions to this fairly new issue in Maya archaeology.

I believe that the inductive process of developing field observations before a comparative analysis has resulted in defining interesting points of view that could not have been possible if the research methods and analyses were adopted according to previous ideas or models.

Finally, the structural approach that constitutes the core of this dissertation is a contribution that is hoped to enrich future palace studies and interpretations. It not only acknowledges the limitations of Maya archaeology and the study of ancient architecture, but also looks to define and highlight the fundamental ideas and basic concepts behind other more specific archaeological models developed from anthropological theory.

CHAPTER V

THE CONCEPT OF STRUCTURE IN ANTHROPOLOGICAL THEORY

In order to interpret the role of a monumental building like the royal palace in Cancun, it is important to define the different anthropological concepts relating to the nature of social structures, as well as discussing the relation between social structures, and individuals. The concept of social structure has been present in anthropology and sociology from their very beginnings, making it necessary to present its development from the different theoretical tendencies of both disciplines, especially British structural functionalism, structural sociology and French structuralism, as well as more recent reformulations and postmodern concepts. These theories will not be covered in full detail, but only their postulates related to the definition of social structures and their analysis.

5.1 Origins and Development of Structural Analysis

The study of social structures has been covered by different sociological and anthropological theories, but the concept of structure in both fields has a common origin, dated back when these disciplines were being defined by the early social scientists of the 18th century enlightenment and their followers of the 19th century.

The concept of social structures originated when societies were defined as homogeneous systems, as postulated by Hobbes, Locke, Rousseau, Coulanges and Comte. Nevertheless, this approach was rejected by other social scientists, such as Montesquieu, Ferguson, Smith, Millar, Kames, Hume and Saint Simon, who argued in favor of the internal variability in societies. Later on, in the 19th century, Herbert Spencer

was the main advocate in favor of the systemic nature of societies. He defined three systems operating in any society: sustaining, reproductive and regulative. In addition, other scientists defined their own concept of social structure as they postulated different theories about the nature and evolution of societies. Among them, the most important were Marx, Weber, Durkheim and Tocqueville (Smith 1998, Crothers 1996).

In general, all forms of structural analysis have tried to isolate aspects of social life which are not clearly evident in its concrete manifestations, because they are embedded in, or combined with, other aspects of many different kinds. In other words, there has been an interest in decomposing social reality and action into means, ends, norms and conditions, through the analysis of the structural properties of groups and individuals (Cohen 1989: 233).

5.1.1 Marx's Concept of Social Structure

Karl Marx's focused in the study of political economy, and defined social systems as "social formations", which are the "structured relations between economy, polity and ideology" (Crothers 1996, Smith 1998). According to Godelier (1982), Marx's concept of structure was not about "a reality that is directly visible and observable, but a level of reality that exists beyond the visible relations between men". These structures were autonomous and functioned as a system of *constraints* to the people. Given his dialectic approach, a key element in social change was the contradiction within a particular structure (intra-systemic) and between structures (inter-systemic) (*Ibid.*). According to López (2003:59), Marx's economic determinism relies in a base-superstructure model, where the structure has a virtual character.

5.1.2 Weber's Concept of Structure

Max Weber studied the values, beliefs and meanings behind social structures, defining different kinds of social units, roles and structures of leadership. His own concept of social structure derives from the postulate that “any society is a historical structure continuously in process of change and development, due both to its internal dynamics and to its need to adapt to external exigencies of differing kinds” (Smith 1998). However, he never gave an explicit definition of social structure as a source of patterned behavior. Instead, he defined three distinct discursive vectors (López 2003:89):

- Social structure as the concrete historical configurations of patterned behavior which always escapes generalizing concepts and is subject to an infinite deferral
- Social structure as the effect of means-ends rationality
- Social structure as the institutionalization of the rationalizing and creative ethic associated with heroic actors

5.1.3 The Structural Theory of Durkheim

Following some of the main ideas of Spencer, the most important basis to the structural trend in anthropology and sociology comes from the work of Emilé Durkheim. Although he never defined social structure in a direct way, his theoretical approach viewed social life as an autonomous form of organized complexity, expressed through organic metaphors, such as social physiology, social organism, social life (collective representations), social knowledge (collective conscience), and social facts (the internal constitution of any group) (Smith 1998, López 2003: 36-42). His approach also defined the two main aspects of groups: social-organic solidarity and mechanical solidarity, the latter being expressed through the “pre-contractual” elements of social life, and the institutional phenomena of coercive and moral nature (Eisenstadt 1982). In general,

Durkheim was a theorist of structure and structural determination, privileging structure over agency (López 2003: 21). For that reason, he has been defined as the “most aggressive collectivist” of his time (Smith 1998).

5.2 British Structural Functionalism

In the early twentieth century, the ideas of Durkheim were developed by various British anthropologists, creating the structural-functionalist school. While some functional anthropologists like Malinowsky were interested in the role of individuals, others like Radcliffe-Brown, Fortes and Nadel gave structures a prime position in explaining the nature of societies (Crothers 1996).

Radcliffe-Brown was the main representative of the structural-functional tendency in anthropology, also called “social morphology” (Cohen 1989). For him, structures were “sets of relations between entities” and social systems were “networks of relations between kinship statuses that prescript the reciprocal roles that regulate interaction”. Within this scheme, individuals are key units of the social order and analysis, but their individual needs are irrelevant for the study of societies (Smith 1998).

Therefore, he follows the idea that societies are integrated wholes, connected by a definite set of social relations. Institutions are also key factors, because they maintain the “structural continuity” of societies. In terms of methodologies, Radcliffe-Brown believed that the observation of structures as part of individual practices leads to defining social structure forms or types.

Malinowski, even when he was mostly interested in the role of individual needs, recognized that the structure of a society consists in the interrelations of its institutions and their components. Institutions are thus “cultural and normative forms of organized action, legitimated by ideological charters” (Smith 1998).

The work of Nadel was directed to the study of network configurations abstracted from social interactions. The network analysis tried to define patterns of relationships linking social positions, in order to learn how network structures constrain social behavior and change. These patterns, argues Nadel, could be abstracted from distributions of relevant social phenomena, such as roles and relationships (Cohen 1989: 46)

Radcliffe-Brown and his colleagues were strongly criticized because their reliance in functional explanations, that viewed social phenomena more in terms of its consequences than causes; they never explained how collective patterns originate, or how structural properties emerge. The structures were thus conceived as something apart from the human activities that are subject to their influence. (*Ibid.* 72-4)

5.3 Structural Functional Sociology

If Durkheim’s ideas were applied by Radcliffe-Brown in cultural anthropology, its influence in sociology was through the work of Talcott Parsons. This theoretical tendency has also been called “Functionalist empiricism” (Godelier 1982), and defines social structures as an aspect of reality that exists in the human mind, which “orders the visible relations between men, and explains the logic of the complementariness of these relations”. Societies are thus functionally integrated systems that search equilibrium.

5.3.1 American Structural Functional Sociology

Talcott Parsons developed a “theory of action”, where societies are defined as self-perpetuating and functionally integrated institutional systems. While he looked for the status quo and the avoidance of conflict, his focus was the heterogeneous composition of societies. Societies, despite their tendency to equilibrium, are highly differentiated, with complex hierarchies of analytic subsystems defined according to four functional needs: goal formulation, adaptation, integration, and cultural latency (Smith 1998:92, Crothers 1996, López 2003:90).

Smith (1998:93) sees in Parsons’ model an interest in studying regulation and integration as functional prerequisites to social order. For analytical purposes, Parsons restricted his concern to institutional units, and treated institutional roles as manifestations of cognitive and value orientations that underlay social systems. Consequently, in a similar way as the British functionalists, institutionalized roles were defined as the essential elements for the self-created and self-regulating action systems present in any society. These roles owed their existence, scope, and effect to the functional requisites of the systems of which they are part. In other words, he defined function as the link between “static” social structure constants and social systems (López 2003:100). Berger and Luckman (1967) defined this approach as macro-sociological, given the major role of large-scale legitimating cultural structures, such as religion, which serve to secure the social structure. These cultural structures serve as a stabilizing factor; a system of mutual coordination of ideas, beliefs, expressive symbols and value-orientations. They are also expressed through shared and consensually accepted precepts and norms that order life and equilibrate and perpetuate the system (Bauman 1999: xvii).

Another important representative of the structural sociology is Raymond Firth, who defined social structure as an ideal model that people have of the forms of their societies, (the proper ways of doing things). He thus equated social structure with Radcliffe-Brown's concept of structural form (an enduring ideal pattern), instead of Radcliffe-Brown's empirical definition of social structure as a network of relations. In contrast, Firth saw social organization as the empirical way in which people actually pursue their various goals. He was concerned to locate actors as goal-seeking individuals at the centre of his model of society, which he regarded as the dynamic, self-modifying complex of activities, relations and interests of both individuals and groups (Smith 1998).

The normative functionalists like Parsons have been criticized by having an "over-integrated" vision of society, where actors are "functionaries" of social roles. In this sociological determinism, societies are self-forming, self-regulating and act for themselves (Parker 2000: 16-21).

5.3.2 Standard American Sociology (SAS): Robert Merton

The term Standard American Sociology refers to the adaptation of British structural-functional anthropology by American sociologists. This was an empirically oriented trend, based in surveying research and the definition and use of standard social background variables. Its main exponent was Robert Merton and some of its applications were associated to human ecology studies, such as Population-Organization-Environment-Technology (POET) and Resource Mobilization Theory (RMT) (Crothers 1996).

For Merton, social reality is inter-individual and super-individual but not supra-individual; meaning that social structures are not independent of individuals, like Durkheim, Parsons and Radcliffe-Brown had proposed (Sztompka 1996a). He was also more explicit in defining social structure, stating that it is something more than an aggregate of people and activities: “an organized set of relationships in which members of the society or group are variously implicated” (*Ibid.* 59)

Merton’s concept of social structure is distinct of cultural structure, because the first is a set of relationships, while the latter is a set of normative values. In Merton’s scheme, people are structurally located, anchored in networks of social relationships, where social status (defined as the position occupied by designated individuals) is the building core of the structure. Social relations are thus patterned, regular and repetitive, but not necessarily coherent and harmonious, because there are contradictory expectations (sociological ambivalence) and multiple incompatible norms. Regarding change, social structures evolve internally as ongoing adaptive processes; or the structures change themselves through amplification and accumulation of innovations or dysfunctions.

Within each structure, Merton differentiates the normative and opportunity structures, expressed as the appropriate vs. real behavior of people. He also defines the latent-hidden and manifest-visible levels of social structure, as two complimentary concepts.

As an analytical tool, Merton (1949) created the “Paradigm of Functional Analysis”, defining a pattern that provides the basic components underlying any variation among functional studies. He wanted to present “codified materials” for concepts, procedures,

and inferences over a range of problems from the requirements of functional analysis. He thus defined three main postulates for traditional functionalism:

1. *Functional Unity of Society*: The standardized social activities and cultural items are functional for the entire system.
2. *Universal Functionalism*: All social and cultural items fulfill functions.
3. *Indispensability*: All items and functions are consequently indispensable.

With his empirical approach, Merton was able to discern some variations within these postulates. First, if societies have some degree of integration, we cannot assume that all have a high degree; second, some social units can be dysfunctional; and third, there are functional alternatives, equivalents and substitutes in each social system. He also distinguishes functions according to their positive, negative (dysfunctional), or nonfunctional role, and in terms of intention, he divided functions as manifest (recognized by participants and intended effects) and latent (unintended effects) (Smith 1998).

For analyzing functional systems, Merton saw the importance of concrete and detailed accounts of the social mechanisms that operate to perform a function, as well as the study of dynamics and change of functions, through the concept of strain, stress and tension on the structural level.

Later in his career, Merton (1975) developed a second paradigm, the “Paradigm of Structural Analysis in Sociology”, which treated the diverse origins that antedate structuralism in order to converge the basic ideas of Durkheim and Marx. This new paradigm defined social structures as sources of conflict, generating differing rates of deviant behavior, and consequently, changes of and within the structures. His definition

of structures did not imply unified norm sets, but a sociological ambivalence between dynamic alternation of norms and counter-norms.

Other sociologists, like Marion Levy, Alexander, Faia and Habermas developed the ideas of Merton, especially his concept of function and dysfunction, and the multifunctional character of social structures, such as group membership. Levy Jr. defined five analytical structures of societies: economic, politic, kinship, educational and religious systems (Smith 1998).

As other functional theories, Merton's basic concepts have been rejected and reformulated as part of more recent structural studies. For some authors, the idea of functional needs, and the constitution of social systems as self-organizing collectivities, represents a form of functional teleology. As a reaction, structuration theorists have focused in what Merton defines as "intended outcomes", or the intentional actions of individuals in any society (Cohen 1989: 116-120).

5.4 French Structuralist Anthropology

During the decade of the 1960's, some French anthropologists leaded by Claudé Levi-Strauss developed the structuralist theory, based on linguistic concepts previously defined by scholars like Ferdinand de Saussure. Later on, structuralism was also applied in other disciplines such as psychoanalysis (Lacan and Kristeya), literary criticism (Barthes), and philosophy (Derrida and Foucault), as part of post-structuralist developments (Crothers 1996, Rossi 1982).

In general, structuralist theories try to define cultural and social universals by an application of structural linguistics to human culture. However, they differentiate culture

and social structure through the analogy with the significant and signifier concepts in language, respectively. They also redefined the term function, correlating it with the linguistic concept of sign (Bauman 1999: xxvii).

5.4.1 The Structuralism of Levi-Strauss

For Levi-Strauss, the concept of social structure does not correspond to an empirical reality, but to models that are built up after it. Structures are then mental patterns that create other ones like kinship and religion, among others. However, this definition of social structure disagrees with the functionalist theories because they exist inside the human mind, although they are visible as part of social relations (Godelier 1982). Structures are also defined as limitations imposed on a universe of possible events, a set of rules of transformation of, and between, groups of interrelated elements. They are expressed as a set of generative rules, historically selected by the human species, governing simultaneously the mental and practical activity of the human individual (Bauman 1999: 51-61).

While Levi-Strauss defines social structure as different from social relations, he recognized that social structures are systems made of interrelated and interdependent parts, and that there were “obvious relationships between the social structure and the spatial structure of settlements, villages or camps” (Smith 1998).

Several authors have criticized Levi-Strauss’ concept because it supposes that social structures are static systems and that the empirical society experiences no change. Thus, the structural models are abstracted in a determined moment and in a given social situation. If the reality modeled is a dynamic and changing complex, those static models

are then fictional. In sum, the debate over structuralist concepts started questioning if social structures are empirical realities or models created by the observer (*Ibid.* 21).

Other authors followed the original ideas of Levi-Strauss and defined their own concepts of social structure. Peter Blau looked for objective structural features in societies, thus defining social structures as the patterns, regularities and the configurations discernible, observed and detected in social life (Rossi 1982:49). Blau's concept of structure refers to the properties of an aggregate that are emergent and that consequently does not characterize the elements composing it. Hence, the structure of a group differs from the aggregate of its members. Emergent structural properties are thus the source of external constraint experienced by individuals, which condition the social environment, restricting people's free will (Cohen 1989: 72). Edmund Leach defined structure as an "ideal order which the mind introduces into things by reducing the multiform flux of reality to simplified images that give one a hold upon reality and make possible social action" (Godelier 1982).

5.4.2 Structural Marxism

One of the main developments of structuralism was structural Marxism, which looked to join the inherent aspects of functional and structural theories through the analysis of social relations as systems with an inner logic. This theoretical trend was a reaction to cultural ecology and cultural materialism, which were criticized by reducing all social structures as mere epiphenomena of the economy, which was also reduced to a function of adaptation to the environment (Godelier 1982: 275).

Structural Marxism goes beyond a pure structural analysis and morphology, taking into account functions as modes of articulation and conditions of transformation of the social structures within the concrete societies studied (*Ibid.* 285). Following structuralist concepts, structural Marxists define two levels of social reality: visible social relationships and invisible structures that create changes at the observable social level. Their emphasis is those hidden structures that are part of social reality, because they vanish behind forms or appearances of physical or social objects. Therefore, the study of these appearances does not provide a scientific knowledge of social reality (Giménez 1982).

The concept of structure includes a form of consciousness or spontaneous representations held by individuals whose activities reproduce the structure. Hence, the systematic studies of these representations, far from revealing the underlying logic of the structure, can only reproduce, at the level of theory, the internal functioning of the structure. This can also throw light on the study of its origins and subsequent evolution (*Ibid.*).

In general, structural marxism goes against pure idealist and humanist explanations, giving more emphasis on economics and social relations such as class conflict. Its two main proponents are Althusser and Godelier, whose definitions differ on their application of structural theory.

Althusser views the economy as key to create relationships between institutions and the basis for kinship and religion roles in society. However, he rejects the rationalistic, mechanistic and formalist tendency of structuralism (Giménez 1982). For him, social

formations are created through a historical and heterogeneous process of ideology development (López 2003).

On the other hand, Godelier favors a more mechanistic concept of structure, giving emphasis on social relations, defined as “relations of production”, as source of the kinship, religious and political aspects of societies. These relations determine the access and control of resources (means of production), allocation of the labor force and the access and control of the social output. The change of modes of production is thus regulated by the mechanic-automatic operation of the objective properties of their structures (Giménez 1982).

5.4.3 Symbolic Structuralism

This variant of the structuralist theory, developed by Piaget and Turner, does not favor the functionalist approaches to social structures. Instead, it focuses on the sacred as the crucial element in the construction of societies. Symbolic elements influence the ways in which the general functions necessary for the working of social systems will perform within any concrete setting (Eisenstadt, 1982).

Social order is thus represented by hidden structures formed by abstract principles and codes which tend to influence the organizational patterns of societies, cutting across changes in regimes, patterns or levels of economic development. The effect of these structures is shown through institutional processes and mechanisms, which provide the decisive principles of cognitive and evaluative organization of human behavior. If institutional similarities persist in the same society in different periods of its development, such continuity derives from symbolic orientations or codes that are

expressed through criteria of membership, regulation of power over resources, interrelations among institutional spheres, and legitimating processes (Rossi 1982).

Moreover, the relation between institutional rules, symbolic premises, and models of social structure involves elements of openness, choice and uncertainty. Prestige is the symbolic dimension of interpersonal relations and the structural principle which regulates membership, and has the potential to transform social order (Eisenstadt, 1982).

5.5 Postmodern directions: Structuration Theories

One of the most important developments of French structuralism have been the structuration theories defined by Pierre Bourdieu and Anthony Giddens in the late 70's, both heavily influenced by the postmodern intellectual movement. Compared to previous theories that favored strong structures and weak agents, they assume the existence of both weak structures and agents. More recent developments define structures and agents as strong and weak at the same time (Parker 2000).

Traditional functionalist and structuralist models had the tendency to rely on “the objective self-moving power of systems”, thus having an “anti-humanist” character. Based in the original postulates by Marx, Durheim and Weber, Bourdieu and Giddens were able to bring back human action as the source of social change. In addition, they incorporated ideas from other authors, like Shutz and Garfinkel, who define social systems as effects of agents, not the opposite (*Ibid.* 32-5).

The principle of structuration was defined as “the relationship between the subjective powers of human agents and the objective powers of the structures/realities they produce”. Hence, structures are not eternal, but exist in historical time and are the

products of particular historical processes. For analytical purposes, the creation of theoretical structures help to understand the world, inviting the investigation of their origins and structuration processes (*Ibid.* 1-6).

Both Bourdieu and Giddens agreed in various issues. First, they avoided the distinction between subjective and objective, because both were equally essential to understand societies. Second, they were against teleological models and defined human agency as the only causation in history. Concerning the concept of structure, they did not distinguish it from agency either empirically or experientially. Hence, the concept of practice was fundamental to their models, defined as the ongoing process which enables structure and agency to constitute each other simultaneously. For Bourdieu, practice becomes “habitus”, and for Giddens, “practical consciousness”. In general, both models restrict the force of structure in his contribution to human conduct, giving agency the power of weaken or strengthen the structures (Parker 2000). However, it is important to point that these two theories are not entirely similar. Some authors consider that Bourdieu’s model has a more sociological nature because he considers the existence of a collective agency, while Giddens avoided the importance of social structures.

5.5.1 Habitus and Constructional Structuralism: Pierre Bourdieu

The work of Pierre Bourdieu represents one of the first attempts of redefining the previous functionalist and structuralist paradigms, mainly through an epistemological and reflexive approach based on the analysis of classical texts, theories of language, and philosophy (Bourdieu 1977, Téllez 2002). As a result, Bourdieu developed a theory of practice that has been labeled Constructional Structuralism (Sewell 1992) and Social

Constructivism (Crothers 1996). Although he was a critic of the functionalist proposals of Parsons and Merton, he did not negate its intellectual importance, given that he recognized the existence of structures and the objective relations that condition social practices and representations (Télliez 2002: 40-5). In the same way, Bourdieu followed some of the basic ideas of the structural paradigm, sharing some basic concepts with Durkheim and Levi-Strauss. Following Durkheim, he favored rationalism and refused pure theory, defending the undividedness of social sciences and the use of ethnology as a privileged device for indirect experimentation (Wacquant 2000).

Bourdieu rejected a subjectivist approach because its failure to account the close connection between the objective structures of a culture, on one hand, and the specific tendencies, activities, values and dispositions of individuals, on the other (Webb, Schirato and Danaher 2002: 33, Tellez 2002). The objectivism of structuralist theory was then adopted by Bourdieu, who followed some of its main insights. The first one is that people more or less reproduce the objective structures of the society, culture or community they live in. Second, the objective structures produce reality in the sense that sign systems determine how people perceive the world. Reality is both produced and delimited by whatever signs we have at our disposal. And third, reality and people are processed through the meaning machines that constitute our sign systems; every object and idea only has a meaning in relation to other elements in that culture (Webb, *et al.* 2002).

Bourdieu's main contribution to the structural paradigm can be summarized by the creation of three important concepts: habitus, field, and capital. They constitute what is arguably the most significant and successful attempt to make sense of the relationship between objective social structures and subjective everyday practices (*Ibid.*).

Undoubtedly, Bourdieu's more relevant concept is the "habitus", which is defined as the mediation that causes an individual agent's practices. In his words, the habitus is:

"the subjective but non-individual system of internalized structures, common schemes of perception, conception and action, which are the precondition of all objectification and apperception; and the objective co-ordination of practices and the sharing of a world view...founded on the perfect impersonality and interchangeability of singular practices and views (Bourdieu 1990: 60)

According to Bourdieu, the different individual habitus are also variants of a collective habitus, which explains, in part, the harmony and similarities between individual behaviors that belong to the same social category (Télez 2002). For Bohman (1999: 133-4), the concept of habitus has functionalist roots, because it is indirectly reconstructed through its effects upon actions. It is thus a "pre-strategic basis of strategy", that is both the shared "cognitive structure" and the "socially structured situation" in which the agent's goals, interests and positions are defined. All strategic aims will always be "variants" of the collective habitus. Cultural constraints on agency constitute the very identity of social agents, to be stronger than those imposed through regulative norms or sanctions. Bourdieu then follows a typical functionalist reasoning in explaining phenomena in terms of social effects, without providing any specific mechanisms for how these effects are produced. Therefore, cultural constraints and socializing institutions enable, rather than limit, the use of practical abilities.

The other key concept developed by Bourdieu is capital and its different manifestations: economic, political, social and cultural-symbolic. The latter corresponds to material things which can have symbolic value, as well as untouchable but culturally significant attributes such as prestige, status and authority (Webb, *et al.* 2002). In consequence, the act of legitimating is a conversion of all capitals into symbolic capital.

It masks, justifies and recognizes authority through an ideological work that is not a lie or a theatrical setting, but a setting where the dominator also believes in the truths that support its domination, expressed in ideological and symbolic constructions, such as religion. Bourdieu also defines the term “social space”, as the economy where the exchange of symbolic goods or capital takes place (Téllez 2002: 89).

The third concept is the social-cultural field. For Bourdieu, these fields are dynamic and structured social spaces such as institutions, rules, rituals, conventions, categories, designations, appointments and titles which constitute an objective hierarchy which produce and authorize certain discourses and activities. They are integral systems of positions where social agents relate, and are made up not simply of institutions and rules, but of the practices and interactions between them (Webb, *et al.* 2002, Téllez 2002). In this scheme, cultural fields are an expression of particular social structures that work behind them. These structures include the values, ideas, desires and narratives produced by, and characteristic of, cultural fields and institutions (Webb, *et al.* 2002).

Some followers of Bourdieu’s model argue that even when representation and symbolizing are results of dynamics in fields and institutions, they do not depend on individual or particular decisions. Social institutions are instances of power whose main function is to institute reality and officialize facts and relations, through acts of legitimation (Téllez 2002). The role of rules, is argued, represent both an explanatory hypothesis to explain reality and the principle which really governs the practice of individuals. A certain number of regular patterns of behavior are the direct result of a will to conform to codified and recognized rules, but regularity is also the product of the rule, and obedience to the rule is an intentional act, which implies individual knowledge and

comprehension of what the rule says (Bouveresse 1999: 46-9). Bohman (1999: 148-9) suggests that Bourdieu ignores second-order practices such as public character formation; instead, he defines three simultaneous dimensions of practical reason that are required in public institutions and pluralist societies: intentional, regulative and constitutive.

5.5.2 Agency and Structuration: Anthony Giddens

The theory of structuration developed by Giddens was based in the reexamination of functionalism and structuralism, incorporating theories that stressed meaningful and voluntary action, but mainly individualism and agency. For Giddens, social structures supply materials to produce practices, but they are reproduced themselves through these practices. The structure is a system of interaction, and comes alive with the practices embodied in the mind, produced as an unintentional by-product of concrete types of human activity. While his version of social structure is visible only in micro-situations, his theory leaves room for more general macro-level accounts of social structure (Knauff 1996, Cohen 1989: 198).

Structuration theory was concerned with the generation and sustaining of social patterns and to correlate structure with action. Social life is generated in and through the concept of social praxis, defined as the nature, conditions, and consequences of historically and spatio-temporally situated activities and interactions produced through the agency of social actors (Cohen 1989: 2). This concept of social practice represents a dual concept of structure, which tries to reconcile action and collectivities in a bidirectional way, where structures are both medium and outcome of the reproduction of

practices. Hence, human agency has power of structuration, shaping the structures through resisting and manipulating structural constraints (Parker 2000: 7).

Even when Giddens focused on individual agency, he did not reject the principle of uniformity or social regularities or the importance of social institutions. For him, institutions were routinised practices that are carried out or recognized by the majority of members of a collectivity, not just concrete forms of social organization. In this scheme, societies have systemic patterns that are stable, organized and permeable, which are integrated at the individual and the collective level (Cohen 1989: 28-39). Giddens defined integration as the regularized ties, interchanges and reciprocity of practices between actors or collectivities, which is not necessarily synonymous with cohesion or consensus (Haugaard 1992: 94). When approaching collectivities, he also identifies two main properties: rules and resources. Rules are structural properties of social collectivities that are manifest only when institutionalized practices are reproduced. They enter into the reproduction of institutionalized conduct in routine activities and in considerable periods in the history of the group. For this reason, it is important to have historical documentation in order to reconstruct the structuration processes of a society (Cohen 1989: 47).

For Giddens, social systems also follow concrete patterns of interaction, where the social structure represents the normative and semantic rules. Taking the previous concepts, systems can be defined as interconnected or articulated series of institutionalized modes of interaction constantly reproduced across time and space, but also coordinated, organized and controlled through social practice. Therefore, systems are not structures, but exhibit structural properties in the procedures whereby they are

reproduced. Structuration is then, the simultaneous reproduction of structure and systemic relations (*Ibid.* 87-8, 114).

Following the previous statements, structuration theory should not be viewed as a form of methodological individualism, because agents can engage in the reproduction of systems only as they undertake institutionalized modes of conduct (routinized practices). History is thus not directly willed by actors, but is the unintended consequence of the multiplicity of their intended acts (Parker 2000: 55). Yet, Giddens denies any collective intentionality or rationality (Bourdieu's collective habitus) (Cohen 1989: 123-4).

Giddens also approached the field of social organization defining two types of systems: homeostatic and intentional. The latter can also be divided into reflexive regulated and self-reflexive regulated. In these two, an intentionally established apparatus serves to coordinate systemic activity. It is an institutionalized set of activities that is maintained through the intentional doings of agents but the outcomes may or may not conform to these intentions. They also need a group of leaders to coordinate and control needs formulated by superordinate agents (*Ibid.* 137-9).

In addition, Giddens recognized the existence of three types of structures: signification (symbolic), dominating (political and economic) and legitimating (legal). The first is the one that prevents individuals from making, or even considering, certain decisions or courses of action. All these structures control two types of resources: allocative and authoritative. The first one corresponds to material phenomena, technology and produced goods, while the second is expressed as management and organization of people at the individual, group and regional level; and most important, organization of self-development and self-expression (Cohen 1989: 154-58, Haugaard 1992: 96-113).

Another important factor in social organization is the process of legitimating, when power holders create “symbolic orders and codes” in order to maintain advantage positions. Face-to-face interaction is also important between high ranked officials, as well as control of information (Cohen 1989: 183-88). The structures of signification and legitimation are “stretched” over time and space through both conflict (sanctions in the mobilization of structures of domination) and consensus (manifestation of mutual recognition of interpretative schemes and norms) (Haugaard 1992: 94).

Furthermore, Giddens defines the importance of spatial contexts or social locales (called “fixity”) that play a role in the reproduction of social systems. These are material circumstances that shape and constrain opportunities for interaction (Cohen 1989: 109).

More recent developments of structuration theory point out that Giddens’ model lacks a clear link between structure and agency. Though he relied on the concepts of “social position” and “social roles”, various authors think that it is the weakest point of his theory. Other critics also indicate that his conception of collectivity and the constraints of social life are poorly defined. In this matter, Giddens recognizes three types of constraints: material constraints, negative sanctions and structural constraints (*Ibid.* 207-215).

5.6 Recent structural theories

The models proposed by Bourdieu and Giddens heavily influenced the different fields of social sciences, particularly cultural anthropology. Nevertheless, by no means their proposals represent the final word in terms of structural analysis (as been assumed by many archaeologists). The ongoing debate over structure vs. agency; choice vs.

constraint; and freedom vs. determinism and regulation, have continued as the social scientists revise and reformulate all the previous functionalist, sociological, structuralist and structurationist models. These have been called post-structuration theories (Bauman 1999, López 2003, Parker 2000) and will be described according to their contributions and complements to previous concepts. Some authors even consider that postmodernism brought a new vocabulary and theoretical understandings to previous postulates, but no solutions or new ideas to the general structural paradigms. For example, terms like “social imaginary” correspond to *myth*, “discourse” to *discussion*, and “narrative” as *common understanding* (Berger 1995: 11)

The recent developments in social structure theory have taken a multidisciplinary trend, borrowing ideas and concepts from other fields, such as network analysis, exchange theory and game theory. In a way, some authors have tried to revive the interest in social structure as a reaction to the postmodernist denials of its importance (Crothers 1996: 65). In general, this return of a structural level of analysis considers the importance of the collective level of social life, where people’s behavior arises from their position in the social structure. This does not negate the role of individual agency proposed by Bourdieu and Giddens, because it has been showed that these do not necessarily have to negate the existence of structures. Instead, the idea is that they complement each other. In addition, the new structural models look for more empirical data to rely on, taking variability into account.

It is important to note that, as previous theories have shown, the definition of social structure maintains a high degree of variation and disagreement. Some still define it as multidirectional *relations* among people, things, groupings and institutions, which

show how the social behavior, attitudes, attributes and trajectories of individuals (and the social groupings they are involved in) are shaped (*Ibid.* 4). In a similar way, it is also defined as the organized set of *social relationships* in which members of the society or group are variously implicated.

Other definitions view social structure as organization of parts, persons or institutions, with given needs and capacities, interacting one with each other. It can also be an arrangement of positions or statuses created and maintained by a network of relationships among persons or actors (*Ibid.* 6).

In addition, some recent approaches have added interesting issues when analyzing social structures: variability, operation at various levels, and a wider range of content and differences in degree of incidence on individual agents. This has enabled new studies concerning the concept of social grouping and its historical trajectory, as well as the internal positions and relations of social structures, their economic base, political power, cultural legitimacy, demography, social and ritual life, relations to other groupings, leadership, organizations and networks. Social grouping are thus defined as groups or categories of persons with specific roles when the persons have, by virtue of their roles, a distinguishable similar location, and a common interest, although they may vary in composition, activities, and relationship with their settings (*Ibid.* 4).

As expected, social structures have been conceptualized as part of reciprocal processes, shaped by the feedback with individual participants. Within this framework, social structures are strategies that maintain and/or change themselves, and that contribute to create cultural or ideological structures (*Ibid.* 29).

Concerning the relation between ideology, material culture and structure, the debate has been revived through the original ideas of Marx, Weber, Alexanders and Bourdieu. While there has been a lack of consensus in defining social structure (relations, patterns, systems, configurations, etc), cultural structures are generally understood as systems of symbols. When relating both concepts, social structures are thus constituted through culture, and culture is also structurally constituted. In other words, culture is not epiphenomenal or instrumental, but essential as agent in the formation of social structures (Rubinstein 2001: 2-14). The concept of culture is thus analogous to the notion of “superstructure”, or the ideas behind a particular social structure. If social structures can be *similar*, cultures can be *common* (Crothers 1996).

In sum, there has been a new questioning in the origins of social regularities. The arguments are based on the persistence of structures over time (not dependent on identities), their aggregation (similar and common results) and their experience as objective facts external to individuals (*Ibid.* 62-4).

5.6.1 Systemic Agency

Archer has proposed a concept of social system that is independent from social action but different than the functionalist self-perpetuating model. Hence, systems are autonomous, preexisting agents and are causally efficacious, and the relation with agency is conditioned by temporality and history. This macro-sociological model refuses the individualist approach, defining a three-level cycle: structural, cultural and agential. Structure thus “constrains agency by setting opportunity costs for agents and by

presenting them with situational logics, which provide them with strategic guidance” (Parker 2000: 71-81).

Mouzelis also advocates an objective concept of structure and social reality, resisting reducing collectivity to individual action, and giving importance to large-scale historical developments. He combines the ideas of Marx and Parsons to define the way that collective organizations depend equally on economic, political and cultural conditions. Based on theory of organizations, he defines institutions as relatively fixed, with a relative autonomy of levels in a hierarchy, where each level gives a different degree or power of agency. Within this scheme, he defines “macro-actors” as the collectivities with positions in hierarchies that have the power of agency (*Ibid.* 89-101)

5.6.2 Restructuration Theory: Power and Agency

Restructuration theory is a reconsideration of some of the main arguments of structuration models, and the analysis of the relationship between conflictive and consensual power produced by agents, and its association with structural constraint and control (Haugaard, 1992: 2).

The concept of power was first approached by the functionalist theorists, such as Parsons. For him, power is not attributable to individual actors but it is a systemic effect. Power “over others” emerges from social structures, and power “to do” is derived from the social system. It is thus a phenomenon of the social system as a whole, produced in order to realize systemic goals. Politics, defined as the institutionally right of leadership, is the ability to draw upon collective obligations in the pursuit of collective goals, and act as a functional subsystem of a society, parallel to the economy. As a pure functionalist

argument, Parsons only portrays power as a consensual normative phenomenon, but does not deal with illegitimate and conflictual power (*Ibid.* 25-39).

In the same direction, Jessop favors a model of structural rigidity and determination, where constraint operates at two levels: production and reproduction of a system of structures as a whole, and the actual contexts of practices. The problem with this model is that it separates practice and social systems and structures during the production of power (*Ibid.* 43-8).

Clegg uses conflict theory to define episodic power as the momentary exercise of power, and dispositional power as the power which actors possess. Power at the agency level is thus episodic, while dispositional power is manifested by the rules and disciplinary practices. Given that this scheme is similar to Giddens' concept of structure, it fails to show the link between power and structure and episodic vs. disciplinary power (*Ibid.* 51-61).

For Giddens, power is related to both structural and systemic aspects of social life: "power to" and "power over". Restructuration theorists claim that he fails to distinguish between rule-governed habitualized patterning of individual acts and the necessary interactive conditions inherent to the creation of socially systemic structures. In consequence, Giddens' structuration theory lacks certain necessary mechanisms for analyzing changes in system organization (*Ibid.* 97-110). According to Haugaard (1992: 112-119), things and objects are only power resources to the extent to which they are systemically structured. Hence, if both allocative and authoritative power resources are structurally constituted, structural constraint is fundamental to their continued maintenance. In other words, there can be no such thing as unstructured power resources.

Also, Haugaard adds that power has an enduring existence in time-space, converting social systems as storage containers of power. Being as a storable flow, power becomes an almost metaphysical force that is conceptually divorced from individual action.

After pointing out some critics to previous theories about structures and power, Haugaard defines the principle of restructuration theory: the actor is no longer who decides if his or her action will contribute to system reproduction. Even when structuration is necessary for structural reproduction, it is not a sufficient condition. The relationship between power and structure is not perceived as synonymous with the relationship between agency and structure. Recreation of rules is not the same as the reproduction of structure, because rules are only converted into structures when they are verified by others.

Restructuration then, contributes to the creation of social structures and the reproduction of the social system, only when it produces social power expressed as a structurally defined set of regularities. Social power also means the ability to achieve a goal through a restructuration process, which includes different levels of mutual and consensual trust. The ability of actors to restructure is thus linked to their capacity to read social order in a common manner, derived from a shared social reading of the rules governing social praxis. If social structures determine who is powerful and who has power resources, these can be manipulated in order to influence the balance of power between actors within a system. In the same line, destructuration is defined as the failure of structural recreation, which implies the inability to realize power. (*Ibid.* 135-161, 203, 235-6).

An alternative, but similar way of approaching power and structure, is the dialectic approach of Lukes. He puts power and structural constraints as opposite ends of a continuous spectrum, thus avoiding the concept of agents without internal and external structural limits, or structures without agents. In other words, he differentiates power from structural constraint using the basic opposition between structure and agency. Hence, agency pertains to contingency and structure to determinacy (*Ibid.* 42).

5.6.3 Relational-Transformational Structuralism

This is an attempt to coordinate the French structuralism of Levi-Strauss and Piaget; the Structural Marxism of Chomsky, Godelier and Althusser; and the American empirical structuralism of Parsons, Merton and Blau (Rossi 1982). The starting point of these forms of structural analysis is the search for the deep logic, organizing principles, and compositional laws of empirical phenomena. Nevertheless, the relational-transformational structuralism objects the traditional structural dichotomies of internal vs. extra-mental, objective vs. subjective, static vs. transformation, and structural vs. individualist. Following the same lines as the structuration theories, this model tries to bridge these oppositions through the concept of praxis or practice. For that matter, it applies semiotic concepts in order to define the interaction between unconscious structures and what they call relational structures, which are matrices that generate an indefinite number of continuously evolving structures. These structures have dynamic qualities, showing changes in their syntactic order, which are produced by subjects. Any subject could contribute to the actualization of a given structural context and can be seen as an operative principle in the development of new structures (*Ibid.*).

5.6.4 Structural Idealism

Structural idealism is an attempt to bring together the concepts of Weber and Giddens with Collingwood's idealist theory, which result is an explanation of human action in terms of the "structural ideals" that actors bring to any situation, which are themselves conditioned by the social structures created by previous actors. The concept of structural ideals, somehow similar to Bourdieu's habitus, are thus defined as the ways in which values are applied by human actors to social interactions insofar as these interactions result in explicit or implicit forms of social structure. As similar to Weber's ideal types of authority, structural ideals can be moral, aesthetic, legal, economic, etc, but all involve some sort of value judgment (Mann 2002: 2-12).

The conception of social structures include a material base, in the way that economic arrangements are constituted, but their expression is through the collective and shared ideals that constitute social reality for a group of actors. Structures also operate through structural ideals, where action and structure dialectically presuppose each other. Action is not a series of discrete acts, but a continuous flow of conduct, which aspires towards ideals that are both individual and structural (*Ibid.* 47-50).

Following the symbolic structuralism of Turner, ideology is defined as one of the principal means by which unconscious assumptions about social life enter the conscious world of interactive discourse. Therefore, people have real restrictions imposed on them, by both the social structures they live and work within, and the structural ideals of other people that shape their own ideals and consequently, their behavior (*Ibid.* 68-9).

5.6.5 Multifunctional Structures

One of the most important of the recent studies on social structures is the work of Michael Smith (1998). He conceives social structures as empirical realities in the interactions and relationships of human populations, rather than imaginary constructs that distort reality by accentuating and abstracting one of its aspects to the exclusion of others. Instead of a functional or causal analysis, he seeks to define the *relations of logical necessity* in the construction, articulation and operation of social units and relations, and the *relations of logical priority* in order to identify and derive links between antecedent, simultaneous and subsequent states of a given structure or process (Smith 1998: 21, 39).

His method for translating empirical phenomena into appropriate abstractions is based in the study of their composition and relationships, and understanding at a conceptual level, how they articulate as principles, requisites, or implications. As a result, Smith defines social structure as the *set of social collectivities, units and relations* which gives a society its characteristic and enduring form, boundaries, organization and processes. Its more elementary units are social status and social role. The latter is defined as the culturally appropriate sets of behavior expected of persons who hold particular statuses in their interactions with specific others. They are variably institutionalized and sometimes loosely defined, but always attached to some defined social status (Smith 1998: 91, 112).

Following the same trend, he defines institutions as established laws, customs or forms of action (practice) that are either a collectively sanctioned authoritative rule of conduct, or the standardized form of behavior practiced by a people. Hence, the role of institutions is to validate social status and roles through social sanctions or institutional

norms that prescribe appropriate behavior. These forms of behavior or rules of conduct become normatively correct, legitimated, and public sanctioned only after a gradual acquisition of sufficient popular acceptance, currency and observance (*Ibid.* 46, 95).

The institutionally established status and roles are thus components of larger bodies or institutional structures, such as the market, the polity, or the kinship system (*Ibid.* 82-3). In addition, Smith also defines the “resilient” abilities of societies, that is, their ability to absorb and adjust to external and internal change. This resilience depends on the nature, proportion and relations of its strongly and weakly institutional and non-institutional components. As the critics of functionalism have always argued, perfectly institutional, functional coherent and closed societal structures would have a great difficulty in adjusting appropriately to abrupt important changes (*Ibid.* 112).

In order to analyze the properties of these macro-institutional structures, Smith proposes a multifunctional approach. Instead of the causal analyses that attribute particular functions to specific structures or events, each structure has functional equivalence and substitutability with others (*Ibid.* 29-34). Smith also considers the diachronic limitations of structural analysis, because social structure models are mostly static and based in an ethnographic present. However, he believes that we can create dynamic structural models, always recognizing that they will be temporarily imperfect (*Ibid.* 22).

5.6.6 *Sociology of Culture*

The sociology of culture, proposed by Berger (1995) is based on the premise that meanings contained in distinctive cultural forms are resilient. They are reproduced and

survive, persist, and change only through *the actions of groups of persons* who “carry” culture from one generation to the next. This branch of sociology pays attention to the interpretation of meanings from symbolic patterns and contingencies of social structures and their effects on cultural forms and on the actual distribution of symbolic culture in human groups. It also identifies the persons and groups, situated in time and place, whose changing constraints and incentives do or do not provide opportunities and motivation to carry those meanings successfully through time, perhaps against the motivated opposition of others (*Ibid.* 62-3).

Contrary to postmodern agency and practice theories, this is a type of determinist sociology that searches for the relations between social and symbolic structures, and how cultural predispositions are implicated in shaping social locations. It claims that no society can endure without some hegemonic culture; without it, routine interaction and ordinary civil discourse would be inconceivable. Hence, there is an inherent tendency to social equilibrium; the transformation of hegemonic culture into diverse ideologies is usually accompanied by an opposite process in which, over time, some ideologies win sufficient allegiance to approach newly hegemonic status (*Ibid.*133-134).

Concerning human action, people are considered as actors or instruments of a script written by others, but these actors may improvise, alter the text or bring interpretive originality, which may eventually become part of a tradition or customary practice. If social order makes most of our lives reasonably predictable, unpredictability is thus found at the most macro and micro ends of the continuum of interaction (*Ibid.* 3-5). On agency, Berger (1995: 137) states that we don't have culture unless it has us. Agency is married to structure, is a part of “structure-as-practice” interaction. It is true that people

are not cultural dopes, but they do not always know the meaning of what they do. Hence, originality exists only as “permissible”.

The concept of culture is fundamental to this model. The traditional definitions in anthropology define it as practices, customs, objects and ideas, a concept that is somehow analogous to social structure. In a sociological perspective, culture is abstract ideas (norms, values, style, strategies, etc) and the symbols that imply or represent them. For Berger (1992: 30-32) cultures are sets of shared meanings associated with customary practices. If culture can become conscious and deliberate, it is also largely implicit, traditional, deep and constituted by presumably shared and unspoken meanings; a kind of tacit background knowledge that creates orderly and customary interaction. Furthermore, ideal culture is defined as the behavior that the culture prescribes or how real behavior is actually distributed among a population; while ideology is the ideas that are consciously and deliberately used for promoting and defending the legitimacy of group interests and practices (*Ibid.* 35).

5.6.7 Postfunctionalism

The development of functionalist theories began with the works of Radcliffe-Brown and Parsons, and was characterized by the definition of “functional requisites” or teleological universal functions that searched for homeostasis and equilibrium in society. The functional analysis of Cohen and Merton was more analytical, based on a logical approach and consequence laws, incorporating evolutionary biology concepts. This latter was further developed by Michael Faia, who defined a dynamic and adaptationist functionalism characterized by dynamic equilibrium and the search of survivorship and

continuity. The conception of postfunctionalism has been the result of advances in biology and physics, thus rejecting the concepts of adaptation and selection and adopting the concept of punctuated equilibrium and nonequilibrium thermodynamics (Kontopoulos, 1993: 155-69)

This reappearance of functionalist theories is also based in the combination of previous theories: systems theory (Parsons), group differentiation theory (Blau, Alexander, Colomy), structuralism (Levi-Strauss, Althusser), collectivist theory and group selection theories. The result has been a hierarchical reconceptualization of social structure, where interest-based and structure-based functions create a dynamic and complex structured system (*Ibid.* 153-5, 159).

This hierarchical theory of social structure defines four levels (*Ibid.*231-3):

1. Local structures: relationships between agents at or close to the individual level of analysis. It is expressed through strategic behavior that give economic and political benefits.
2. Quasi-local structures: at the level of specific unit institutions, where categories of interactants relate to each other.
3. Quasi-global structures: classes and social categories at the inter-corporate and inter-collective level of analysis.
4. Global structures: emerging and dominant collective agents that impose their own macrologic of organization to the others.

In this scheme, there are hierarchical structuring logics that create boundary conditions for the lower levels. The high order structures constrain and limit the possibility of lower structural formations by prohibiting some structured states,

differentially favoring certain forms, or producing obstacles to the development of others. At the same time, the high structures can favor certain options through returns and endowments of the corporate and collective actors, while there is always the option of invention of new structuring logics and improvised strategies for the lower ones. Furthermore, every level in the hierarchy is semiautonomous and polymorphous, allowing the existence of contradictions between production and producer, necessity and freedom, structure and agency, and stability and transformation (*Ibid.* 190-2, 324-5).

According to these recent postulations, there are three useful basic theses in classic functionalist theories that are reconsidered: 1) Interconnection: all elements of social life are interconnected, because they strongly influence one another; 2) Functional interconnection: all elements of social life support or reinforce one another, and the whole society they constitute; and 3) Explanatory functional interconnection: each element is as it is because of its contribution to the whole (*Ibid.* 156).

5.6.8 Institutionalism

The study of institutions and their role in society has its roots in political science and economics, especially during the late 1960's and early 70's, with influence from group conflict theories and structural functionalism. While institutional organization was viewed as a source of conflict when privileging particular interests, it was also defined as the principal factor structuring collective behavior and generating distinctive outcomes. Institutions were thus defined as *the formal or informal procedures, routines, norms, and conventions embedded in the organizational structure of the polity*. They have a prominent role, especially as political institutions, which depend on the asymmetrical

relations of power defined in each society (Hall and Taylor 1998: 16-9; Soltan, *et al.* 1998: 4).

The recent studies on institutionalism take a political and a sociological approach. The first one is called *rational choice institutionalism*, and defines institutions as strategic responses to collective action problems and as instruments for the promotion of cooperation among self-interested agents. This posture has taken concepts from the new economics of organization (importance of property rights, transaction costs) and theories of agency. Hence, these institutionalists believe that relevant actors have a fixed set of preferences and give emphasis to the role of strategic interaction in the determination of political outcomes (Hall and Taylor 1998: 22). Furthermore, structures circumvent cycling and collective action problems by narrowing the range of alternatives that may be considered. Institutions limit choices, as they are the culturally derived strategies that lead to social order (Soltan, *et al.* 1998: 9).

The other posture is *historic institutionalism*, which has been developed as part of the sociological tradition traced back to Weber, Durkheim, Simmel, Parsons and Merton, but recent postulates have incorporated more elaborate concepts related to social structures. One of these is the neofunctionalism of Alexander, who explains social change based on group interests and the shifting balance of power among groups. Another influence has been behavioralism, which focuses on the limits imposed by institutions and the correspondingly greater influence of human mentalities, cultures, and interests. This new sociological institutionalism recognizes the importance of both individual and group interests, as well as the variations in incentive structures across time and place, the

role of institutions in strategic interactions, and the result of socio-cultural values and norms (*Ibid.* 6-8).

Therefore, historical institutionalism focuses on the role of prior choices, common norms, and culture, as narrowing or expanding the range of acceptable options for an individual. Institutions thus represent a kind of social order, but they do not always promote cooperation and economic growth (*Ibid.* 4). Historical institutionalism defines two ways in which institutions affect the behavior of individuals. The first one is a calculus approach or strategic calculation, where individuals seek to maximize the attainment of a set of goals given by a specific preference function. The other one is the cultural approach, where behavior is bounded by an individual's worldview. The choice of a course of actions depends on the interpretation of the situation, rather than on purely instrumental calculation, and institutions provide moral or cognitive templates for such interpretation. Moreover, institutional forms and procedures are not adopted simply because of their efficiency, but also as culturally specific practices. Even the most seemingly bureaucratic of practices must be explained in cultural terms, because institutions are not just formal rules, procedures or norms, but the symbol systems, cognitive scripts and moral templates that provide the frames of meaning that guide human action. Institutions influence behavior by providing cognitive scripts, categories and models, not only specifying what one should do, but also what one can imagine oneself doing in a given context. Finally, this theory approaches social change to explain the emergence of new institutional practices; not because they advance the means-ends efficiency, but because they enhance the social legitimacy of the organization or its participants (Hall and Taylor 1998: 17-26).

Within these two institutionalist schemes, social order can be thus defined as the system of the most basic institutions of a society. The character of these institutions is both formal and informal, as part of a self-enforcing system with a relatively stable pattern of behavior and cooperation acts by the individual members of the society. However, social order is problematic and individuals can stretch its boundaries and resist its constraints (Calvert 1998: 133-4). If institutions are the product of politics, there is a strong interaction among decision makers and the rest of the society, expressed in the form of choices, determining values, and accepting, ranking or rejecting alternatives. Here is where institutions play a role in reconciling individual and collective rationality, reducing uncertainty and making the world more predictable. However, they also serve for other purposes, such as moral standards, instruments of wealth maximization, error handling, etc. (Soltan 1998: 45-58).

5.6.9 Political Structuralism

The development of political anthropology has been influenced from many theoretical sources, incorporating new approaches to power and politics. For example, Foucault's concept of structural power is defined as the ability to structure the field of possible action of others, providing the framework for power practices in both the material and ideational domains. Power is thus conceived as the force that configures a society's political economy by deploying and allocating social labor. It exists at a level of abstraction above the individual political agent (Kurtz, 2001: 2, 27-8).

For authors like Swartz, Turner and Bailey, power structures can be analyzed on the role of agents, because they represent the normative and pragmatic rules that regulate behavior, rights, and duties of those agents involved in the politics (*Ibid.* 108).

Political science has always been influenced by functional approaches, but since the 1980's there has been a new awareness of the significance of structure for an understanding of the way political systems operate. Structuralist influences pointed to the importance of looking for a possible underlying logic in society, and to differentiate "deep" and "surface" structures and their mutual influence. However, rational actors are still viewed as not entirely free to determine their own fate, and inescapable from certain objective constraints or restrictive structures (Easton 1990: 9, 20-8, 110-117). As a result, political analysis has considered the role of structures as constraints on political actions and policies, especially through patterns of social relationships over which the individual actor may have little control. Nonetheless, structures do more than constrain, because they also facilitate activity (*Ibid.* 52).

Recent theories on the structure of political systems are similar but not identical to the structural theories about systems. The concept of structure plays a central explanatory role when approaching political systems, in order to understand the relationship between higher and lower order structures in political institutions. However, unlike economic or social structures, political structures are closely involved with decision making. Taking ideas from Boudon and Blau, political structures are defined as patterns, regularities and configurations that can be observed, discernible and detected in observed data in social life (*Ibid.* ix, 9, 35, 46-51, 116-117, 155).

When analyzing political structures, Easton (1990) defines two meanings: membership units or entities, and the interactions between them. In any case, they cannot be viewed as physical things or as concrete institutions (which may be structured but they are not themselves structures), because they are properties of things, not the things themselves. Such interactions lack the tangibility of structure in physical contexts, making entities such as courts, legislatures or administrative organizations bearers of the property, not the property itself. Therefore, political structure cannot be interpreted as a separable spatiotemporal element. In addition, Easton defines political culture as the systems of meanings incorporated into language and symbols that are transmitted from generation to generation in a political system. It arises out from collective experiences of a group rather than from the wishes of individuals. Ideology thus represents one component of political culture, being the attitudes and traditions of a political system that guide and limit current choices (*Ibid.* 30-44).

A political system, as the most comprehensive manifestation of political life, can be thus defined as the interactions through which values are allocated authoritatively for a society. The system includes political authorities, a political community and a regime. The latter is also defined as the goals or values of the political system and the structure of authority, as exemplified by different kinds of exemplified by democracies, dictatorships and monarchies, among others. The reason for a political regime to assume a particular form depend largely upon the nature of the complex of structures represented by the political system, viewed as an interdependent set of relationships. Hence, the organization of political systems as whole entities (overarching structures) shape the form that regimes take and thereby influence the nature of public policies. Furthermore, organizations are

defined as particular kinds of structures, where parts are arranged according to known rules so as to meet specifiable purposes (*Ibid.* xv, 11-14, 58-9, 268-9).

Easton has defined a hierarchical model for political structures, which is largely based on structural Marxism. While Marxists viewed the notion of mode of production as a form of domination structure, they never defined its relationship with the higher order structure and the cause of variable forms of political regimes. Easton also views the state of society at any historical juncture as a product of the interaction of all social subsystems (economic, cultural, psychological, and political) without any special emphasis for the economic one. Nevertheless, the most important aspect of political systems is the relationship between structure levels in a nested hierarchy, because it solves the polar dichotomy between voluntarist and determinist positions. That hierarchical classification of structures defines the different positions occupied by individual members of the political system as well as by political collectivities, creating a continuum where objective social conditions determine behavior, together with limiting circumstances in which human choices can be implemented within specifiable constraints (*Ibid.* 69, 162-7, 235-7, 279).

These structuring levels can be of two main kinds: basic or high order, and low order. The first one, also called “global structures” refers to form the broadest pattern of relationships, and the object of reflective abstractions. They identify no specific property of the social system, but a diffuse or undifferentiated set of phenomena that seems to provide the underlying conditions, determinants, or constraints for the lower structures. The low order structures constitute the highly variable types of regimes and their associated differentiated structures, as well as specific aspects of a political system, such

as: 1) formal structures of the authorities (government); 2) informal structures (behavior) and the relationships around it; 3) formal (legal) and informal rules specifying rights and obligations for the authorities and ordinary members; and 4) values and goals (ideology) associated with the given political system (*Ibid.* 62-4, 77-78).

While the informal structures are the relationships that emerge naturally out of the day-to-day interactions in which members of a political system engage, formal structures are the relationships that are established through some public procedure where political authority is allocated and organized. These latter may be prescribed through written documents or some special ceremonial statement, such as rituals that prescribe the rules by which members are to define their roles and to conduct themselves. Government, as a form of formal structure, is the one that controls the direction, rate, and quality of development, managing the social and political tension occasioned by change. Furthermore, formal structures can have two senses or possible meanings: The first one refers to concrete sets of political relationships (empirical or behavior structure), and the second one is represented by the prescriptions or rules for the behavior of political actors in their relationships to each other. In other words, they are the desires and expectations about how given institutions ought to be organized and how actors ought to behave as participants in them. As defined previously, structures are not the actual political arrangements, but the design for patterns of political interaction (*Ibid.* 65-6, 81, 95-6).

Rules represent the ideal and culturally approved roles that prescribe behavior and are expected to organize the political relationships, though they may or may not reflect the actual interactions of the members of the system. Formal rules can be characterized by laws or even rituals that have special recognition or legitimacy in the culture. They

serve as power maps or organizational charts that encode power relationships at a give time and place, recognizing and reinforcing publicly the various statuses of power groups (*Ibid.* 67, 74, 99).

In sum, this chapter has shown how structural theories in anthropology have shaped and reshaped the concept of social structure, based on traditional functional and structuralist models, as well as postmodern trends and their most recent critiques and reinterpretations. Yet, this theoretical discussion has to be enriched with architectural theory, especially the concept of built environment, in order to build a theoretical framework for the archaeological analysis that concern this dissertation.

CHAPTER VI

THE STUDY OF SOCIAL STRUCTURES THROUGH ARCHITECTURE

The main argument of this dissertation relies on the relationship between architecture and social structure, in the sense that architectural design can reflect the goals and intentions of the leaders and people involved with the sociopolitical system of a particular society. Hence, structural theories support the archaeological interpretation of the architectural remains as means to interpret social complexity and power strategies, especially the ones related to the construction of monumental architecture such as temples and palaces.

Having discussed the concept of structure in anthropological theory, this theoretical discussion will be enriched by perspectives coming from linguistics and architectonic studies. The goal is to find an appropriate theoretical basis for the analysis of Cancuen's royal palace and the sociopolitical structure behind its construction. This theoretical model will combine the most relevant arguments coming from the disciplines of anthropology, sociology, linguistics, archaeology and architecture, not only for the analysis of this particular building, but as a general proposal for interpreting Maya palaces and ancient monumental architecture in general.

While not a social science per se, the discipline of architecture has engaged with different social, economic, and spiritual aspects of humankind. It can be an illuminating description of a historical period, because in ancient times architects worked under the auspices of kings and elites, making it an active force that participated in social dynamics (Raskin 1974: 1-3). Moreover:

“When the architect sets pencil to paper, he is doing more than designing a building. He is describing his society to itself and to the future. He makes his plans, draws his drawings, and builds his buildings according to his own ideas, of how they should be. In most cases, his predilections, his preferences will be in general the same as those of his society. He finds himself in a further role: the environment he has built now becomes a factor in man’s life. He is no longer a describer of his society; he is a potent force acting upon it, influencing its shape and character” (*Ibid.* 5)

There have been two main lines of inquiry when considering architecture. The first one includes classic perspectives of traditional art history and artistic-aesthetic intention. They define buildings as large sets of stylistic features and construction techniques that represent shared knowledge, creating taxonomies of buildings based on their similarities. The second one comes from architectural criticism, applying metaphorical properties and using language to highlight specific features of buildings. This constitutes a critical response to general statements and notions such as “form follows function”, questioning the inner motives behind architectural creations and an attempt to understand the cultural construction of built space and the ways humans create and conceive architecture (Moore 2005: 4-9).

Therefore, social approaches to architecture should be derived from basic concerns and perspectives about the culturally constructed landscapes which, like other cultural dimensions, include utilitarian, non-adaptive, innovative and conservative elements. Humans both shape and are shaped by architectural creations, which in turn are not passive creations. In a more holistic approach, a single building may embody a wide range of cultural decisions, given that different dimensions co-exist in the minds of builders and users of space (religion, politics, materials, engineering constraints, costs, alignments, etc). It is thus necessary to recognize patterns to determine meanings, considering four basic fields (*Ibid.* 10-12):

1. Social organization represented mainly in domestic dwellings and familial organizations
2. Social symbols reflected in built forms and site plans that act as communicative or mnemonic devices. This includes the search for a shared structures and spatial syntaxes that relies upon a linguistic metaphor or as cultural patterns.
3. Psychological, which include mental explanations and reactions from individuals
4. Social production and reproduction, emphasizing the role of society, polity, and economy in shaping architecture.

Following the same direction, Martin Locock (1994) defines that buildings can be analyzed in a “structured way”, in terms of their role in constructing a society, as a mode of creating and transmitting social statements. Buildings are shaped by the society that creates them, but they also impose constraints on social action, especially as stage-sets for individual action. Architectural studies also reveal ethnicity as expressed in the variability of buildings, as well as planning and control strategies within a society (Locock 1994: 10-11).

Susan Kent’s sociopolitical theory of space and architecture is directly related to the development of complex societies: The greater the amount of sociopolitical complexity present in a group, the higher the ratio of loci that are functionally restricted to multipurpose activity and the more compartmentalized the architecture. Segmentation, hierarchy and stratification are present in various parts of culture, behavior, and material culture; and it increases with the development of sociopolitical complexity. With this, it should be possible to predict aspects of the sociopolitical organization of a group by knowing the organization of space and architecture (Kent 1990: 5-7).

The formal structural analysis in architecture was developed in the late 60's, as a sub-product of the structuralist theories in anthropology and sociology, especially through the application of semiotics and linguistics theory to spatial analysis. Later studies adopted structuration concepts such as agency, and other concepts coming from behavioral-environmental psychology, in order to define a more active participation of architecture in social change and dynamics. These approaches will be described in the following pages:

6.1. Architecture and Semiotics

The pioneer of semiotic analysis in architecture has been Donald Preziosi, who defined important concepts and methods that are now widely recognized and applied to the understanding of buildings and their meaning in society. During the late 1960's Preziosi applied linguistic semiotics as a means for architectural analysis, in order to look for architectural deep structures and codes, and classifying architectural formations into minimal meaningful units. In general there has been an input by studies of proxemics, kinesics, environmental psychology, man-environment relations, body language and perceptual psychology into architecture (Preziosi 1979a: 2).

One of the key concepts developed in architectonic analysis is built environment, understood not just as the sum of artifactual or human-made formations, but the “formations appropriated from a given landscape and formations made solely by the relative deployment of bodies in space” (*Ibid.* 3).

Semiotics has been defined as the study of sign systems instituted by societies within given contexts in order to understand the culturally codified conventions on which

the process of signification is based. Architecture, like language, is comprised of a system of signs for the communication of information. Even when form is an important variable, it is not the only source for the behavioral interpretation of information. There are four important premises in semiotic analysis in architecture: 1) all of the built environment has and communicates meanings; 2) meanings are conveyed by sign systems using redundancies; 3) the coded meanings are established by acceptance of cultural conventions; and 4) the codes establish cues for expected behavior responses. In semiotic analysis, it is important to define the visitor's conception or mental image of a building, including his expectations based on broad cultural conventions and guided by redundant symbols, which provide enough clues for the visitor to respond properly in a new built environment. A proper balance between new information and redundancy in the flow of coded data is necessary for the complete and unambiguous communication of a message, and the medium is architecture (Sanders 1990: 46-7).

In general, Preziosi rejects the form/content dualism and the functional and art-historical notions of meaning. Instead, building environments can be analyzed as semiotic systems that exist together with other sign systems in different media. (Preziosi, 1979b: 2-3). His proposal is that language and the built world provide a complexly integrated matrix for action and interaction; a multimodal system of signs which serves as the primary template for the individual action and the collaborative consciousness of groups. The built environment is thus an ongoing and dynamic system of relationships among signs and not among materials, which exist spatially and temporally and are subject to change and transformation (Preziosi 1979a: 13-15; Preziosi, 1979b: 7).

In addition, Preziosi defines architectonic code as “the entire set of place-making orderings whereby individuals construct and communicate a conceptual world through the use of palpable distinctions in formation addressed to the visual channel, to be decoded spatio-kinetically over time”. This code is fundamentally a system of relationships that is manifested in material formations, and the medium of a given code is normally a mosaic of shapes, sizes, colors, textures and materials, associated through similarities and differences in visually-palpable formation. These architectonic signs are realized through a complex multidimensional network of relationships, creating a system of contrastive geometric and material oppositions. However, all these component units are not all meaningful in the same way, because they are hierarchically ordered as a system of signs of various types, where connections of different kinds alternate, overlap and combine (Preziosi, 1979b: 2, 88).

Moreover, architectonic objects represent “patterned and tridimensional-syntactic arrays” (analogous to syntax patterns in languages) articulated by means of code-specific and rule-governed contrasts and propositions among masses, spaces, materials, colors, textures, and relative sizes. They are not static stage sets, and every component implicates the reading of adjacent components, both visible and potentially visible (Preziosi 1979a: 4-5, 58). In terms of spatial structure, Preziosi defines architectonic systems as made up of configurations of “space cells” of a wide variety of geometric configurations and sizes. These consist of artifactual and/or appropriated environmental constructs conventionally linked to culture-specific information about the conceptual world of the society.

The architectural structure of these spatial units constitutes a complex space-time framework for human action and interaction, where activities are framed or situated not

only spatially, but also sequentially in groups of space cells composed in three-dimensional aggregates. Besides these cellular formations, architectonic objects vary according to the sequence of cells, kinds of materials (colors and finishing), infrastructural fittings (furniture), relationships to urban contexts, sizes and positions of formative components (windows, doors, stairs, etc.), and presence or exclusion of symbolic motifs. However, there is an important distinction from the formal structure of an architectonic code and its material structure, because the latter serves as a systemic function in the realization of the former (Preziosi 1979b: 13-16, 62, and 88). Constraints upon the choice of materials are inevitably found to be a result of cosmological, political, economic, technological, and other factors. They, along with architectonic and linguistic ones, comprise in large part the cognitive map a society has of itself. Such constraints arise out of an equilibrated network of cognitive relationships, with each factor in some way a reflection of some or all of the others. However, this cognitive map of a culture is subject to changes in its components over time in lesser or greater ways. Material structure is thus partly architectonic in origin, and partly cultural or “external” to an architectonic system per se. It is simultaneously bound up with architectonic and extra-architectonic factors (*Ibid.* 77).

Fundamental to the nature of architectural objects are the disjunctions, contrasts, and discontinuities present in each one, which may be distinguished through their material expressions (Preziosi, 1979b: 12). However, the same object formation will have variant meanings and behavioral associations in different contexts (Preziosi 1979a: 1). Hence, meaningfulness is a property of an architectonic code at all levels of its organization. That’s why everything about a building is meaningful in some way, but not

everything is meaningful in the same way. There exist palpable levels of organization in a building, and each of these levels exists in an interwoven dialogue with all other levels. Furthermore, changes in one level affect aspects of composition and organization on other levels, and it is clear that the conceptual organization of an architectonic formation is inherently multiple (Preziosi 1983: 155). Almost everything may be employed significantly, from variations in color, texture and lighting, to the geometric configurations of a formation, including shapes of objects and their relative placements. The meaning of an architectonic construct is internal to its own code, associated with a set of cultural texts, doctrines or beliefs, which themselves comprise significant formations in their own right as adjacent codes. Architectonic constructs thus serve as iconic signs in that their spatiotemporal organization simulates or models the behavioral geometry of episodic routines (Preziosi 1979b: 63, 71).

The functionality of architectonic systems is a very complex matter, and it has been mostly approached by functionalist explanations coming from art historians. The confusion in traditional explanations of architectonic functionality comes mainly from the question as to whether architecture is art, craft, engineering, theatre, or housing. As a result, attention has been given principally either to the contextual-referential usage or the aesthetic characteristics. However, within the semiotic scheme, architectonic formations are inherently multifunctional in nature, meaning that an architectonic object may function depending on the contextual associations, but it also coexists with other functions (Preziosi, 1979b: 4, 93). According to Preziosi, form does not necessarily follow function, any more than function is determined by form. Instead, a given construct

reveals, in code-specific ways, a variety of orientations of its components, and any of those may be in dominance at a given time over others (*Ibid.* 64).

For defining building function, Mukarovsky has defined a functional correlativity in architecture, consisting in five “functional horizons” (Preziosi 1979a: 48; Preziosi 1979b: 65-8):

1. Referential function: its immediate purpose as organizer of physical space, where each part, instead of having a functional independence, is interdependent and mutually implicative with the other ones.
2. Allusory function: when a function is determined through an historical purpose, represented by a fixed canon, code or set of norms for a kind of structure and its previous development.
3. Territorial function: Buildings exist as a manifestation of the identity and territoriality of its users and makers, reflecting the organization of the collective in accordance with the society and the available economic and material possibilities.
4. Aesthetic function.
5. Individual function: represented by expressive or emotive decisions deviated from norms and preceding horizons.

In addition, architectonic function and meaning have, in linguistic terms, a relative permanence of its intended message, because architectonic formations will continue to broadcast long after other forms of oral and written communication. Also, they may serve to contextualize or ground other kinds of semiotic formations, since its signal will decay at a much slower rate than other media (Preziosi, 1979a: 8-9; Preziosi 1979b: 6).

With respect to change and agency, architectonic formations may become inter-subjectively appropriated by groups of individuals, so its referential associations may change over time, whether or not the construct is materially altered. Therefore, any built environment does not stand parallel to the processes of change, for it constitutes a sign-system that induce information regarding the collectivity of the social group, its group identity, and they prescribe, augment and perceptually enhance that collectivity. If architectonic objects function by staging behavioral episodes or routines, they also frame interpersonal interaction when dividing, structuring, delimiting, or zoning an environment. As a semiotic code, an architectural formation is inherently relational in aspect and organization (Preziosi, 1979a: 50-55).

In sum, both verbal language and the architectonic code are similar in their capacities to assimilate the world of experience and attempting to translate any content, including those codified by other systems, into their own symbol systems. If built environments suggest certain readings, such messages may be decoded with a grammatical procedure for its spatially-sequenced unfolding. Also, given that architectonic and linguistic systems share features by virtue of their generic functions as human semiotic systems, they could reveal correlative processes of formation and signification. Therefore, the analysis of architectonic communication, representation, and expression must take into account every distinctive feature of social organization, both materially and formally (Preziosi, 1979b: 6, 13, 70):

“Even the most utilitarian buildings organize space in various ways, and in so doing they signify, issue some kind of message about the society’s priorities, its presuppositions concerning human nature, politics, economics, over and above their overt concern with the provision of shelter, entertainment, medical care, or whatever” (*Ibid.* 88)

Later on, Preziosi stated that architectural studies can only be firmly grounded in synchronic studies, focused on the contextual network of relationships which defines, and is in turn designed by, its component formations. Hence, the significance of any given architectonic form is defined by the sum of its relationships to all the other co-present formations at a given place and time. The establishment of the synchronicity of data becomes difficult when establishing the relative chronology of a construction, especially when there is no access to the initial plans and subsequent alterations and modifications of a building. It is through a comprehensive synchronic analysis that the systematicity of an architectonic corpus is revealed, and the dynamic equilibrium of its relationships firmly established (Preziosi, 1983: xvi-xxi, 207)

6.2. Architecture and Structuration

Giddens' structuration theory has been applied to architecture by authors like Donely-Reid, Adams and Bawden. For them, buildings play an active role in structuring social hierarchies and creating power strategies, especially if social, political and economic powers are the important variables behind interactions and relationships between space use and architecture. If architecture structures the use of space, it also functions as an integrating mechanism between the built environment and space utilization, using social structure as a framework (Kent 1990: 5-6).

6.3. Architecture and Behavioral-Environmental Psychology Theory

Architectural studies have been aided by the concepts of other disciplines, such as the behavioral psychology developed by Donely-Reid, Kus, Raharijaona and Rapoport.

These authors, especially the latter, have specialized in the study of non-western vernacular architecture. For them, architecture is a reflection of behavior, and consequently, the use of space is a reflection of culture, though they are not the same. Within this scheme, architecture is “the conscious manipulations by humans to create boundaries where they do not exist in nature”, and it is a major determinant of the flow of human culture. Furthermore, there are different aspects of culture that interact with architecture; culture structures behavior in terms of the use of space, in turn, the use of space structures material culture in terms of the built environment (*Ibid.* 1-5).

Amos Rapoport has been one of the pioneers of the environmental-behavior approach since the late 60’s. His approach is based on the ideas from Erwin Goffman, especially his concept of role setting, where the stage is what defines a situation, reminding the actor of the appropriate rules and ongoing behaviors according to the situation defined by the setting. His architectural studies are thus centered on the relation of culture and built environment, defining architecture as part of culture. The concept of culture is also defined as a theoretical construct that include “ideational” components such as world view, values and lifestyle. On the other side, social variables are more concrete, and are represented by social structures, groups, networks, relationships and behaviors that are observable manifestations of culture, including the built environment (Rapoport 1990: 10-12).

The main proposal is that architecture encloses behavior, and built environments are created to support desired behavior. Hence, architecture affects, guides and constrains human activities. However, these activities are not all self-evident when analyzing architectural components, and need clarification through four main aspects, components

or levels (*Ibid.* 11,18): 1) the activity itself; 2) how are they carried out; 3) how are they associated to systems; and 4) how are they associated with meaning. The latter two are the most important, because activities are not isolated and they exist only as systems of activities or behavior circuits. This makes it necessary to analyze the whole cultural landscape, not just architecture or buildings. However, it is the association of architecture and meaning that constitutes the most important aspect of Rapoport's analysis, because it links settings with people and their activities. He defines setting cues as culture-specific and the major purpose of the built environment, because it reminds which rules apply and how to act. For all this to happen there must be regularities and patterns, even when individual variations occur. The built environment, functioning as a setting, can be fixed (buildings), semi-fixed (furniture and decoration) and non-fixed (people's behavior). Semi fixed settings are more informative about specific activities and functions, than fixed ones (*Ibid.* 12-13, 18).

Following the classification of built environments, Sanders (1990: 43) has defined various factors that determine the form and use of domestic spaces, which can be applied to built environments in general. Climate and topography are naturally fixed, while construction materials, level of technology and economic resources are flexible depending on the particular environment. The last two are function and the cultural conventions present in the creation of built environments.

Concerning function, there is a primary or utilitarian function and a secondary or conceptual function. The conceptual one corresponds to the use of buildings as set of symbols for cueing expected behavior. That function is crucial for proper and acceptable social behavior by encoding the world view and cultural values of the builders, which

also sets the ideals which limit the actions, choices, and decisions of group members. For the user, architecture provides physical reminders of accepted socio-cultural rules and conventions, reinforcing those conventions by providing repetitive cues to acceptable behavior in any given situation. Buildings thus communicate meanings to help serve social and cultural purposes, providing frameworks, or systems of settings for human action and appropriate behavior (Sanders 1990 45-46).

The cultural conventions present in built environments represent the interactive relationship between behavior and architecture, as proposed by semiotics and demonstrated by environmental psychologists; it is a codification of conventionalized behavior as reflected in the organization of the built environment. While there are theories that try to explain the interaction of human behavior and the built environment through genetic factors, the most accepted models are cultural, defining the interaction of society and ecology as interdependent and mutually determinative. Environmental psychology (behavior-environment studies) supports semiotic predictions through studies of how users respond to various architectural situations, demonstrating that the architectural codification is directly responsible for the variety of individual responses (Sanders 1990: 44-7).

The behavior-environmental theories have defined four components that affect cultural conventions in architecture. These can overlap and have to be integrated in any architectonic analysis (*Ibid.* 48-51):

- a. *Personal structured space*: vital for the psychological well-being of humans, determines distance behavior (proxemics studies).

- b. *Territoriality*: functions as a major stabilizing force in society, providing cues to acceptable social behavior through territorial markers and accepted codes,
- c. *Privacy regulation*: control of unwanted interpersonal interaction and communication, looking for an optimum balance of contact level. It is applied through norms of behavior for individuals and groups, and the control of isolation and interaction, threatened by curiosity tendencies that invade the privacy of others. The structuring of privacy can be evaluated through study of the relation between interior and exterior space or by comparing barriers and boundaries. If transitions are an important part of the architectural organization, boundary demarcation will tend to be clear and territoriality becomes an important aspect of privacy control.
- d. *Boundary controls*: they can be psychological, spatial, social and socio-physical.

A more recent development of Rapoport's model is the one called "architectural anthropology" (Amerlinck 1995, 2001). It was originally proposed by Nold Egenter as "an analytical inductive framework and a macro theory for trying to scientifically comprehend human construction" (Amerlinck 1995: 9). Egenter tries to redefine architecture in an anthropological sense, relating construction activities with Rapoport's concepts of built environment and cultural landscapes. While Rapoport focuses on the product of building, Egenter is concerned with the process. Just as other semiotic approaches, the built environment is viewed as an active means for communicating and structuring human space (*Ibid.* 15).

For Amerlinck (2001), architectural space is both an object and a process, which includes not only the physical construction, but also the process of social appropriation

and its constant recreation by society. In a material sense, the built social space is arranged according to some universal structural variables or categories, such as orientation, laterality, centrality and frontality (*Ibid.* 2).

Within this background, architectural anthropology is thus defined as “the exploration of the whole spatial dimension of human behavior”, centered in the human constructive or building behavior, which transforms natural and manufactured resources in tridimensional forms that define, delimit, and enclose space. However, despite the lack of ethnological research in building activities, it has become a useful tool for archaeology, because buildings and all sorts of spatial information play a fundamental role both as evidence and in analysis of human behavior (*Ibid.* 6).

6.4. Contextual Analysis in Architecture

By treating architectural elements as a system of signs that are arranged in ordered sets of relationships, semiotic analysis has made certain aspects of architecture more understandable. But there are some limitations and flaws, such as the danger of circular argumentation or the emphasis on symbolic meaning to the exclusion of other co-present meanings. As a result, more explanatory value can be gained from semiotic analysis through linking it to a detailed contextual analysis, which requires a complex re-articulation of the entire network of relationships found between rooms, and clusters of rooms and functional zones (Hitchcock 2000: 53-57).

If linguistic analogy and semiotics interprets signs, contextual analysis interprets complete texts. A textual metaphor thus implies that interpretation takes place as a practice or reading which can change based on the historical conditions of the reader.

Material culture is also defined as an intellectual practice or “reading”, and a social discourse of experience (*Ibid.* 10).

This approach is largely based on the idea that patterns of movements can be represented as the repetition of routine activities across specific time periods. These daily routines are structured by the architectural layout of buildings, and the artifact distributions within them. The routines are reproduced in day-to-day practice so that they constitute what Giddens calls *contexts of interaction*, which serve as the location of its meaningful content. In serving as such a location, architecture serves to regularize the conduct of knowledgeable agents, corresponding to what Judith Butler has recently termed *performance iterability*. Material culture is thus a communicative system that works reciprocally structuring social practices and being structured by them (*Ibid.* 21).

The study of the structured distribution of architectural features is a way for recognizing repetitive behavior in an architectural context. It must include the identification of signifiers within the network of spatial relationships between architecture, artifacts, space and the environment. These constitute set of signs to be “read” and interpreted by means of their relationship to other objects (*Ibid.* 17).

6.5. Sociology of Architecture

Recent sociological studies have focused in the issue of how space is devised in order to obtain desired impressions for a particular social use. These have also defined that the sociological effect of architecture is to assure face-to-face communication. Although this architectural approach is more related to symbolic and non-linguistic communication, its analysis corresponds to the fields of semiology and semiotics that

were initiated by Saussure, who considered linguistic sign systems as part of the framework of social life. In the same line, Simmel treated the space and spatial order of the society in terms of exclusiveness, spatial fixation, and spatial distances (Ankerl 1981: 13, 39, 44). Hence, architecture is considered as a particular medium of communication and a built space that determines the presence of others. The study of the one-way communication created by space systems is complemented by the analysis of their sociological meaning when structuring face-to-face communication processes. If architecture is an artistic and technological creation, the process of such creation also involves broader social communication processes that are prior to architecture itself (*Ibid.* 43, 54-55).

All research included in the sociology of architecture focus on the created and perceptible spaces as a primary framework for all spatial activities. Created spatial systems are a proper communication medium that can be described structurally, in order to look at characteristics which both affect and are affected by other social communication structures. Then, the most significant implication of this theory is that architecture can be classed with other structured sign systems (*Ibid.* 57, 151).

Space is the central concept of the sociology of architecture, and *created space* is defined as the medium that creates the set for the polysensory face-to-face communication. As a communication means, architectural media has rules of morphological construction and syntax that can be studied through semiotics. According to semiotics theory, there are three distinct and successive subjects of study that can be applied to both linguistics and architecture (*Ibid.* 153):

- a. Syntactics: formal relations among signs which bear messages

- b. Semantics: relation between sign and signified (referent)
- c. Pragmatics: relation between sign and its interpreter (hermeneutics)

In space systems, there are syntactic patterns that could be put in analogy with sentences, because they create a complete unit of meaning and each composing space has a specific purpose (*Ibid.* 2-6, 42-43). Hence, verbal signs are to language as space to architecture. However, the basic difficulty in applying linguistic categories to the architectural medium is that architectural spaces constitute a continuous series while linguistics deals with discrete elements (*Ibid.* 170).

Architectural space is closely associated with the creation of privacy or intimacy through the manipulation of volume, shape and other isolation devices. This aspect of space involves the creation of communication flows or structures by means of a set of communication networks. Indeed, a well-defined space prefigures how many participants and which multi-sensorial defined communication networks are possible and which ones are excluded (*Ibid.* 6, 36, 43).

In order to explain how this structural communication is established in space repertoires, it is appropriate to study *space impressions*. These can be defined as the first denotative message for the recipient and the stimulus created by the impression of an architectural space. This means that the polysensory message that the recipient receives do not depend directly on the physical conditions such as volume and shape, but it is largely influenced by the impression created by that particular architectural space. In other words, the physical virtuality of architecture operates behaviorally as a stimulus of aesthetic and other emotions (*Ibid.* 36, 47, 150).

As a result, architectural creation is defined as the development of multi-sensorial perceptible tridimensional space concavities that have a primacy over all other objects situated within them. In this process, there is a close relation between purpose and representation, because it involves the designer's creative intention (*Ibid.* 15, 35).

On a very general level, many sociologists view architecture as a vehicle of possibilities. In conclusion, if architectural space can be defined as a device for channeling face-to-face communication, it can also be defined itself as a set of virtual communication structures (*Ibid.* 36).

6.6. Architecture and Power

Theories of political power have also enriched the analysis of architecture, studying its role in determining and implementing public goals and the differential achievement and use of power by the members of the group concerned with those goals. In terms of power, architecture is associated with patterns and meanings that stand separate from personal experience and reflect larger dimensions of social order. This approach does not treat architecture just as a passive and concrete reflection of political structures and exercise of power (often expressed in levels of socio-political complexity), but as varying modes of political processes which are produced and reproduced (Moore 2005: 2-3).

The analysis of the relationship between architecture and power is performed through public buildings, which reflect differing public orders and social motives. Indeed, they are physical testimonies of the use of power, involving an asymmetry in social relations and resting on the twin foundation of legitimacy and force, and consensus and

coercion. Public architecture is multidimensional in nature, because it may serve as monuments, commemorative constructions to be viewed, stages for social dramas, visual focus of large numbers of people, etc. In terms of function, public buildings can be catalysts for social coalescence, but they may be also designed to define, separate, or exclude. In general, different types of buildings reflect and shape different configurations of social life (*Ibid.* 2-4). Public architecture is mostly represented by monumental constructions, whose principal defining feature is that its scale and elaboration exceed the requirements of any practical functions. These buildings are not domestic; they are separate from the everyday and designed to be recognized, even though their meaning may not be understood by all members of a society. Also, they represent cultural constructs imbued with symbols that communicate the basis of social order that plays an important role in the composition of social groups (*Ibid.* 92).

If public architecture represents political processes, changes in size, function, and organization of monumental constructions reflect –at least dimly- changes in the nature of social power. Moreover, the architecture of power or social control is shaped by ideology, as a social production of meaning. Then, when public buildings are constructed under the direction of elites, such constructions will exhibit the values held by elites and meanings understood by the society at large, sometimes marking the physical separation and/or encounter between lord and subject. In other words, an architectural tradition can be defined as the material expression of ideology and a constructed representation of social control. When the relations between members of a society take various forms, those relationships are codified and preserved in architecture (*Ibid.* 109).

Also, if the language of buildings shape behavior, public constructions become speakers of power that engage in a dynamic discourse with people (*Ibid.* 16). Furthermore, Lynch defines imageability and legibility as another characteristic of public monuments, as their capacity for conveying meaning and the clarity with which meaning can be read (*Ibid.* 96). Blanton also defines public architecture as a relatively efficient communication media. Although the initial costs may be high, once built, it can be seen by thousands of people over great lengths of time. The communicative potential of a monument is also partly shaped by the intersection of dimensions like visibility and imageability (*Ibid.* 102-104).

In another matter, even when there is a direct relationship between social complexity and the scale of monumental architecture, there are different forms of public architecture that evoke different meanings and distinct social responses. In other words, public architecture exhibits socially significant differences, expressed in variation rather than emphasizing continuities of tradition. Therefore, these variations reflect differing social uses and/or contexts (*Ibid.* 95). One of the main contexts of public architecture is ritual, because ritual architecture and sacred places have a communicative potential that is formalized in their plans, features and contents as recognizably different from other classes of structures (*Ibid.* 107). These can be distinguished in five kinds of variables or elements:

1. Permanence: the anticipated duration of a ritual construction
2. Scale: the size of the structure and the relative size of the ritual structure
3. Centrality: the location of the structure in reference to the nearest settlement

4. Uniqueness: the relative distribution of the ritual structure as measured against some scale of settlement complexity
5. Visibility: the relative publicness of a ritual space, including the effects of distance and artificial barriers on human perception

6.7. Social Structure Analysis in Archaeology

Up to this point, I have reviewed the majority of anthropological, sociological and architectural theories concerning social structures and their relation to material expressions, especially architecture and built environments.

Now we can focus on the ways that archaeologists have used these theories as a means to interpret social structures from past societies, based on material remains.

6.7.1. Theoretical Development

The first attempt to study social structures through archaeological evidence dates back to the apogee of functionalist theories in the 50's, and was later developed by the so-called New Archaeology of the 60's (Hodder 1982). As a direct application of functionalism, the interpretation of ancient social organization was based on the use of organic analogy, expressed in concepts such as system, equilibrium and adaptation. Material culture was viewed as a means of adaptation, performing those functions required by both individuals and societies. The incidence of this cultural ecological approach launched a series of researches on settlement patterns, such as Gordon Willey's work in the Viru Valley. Yet, as many critics have stated, the ecological functionalism did not explain cultural variability or the role of individuals in social groups.

The concept of structure as an adaptation system was further developed within the New Archaeology. A system-structure was defined as a particular set of relationships between various components, and the way the interrelationships are organized. Archaeologists were thus motivated by the search for objective and quantitative patterns in artifact and settlement studies, in order to define these structures (*Ibid.* 6).

As a reaction to the cultural ecological studies, some archaeologists focused on the basic premises of Structuralism (Leach 1973, Levi-Strauss 1958) as means for archaeological interpretation. These pioneer structural studies focused mostly on Paleolithic art, and looked not for social structures, but for codes or rules inferred from observed systems of interrelations. The main issue was not structures themselves, but the social context in which they are produced (Hodder 1982: 7). Within this scheme, the organization of social systems has underlying structures, and material culture can be examined as a structured set of differences. The structured symbolizing behavior has functional utility, and it has an internal logic of its own, which is not directly observable. Therefore, structures must be interpreted as having existed partly independent of the observable data and outside of the human mind. As other major critiques to structuralism, this archaeology did not explain the process of structure generation and change, as it represents a synchronic and static approach.

Ian Hodder's contextual archaeology applied structuration and practice theories in order to explain the generation of structures within meaningful, active and changing social contexts. This relationship between the structure of ideas and social strategies is reflexive, where the individual's actions in the material world reproduce the structure of society, through symbolic and structural principles. These are also reproduced,

reinterpreted and changed as a result of those actions (*Ibid.* 8-11). Following previous symbolic studies, Hodder looked for defining symbolic associations that have particular meanings in archaeological contexts. These internal and subjective meanings can be visible to archaeologists through the institutionalized practices of social groups, which include observable patterns (Hodder 1986: 128).

6.7.2. Archaeological Evidence and Social Structures

More recent structural proposals in archaeology believe that we can effectively grasp the symbolic, structural order of surviving material culture through rigorous and controlled analysis, where ethnographic analogy plays an important role. Given that structuralism has been characterized by a systematic extension of linguistic concepts to non-linguistic fields, archaeological evidence can be defined as semiological entities or cultural constructs that are analogous to sentence structures with definable meanings and arrangements of components. Therefore, material culture constitutes meaningful constructs whose significance and meaning can be determined by specific principles of structure, similar to syntagmatic ordering. This linguistic metaphor operates as an analytic model, providing a general conceptual framework for research, where formal variability in the archaeological record is due, to a significant extent, to structuring mechanisms operating on a cognitive and ideational level (Wyllie 1982: 39-41).

The material record does not have an intrinsic meaning, because it depends upon the way it participates in the active creation of the material world. Objects are thus organized into meaningful patterns using sequential and alternate groupings, according to formal rules or spatial syntax (Hillier, *et al.* 1976).

Following structuration theory, postmodern archaeological postulates define a dual nature of societies, consisting in individual people and social structures. Individual acts are orientated according to rules which in turn are reproduced by actions. Material culture has a central role in the relationship between the individual and the social structure, because material items are structured according to principles, but they also structure further individual actions as part of a particular ideological framework. This structural dialectic reflects the polarized anthropological positions already discussed: methodological individualism and systemic-holistic approaches (Tilley 1982: 26).

However, detailed discussions of what social structure might be are virtually non-existent in the archaeological literature. As a result there has been a theoretical oversimplification in two fundamentally different theories. The first one includes various structural-functionalist proposals, coming from authors like Evans Pritchard, Firth, Dahrendorf, Goodenough, Merton and Nadel. These share the concept of social structure as networks of observable patterns of interaction between individual actors. Structure becomes equivalent to pattern, defined from empirically given realities or from abstractions based on these. The other trend has focused in role theory, defining social structure as ordered arrangements of social relationships which occur between people as a consequence of their playing different roles in different contexts. Structures exist only as they are actively reproduced in human action and cannot exist independent of system. In consequence, the structure and agency are either conflated or used interchangeably (*Ibid.* 27-8).

Tainter considers that for archaeologists, the concept of structure has been important as a means of description and consequently has not had real theoretical

importance. Instead, following Tilley, there is a need to discover the abstract systems of relationships which governs the “observed” social relations in the past. Even when Saussure and Levi-Strauss did not believe that such structures are open to direct empirical observation, they defined them as real (*Ibid.* 28).

Nevertheless, Edmund Leach is more skeptical, suggesting that the material record should be understood in terms of the complex cognitive workings that constitute the interior of a black box that is decisively closed to the archaeologist because they are never accessible to direct inspection (*Ibid.* 41). Hence, structural methods in archaeology should be conceived as procedures of constructing models or attempts to bring order to cultural phenomena by providing an account of the cognitive and ideational factors assumed to have been instrumental in generating them. These models are formulated on the basis of a realist presupposition that such processes did exist but are indirectly accessible to us through their material expressions.

Tilley also suggests distinguishing structures from systems. Structures are not common to all mankind, because they are particular in space and time. They make up systems or social formations, but do not constitute them. As discussed before, structures may constrain human interaction not in a simple causal way, but in structuration processes that include contradictions and non-correspondences between individuals and social systems. In archaeology, these sets of structural principles are only seen through their material effects, representing both the medium and the outcome of the activities of individuals (*Ibid.* 28-9).

For structural archaeology, the concept of praxis is relevant as a means for understanding ideational systems that are embodied in material culture. These material

expressions structure and are structured by the perception of actors of their social world, and may be a powerful way of legitimating the existing social world. Hence, structural principles are components of structures, but they are also the principles drawn upon by actors in the reproduction and transformation of their social and material conditions of existence in and through praxis (*Ibid.* 31-2).

If material culture reflects the organizational principles and processes of human life, it is through the understanding of such processes that we may best be able to interpret changes in material culture sets over time (Miller 1982: 17).

6.7.3. Structural Analysis of Architectural Remains

Modularity –or replicated regularity- in the planning and construction of buildings is an extremely ancient phenomenon, coming from the need for consistency and regularity in the ordering of parts of a building (Preziosi 1983: 319). For that reason, archaeologists can learn about ancient behavior by studying ancient architecture. In contrast to portable artifacts, architecture is most apt to retain the context of its original use, and its least affected by the disturbances of site formation processes. Since all activities have a spatial component, the archaeological study of spatial organization can reveal, via contextual relationships and redundancies, aspects of other systems and conventions (Sanders 1990: 43-7). Furthermore, architectural remains serve as ‘memory traces’ of the mechanisms that constrained and enabled human action. The study of its structured distribution is a method for recognizing certain forms of behavior in the archaeological record, through the detection of rule-bound or deliberate patterns in the

deposition of archaeological remains. These indicate formalized repetitive actions on the part of social actors who created the deposit over time (Hitchcock 2000: 21).

In terms of utilitarian functions, material objects are closely linked with their meaning, whereas symbolic meanings with regard to architectural features are not always clear. Hence, their interpretation requires the study of the additional meanings that architectural features take in their contextual relationship to other signifiers. As a result, the interpretation of function becomes a practice of “reading” on the part of archaeologists, with the use of experience, thought, reason, reconstruction, imagination, and conjecture. This contextual interpretation can also be aided through the recreation of movement through rooms and the experience and use of art and artifacts in their context (*Ibid.* 193). A fundamental hypothesis is that the relationships between humans and their built environments are dynamic and interactive. Much of the research carried out by architects, geographers, and ethnographers investigates whether, and how, the forms of the built environment are congruent with cultural, organizational, and behavioral features of the societies and people they study. Archaeologists, unlike architects or geographers, usually have access to only one dimension of the relationship—the built environment, which itself is imperfectly preserved, sampled, and understood. We assume that the built environment reflects ancient patterns of behavior, organization, and meaning in coherent ways, and we try to use it to reconstruct these features of past societies (Webster 1998).

According to structural analysis, a group of individual meanings transmit messages easily, even where the content is not self-evident. In the case of architectural remains, these represent social statements reflecting the choices of designers and builders (Locock 1994: 5). One concept intimately connected with analyses of built environments

is design, reflecting the idea, particularly strong among some architects and planners, that such environments are the purposeful creations of human actors. Design is an attractive notion because humans unquestionably do devise and create elements of the built environment in purposeful ways. Therefore, architectural components directly reflect integrated human intentions; they can be regarded as texts, preserved messages to be deciphered (Webster 1998).

Saunders (1990) goes further, linking the relationship between social and spatial interactions to the reproduction of social relations. Sahlins (1976: 37) described such relationship as the medium by which a system of culture is realized as an order of action. Hence, architecture, like all material culture, communicates as a language that can be described schematically and reconstructed archaeologically (Sutro and Downing 1988, Sanders 1990, Blanton 1989, Patrick 1985, Hanson and Hillier 1982; Hillier and Hanson 1984). For Rapoport, it is very difficult but not impossible to reconstruct individual activities from the archaeological record. These are not usually discernible and probably relatively unimportant to our understanding of the past. Even if we could delineate single events, it is not single-activity reconstructions that are important to the understanding of past uses of space. Rather, it is the patterning of activities that is crucial (Kent 1990: 3).

Structural analysts encourages examination of architecture in terms of universal principles such as proxemics and access, in order to understand the way people think about their spatial world (Hodder 1989b: 72). Access analysis, for instance, reveals strategies for social control accomplished through the control of space. Social control as a mechanism of power is encoded in architecture, particularly public architecture, which serves as a stage where structures of power, privilege, and inequality are created, enacted,

and re-created (Moore 1992; Isbell, *et al.* 1991). Given that power has an enduring existence in time-space, it can be stored and it can emanate from architecture to control social agents (Haugaard 1992: 112-4).

It is in the social domain of public architecture that the character of a social order should be highly visible and legible. The realm of public architecture is then crucial for archaeological research in the sense that it is an attempt at spatial organization which potentially involves a high degree of conscious conceptualization of a social order previous to its transformation into material-spatial order (Kus 1982: 54). It is thus productive to identify public architecture as generic public spaces and to delineate activity patterning in all kinds of architectural remains (Kent 1990: 4).

In their study of Maya architecture, Johnston and Gonlin (1998) review the study of architecture and art as a means to decode cultural meanings that reflect ideologies and worldviews. However, they question the nature of the meanings that such studies retrieve, and how representative they are for a society as a whole. For these authors, there are three principal approaches to architecture: cultural, social, and functional. Not all aspects of these approaches are mutually exclusive, as there is some overlap between them.

The functional approach enjoyed its greatest prominence in Maya archaeology from the 1950s through the mid-1980s. Residential structures were defined as reflections of social organization, and building use or “function” was not socioeconomic. Later on, the social perspective rose as an outgrowth of the functional one, but focusing on culture, not on society. The household was thus defined as a unit of socioeconomic organization, reflecting a materialist emphasis rather than idealist concerns. Finally, the cultural approach emerged as part of the larger structuralist paradigm, defining architecture as

expressive media that communicate messages about power, gender relations, status, and humankind's relationship to the cosmos. Buildings were defined as stages where culture is enacted and reproduced through daily human action. Following Bourdieu and Giddens, cultural or ideational "structures," are the mechanisms through which collective or individual enactment of culture is produced and maintained. If individuals reproduce and express cultural structures by enacting them in daily practice, it is also possible to analyze such meanings within the context of culturally ordered space, either the built environment or the marked or interpreted landscape.

Archaeologists analyzing the built environment also define a dichotomy between utilitarian and symbolic perspectives, giving the latter more preeminence in structural analysis. When favoring the concept that "the built environment corresponds to ideal conceptions of social, political, and religious life", basic adaptive or behavioral functions are often downplayed or ignored. Cognitive and symbolic meaning is thus more important than instrumental function. However, if humans plan and construct their built environments according primarily to culturally-determined cognitive frameworks, it is important to note that cognition is in turn affected by the built environments. In other words, ideas always intersect with quite practical considerations, making the built environment an arena and also an instrument for the pursuit, expression, and maintenance of power (Webster 1998).

According to Johnston and Gonlin (1998), structuralist analysis promises to be highly productive for Maya architecture, because it represents a vehicle for communication of meanings and stages for reproduction of those meanings in the context of daily ritual practice. It is also useful when applied to well preserved residential

architecture, where patterns are similar to modern and ethnohistoric houses. Buildings are thus “structuring structures”—culturally loaded spaces that socialize by encouraging practices consistent with the meanings that they encode. To sum up, the structuralist approach is attractive because it unites the idealist’s concern with abstract structures and the materialist’s concern with the structure of power. Unlike most materialist analyses, it focuses not on the socioeconomic or social substrata of hierarchy, but on its symbolic expression in architecture. However, it is very difficult to determine archaeologically how well in ancient societies the ideal and the symbolic actually corresponded to the real past behavior and organization. There is also a risk of circularity in the archaeological enterprise: behavior, organization, and meanings reconstructed *from* ancient built environments will obviously be congruent *with* them (Webster 1998).

Another archaeological problem is that the great centers have long histories with large-scale accretions consisting of many structures built at different times, which cannot easily be read as texts. Our ability to decipher then depends largely on the adequate control over chronology of construction and use. In order to understand design and intention, we have to be careful in distinguishing the different kinds of built forms as units of analysis, especially individual constructions built over very short periods of time (*Ibid.*). They offer the opportunity of analyzing plan and function. In some rare cases, we find large and complex buildings that represent a single construction phase.

6.8. Structure, Architecture and Archaeology: A theoretical proposal for analyzing the royal palace at Cancuen

In order to analyze the meaning of an ancient complex building such as the royal palace of Cancuen, it is necessary to define a theoretical approach for organizing and interpreting the different kinds of archaeological and historical data collected during the field research. To summarize all the theoretical currents and ideas related to social structures and architecture, I believe that the structural paradigm in social sciences can be framed through the sequential articulation of five key concepts: 1) social structures, 2) cultural-ideological structures, 3) social systems, 4) institutions, 5) and built environment.

The first and basic level of analysis is always the concept of social structure. Social structures can be observed and analyzed as they create particular social systems and when they are recreated as individual practices. They originate from cultural and ideological patterns and are explicitly expressed in the form of institutions and power structures, which are also reflected in enduring material forms. For archaeologists, remains of public and monumental buildings thus constitute a unique opportunity not only for the creation of structural models of ancient societies and their elite groups, but also to test them as they are reflected in architectural planning and construction.

This model of structural reasoning has resulted after revising some of the most important postulates coming from structural theories, which include traditional functional and structuralist models, postmodern trends and the most recent critiques and reinterpretations. Yet, I believe that this theoretical discussion deserves a final summary and discussion of each of the five concepts previously mentioned, in order to build a theoretical framework for the archaeological analysis that concern this dissertation.

6.8.1. *The Concept of Social Structure*

After presenting a detailed review of the development of the structural paradigm in anthropology, sociology, architecture and archaeology, I am convinced that the original conception of social structure has not changed despite the different theoretical positions already discussed. Still, there has been a continuous debate not on the conception of what is a social structure, but where it originates, how it is expressed and what is the effect on individuals and social groupings.

The previous statement tries to clarify the context of structuration theories, especially those of Bourdieu and Giddens, because they maintained the basic premise of the structural paradigm, which is the existence of social structures in all levels of social life. Far from representing a “structural revolution” in social theories, these postulates continued a long development in the understanding of how social structures can be observable and analyzed, without even questioning the existence of a structural order in social life. Despite the belief that “old” structural theories had fallen into disuse, the original concepts that created the structural paradigm still have full validity when approaching the different forms of social structural analysis.

The first definitions of social structures arose within the very beginnings of modern social sciences, when classic authors like Durkheim, Weber and Marx noticed that human behavior is patterned, constrained and conditioned by rules that may or may not be visible. However, it was Radcliffe-Brown who gave the first concrete definition of what a social structure is: *an organized network of relations between social entities*. It seems incredible how such a basic concept has generated so much discussion in social sciences. At the end, I see no reason for not keeping the same basic words; a social

structure has always referred to *relations* between individuals, groups, institutions and other forms of social actors. For functionalists, these relations were also described as *patterns, regularities* and *configurations* that are positive for integrating social groups. Nonetheless, structuralist critiques to functionalism redefined these relations as irregular, ambivalent, conflictive and contradictory, suggesting a more dynamic model.

One of the first debates over social structures was their visible or invisible nature. Sociologists preferred a more empirical and observable nature, while French structuralists viewed them as abstract configurations of reality existing in and governing the human mind, consciousness and action. Studies of social structures thus acquired a symbolic orientation, becoming abstract principles in the form of codes and rules that influenced the social groups' organizational patterns.

With the development of structuration theories, social structures were no longer viewed as cohesive or adaptive devices, or as static mental prescriptions. Instead, the concept of structure became more associated with a subjective, dynamic and multidirectional process (agency and practice) that links intentional acts of individuals and collective regulative norms and sanctions. Social structures were thus defined on one side as abstract and cognitive entities, but at the same time as observable situations that are part of daily life.

Besides the constant revision and reformulation of structural and structuration theories, the ongoing transformation of the social structure concept has been more superficial than essential. All authors still recognize the importance of studying *social relationships* among people, things, groups and institutions, in order to understand patterns of social behavior and attitudes. In addition, new theoretical proposals try to

define the role of *external* variables that affect these relations, with emphasis on the role of social status. As a result, recent structural analyses prefer to divide social structures into categories and hierarchies, in order to create more realistic feedback models that create and recreate these structures through time and in particular settings. In a similar way, other authors have tried to clarify the unconscious nature of social structures, defining various types and levels of individual, collective and public relationships.

In conclusion, social structures, whether collective or individual, are not palpable objects. They are the entire set of relationships that create social formations or systems. Although there is still some debate over their observable manifestations, most authors agree that they express the cultural patterns and ideology of a society. Given this definition, it is difficult that archaeologists can reconstruct the social structures of a group that has disappeared. If the material remains are only incomplete expressions of such structuring relationships, archaeological interpretations are thus reduced to theoretical models that only suppose the basic principles of social structures. As a result, it will always be uncertain how close these models are to the actual behavior patterns.

6.8.2. Cultural-Ideological Structures

Since the beginning of structural analysis, social structures were differentiated from cultural structures. If social structures were associated with the patterns of relations between persons, groups and institutions, cultural structures were defined as the ideas, beliefs, symbols, values, precepts and norms that exist behind these social actions. Even when cultural structures exist inside individual minds, it is assumed that they are shared and consensually accepted by all members in a society. However, this does not mean that

all individuals act in the same manner, because the social reproduction of cultural structures involves the creation of identity in each social agent, which is a dynamic process that can vary in so many forms as many individuals exist. In any case, cultural structures, defined as superstructures by some materialist theories, are essential in the formation of social structures.

If the existence of cultural structures has been compared with some form of script that predetermines social action, this only means that there is an ideal culture that people may choose to follow. Nevertheless, structuration theorists are clear in defining these structural ideals not as real behavior, but just as templates used as frames or strategies in the production and reproduction of social structures. In addition, cultural structures are also redefined constantly through the action of individuals.

A particular form of cultural structure is an ideology. All authors agree in defining ideology as a cultural structure that becomes cultural or symbolic capital when used for promoting, defending and legitimating the status of a particular individual or group. If used for political purposes, it may become a regime or tradition, especially if endures for a long time period.

6.8.3. Social systems

The definition of social systems has been confused as being equivalent to social structures, but from the beginning they were conceived as different. In general, a social system can be defined as a particular form of social structure or a set of social structures related to economical, political, kinship or ideological patterns that are defined

collectively as part of a particular social grouping. In this sense, the social system is a more specific concept, because social structures cover *any* form of relationship.

Social systems tend to exist as networks of relations that distinguish particular groups, which are usually stable and organized at the individual and collective level. Some authors also define a hierarchy of social systems that are differentiated according to the roles, categories and interests shared by groups of people. For actors that have high hierarchical positions, they can create political systems that have the power of collective agency, which have direct effects over other social systems and individuals.

6.8.4. Institutions

The nature and existence of social structures have been studied through a wide variety of expressions that are more or less directly observable. Among these concrete effects, different authors have defined social structures as a means for creating collective conscience, integration, solidarity, regulation, cohesion, interchange, reciprocity and management. As defined previously, functional and ecologically adaptive arguments relied on these forms of human relations.

Materialist proposals have also defined social structures as having economic roles, especially the control and regulation of access to material resources. In addition, political analyses have shown that social structuration plays a fundamental role in defining status and prestige between individuals, especially the processes of legitimation through symbolic orders and rules that give advantaged positions to people. These can be specific forms of action that encode power relationships, such as the development of rituals as means of public legitimacy and status reinforcement. This view is somehow

antagonistic to the notions of social structures as consensual relations, because it gives more importance to the conflicts in decision making, between real versus appropriate behavior and collective versus individual goals.

In a more neutral arena, recent theories view social structures as both cohesive and conflictive, defining them as social spaces where all kinds of interactions take place. These spatial contexts allow the generation, sustaining, expression and replication of social patterns and standards, as well as their continuous change and restructuring. However, in a broader view, social structures always narrow to some degree the range of alternatives of action. Therefore, social structures act as constraining agents, because they provide opportunity costs, situational logics and strategic guidance to individual actors, in order to create forms of self expression, but at the same time according to cognitive categories and models previously defined.

The wide range of expressions of social structures also includes material expressions, such as the spatial structure of settlements, villages, camps or more complex architectonic settings.

Another important expression of social structures is the existence of institutions. They can be defined as the forms of organized action, laws, customs, procedures, routines, norms and conventions that operate at the collective and individual levels. According to structural theories, the existence of institutions maintains the structural continuity and order of societies linking individual and collective rationalities, playing an important role in processes of identity formation and making the world more predictable.

Therefore, following the previous concepts, institutions represent an expression of both social and cultural structures. For that reason, many structural studies have focused

on the institutionalized practices of individuals and groups. In the case of archaeology, it is thus highly recommendable to approach past social structures through the study of institutions, which indirectly will lead us to the reconstruction of cultural structures and ideologies.

6.8.5. Built environment

In order to create a structural model for archaeological research, it is important to define that social structures are manifested in material remains through the concept of built environment. As a semiotic construct, the built environment constitutes a dynamic set of signs and meanings that created impressions and communicated messages essential to the structuration processes. Hence, those signs and meanings constitute a reflection of the cultural conventions that created that location and most important, a material evidence of the social structures that were created and recreated in that space.

Architectural remains must then be analyzed as structuring structures. In other words, they represent sets of codes, patterns, signs and rules related to each other and related to particular social structures. They could have functioned as social stages that shaped, organized, predicted and restricted human action through the division and delimitation of physical space, reinforcing social hierarchies and creating power strategies.

In archaeological terms, architecture has preeminence over other forms of material expressions because of the relative permanence of the symbolic message and socio-cultural rules and conventions that were originally conceived in the designer's mind. For public and monumental buildings, which tend to preserve in better ways, their

remains constitute material expressions of power and social structures, transmitting statements about the collective world view, motives and cultural values behind them.

5.9.2 *Structural archaeological analysis:*

As a conclusion, this theoretical discussion has shown that for anthropologists and sociologists, the basic unit of structural analysis is the social structure. However, if social structures are constantly reproduced and subject to change, the archaeological evidence of ancient human relationships will always be largely incomplete and mostly limited to the written and pictorial records left by the past societies. Even for the Lowland Classic Maya civilization, the understanding of their social structures remains highly speculative and incomplete.

The limitations of interpretation in archaeological research makes structural analysis more difficult, but not impossible. Although material evidence does reflect the existence of social structures, the archaeological data should be conceived as long term and collective expressions of social structure processes. As a result, I believe that structural archaeological analysis has more advantages for studying the more general patterns that exist parallel to social structuration processes. In that case, the unit for analysis should be not social structures, but the abstract cultural structures that tend to have a larger permanence in time and space.

Both social and cultural structures are expressed in different forms of patterned behavior found in the different hierarchical levels of society. Nevertheless, archaeology is again limited in the scope of structural analysis, because material remains have a tendency to be preserved in a biased way. For that matter, the study of structural patterns

in domestic architecture will depend on the particular formation processes for each region, because perishable materials are difficult to find in proper conditions. This creates incomplete scenarios that do not allow proper structural interpretations. On the other hand, the study of elite architecture gives a more advantageous situation for reconstructing structural patterns, given the durability of stone and other materials that were accessible only to limited social groupings. As additional sources of information, artistic expressions and written records provide closer portraits of ritual and daily life, allowing closer reconstructions of particular social structures. However, these were also restricted to people with higher hierarchical levels.

In conclusion, for the architectural study of this dissertation, structural analysis is most suitable for identifying the ideological patterns that were responsible for the creation of a monumental building such as the Cancuen royal palace and its associated artworks. If ideology constitutes a specific form of cultural structure, its symbolical expression in material form will also provide a means for reconstructing its function and the interpretation of the particular sociopolitical institutions associated with the built environment at the ancient city of Cancuen and by extension, the Lowland Maya centers during the late 8th century C.E.

CHAPTER VII

ANCIENT ROYAL PALACES AND ROYAL COURTS

The concept of palace and royal court is, in a broad sense, a well know term. It has been used for almost any ancient civilization or modern capital to describe their most sumptuous buildings. Apparently, its application to Classic Maya architecture should not present any problems, due to the large amount of examples known in the different archaeological sites. Nevertheless, palaces are complex buildings that require careful analyses, and more attention is needed to their interpretation, especially because they play a key role to understand royal courts, elites and sociopolitical organization in general.

In this sense, a comparative analysis of palaces around the world is useful as a general background to understand the architectural structure of Maya palaces such as the one in Cancuén. Particular emphasis will be given to palatial studies in ancient Greece, where structural oriented archaeological analyses have played an important role in interpreting Minoan and Mycenaean civilizations through architecture.

In addition, it is also necessary to review previous studies and interpretations of palaces in the Maya region, in order to determine the function and meaning of these important buildings. With these data, we will see if the royal palace of Cancuen can be compared to similar types of palaces of contemporaneous sites, in order to define a particular sociopolitical structure in the late eight century that could have been expressed in architectural language.

7.1 The Concept of Palace

Even when the word “palace” originated to refer to the “official residence of a chief of state” (Merriam-Webster), in archaeology it corresponds to a concept related to a wide variety of building types. This not only makes difficult to find a general definition of palaces but also impedes the use of a sole conceptual basis for the current analysis. However, despite the lack of a single definition, all different points of view show a number of basic characteristics that allow the construction of an appropriate definition that can be used to approach Maya palaces.

Probably the most important of these common characteristics is the notion of multi-functionality. Palaces combine the residential and domestic environment of the royal court with the government and its bureaucratic activities of administrative, economic, ritual, military and recreational nature (Andrews 1975, Barber and Joyce 2006, Lekson 2006, Martin 2001, Sarro 2006). This functional fusion and overlap is physically represented in particular architectural settings that reinforce social distinction and control, always locating the ruler and its court as central, elevated, restricted, and circumscribed (Andrews 1975, Traxler 2001).

Despite its multifunctional nature, the palace is commonly conceived as the royal household or the residences of individuals of wealth or high social rank, along with their families (Sarro 2006, Webster and Inomata 2004). However, royal palaces were not just a unique and exclusive residence, because they could include spaces and buildings occupied in a temporal mode (Ciudad and Iglesias 2001: 26). Other common features of palaces throughout time and space have been defined by Pillsbury and Evans (2004),

which include: 1) prominent architectural features; 2) restricted access; 3) extensive storage facilities; and 4) amenities such as gardens and displays of waterworks.

Furthermore, the palace has to be defined as a form of built environment, which expresses formal designs and ideologies that encode functional requirements and a spatial consciousness of the community, becoming an arena for decision-making of the state and expression of high elite culture (Martin 2001: 168, Webster 2001: 132). At the same time, palaces bridge the world of the ruler with his subordinates and the rest of the society according to structured relationships of power (Demarest *et al.* 2003, Lekson 2006).

Even when the previous concepts apply generally to all palaces, it is important to remember that the nature, quality and quantity of royal power differ from one society to another, as well as the nature, size, and distribution of royal palaces (Isbell 2006). For example, the existence of sub-royal palaces is related to members of the nobility that were situationally or permanently excluded from the highest political office, requiring household facilities apart from royal ones (Webster and Inomata 2004).

7.2 The Concept of Royal Court

The concept of palace is intrinsically attached to the existence of a royal court. According to most authors, a royal court can be defined both as a group of people and a particular physical place. The court as a group of persons is defined as the people who surround a ruler, whether his or her royal relatives, lesser nobles, advisers, officials, military personnel, visiting dignitaries, ambassadors, prisoners and political hostages, scribes, scholars, physicians, religious specialists, entertainers, artists and artisans, retainers, servants, dependents or guests (Inomata and Houston 2001a: 3, Webster 2001).

For Houston and Cummins (2004), palaces must be studied in relation to the ruler or noble who occupies it, because such people give meaning to the palace as they are the conscious strategists, transcendent symbols, and sacred beings who combine pragmatic self-interest with collective cultural values. It has also been pointed out that the royal courts were strongly integrated, both socially and morally, especially through the sharing of common ideals (Inomata and Triadan 2003).

On the other hand, the royal court as a physical space is an architectonic setting, a building or buildings where the royal family lived, where the court activities took place and where the privileged ones contacted daily and directly with the ruler (Harrison 2003b, Inomata and Houston 2001a: 3, Webster and Sanders 2001: 59).

Nevertheless, the concept of royal court is more than just a building or a restricted group of people. In a symbolic way, the court has broad social integration functions, like the management of internal and external affairs, and the intersection of power relations and political institutions (Ciudad and Iglesias 2001:26, Harrison 2003b:116, Houston and Stuart 2001).

Given that the royal court is defined as the interaction between people and a particular type of built environment, its nature is linked to rules of protocol and habitual practice (Inomata and Houston 2001a: 3). Applying practice theory, Jackson (2005: 116-7) sees the court as an “officialization of a hierarchy” that represents a coordination and enactment of a shared habitus that involves public performance. In addition, these elites can be defined as the “agents who act out or enact the classificatory structures of which they are a part” and the “group that access, comprehend, and circulate symbols of social power or symbolic capital” (*Ibid*).

7.3 Palaces as an Expression of Power and Politics

As has been exposed in chapter six, there is a general agreement on the relationship between architecture, sociopolitical organization, and power structures. The relationship is, thus, unavoidable when interpreting palace forms and functions, as has been noted in previous studies in the Maya area (Ashmore 1998, Chase and Chase 2001, Christie 2006a, Houston and Stuart 2001, Isbell 2004, Pillsbury and Evans 2004, Sanders 2006: 399, Webster and Sanders 2001: 46).

The concept of palaces as expressions of power is based on a political landscape framed by patterns of coercion, obedience and exclusiveness that distinguished the royal court from the rest of the population. The scale and elaborateness of palaces clearly reflect the amount of labor investment and the power of their residents, expressed in location, spatial arrangements and the use of specific icons and visual and acoustic effects (Houston and Stuart 2001, Inomata 2001b: 344, Inomata and Triadan 2003: 175).

In addition, the restriction of royal precincts had functions other than defense or security, serving mostly as visual and social separation (Moore 1996: 92–120, Pillsbury and Leonard 2004). Access to privileged spaces has been a significant component of the royal court identity, because it is associated with the physical proximity to the ruler (Jackson 2005: 620).

If the palace becomes a physical and permanent incarnation of authority, it can be analyzed as an institution. In this sense, the palace transcended the ruler when it was converted into a political statement and the seat of government, which eventually became the form of bureaucratic structure that enabled a state to function (Christie 2006, Morris 2004, Salazar and Burger 2004). Construction of palaces is usually correlated with the

establishment of new political orders that strengthen a central authority, like the transition from chiefdoms to archaic states (Chapdelaine 2006, Flannery 1998). Furthermore, if royal palaces show how power is socially produced, continuity in palace form implies the prolongation of institutions and knowledge (Isbell 2004).

The palaces and other spatial settings related to courts are thus archaeological means for interpreting the degree of centralization of power, stratification, bureaucratic formalization and administrative functions of ancient societies. Therefore, these architectural complexes are an important source of information for studying the way that social organization, politics, lifestyle, ideology and religion varied and changed through time and space (Andrews, *et al.*, 2003, Inomata 2001a: 40, Inomata and Triadan 2003, Rivera Dorado 2001: 174).

At a more detailed scale, palaces are also an important window into the organization, attitudes and activities of courtly people that sometimes can be related to specific historical events. More than just material residues of past behavior, they can be viewed as built environments that shaped the concepts, thoughts and acts of the court (Inomata and Houston 2001a: 3, Webster 2001, Webster and Inomata 2004). According to semiotics, palaces are the kind of intermediary objects that express coherent systems of intentions, because architecture controls, physically and symbolically, the environment for making possible interaction and collaboration (Hohman 1998: 38-40)

Nevertheless, palaces cannot be studied in isolation from the larger settlement complexes of which they were a part. As instruments of power, they were articulated with other spaces as part of different strategies of rule, creating a landscape that linked authority with the rest of the population (Morris 2004, Jackson 2005: 39).

7.4 Palaces as Households

The role of palaces goes beyond mere political tools of empowerment or unique emblems of states. In a complementary form, they also represented the residence of the ruler and the royal court, sometimes evolving as large and elaborate residential complexes that allowed the blend of politics, ritual and domestic life. In this sense, the palace has been defined as a true household that involved quotidian contact and productive and reproductive activities (Houston and Stuart 2001).

The analogy between palaces and households has been associated with Levi-Strauss' concept of "house societies". According to that model, kinship patterns are insufficient to explain social organization, making necessary to define a sociopolitical order made of both material and nonmaterial wealth that legitimates itself through both kinship and affinity (Ringle and Bey III 2001). The palace is thus the symbol that represents an idealized domestic space where the society in general participates in different levels of relationships.

While some authors see the similarities between palaces and other elite and non-elite residences, others emphasize that there is a marked difference between them, in terms of size, location, construction materials and decoration (Christie 2006). Other authors point that palaces are different because they must include spaces for public displays and institutional activities, while other types of residences don't (Barber and Joyce 2006, Pillsbury and Evans 2004). A third aspect that differentiates palaces from other residences is their restriction in access and privacy, accomplished through higher platforms, sunken patios and closed plazas, as well as construction of other types of architectonic barriers (Ciudad Ruiz 2001: 334).

It is thus important to notice that elite residences in general tend to vary significantly in size and elaborateness, making it problematic to equal the concept of the palace with the elite residence (Inomata and Triadan 2003). In that matter, Inomata (2001b: 341) properly addresses the concept of “elite residence” as based strictly on function and not from morphological attributes. Also, royal courts have not always been related to palaces and other physically defined boundaries (Webster 2001). For example, it is known that in China, during the Ming and Quin dynasties, the court lived outside the palace (Inomata 2001a). Some palace type buildings were even occupied by non-elites and others did not have residential functions at all (Isbell 2006, Inomata 2001b: 341, Quilter 2004).

7.5 Variables for Palace Analysis

From an archaeological perspective, there are different forms to analyze and interpret ancient palaces, depending on the variables used by each researcher. Christie (2006) defines three variables: form, comparison with elite residences, and sources of power. Barber and Joyce (2006) focus on spatial organization, architectural elaboration and location. Inomata and Houston (2001a) base their interpretations on spatial settings, access, social status, function and symbolism. In a more descriptive and architectural manner, Hohman (1998) identifies various levels of space elements, that include courtyards, plazas, structures, terraces, stepped areas, platforms, rooms, benches, niches, vaults and so on. In a similar way, Harrison (2003b) uses architectural variables, like location, size, shape, interior and exterior complexity, and clustering.

All these classifications share some common variables that can be summarized in the following list of general attributes:

1. *Size and elaboration*, that refers to the level of monumentality within the site or in a regional scale. Its study allows the interpretation of messages of social identity of individuals, groups or genealogies related to the palace.
2. *Location or setting of the palace in the site, and its relation to other culturally defined and modified landscapes*. This variable is fundamental to interpret the symbolic meaning of the palace as part of a whole community.
3. *Architectural elements that are present or absent*, which allow creating typologies of buildings and their functions.
4. *Structural and spatial arrangement*, which includes physical elevation and horizontal separation from other residences, and internal patterns of access, inclusiveness, proximity, distance, restriction, connectedness and demarcation. The material structure of the palace is the one that shapes the space for social action and reaffirms cultural norms of the court, through the creative interaction between people and the built environment (Martin 2001).

7.6 Ancient Palaces Throughout the World

Having described the general characteristics and attributes of palaces and royal courts, it is important to mention some cases in the Old and New World that exemplify the wide variety of forms and functions of palaces, as well as their utility as means to interpret ancient sociopolitical organization.

7.6.1 Palace Studies in Old World Civilizations

We can find many examples of architectural studies in Old World archaeology that relate to palaces and royal courts. In Japan, courts of the sixth to seventh century show a changing pattern of power-holding within the court group that can be traced architecturally (Inomata 2001a). In Egypt, Driessen (2002:5) has defined some patterns in palace plans, which included a throne room and a hall of investiture or a chamber of audience, thus explaining their function as the place where official visitors were received.

Given that the present study is oriented to structural analysis, it is important to focus on similar studies, which were heavily influenced by the works done by Clifford Geertz with the palaces and courts of Bali during the nineteenth century. Through his structural lens, Geertz defined a palace as “a tool that impacted the emotions of everyone who entered it, promoting a world order composed of social difference and superior power for the king and his family” (Isbell 2006). Following the same line, the most informative works up to date are the architectural interpretations of Minoan and Mycenaean palaces, which in my opinion, are very similar to palace studies in the Maya region.

For that reason, I will use those studies as an exemplary case of how spatial analyses is fundamental for functional interpretations and for creating structural models of sociopolitical organization.

Minoan Palaces

Minoan civilization developed in Crete and its surroundings between the nineteenth and eleventh centuries BC. However, it was during the periods called

Protopalatial (1900-1700 B.C.E.) and Neopalatial (1700-1425 B.C.E.) that sites were characterized by the emergence of monumental “palaces” or “palatial villas”.

Minoan palaces have been interpreted through particular models that may reflect a particular social organization. For almost a century, these interpretations have tried to explain the central role of palaces in Minoan sites, in order to understand the sociopolitical system that integrated the different island settlements, especially the role of Knossos as the major center in the region.

The geopolitical models for Neo-palatial Crete have been based on the assumption that the palaces served as the political, economic, and religious centers for a wider area (Schoep 2002: 15-16). These can be classified into three different trends that vary in the degree of centralization:

1. *Knossian hegemony*, where the island was politically unified and the other palaces were subordinated to the palace of Knossos
2. Palaces were centers of small basically independent units
3. Regional centers were largely independent polities owing ideological allegiance to Knossos

Hamilakis (2002: 181-2) has defined two main theories in the development of these models, in terms of how they relate to a “Knossocentric Ideal”:

1. Palatial sites were small independent polities or proto-states where the palace was the main basis of power
2. Knossos was the supreme authority, governed by a king or queen and an aristocracy, and the villas were either the residences of dependent officials or the king’s summer residences.

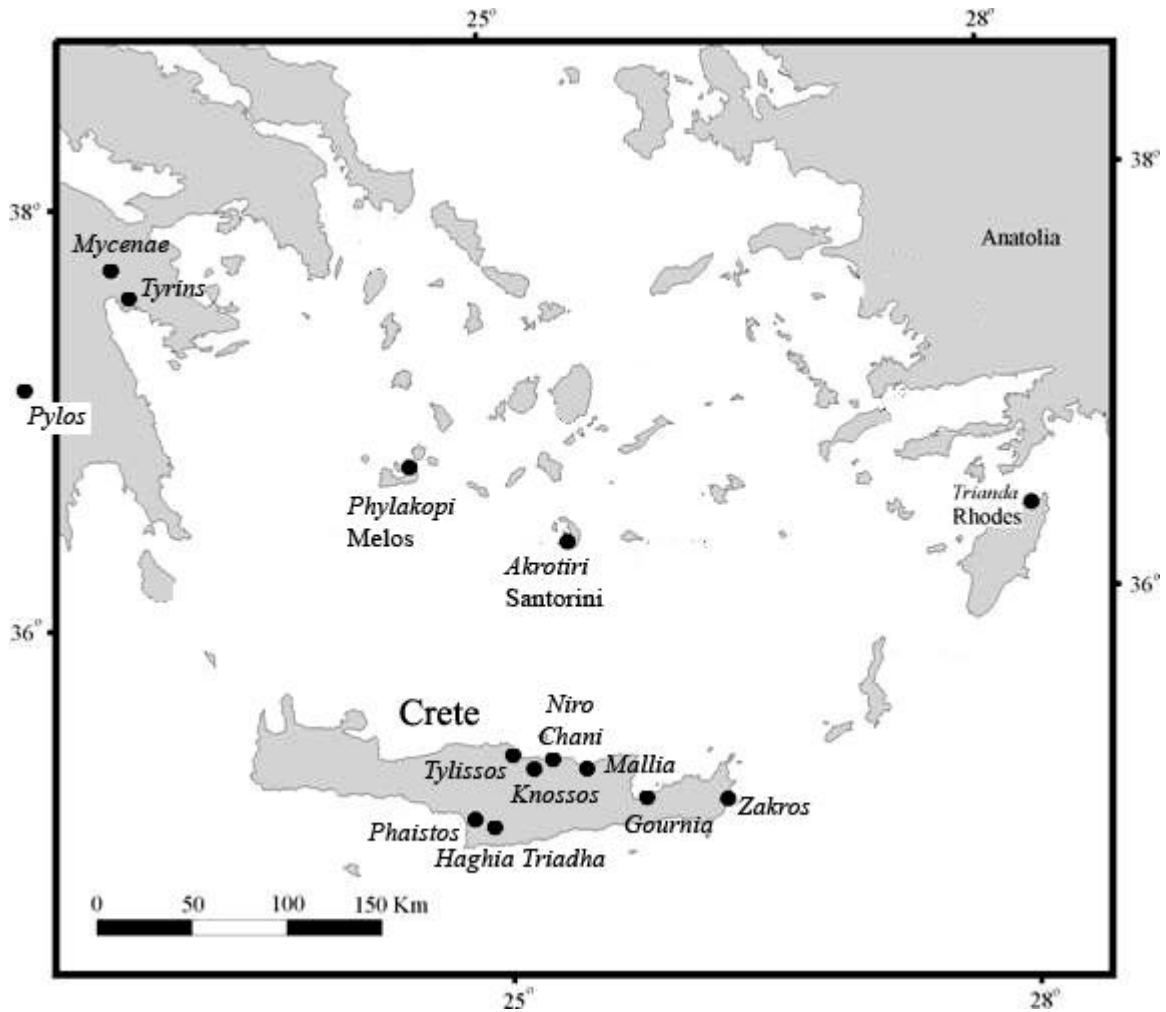


Figure 7.1 Palace sites in Minoan and Mycenaean Greece (After Sewell 2001:12)

Other interpretations have relied on the peer-polity interaction model and the conflict school, defining a rivalry between Knossos and the other centers (system of social disruption and conflict). On the other hand, Driessen (2002) has defined a sociopolitical organization centered on the central court of the palaces, based on a “cognitive code that emphasizes a corporate solidarity of society as an integrated whole, based on natural, fixed, and immutable interdependence between subgroups” (*Ibid.* 11).

The development of these interpretive models in Aegean archaeology began with a pure empiricism that was later influenced with formalist and diffusion theories, based

on the belief that there is a causal link between form and function. More recently, semiotics was incorporated in technical studies, as well as post-structuralist, contextual and postmodern concepts. These late structural models have tried to identify patterns in architectural formations and/or artifact distributions, interpreting them as representative of cognitive or social systems (Hitchcock 2000: 10, 15, 27).

The initial discussions of Minoan political organization were based on remarkably flimsy conclusions and on assumptions derived from superficial impressions. In the early stages of Minoan archaeology, Evans and his followers interpreted the functions of the buildings quickly termed ‘palaces’ on the basis of purported resemblances to palatial compounds elsewhere in the eastern Mediterranean during the Bronze Age. While it is clear that the great compounds of Knossos, Phaistos and Mallia (Figure 7.1) housed large and complicated bureaucracies, it was not clear if those bureaucracies supported a royal household or a general commonwealth (Preziosi 1983:77).

In that context, the Minoan “Temple-Palace” was defined by Evans as a “vast and sumptuous residence of a chief of state, of an important person or of a rich person” (Driessen 2002: 1-2) and the “residence of the highest political and religious authority within a hierarchichally structured society” (Evans 1921:3-4, quoted in Schoep 2010:219). In addition, room functions were arbitrarily assigned, based on form or using analogies with Egyptian architecture. In a Darwinian diffusionist evolutionary scheme, there was also a tendency to link functional interpretations with earlier forms in other cultures (Hitchcock 2000: 28). In general, the pattern was to assign an identical function to a similar room type even when there was no archaeological context. If there were any archaeological findings, there was also the problem that it was uncertain if the artifacts

represented primary or secondary use (*Ibid.* 49). The use of room types and traits as empirical shorthand did not explain the palaces as a whole. Instead, these classificatory schemes were based on teleological goals that implied a mystical faith that a final interpretive truth was out there, waiting to be brought to light (*Ibid.* 52). The residential function of these complexes have also been disputed recently:

“There is no solid evidence that these [the Palaces] were the residences – permanent or temporary– of queens, kings, or priests, or other political or religious functionaries”...The fact of the matter is that we do not know for certain just how the great central building compounds were actually used” (Preziosi and Hitchcock 1999: 89, quoted in Schoep 2010:220)

With the rise of structural influences, new interpretations started to question previous ones, taking into account architectural and archaeological contexts and rejecting assumed functions suggested by reductivist terminologies and classifications (Hitchcock 1994). Structural analysis was thus directed to study palace plans in order to discover the nature of formal components in Minoan architecture, and their patterns of association, interaction, and transformation. The goal was to define an orderliness and systematicity underlying the Minoan built environment, as a means to understand other aspects of Minoan culture (Preziosi 1983: xvi-xxiii). As a result, the main stream of architectural studies in Minoan palaces centered in planning:

“it seems evident that considerate deliberate planning must have preceded the actual construction of these buildings” (Hitchcock 2000: 47).

With detailed structural and modular analyses, it has been determined that the complexities of palace plan arrangement were not the result of the agglutinative addition of space-cells to each other over periods of time, as was once thought, but were the result of intentional initial design and construction (Preziosi 1983:6). Also, instead of carrying

isolated analysis or comparisons to other similar architectural features, these complex buildings started to be truly understood by studying them in relationship to the artifacts, associated rooms, and other features that were found in association with them (Hitchcock 2000: 16) (Figures 7.2, 7.3).

Diversity in spatial relations among Minoan architectural features was created in several ways in the distribution and quantity of particular features that changed over time, such as construction details, placement of doorways, stairways, corridors. (Hitchcock 2000: 18). At the same time, similarities were found, not in overall ground plans, but in details of organization and in relationships among components (Preziosi 1983:7).

In general, it is now accepted that the major Minoan palaces at Knossos, Mallia, Phaistos, Zakros, Haghia Triadha and Gournia are essentially contextual variants of the same architectonic organization (Preziosi 1983:149). The same or equivalent features are present in the design of all of these mega-structures and it seems evident that they replicate the same patterns –both topological and geometrical- across various transformations in size, materials, positioning of cells and clusters, and orientations:

“There exist certain patterns of formative organization in the planning and layout of Minoan buildings, in particular, that there exist a number of constancies in the ways in which spaces of various function are related to one another” (Preziosi 1983:33).

“Despite differences in size and absolute placement, all of the examples of the hall system/residential apartment quarters of Minoan builders are variations on a common formal and functional theme. The palatial hall systems are but larger and more finely articulated versions of the common residential systems” (*Ibid.* 154).

“The orderliness or systematicity of Minoan design is manifest in the ways in which builders divided a building program into component functional parts, ordered those parts according to a proportional allotment of spaces, and mapped these requirements onto a program for construction by means of modular layout grids or regular geometric conformation” (*Ibid.* 319).

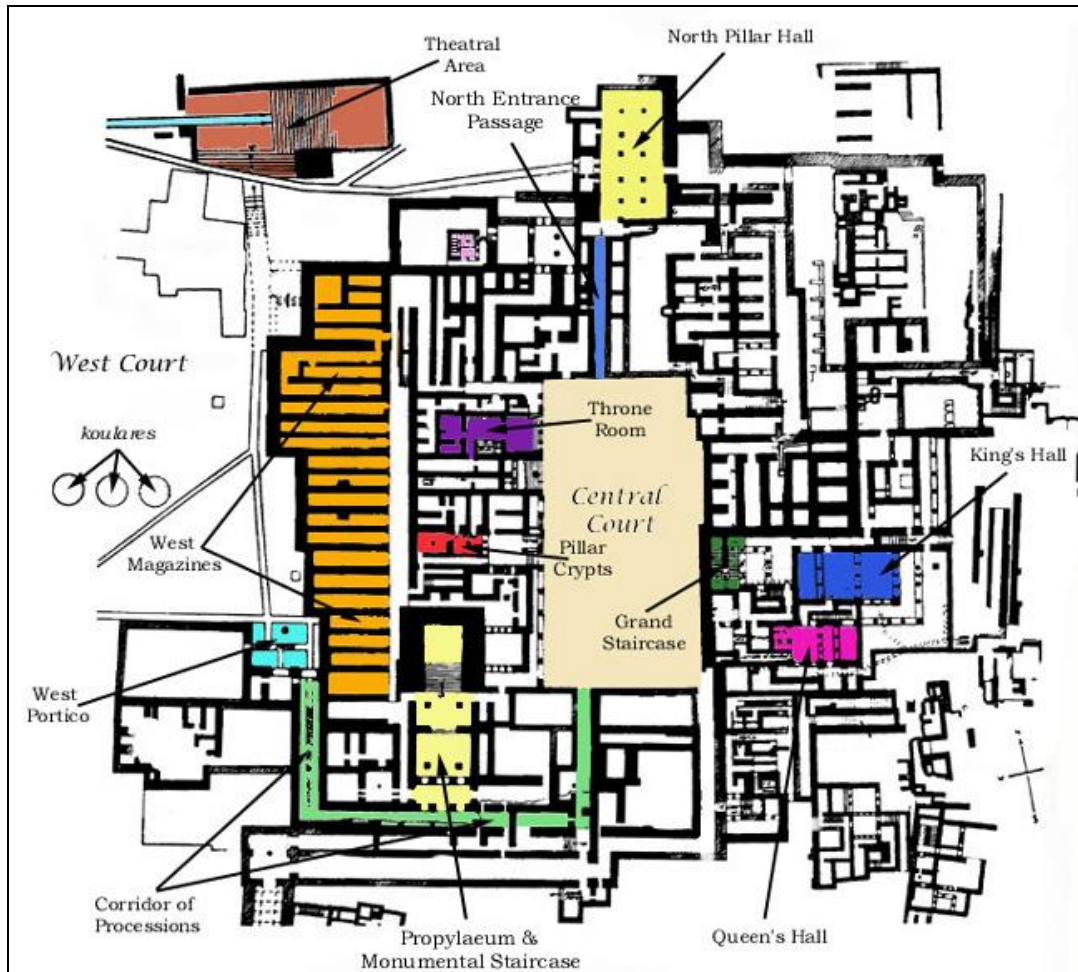


Figure 7.2 Plan of the Palace at Knossos (XTEC, n.d.)

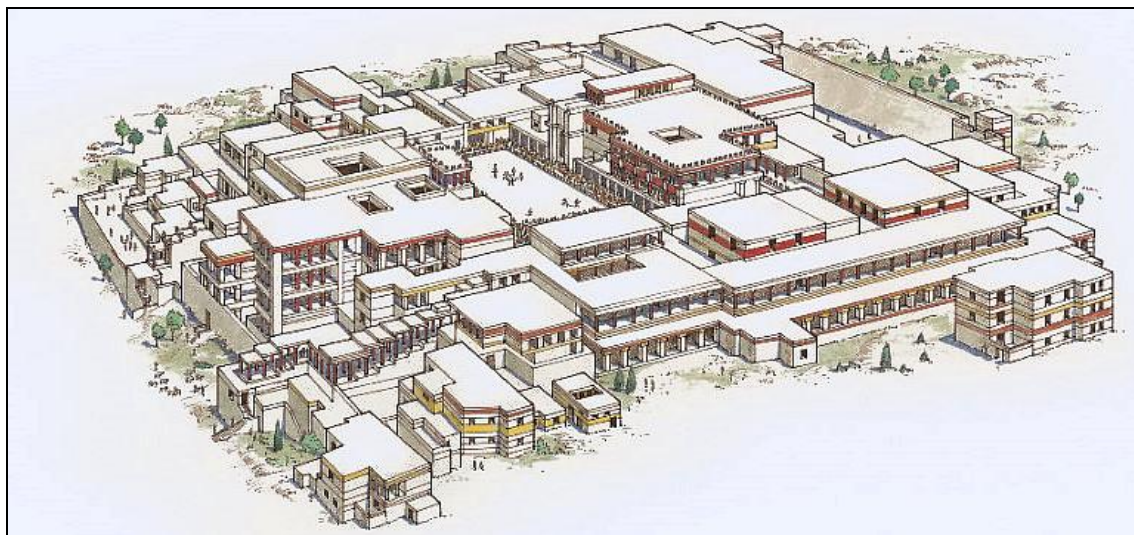


Figure 7.3 Reconstruction of the Palace at Knossos (Sheppard 2007)

Despite the common interpretive polarization between ritual/religious and political/economic functions, Minoan palaces have been conceived as spaces where it is almost impossible to separate them. Instead of looking for specific functions, they interrelated them, acting as the location of diverse activities that encompassed a range of functions of domestic, ceremonial, political and economic nature. All of these were centered in halls and reception rooms, whose occupants were the ruler and the central authority, and possibly other competing groups of the society (Day and Relaki 2002: 219-20). About their ritual nature, Driessen (2002: 8) emphasizes their use to commemorate remembrance, joining the past and the present. Performance of rituals depends heavily on the existence of both natural and artificial spaces that condition the pattern of movement during ceremonies. Enclosed courts were constructed to manipulate visual perception and the communicative potential of specific unifying and integrative rituals. This process implies an institutionalization of permanence, intensification and standardization, reflected by the repetition in modular design of Minoan palaces and their central courts.

Given the notorious absence of major temples, it seems logical to attribute a temple function to these “palaces”, or “court compounds”, which could have been conceived as centers of administration and residences of human rulers, but also as sanctuaries and homes for gods (Driessen 2002:7-8).

As mentioned before, the palace at Knossos is the largest and more studied of all Minoan palaces. Its plan consists of a contiguous mass of construction surrounding a large central court, which includes around 250 separate cells in its ground floors that also are divided into a “jigsaw of cell-clusters” (Preziosi 1983:91) (Figure 7.2). These created a network of halls, corridors, and light wells with monumental appointments and unique

structural features where the social, ritual and private coexisted (Hitchcock 2002). The palace comprises a set of distinct functional zones with controlled access at particular points between these zones of cell clusters. This cell-cluster organization of the Knossian palace is perfectly consistent with the organization of the ordinary residential structure into distinct and semi-autonomous functional zones. Also, although there is no doubt that the entire palace was built over a period of time, it did not grow by accretion. It now seems more evident that the structure was planned as a whole, and its component parts were laid out according to a predetermined scheme (*Ibid.*).

The pattern of Knossos has been termed the “Minoan Hall System” (*Ibid.*), because the room clusters are organized around a central court and were directly associated to a series of halls that served for different functions like storage, ritual, rest and habitation. The pattern was replicated at the palaces of Phaistos, Mallia, Zakros and Gournia, but present more variability in other minor sites, like Niro Chani, Tyliisos, Akrotiri and Haghia Triada (Figure 7.4). Like in Knossos, the palace in Akrotiri provides an important fresco imagery that has helped to understanding Minoan ritual through the structuration of gender roles and the symbols involved.

The concept of a “Minoan hall system” does not suggest an essentialist classification that excludes difference. Despite the overall similarities, all forms of hall systems and their architectural contexts are not the same, because they were multifunctional (*Ibid.* 16). Their meaning cannot be reduced to simplistic notions of residence, ceremony, or ritual because it is important to relate them to specific contexts, such as their placement within the structure, associated rooms, artifacts, frescoes, etc. (Hitchcock 1994: 39).

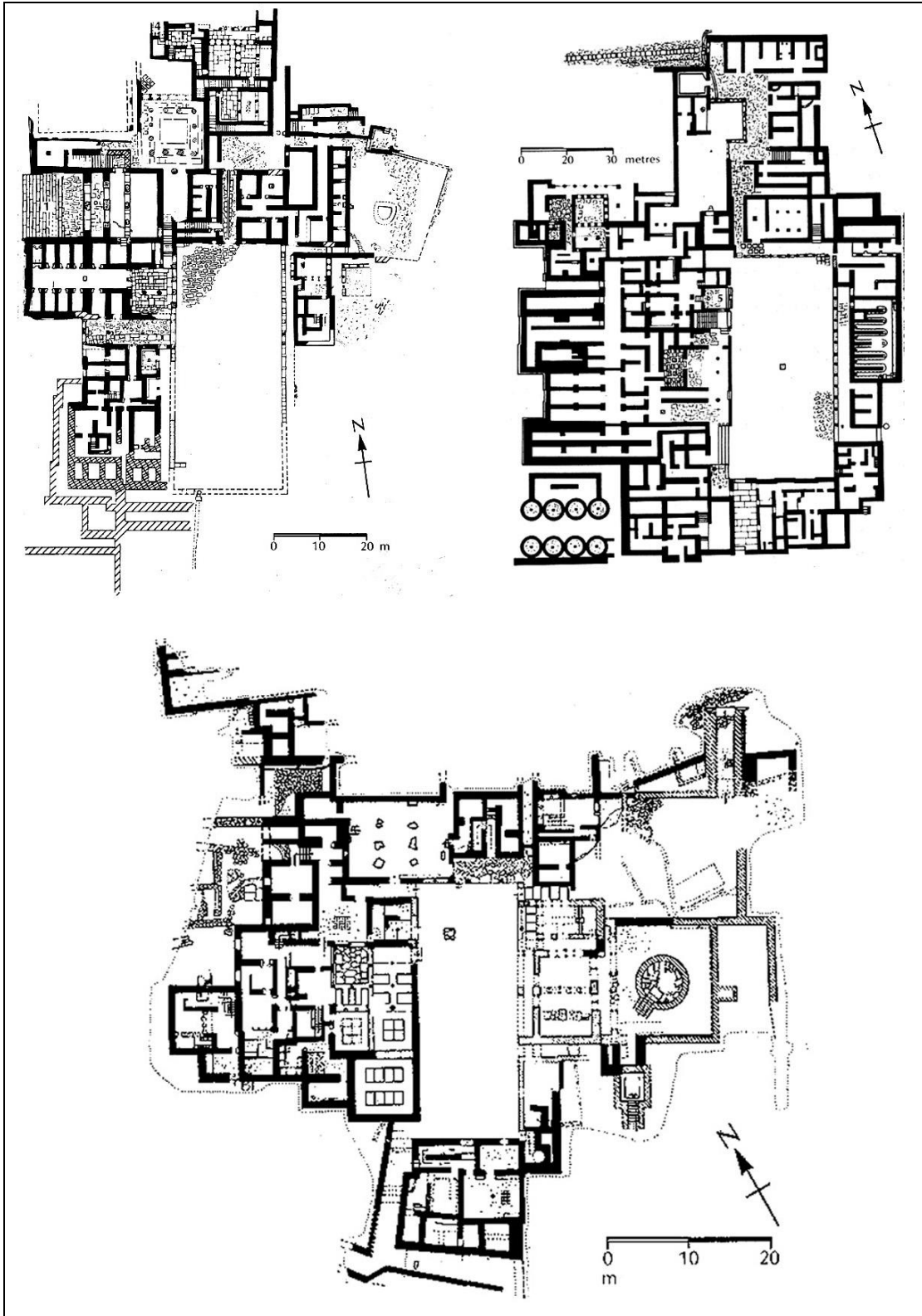


Figure 7.4 Plans of palaces at Phaistos (above left), Mallia (above right) and Zakros (below). (After Studyblue, n.d.)

In terms of material contexts, Minoan palaces are directly related to the presence of ‘prestige artifacts’ that exhibit a scale and elaboration indicative of conspicuous consumption, social hierarchy, and power. They were constructed on a level that entailed the need for planning, full-time specialists, and the organization of materials and labor. In other words, they serve as evidence of social complexity and the emergence of social ranking and hierarchy that characterized Minoan society (Hitchcock 2000: 24).

Most of the recent functional analyses of Minoan courts agree that the palaces were gathering places for groups of individuals, facilitating interaction between various parts of the building or between the building and the surrounding area. For that matter it has been important to study the internal and external entryways, suggesting movement patterns for gatherings and processions (*Ibid.* 62).

Minoan palaces could have combined residential, political, religious and public functions, as well as an important economic function, concerning production, trade and storage. The large number of habitation and reception areas, and utilitarian rooms, could have been used for the redistribution of commodities in the shape of rations to workers and artists, or gifts to the elite (Driessen 2002: 6-7).

More recent interpretations (Schoep 2010) have emphasized the religious function of these complexes, questioning their residential function. For that reason, they are designed as “court buildings” instead of “palaces”. If Minoan society is understood under a heterarchic or decentralized model, these court buildings represent religious centers, not political authority, and the royal residences or “houses” could have been located in more peripheral locations. The problem resides in the lack of understanding of the general settlement patterns that surround the court buildings. As a result, little is known outside

them. At Knossos, for example, the Little Palace-Unexplored Mansion constitute a complex building (smaller than the Main Palace) that may have been the royal residence, but located in a more private or sacred location (*Ibid.* 232-4)

At a regional level, Minoan Palaces played a key role integrating regional centers in what has been labeled as a “wider palatial system”. Architectural differences at each regional center could reflect the performance of different rituals connected to the worship of different tutelary deities at each site. These rituals could have been related to the economic focus of each regional center, specialized in the production, acquisition and distribution of certain types of commodities that were exchanged for other products coming from other centers. This system could have also operated at the level of elite gift exchange, promoting solidarity and/or obligations between regional centers. These practices contributed to the gradual formation of a network of regional religious and administrative centers that was supported through intra-island exchange and feasting and drinking ceremonies (Hitchcock 2000: 89).

Even when the court-centered palace functioned as a ceremonial center, it is not clear if it also served as a residence of the most powerful group. It is possible that the political, economic and religious power was not centralized in just one group residing in the palace, but that different groups had access to resources and in some way to power (Schoep 2002: 32). Also, despite the general agreement that the palaces played a major role as integrative spaces through ritual and feasting, various authors question their role as a traditional seat of authority with a type of hereditary king ruling a circumscribed territory. Instead, some alternate models suggest a more dynamic interplay between different factions, with the winning one residing in the palace. Other authors believe that

the real political power resided outside the palace, reducing its function as a ceremonial and religious centre used by different groups (Driessen, *et al.* 2001: x).

This scenario put the palaces as the bases of factions of different size, and social/political influence. Is it possible that they were the residencies for the leaders of the factions, but more importantly, they are likely to have been some of the key focal points for the social gatherings and ceremonies performed by the faction as a whole, the arenas of social competition and of conspicuous consumption, hence the plentiful reception and ceremonial spaces (Hamilakis 2002: 188)

The latter interpretations are supported by the circulation pattern of palaces that always leads to the central court and not to a throne room. This could reflect a flat or horizontal hierarchy of a 'faceless polity' organized in corporate groups, and suggest their function as communal and ceremonial meeting places by both elite and non-elite groups for ritual and integrative actions (Driessen 2002: 5-8).

In sum, the palace was a well established, conceptualized urban and ritual landscape where hierarchical processes were at work. The restricted access to the central court and the interaction between outer and inner courts created a single and encompassing ritual space. The secondary rooms and structures around the court served as artificial large enclosed places for specific rituals, including feasting, dancing, processions, sacrifices and communal meals. Hence, the Minoan Palace carried elements of ideology and religion through the rituals, on the one hand, and of elements of production and technology for the feasting, on the other. If these palaces were communal buildings, they probably did not have a primary political and residential function, but

served as the main political arena for the fulfilling religious and ritual tasks (Driessen 2002: 9-13).

Schoep (2002: 20-22) defines this scenario as a heterarchical organization; a social landscape in which power was not concentrated in a single location but emanated from different social actors. Each architectural element is either unranked relative to other elements or possesses the potential of being ranked in a number of ways. That created a hierarchy that was not rigid and fixed, but fluid and fluctuating. At the regional level, these palaces were part of a large, island-wide integrating political structure. Their architectural design suggests that dependent centers emulated the main centre, but also point to a strong interaction between independent polities (peer polity interaction) through common ideological values.

Mycenaean Palaces

Mycenaean civilization flourished in mainland Greece just after the abandonment of Minoan island centers around 1400 BC. (Figure 7.1) Their political organization was based on secondary, first-generation states that arose from competing chiefdoms that had contact with Minoan centers, but developed in a different direction. In a regional level, the network of palace centers was more hierarchical than heterarchical, showing more signs of centralization. Also, their palaces were smaller than the Minoans, and functioned differently because they were designed to accommodate fewer people (Galaty and Parkinson 2007: 9-10).

The Mycenaean palace design was centered on the “*megaron*” unit, which was a rectangular room with four columns surrounding a hearth, and long walls extending to

form a porch and a vestibule (Figures 7.5, 7.6). Like their Minoan counterparts, palaces in Mycenae, Tiryns and Pylos have been interpreted as multifunctional buildings, serving as residences for the ruler and his family, but also containing spaces for sacred rites, workshop areas, storage of goods, and archives of records (Galaty and Parkinson 2007b:25) (Figures 7.7, 7.8)

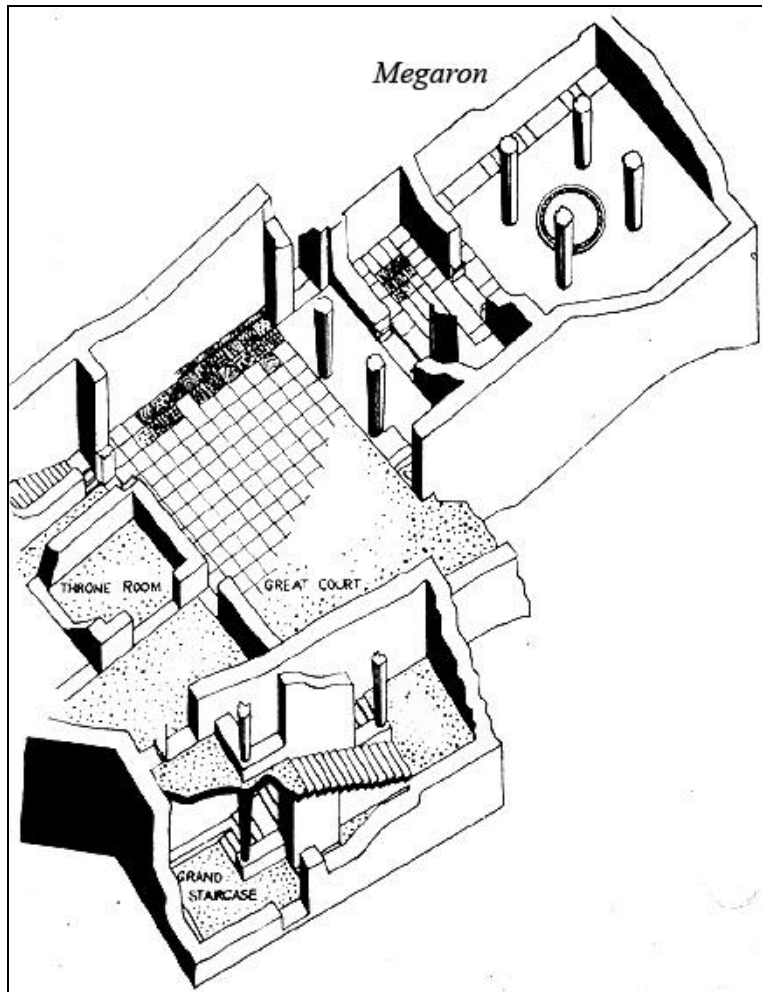


Figure 7.5 Location of the Megaron in a Mycenaean palace (Basic, n.d.)

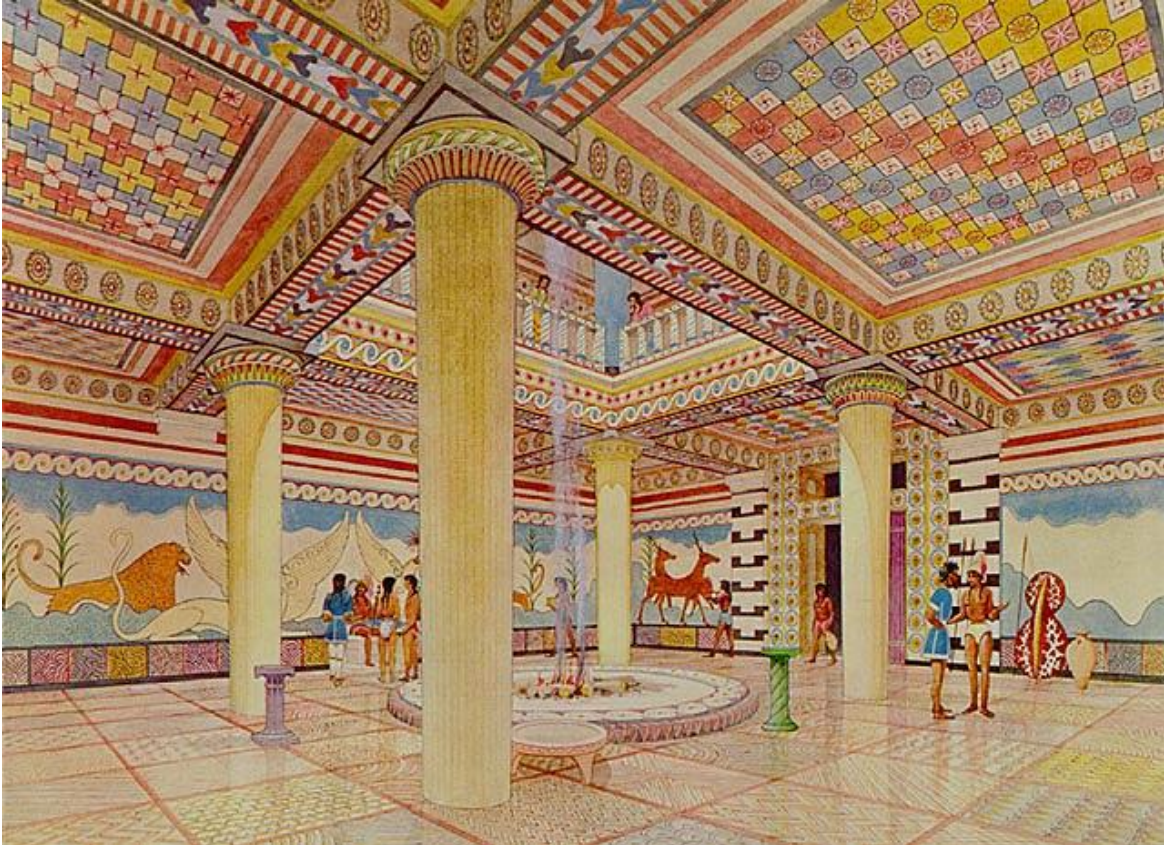


Figure 7.6 Reconstruction of the Megaron in the Palace of Pylos (Painting by Piert de Jong, Hellenic Ministry of Culture)

Unlike Minoan palaces, Mycenaean architecture was clearly intended to serve a single ruler. The access pattern indicates that all traffic was directed towards the core of the complex: the throne near the hearth in the megaron (Driessen 2002: 4).

These palaces also played an important role in economics, because they helped to adjust political centralization with economic power, putting both in the hands of an upper class. It was a type of redistributive economy in which labor and resources were channeled to or through palaces, as has been recorded in tablets with Linear B inscriptions. Therefore, the models of political economy in Mycenaean civilization emphasize a palatial control of economic activity, where private reciprocal and market transactions were carried within a non-palatial sector of the economy. Despite sitting atop

primate settlement systems, Mycenaean elites did not control all aspects of the economic system, though they clearly administered certain industries from the palace. The Mycenaean palace economy was not redistributive in the form of collected tributes; instead, feasting was probably the vehicle for identity creation, and included a fairly wide segment of the society. In this context, palaces were the means whereby the elite sought to build social cohesion and justify their social rank (Galaty and Parkinson 2007: 4-8).

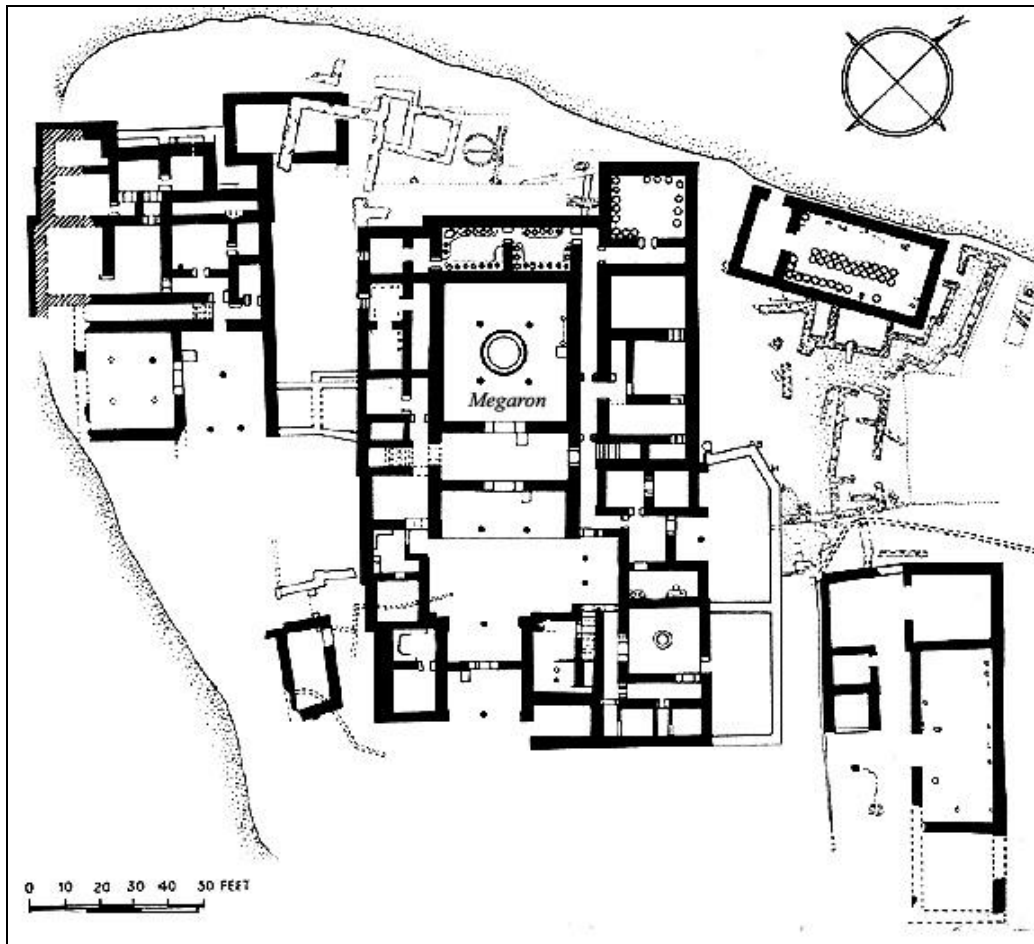


Figure 7.7 Plan of the Palace at Pylos (Basic, n.d.)

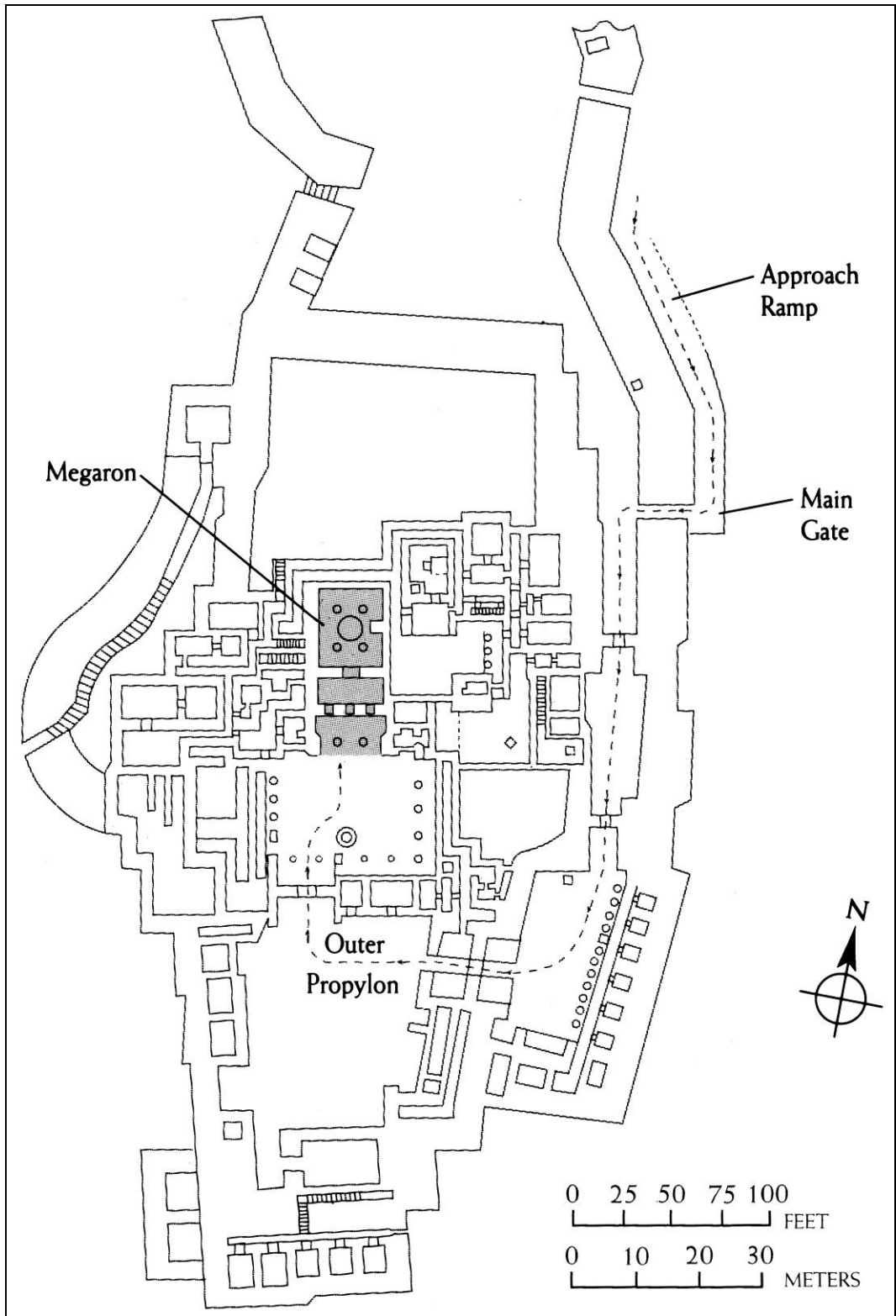


Figure 7.8 Plan of the Palace at Tyrins (Animoart, n.d.)

7.6.2 Palace Studies in Mesoamerica

There is important information about palaces and royal courts from Central Mexico and other parts of Mesoamerica that provide data useful for analyzing Maya palaces. For example, recent studies in El Tajin have identified an acropolis type palace complex in the Building of the Columns and the Tajin Chico group (Figure 7.10), located apart from the ceremonial lower plaza and characterized by an interior plan with restricted accesses and a non hierarchical distribution of interior courtyards. Building A consists of a closed quadrangle decorated with motifs associated with the cosmos cardinal directions (Sarro 2006: 181-3) (Figure 7.9). Building Y created a restricted access to this area, located in the main access in front of the Northern Ballcourt, which is the largest open space in the site (Sarro 2006). This and other buildings created an “outer rim” that provide a kind of wall around the acropolis (Figure 7.10).

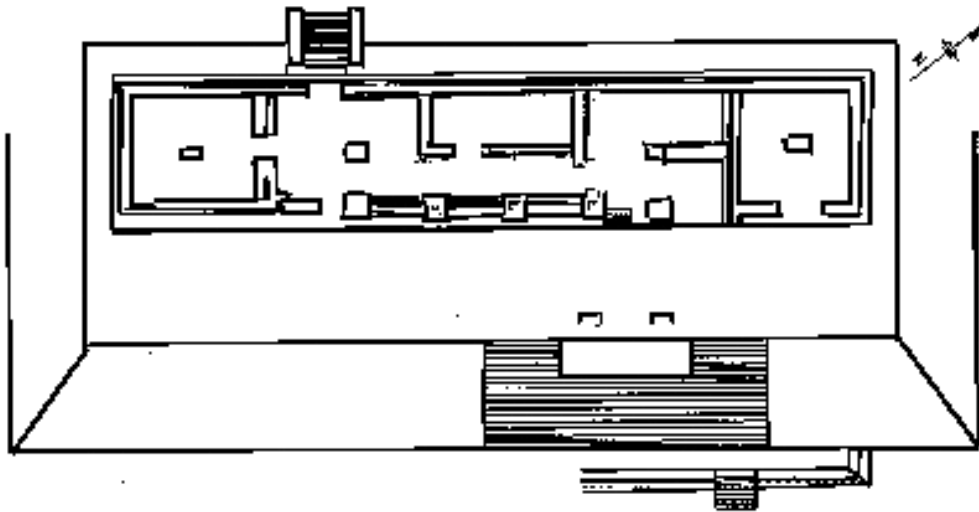


Figure 7.9 Plan of Building Y, El Tajin (After ReoCities, n.d.)

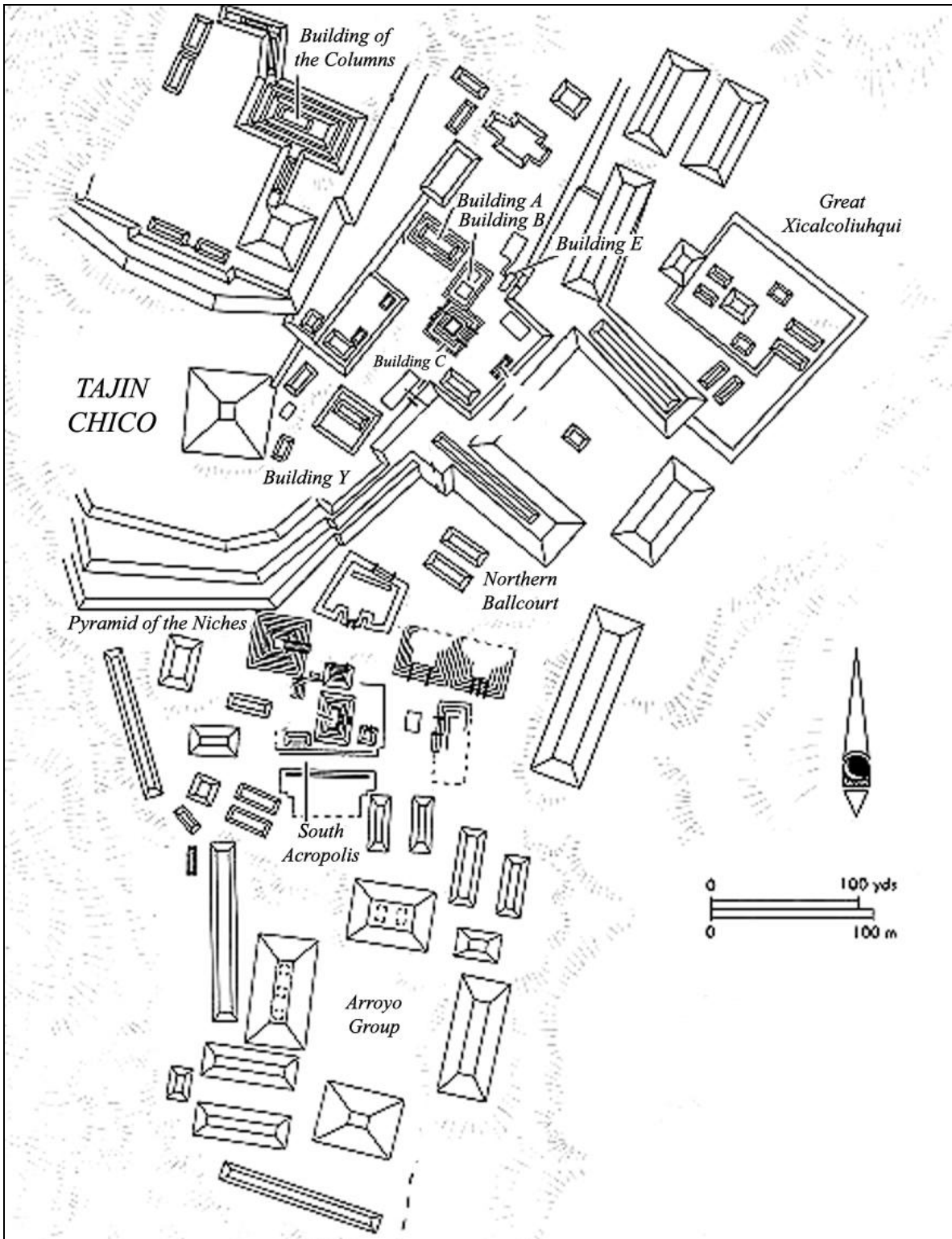


Figure 7.10 Map of El Tajin showing the location of Tajin Chico and associated palaces (After Coe 1998)

In Oaxaca, architectural studies have also defined an evolution pattern that starts with private elite residences in Monte Alban to public palaces in sites like Yagul and Mitla (Barber and Joyce 2006).

Teotihuacan and Toltec Palaces

In the central highlands, the evolution of palaces begins with small and almost irrelevant constructions in Teotihuacan, ending with large palatial compounds that were central in the administration of the Aztec empire (Evans 2006). During this process, the layout of palaces changed, especially the location of the main interior patio and the arrangement of rooms around it, suggesting an evolution of architectural planning that reflects the changes in sociopolitical organization.

Among the great quantity of residential compounds that were built in Teotihuacan, Sanders and Evans (2006) have identified a sequence of three locations that could have served as royal palaces in different periods of the city's history. The first one is the Xala compound, built during the Patlachique and Tzacualli phases (150 B.C.E.-150 C.E.). Later on, during the Miccaotli (150 C.E.) and early Tlamimilolpa phases (C.E. 150-300), the Ciudadela was probably the location of a main palace.

During the later stages in the city occupation, more palaces seem to be added in the Street of the Dead Complex. These compounds have a similar arrangement of rooms and interior courtyards that is characterized by the absence of throne rooms and large courtyards (Evans 2006) (Figure 7.11). Based on the archaeological evidence found in these areas, it is clear that palaces were not used for storage or food production (Ball 1993).

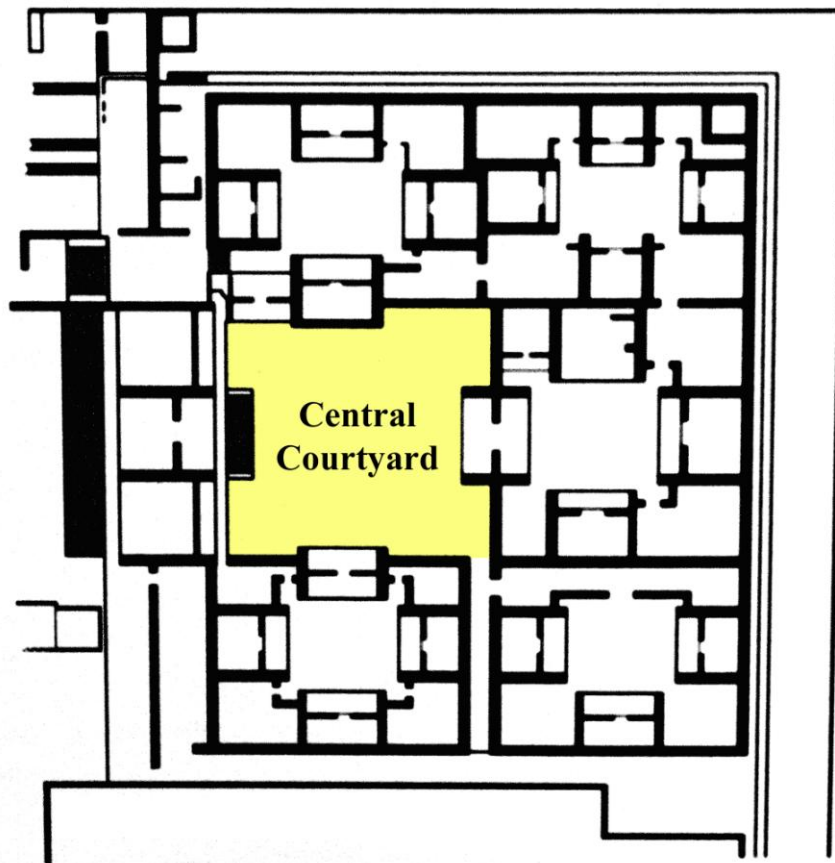


Figure 7.11 Plan of the North Complex, Ciudadela, Teotihuacan
(After Evans 2006: 294, Figure 10.6)

In the later Toltec capital of Tula, several palaces have been identified by Evans (2006): Charnay's Palacio tolteca (Figure 7.12), the Palace to the East of the Vestibule, the Burned Palace, and possibly the Palace of Quetzalcoatl. These seemed to have functioned as administrative centers, while other compounds could have had residential functions, such as Building D and the residential centers of Cerro La Malinche and El Cielito. During this time, the main courtyard of the compound is no longer located in the center, suggesting that it was a semi-public space and a vestibule for presentation rooms and ritual areas.

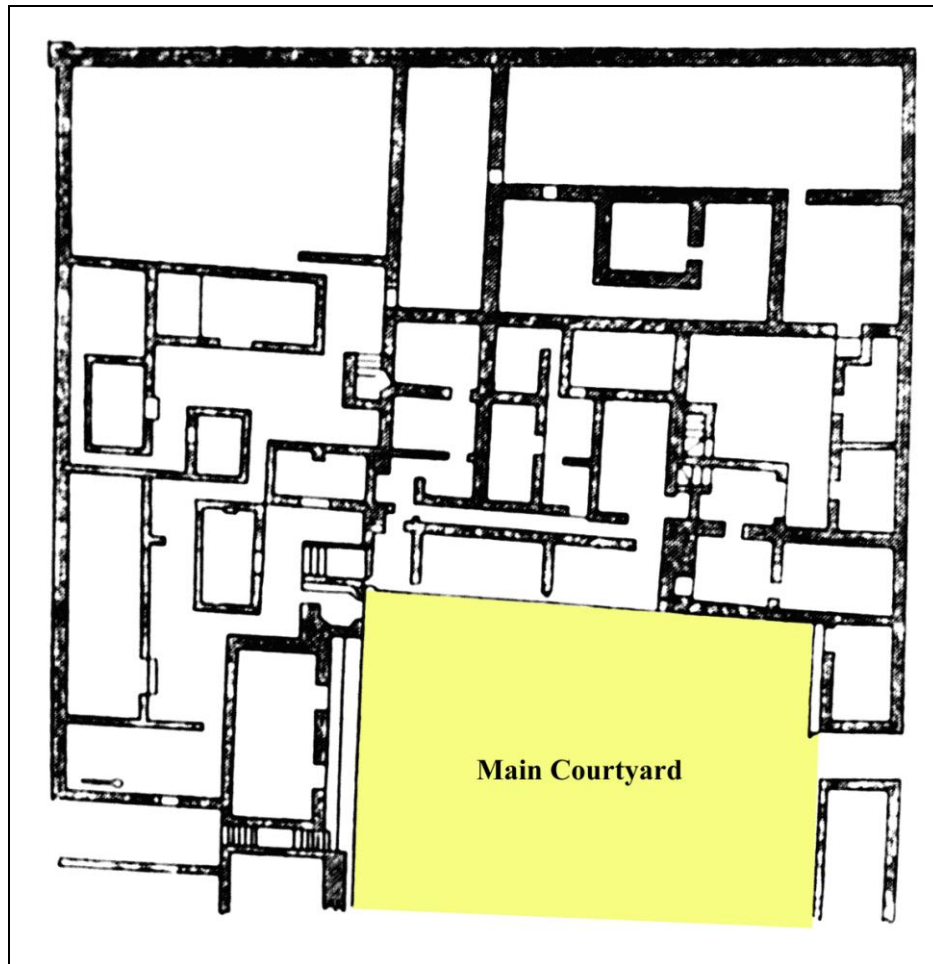


Figure 7.12 Plan of the Palacio Tolteca, Tula (After Evans 2006: 300, Fig. 10.9)

Aztec Palaces

In Aztec times, palaces were known as “*tecpan*”. These were large and square buildings that faced the main plaza of a site. Their design included an entry sunken courtyard and a “dais room” just across the main entrance (Figure 7.13). Apart from the courtyard and dais room, they included suites of consultation, storage rooms and habitation rooms. Tecpans were built at almost each local and regional site (about 500 known), functioning as administrative places for government and residences for the local ruler.

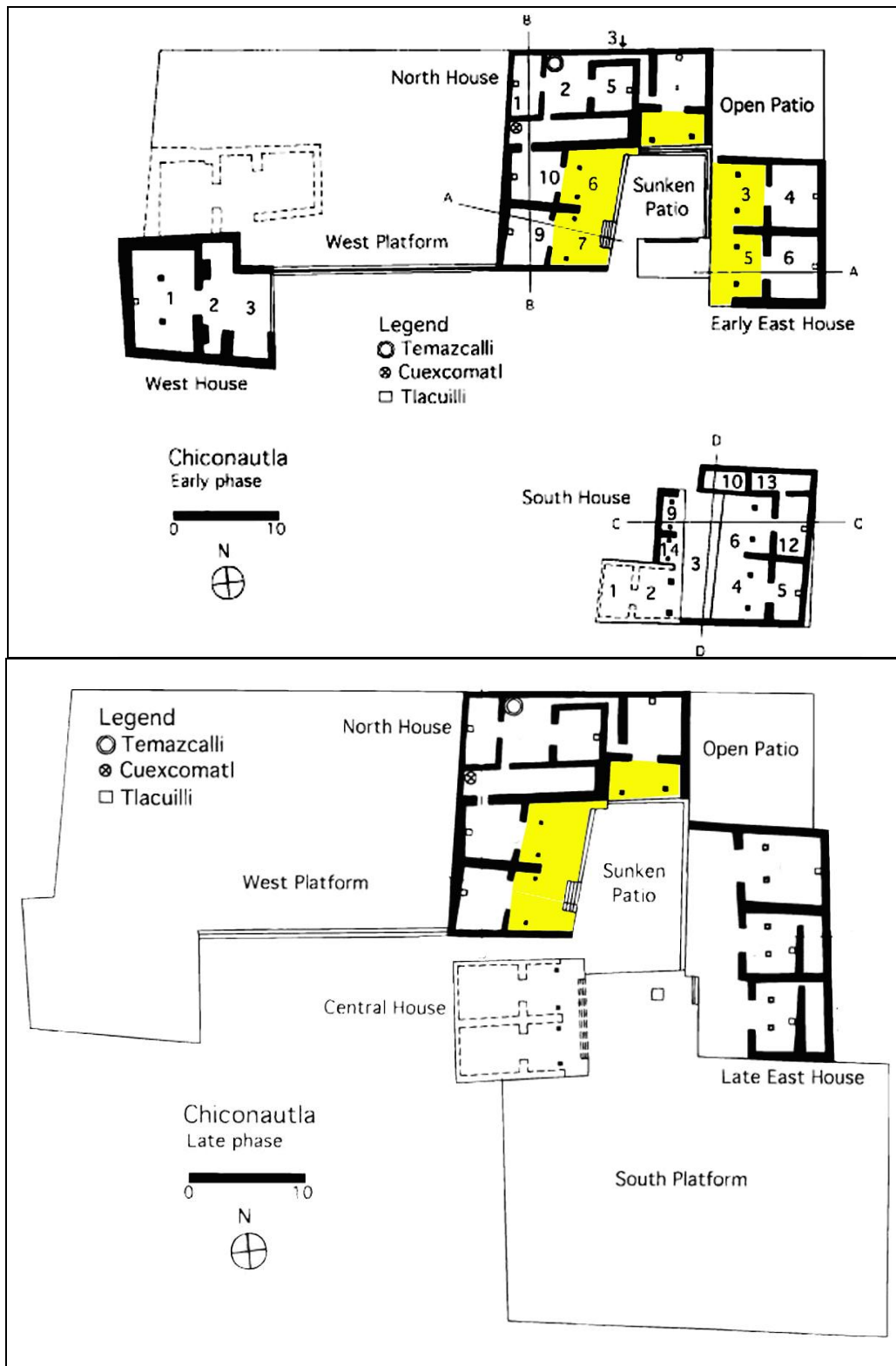


Figure 7.13 Palace at Chiconautla (dais rooms in yellow) (from Elson 1999)

In terms of architectural design, their plan was dominated by the large entry courtyard that could have been some sort of communal space, functioning as a nexus between the hierarchical levels of the society. In this scenario, the site main plaza could have been used as a kind of palace anteroom where public ceremonial events took place, followed by more private rituals carried out in the palace courtyard (Evans 2004, 2006). According to descriptions made by Duran, and documents like the Map of Quinantzín, it is clear that royal palaces in major centers like Tenochtitlan and Texcoco had a more elaborate access pattern (Evans 2001), suggesting the existence of a “code of withholding royal and noble presence”, where the king’s presence was strictly limited in terms of privacy and access. In Iztapalapan, the palace included pools of fresh water made with masonry walls and steps leading down to the bottom (Evans 2004).

7.6.3 Palace Studies in South America

The vast amount of archaeological data coming from the different regions of South America is also an important source of comparative data concerning the study of palace architecture. In the Peruvian coast, during the Early Intermediate Period (200-600 C.E.), Huacas of Moche was a centralized urban center that functioned as the capital city of a multi-valley state. It contains a large monumental structure that has been defined as a multifunctional palace, characterized by a central location, limited access and defensive features. It contains a residential section with distinctive decorations, a large audience room for religious and political events, storage spaces, rooms for administration, and a large enclosure or plaza for gatherings and assemblies. In general, it was a building that served as a temple, palace and burial place (Chapdelaine 2006).

During the Late Intermediate period, the Chimu Empire was characterized by the construction of large grid-like compounds called *ciudadelas*. The *ciudadela* was a private residence with a public role that functioned as a manifestation of political authority. They were built according to cardinal features and were meant to centralize activities and separate the ruling elite from the commoner populations. This developed into a dynastic state based on divine kingship, which emerged during the foundation of the capital at Chan Chan. A direct product of centralized power was manifested in gathering together previously isolated centers into the single walled *ciudadela* complexes (Figure 7.14). The elaborateness of the elite architecture in Chan Chan contrasted with the smaller compounds built in minor provinces (Pillsbury and Leonard 2004).

The *ciudadelas* were built according to a basic plan, dominated by a central route defined by a ramp, a door, and a narrow anteroom. These spaces were important points of public ceremonies, which involved presentations to the elite, thus functioning as places of encounter between different social levels. Architecturally, this central path is evidenced by the existence of differential traffic on the right/left vs. the central routes, where the central doorway is narrower than the lateral ones. The central ramps are also more elaborated artistically than other portals, and more offerings have been found associated with central ramps than right or left portals (Moore 2005).

Palaces in the Inca territory had ideal designs but were at the same time highly variable and innovation seems to have been common (Isbell 2004). Their basic design was defined by a series of inner patios or courtyards that declined in size and elevation as access became more restricted (Isbell 2006). Enclosure within walled precincts was then

the key attribute of Andean palaces, with some exceptions when part or all of the palace was elevated on high, steep-sided platforms (Isbell 2004: 222).

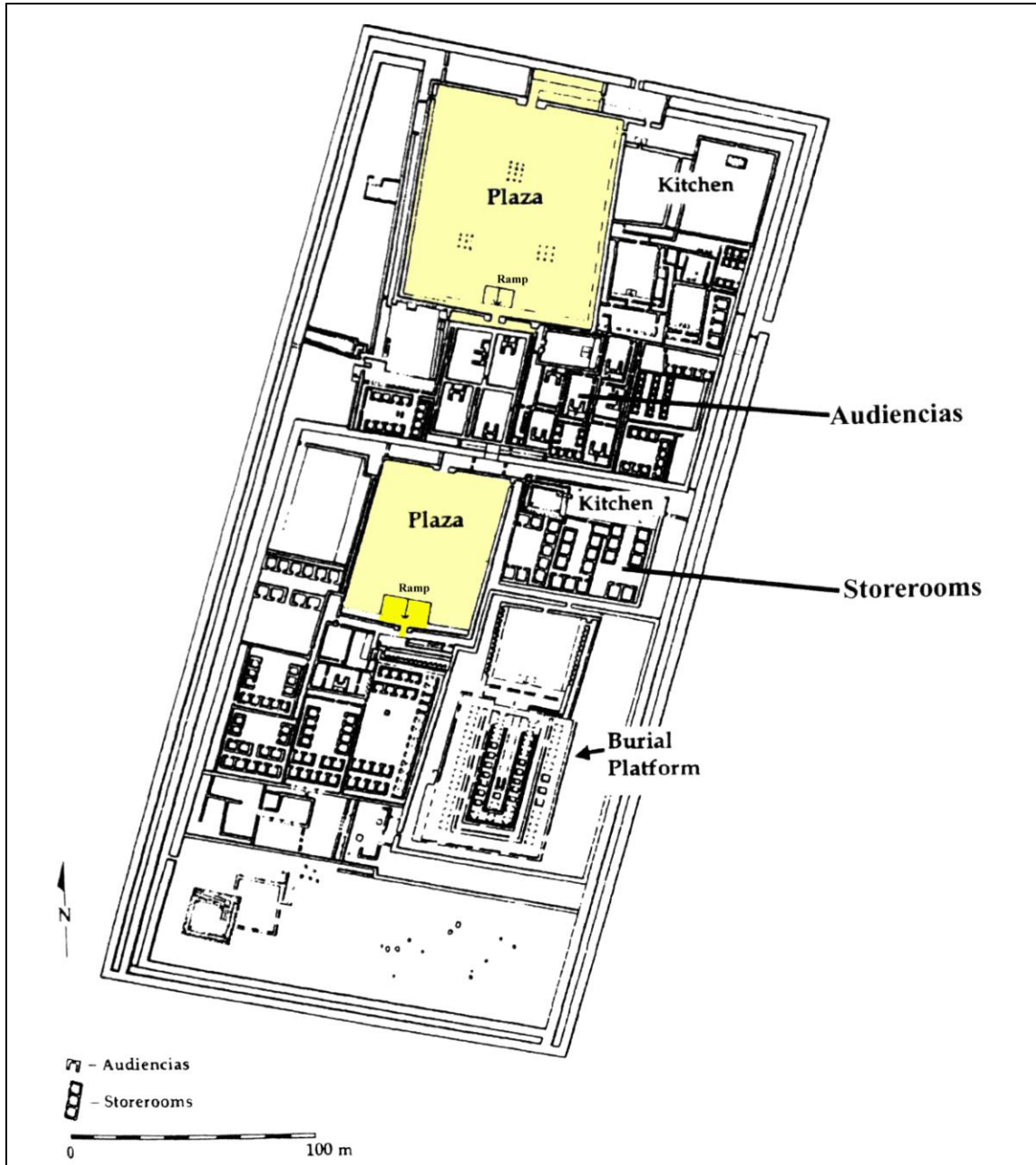


Figure 7.14 Plan of Ciudadela River, Chan Chan (After Evans 2006: 317, Fig. 11.2)

Machu Picchu offers an example of how the first Inca emperor used the palace architecture as a vehicle to express authority. The site was largely designed and built as a single unit, and according to William Coaldrake (1996: 281), this kind of architecture helped to effect the centralization of authority and created a pervasive image of a new order (Salazar and Burger 2004).

7.7 Concluding remarks

From this small sample of cases, it seems clear that each society has developed its particular design for palaces. The variation in form, size, and function makes impossible to conceive a universal template for analyzing these buildings. Nevertheless, the most important aspect of these ancient palaces from different civilizations is that they were not confined to residential use. Palaces have to be defined as multifunctional built environments, sometimes with a high degree of privacy and restriction, but in other cases designed to interact with large audiences through exterior spaces.

Particular attention has been given to Minoan and Mycenaean palaces, because their study has been based on structural analysis. As a result, their interpretation has been pivotal to understand the sociopolitical system where these buildings played an important role. In addition, the similarities in architectural design do not reflect a fixed canon, but represent “contextual variants” of a shared political organization.

With these concepts in mind, we will now turn to the Maya region, in order to revise and compare all data concerning palaces, especially those built in the Lowlands during the Classic period.

CHAPTER VIII

MAYA ROYAL PALACES: A COMPARATIVE AND CHRONOLOGICAL ANALYSIS

The previous descriptions of palaces throughout the world are intended to introduce a more detailed comparative analysis in the Maya region. Despite differences in time, geography and sociopolitical organization, it seems that all forms of ancient palaces share the general characteristics described in the beginning of this chapter, thus allowing cross cultural comparisons that may help to interpret specific cases of Maya palaces, such as the one in Cancuen. Nevertheless, comparisons between Maya palaces will show important variations in design and function across time and space, suggesting a progressive development that began during the Late Preclassic and Early Classic periods, and reached its apogee during the later half of the Late Classic (750-850 C.E.). Furthermore, palace constructions dated to the Postclassic period show that the concept of palace continued well after the collapse of Classic lowland centers, evolving in different forms that were adapted to new sociopolitical conditions and ultimately fading away during the sixteenth century, when Maya societies experienced deep transformations caused by the Spanish conquest.

8.1 Development of palace studies in Maya archaeology

Unlike Aztec palaces, we don't have detailed descriptions of Maya palaces in Yucatan or Petén during the sixteenth century. The few Spanish ethnohistoric accounts briefly mention that plazas were used for court gatherings, and that colonnaded halls functioned as council houses or *popol nah*, characterized by the presence of raised shrines

(benches) in their interior (Ringle and Bey III 2001, Webster and Inomata 2004). Basically, both Maya and Spanish accounts use the word “palace” to refer to any multi-roomed structures that were not temples or ball courts. Cortés (1986) describes them as:

“houses belonging to certain men of rank which are very cool and have many rooms, for we have seen many as five courtyards in a single house, and the rooms around them very well laid out, each man having a private room. Inside there are also wells and water tanks and rooms for slaves and servants of which they have many” (cited in Smith 1962:183).

Clavijero also said that:

“...the houses of lords, and people of circumstances, were built of stone and lime, they consisted of two floors, having halls, large courtyards, and the chambers fitly disposed...” (Webster 2001).

In general, sixteenth century Spanish writers described these types of structures as palaces because of their great size and grandeur. Lopez de Cogolludo suggested that the House of the Governor in Uxmal was a royal palace, finding support from an Indian informant that described it as the residence of the king (Kowalski 1987:76).

It was not until the eighteenth century that Maya palaces were described again. Their first “modern” mention was done in 1784 by Calderon, who named the “Palacio” in Palenque, and a year later, Bernasconi conceived it as part of a true urban city (Schavelzon 1990). Nevertheless, the term palace became widely used by Maya explorers since its publication by Stephens (Christie 2003a). In Santa Rosa Xtampak, he wrote:

“In ascending the grand staircase, cacique, priest or stranger had before him this gorgeously ornamented portal, and passed through it to enter the centre apartment of the upper story” (cited in Andrews 1995a: 90).

With the development of scientific archaeology, Alfred Tozzer published in 1911 the first interpretation of Maya palaces as residential type structures, possibly the homes of the priests (Christie 2003a). However, Linton Satterthwaite, who was working at

Piedras Negras in the late thirties, challenged that interpretation and rejected the use of the term palace, which was directly associated with residential functions. Instead, he argued for their function as audience facilities used by priest-administrators (Satterthwaite 1943:17). This interpretation was also supported by Eric Thompson and Eric Vogt, who claimed a ritual function (Christie 2003b). Thompson's ideas were based on the "priest-peasant" and "vacant ceremonial center" models, which described Maya social organization as pure theocratic. Maya cities were thus conceived as uninhabited and empty ceremonial centers that were used as symbolic places for ritual (Webster and Sanders 2001: 44-5). Within this scenario, palaces were also defined as important public buildings used for administrative purposes, storage, and temporary quarters for priests and novitiates. Also, the notion of lack of comfort, the lack of evidence of eating and sleeping, and difficulties of transporting drinking water, suggested that nobles lived in thatch-roofed houses near an outer perimeter of the ceremonial center (Kowalski 1987: 77-80). Alfred Kidder also supported this interpretation:

"I cannot imagine any sensible ruler having chosen to live and to install his family in such damp, gloomy chambers...seems to me unlikely that structures of this type served as permanent abodes, but rather, that they were used as temporary retreats, perhaps for priestly brotherhoods, for the housing of novices, or something of that sort" (Kidder 1950:11).

On the other side, archaeologists like Spinden, Bullard, Potter, Merwin, Vaillant and Adams supported Tozzer's hypothesis of residential palaces (Adams 1974: 286, Kowalski 1987: 80-81). However, the main supporting arguments came from Ledyard Smith after his investigations in Uaxactun and Mayapan, who defined the advantages of palace rooms fitted with benches compared to other possible living spaces for the elites (Smith 1950:44). He interpreted Uaxactun's Structure A-V as living quarters for priests

and high officials and their families, but also for private religious ceremonies. This ambiguity was more clear in Mayapan (Smith 1962), since no real palaces were found (Christie 2003a). For example, Structure Q-208, located nearer the center of the site, was interpreted as the residence of a noble family with a private shrine. The architectural plan was a larger and more ornate version of a typical dwelling, and was roofed with corbelled vaulting or beam and mortar roofing. These similarities indicated a shared pattern between the houses of commoners and rulers (Kowalski 1987: 82).

The debate concerning the residential function of Maya palaces was not resolved until the focus of Maya archaeology shifted to residential and peripheral studies that tried to answer larger issues related to political organization and the nature of cities. This was first accomplished in the early sixties by the Tikal project, where Peter Harrison carried out the first systematic excavation of a Maya palace. This was followed by detailed architectural descriptions and excavations by Pollock, Kubler, Andrews and Kowalski, mostly in the Yucatan region. All these works started to show that palaces had multiple functions that merged domestic, religious and administrative uses, thus questioning the application of a simple dichotomy of temple and palaces (Kowalski 1987).

During the seventies, Maya archaeology was in the hey-day of processual theory, which tended to be anti-elitist (Quilter 2004). For that reason, the use of the term “palace” diminished, and the concept of “range-type building” was preferred (Harrison 2003b). At this time, more projects were designed to investigate elite residences, both inside and outside the epicenter. Some of these pioneer studies were carried out in Copan, by Harvard University between 1975 and 1977, by Proyecto Arqueológico Copan, between 1977 and 1984, and Tulane University between 1990 and 1994 (Andrews *et al.*,

2003). As a result, new models were created in order to explain the nature of Maya cities and political organization, which in turn affected the functional interpretations of buildings. One of the strongest influences was Fox's five city types: industrial, colonial, merchant, administrative and regal-ritual (Fox 1977). According to Sanders and Webster (1988), Maya cities were of a pre-industrial nature and could only be explained through the latter type, given that only the great cities of the Mexican highlands reached the level of administrative centers. Regal-ritual centers were part of segmentary and decentralized states, based in kinship hierarchy and ideological functions (Chase *et al.* 2001: 98). For Webster and Sanders (2001: 47-8), the regal-ritual model could be applied to Maya cities considering their high population numbers, dense population cores and more internal heterogeneity, which also expressed a hierarchical system extending from the royal palace to the peasant dwellings (Ciudad and Iglesias 2001: 15). In this scenario, royal households focused on the persons and actions of living kings, tombs and monuments of their ancestors or predecessors, and the facilities for projecting royal authority and rule. Dynastic power and ritual resources also emanated from royal palaces, creating true royal courts (*Ibid.* 59). Despite the general acceptance of this model, several authors consider that reaching a single model of spatial organization and social structure in Maya cities remains an unsolved matter (Chase, *et al.* 2001: 98, LeCount and Yaeger 2010b: 21)).

During the nineties more information enriched the study of royal courts, with data coming from detailed excavations in palaces throughout the entire Maya region. Epigraphic decipherments have also helped to reconstruct the organization, function and meaning of royal courts, especially through the analysis of royal titles, events and names, as well as the study of palace scenes represented in polychrome vases and sculpted panels

(Webster 2001). This new approach in Maya palace studies was presented in 1996 during a symposium in the American Anthropological Association, organized by Takeshi Inomata and Stephen Houston. As a result, two volumes on Maya Royal Courts were published in 2001 (Houston and Inomata 2001a, 2001b) and other compilations and comparative studies have followed it since (Christie 2003, Christie and Sarro 2006, Evans and Pillsbury 2009).

8.2 Interpreting Maya Architecture

The current status of architectural studies in the Maya region covers a wide variety of topics, being the result of almost a century of research. Hence, in order to improve our understanding of a particular type of building such as the palace, we need to review some of the latest interpretations concerning the nature of Maya architecture.

In a very general way, Webster (1988) has defined the role of architecture as one of the most important tools for the study of Maya civilization. He summarizes the different approaches in which architecture has played an important role:

- The definition of the Maya culture area
- Epigraphic and iconographic studies
- Studies of Maya cognition, especially as it relates to spaces and places
- Chronological studies
- Relations between the Pre-Spanish Maya and ethnohistoric accounts
- Studies of Maya population size
- Promotion of the past as a matter of national pride and tourist attractions

- Hypotheses about the nature of political power (how it was organized, legitimized, and exercised)

8.2.1 Maya architecture and politics

Building plans, the scale and timing of building events, and the images and symbols associated with them, constitute one of the best windows into Maya politics (Webster 1998). In the same line, Demarest (2006) views elite residences and architecture as the key for identifying specific activities and sources of power for each particular dynasty. In this scheme, architecture was not only the setting of political agency, but an active player of royal strategy. Most of the recent interpretations related to Classic Lowland Maya political power agree that the center of the royal court was the king himself and his surrounding family and secondary courts, composed of advisers, retainers, guards, assistants, craftspeople and servants (Inomata and Houston 2001a: 7-9). However, it seems that the Maya did not have a distinct or bounded collective entity of “entitled elites” or “court members”. Boundaries were more defined between elites and lower status people than between royal and non-royal elites (Jackson 2005: 271, 597).

Despite the presence of sumptuous façades of power, the evidence points to the existence of weak political systems behind them. Webster (1988) considers that even when Maya cities were centers of polities, their boundaries were fluid and constantly shifted through time. In addition, it seems that the political stability was largely dependent on the charisma and skill of individual rulers. Kings were thus essential to governance but not very powerful in bureaucratic or coercive terms. Their role was expressed mostly through royal rituals and metaphorically managed economic affairs.

Given that force was less important than display and feasting, there was a large investment in monumentality, where architecture played a key role. As a result buildings such as pyramids and palaces expressed power messages but probably masked internal organizational weakness and fragility.

8.2.2 Variability in Maya architecture

One of the main characteristics of Maya architecture is variability. Although their basic typology is limited, most buildings were constructed in a unique way, as a single masterpiece that reflects a certain degree of individualism and even a distinct personality (Martin 2001). As a result, there are few cases in which architects followed a defined template (e.g. twin pyramid complexes in Tikal), but the results were never identical. This variation from site to site contrasts with the regularity in building design that can be found in other pre-Columbian civilizations such as the Aztec, Inka and Chimu (Christie 2006). According to Kowalski (1987: 76), the variety of buildings cannot be explained by technology alone, suggesting that the Maya's cultural values and societal requirements were more important factors in determining architectural form. For that reason, Maya palaces show a behavior pattern that requires a very complex analysis and must be studied within specific cultural and historical contexts, given that they vary significantly from each other in terms of form, composition, function, meaning, and organization (Ciudad Ruiz 2001: 308; Inomata and Houston 2001a: 5; Webster 2001: 144).

In the case of palaces, there is great variation that cuts across different forms of political and economic contexts. Just as there are different kinds of palaces, there may well have been differences among courts (Chase and Chase 2001). The variability in the

contexts and locations in which politically active elites operated also reflect different patterns of flexibility in political strategy (Jackson 2005: 621). As a result, the political identity and individuality of a city or capital of an autonomous polity created particular artistic and architectural expressions that were promoted by the different rulers (Rivera Dorado 2001). Then, we can be able to infer the political strategies, idiosyncratic concerns, and even the personality of Maya rulers from the architecture that they left behind (Fash 1998).

Given that the architecture of elite residences and royal courts is not expected to look exactly alike in every city, comparison between and among cities is expected to be a fruitful means of seeking those attributes that express a city's individuality (Harrison and Andrews 2004: 116).

This variability of Maya buildings by no means reflects a lack of planning. Even though there is no single plan or layout for palaces, they tended to change through small adjustments balanced against master plans, and such decisions resulting from a historical framework that varies from place to place (Houston and Stuart 2001: 57). The study of these processes can also help identify the government seats of particular rulers and determine modifications introduced during their reigns (Lacadena and Ciudad Ruiz 1998: 53-54). However, not all experts are convinced by this diachronic perspective. Chase and Chase (2001) point that because palace compounds were not built at the same time, they are difficult to relate to particular rulers, and all buildings may not have been occupied at the time of abandonment. For that reason, analysis is largely restricted to final phases, mostly the latter stages of the Late Classic (Martin 2001; Folan, *et al.* 2001). Therefore, cities with relative short and simple political histories are comparatively easier to

decipher spatially, while those with a longer political development show more difficulties for their interpretation (Ashmore and Sabloff 2000: 30).

At a regional level, architectural variability also reflects the relation between small-ritual centers and large-centralized urban cities. Palace settings can thus express particular political strategies of each site and its ruler, as it related to other regional centers or networks (Demarest 2006, LeCount and Yaeger 2010b: 28)

Given the variable nature of Maya architecture, an interdisciplinary approach is needed for studying buildings, especially palaces. It must combine archaeology, epigraphy, art history and anthropology, focusing on architectural space as a variable for reconstructing cultural behavior (Christie 2003a). Furthermore, such analysis can be carried out according to different theoretical trends, especially of functional, cognitive and structural nature. These are described below:

8.2.3 Morphological analysis

The most common architectural analysis is the one that is based on form and size. As a result, differences in the shape and dimensions of buildings result in the creation of types that help to classify all constructions. In terms of classification, Maya buildings present a wide variety of forms, which have been summarized in great detail by Rivera Dorado (2011):

- Large palace
- Small palace
- Multi-storied palace
- Temple-palace
- Pyramid-palace
- Pyramid without shrine

- Ceremonial platform
- Circular building
- Labyrinth
- Colonnade
- Portico room
- Ball court
- House
- Council house
- Oratory
- Causeway
- Water deposit
- Tower
- Observatory tower
- Triumphal arch
- Sweat bath
- Defensive wall

However, although this classification is one of the most complete ones published to date, these types are not exclusive. Maya buildings often combine some of these in a single construction. For example, a *ball court* can include an *oratory* and a *ceremonial platform*.

In terms of form, all structures classified as palaces are usually long and narrow. Inomata (2001b: 341) defines this type as a large and elaborate *multi-chamber* or *gallery* building. It is important to clarify that this type does not consider any specific function.

In general, morphological types are not very useful for interpreting ancient behavior. For that reason, it has been necessary to develop other forms of understanding architecture.

8.2.4 *Functional analyses*

The most basic and important form of analyzing architecture is to determine the function of each building type. In the early stages of Maya archaeology, Proskouriakoff (1963: 120) pointed out that the Maya manipulated space in ways that served more than just aesthetic needs (Houston 1998c). Function has thus been defined in economic and social organizational terms: what a building or room is used for and how efficient was. More than inferring a specific function, it is also important to discard what other reasons they had for its existence (Prem 2000: 63).

In studying architectural form, Mayanists have interpreted not only economic function but also the functional relationship between cultural traits and social systems (Trigger 1989:298). As a result, buildings are often classified according to functions based on social and economic terms, assuming that architectural form reflects building and social function (Rapoport 1990:11). For this study, it will be considered that such associations should not be applied directly, and it is preferred to say that the buildings that exhibit a common form *may* share a common function (Harrison and Andrews 2004:116).

The morphological nature of Maya palaces is based on repetitive and modular spaces, whose durable, built-in features do not directly reveal functionality. They are also very individualistic and the amounts of space are distinct in nearly every case (Adams 1974: 287). Moreover, their remains lack perishable evidences such as furniture (Webster 2001). Because these and other limitations, the functional interpretations have been aided by data coming from ethnohistorical sources, related inscriptions and scenes painted on polychrome vases. They suggest their use as royal residences, ritual spaces, schools, and

priests' residences (Harrison 2003b). In terms of domestic life, they can also include food production and eating. Of a more "official" nature, palaces can include council rooms, audience halls and storage facilities, as well as open spaces for the public display of the ruler (Christie 2006).

Palaces must also be considered from a wide functional panoramic, which is close to the concept of "court" developed in other regions of the world, where, according to the different logics imposed by each cultural tradition, different and complementary tasks were carried out (Ciudad Ruiz 2001: 307). For that reason, more recent functional interpretations are now more focused on administrative functions, internal power relations and symbolic properties (Inomata and Houston 2001a: 5), as well as different forms of exchange of wealth and power (Ringle and Bey III 2001). Maya palaces were thus symbols of wealth, power, order and heritage; an ideological support for the court expressed in diplomatic settings, administrative seats, and places for meetings and councils. The ones that served as permanent or temporal residences were also family sanctuaries (Rivera Dorado 2001: 148, Traxler 2001).

Therefore, the functional approach of palaces is based on the concept of the Maya court as the central body of administrative functions and the "backdrop for the political enterprise" (Traxler 2001), which included polity administration, adjudication, diplomacy (welcome visiting dignitaries), royal rituals (marriage, accession), feasting, public rituals and ceremonies (sacrifice, war captives presentation, dancing, divination), commercial activities (gift exchange, local and external tribute collection), artistic and scribal production and attending the royal family needs (Inomata 2001: 28, 49; Reents-Budet 1994:253-255; Houston and Stuart 2001; McAnany and Plank 2001).

Palace structures also had at least a partial function as residential buildings, besides their administrative, storage, and audience space (Adams 1974: 287). In the case of royal residences, their spatial arrangements may have facilitated domestic needs of the royal family and secluded the sovereign from the rest of society. Other residences could also house the administrative, diplomatic, and ceremonial activities of the polity (Inomata 2001b: 343).

As a synthesis of all these activities, Jackson (2005: 424-31) has defined four elite behavioral categories associated with Maya architecture in general:

1. Public ritual/political performance
2. Activation of hierarchy related with royalty
3. Activation of hierarchy related with lower ranked individuals (labor forces)
4. Control of information and representation (inscriptions)

Some authors have defined a more hierarchical approach in functional analysis, identifying the degree of importance of all the different activities and functions described above. For example, McAnany and Plank (2001) consider that palaces could have more ritual than administrative tasks. On the other side, Ringle and Bey III (2001) view courtly festivities and rituals as complementary to more administrative goals such as formulation of policy, dispensation of justice, conduct of diplomacy, awarding of benefits, and reception of tribute and fealty.

In addition, some functions have been proposed to specific spatial units present in palaces. For example, the acquiring and displaying of tribute items has been associated with the modular rooms that face out from the façades (Webster 2001). Also, galleried quadrangles and benches are a common feature of palace interior spaces, suggesting little

variability and a possible common function (Martin 2001). Some rooms that present certain types of benches have been interpreted as throne rooms, and could have been used for reception of tribute goods, prisoners, visiting dignitaries, ritual divination, accession rituals and domestic scenes (Harrison 2001).

Although buildings and their associated spaces have been used to determine planning and the urban character in Maya centers, their functions have been established from very speculative bases, especially palaces. Their architectonic elements, style and decoration have been very well known, but determining their function is always influenced by our own social models (Ciudad and Iglesias 2001: 24). For that reason, not everybody all agree with the functional notion that the material condition and spatial organization of the archaeological record directly or unambiguously reflect patterns of past economic behavior and social organization (Johnston and Gonlin 1998). For palaces, the conflation of morphological (long structures or even pyramidal platforms) and functional inferences has yet to be demonstrated through empirical research (Inomata and Triadan 2003).

It is important then to support functional interpretations with some kind of archaeological evidence. Epigraphy has been very useful to determine particular offices of nobles, based in the decipherment of titles like *aj k'uhuun* and *b'aah ajaw*. Archaeological data has also helped to identify workshops, presentation palaces and residences, while iconographic analysis of murals and polychrome vases has also proved the existence of tribute presentation activities in palaces (Martin 2001, Valdés 2001).

8.2.5 *Structural analyses*

Interpreting Maya ancient architecture must include a morphological, typological and functional perspective, but should go beyond these in order to reconstruct more general aspects of the society and individuals who were responsible for its existence.

Instead of focusing on aesthetic concerns, a structural analysis is focused on explaining the relations between built environments and symbolic systems, social behavior and spatial organization (Liendo 2003: 184). Interpreting palaces and other forms of monumental architecture also require more than just formal, functional and contextual studies. They have to be studied in order to reveal their hierarchical position in the architecture and space of Maya cities, and their consequences in determining the rise and development of political institutions (Ciudad Ruiz 2001: 306). In Maya archaeology, political structure has been determined primarily from epigraphy (Jackson 2013), and architectural analysis has been limited to style, techniques and function. In other words, the political value of architecture has been ignored (Lacadena and Ciudad Ruiz 1998: 53-54).

According to Johnston and Gonlin (1998), a structural approach may be most productive when used to analyze large, well preserved, or decorated structures such as palaces and temple complexes. For that reason, I will present some recent models that have relied on structural theory for interpreting spatial organization and architecture as material evidence of social and political structures of Maya society during the Classic period. But before presenting specific models, it is necessary to review some general trends in the interpretation of Maya political structure. Hammond (1991a) has divided all previous approaches into three different levels:

1. Bottom upwards: Analysis of single sites or polities as “typical” specimens, based on settlement studies for identifying ecological and economical foundations.
2. Top downwards: Initially influenced by a cultural materialist perspective, the analysis from the level of superstructure (ideology) towards the relations of production and the productive forces that form the infrastructure. More recent approaches have emphasized the importance of identifying collective regularities and political structures, taking into account different levels of abstraction, that range from the large cumulative landscape of civic centers, to the political agency and individual actions of kings and nobles (De Montmollin 1995).
3. Sideways: Use of ethnohistorical and epigraphic data, as well as comparisons with non-Maya cases

In addition, there are four key concepts and theoretical issues that can be approached through structural analyses, as defined by Jackson (2005):

1. Class Hierarchy: Although there is no clear consensus about the nature of the class structure in Lowland Classic Maya society (two-class, three-class, multiclass), it is important to investigate the relations between classes and also among people of the same class (*Ibid.* 22-5, Jackson 2013: 5-6).
2. Elites: Defined as a distinct identity group, but their relative position within the larger social structure remains unclear. The research perspectives have to focus on both the institutional/organization and individual levels (*Ibid.*: 46)
3. Royal Court: Conceptualized not as a rigid structure, but as a variable entity that allowed changing circumstances and different local expressions. It is also related to specific places, whose architecture provides information about the ways in which

repeated activity shaped social and political structures and how space affected social interaction (*Ibid.* 43, 64-69, Inomata 2001: 39)

4. Structure and practice: Both aspects can be connected with material remains, especially the relation between structure of politics, court ceremonialism and ritual. According to Geertz and Giddens, material remains should be understood as products, byproducts and facilitators of past structures and identities (Jackson 2005: 41, 92-98)

These concepts have created a more structured and systematic approach to Maya architecture. Analysis of design and space between and within buildings provides a wider perception of formal structure that can be defined as a specific syntax of Maya architecture (Hohman 2000: 37-8). The particular plan of a site represents the result of many local and specific decisions that could take many generations, and there was a particular architectonic language available for transmitting messages with political or cognitive importance. The decisions of ancient urban planners are decipherable, and the legibility of a site's plan is related with the span and complexity of its political history. However, the specific architectonic components vary from place to place, and through time. Therefore, there was never a static formula for urban planning. The Maya had many options for affirming and promoting architecturally a wider political and ritual environment in a particular part of a civic center (Ashmore and Sabloff 2000:21).

For Maya rulers, architecture was then a medium for structuring social interaction, conveying a symbolic message and affecting society in an objective, material sense (Liendo 2003: 185). Buildings were objectifications of ancient patterns of social organization, reflecting indigenous conceptions of kinship, alliance, authority, status, and wealth (Webster 2001: 146)

According to authors like Preziosi (1977), Lang (1987), Rapoport (1980) and Ankerl (1981), architecture reflects, not constitute society. The built environment, defined as spatial arrangements expressed in physical settings, reflects past and present concepts of normative patterns of behavior, which are shaped by cultural templates that approximate cognitive models held by people in the society, or by a specific group such as the Maya court (Ashmore 1992). Architecture is thus a form of communication in which the primary meaning is cultural rather than behavioral. It mediates between the cognitive environment and the physical environment, as it conditions, stimulates and affects the network of communications.

The study of the distribution and general characteristics of the interior space of buildings is an essential factor for understanding their functions and typological differences (Rivera Dorado 2001: 146). Palaces display rules of geometry and layout that both structure and monumentalize larger political realities (Lekson 2006). Hillier and Hanson (1984 cited in Christie 2003a) also indicate that the analysis of spatial structure goes beyond functional interpretation, because it can be related to the reconstruction of social formations. Maya society can thus be approached in terms of its intrinsic spatiality, where the primary purpose of architecture is the ordering of space, outlining a syntax of space whose primary elements are closed and open architectural spaces. Applying Durkheim's concept of mechanical and organic solidarity, spatial separation is defined as a means for social integration through similarities of group belief and structure, facilitating social encounters for information and material exchange. The correspondence and non-correspondence of socio-spatial systems is thus expressed through the degree of proximity between architectonic elements.

One of the pioneer studies in spatial organization was the analysis of communication routes within the Lubaantun site core (Hammond 1975: 78–83). Other investigations have centered on defining patterns of directionality and orientation (Ashmore and Sabloff 2000), but the majority focus on how world view and cosmology structured Maya perceptions of space, settlement, and architecture (Demarest *et al.*, 2003), and how the built environment shaped human interaction and served as a mnemonic device that invoked and recalled the cosmology of kingship, royal history, and court etiquette (Houston and Inomata 2001a: 8).

More recently, graph analysis has helped the study of architectural space, creating quantitative measures of interconnectedness of access within a structure, based on number of rooms and the number of connections between rooms (Liendo 2003). For example, Mayan palaces show a pattern of progressive enclosure, additional doors, corridors, and rooms that change the meaning of a space by making it more difficult to get to (Houston 1998). All these aspects of architecture, such as privacy and boundary construction and maintenance have not yet been fully explored by Mayanists and constitute future goals for structural-oriented analyses (Johnston and Gonlin 1998).

Nevertheless, these models can have interpretive limitations due to the constant remodeling efforts carried out in palaces and other monumental buildings. For that reason, they must incorporate the analysis of independent evidences coming from other sources of archaeological data (Christie 2003a: 8).

Recent applications of practice theory have enriched the interpretation of social structures, because spatial contexts are now conceived as active players in shaping the practices that were enacted within them. The physical environment is then understood as

an important element of the contextualization, and also as a replication of the hierarchical forms enacted within its space. As a result, hierarchy and social power are encoded in decipherable ways on the spatial contexts in which they were reproduced (Jackson 2005: 621-22). For example, segmentation in culture and behavior such as architecture increased with the development of sociopolitical complexity (Christie 2003a, Kent 1990). Relative rank was thus correlated with spatial disposition around the holy lord and the monumental architecture associated with him. The arrangement of people was accorded with a carefully tuned structure of relative ranking, similar to what Giddens define as “position-practice’ relations”, where social interaction is situated through routinized encounters (Houston and Stuart 2001: 63-4).

The planning of public space can be defined as consequence of ideological, technical and political constructions of the elites, which created a hierarchic landscape that differentiated different segments of the society. Nevertheless, the “construction” of a city also incorporates the notion of collective effort, a tradition of homogeneity and “urban behavior” where social bonds are fluid, not permanent and limited to specific social domains. As a result, Maya cities were an expression of both types of social behavior, one very hierarchical, established by rigid patterns of planning in the spaces of public function (whether ritual or administrative), and the other more homogeneous that incorporates the surrounding landscape of the city, where daily habits gave form and structure to the peasant populations. Even when the architecture of a city was planned by leaders, their maintenance and successive enlargements could have been the result of interaction between them and their followers, social groups, artisans, religious personal

and immigrants, manifesting a strong group interdependence (Ciudad and Iglesias 2001: 29-34).

The relation between larger structures and institutions with individual identities and agents has been explained through the concept of “officialized practice”, which is a common conception of the habitus that involves public and/or ritual demonstrations. The group is then a spectator of a visible representation of a world-view (Jackson 2005: 101-107). Within this conceptual framework, the Maya royal court could be viewed as an institution of generation and regeneration, where an official ideology was reproduced and maintained through social or group practice (Kurjack 2003: 286, Inomata and Coben 2006: 22-25, Jackson 2013: 73).

However, any form of collective practice is subject to change and variability, which are inherent processes in identity creation and reproduction. The reproduction through repetition introduces the possibility of change, creating different types of organization or variants of similar structures (Jackson 2013: 81)-103. The accumulative variation of architectural elements to be found in each city makes them highly variable, creating a continuum of urban designs, some being very coincident and others more divergent (Ciudad and Iglesias 2001:35).

The discrepancies between “ideal” structures and real practice suggest a less conscious role of the agent, including arbitrariness and irregularity (Jackson 2005: 108-113). However, Maya cities were largely the expression of the exclusive wills of the ruling elite that could inhibit the citizen behavior of their occupants to a certain degree (Ciudad and Iglesias 2001:35). Furthermore, the Classic Maya polity as an imagined community may have occupied a relatively small place in the mind of each individual,

meaning that there was not an homogeneous and consistent system of meaning shared by all members of a society (Inomata 2006: 189-191, 205).

One of the disadvantages of typological analyses in Maya architecture is that they create rigid classifications of building forms that ignore the high degree of variation. On the other side, a structural analysis allows measuring spatial differences in different forms. Some of these attributes are integration, privacy, communication, replication, decoration and size, among others (Christie 2006a). However, one risk of applying structural analyses to Maya architecture is to take for granted that a certain degree of social organization must have portrayed a similar degree of architectural complexity (Christie 2003a: 6).

8.2.6 Theatrical and Performance analysis

One of the most recent applications of structural analysis to the understanding of Maya courts and their associated palaces is the concept of performance and political theater. The model is based on pervious works by Geertz, Tambiah and Turner (Christie 2006a, Inomata and Coben 2006) and has received considerable acceptance in Maya archaeology. Geertz defined theatrical performance as the state's primary purpose in Bali, where royal ceremonies were not a means to a political end, but the end itself (Geertz 1980). He advocates a form of poetics or aesthetics of power, rather than a Weberian notion of the mechanics of power (Inomata and Coben 2006: 28). In Tambiah's theater state and galactic polity model, the structurally segmentary net of states depends largely on ideology that is expressed through theatrical performances (Demarest 1992, Demarest *et al.*, 2003: 140). For Victor Turner, rituals are a form of social dramas related to

dynamic processes –rather than static structures- of social relations that not only mirror social change, but also create it (Inomata and Coben 2006: 19, Jackson 2013: 81). In addition, Baines and Yoffee define courtly performance as:

“a part of ‘high culture’ that includes the production and consumption of aesthetic items for and by the top elites, through which they appropriate meaning... Theatrical performance also express their versions of worldviews, history, cultural ideals, value systems, and social order, which serve to define and maintain structured social relations among different classes, genders, and interest groups (*Ibid.* 26).

This definition of theatrical performance is different from Hodder’s concept of quotidian actions (*Ibid.* 5), because it refers to complex activities that follow specific protocols and are restricted to limited actors. Therefore, spectacle and performance are integral elements of political process because they are means to constitute political subjects through the formal and codified enactments of relationships (Coben and Inomata 2006: 3-5). For the ancient Maya, theatrical events were not simply tools of elites for their ideological propaganda; rather, they were arenas for processes of ideological competition, collaboration, conflict, negotiation, transformation, and subversion of asymmetrical power relations in the community. They had critical implications and consequences for the development of centralized polities. When agents of political power presented themselves in front of a large number of spectators and the participants, they shared experiences through their bodily co-presence (Inomata 2006: 211, Inomata and Coben 2006: 10-12)

There are different types of large-scale spectacles and grand construction projects at which individuals directly sensed and witnessed the presence and operation of the polity-wide community (*Ibid.* 22):

- Polity-wide gatherings with the ruler as the protagonist or sponsor
- Diplomatic ceremonies involving multiple political units
- Courtly activities with a relatively small audience
- Religious rites detached from governmental institutions
- Festivals at the village level
- Pilgrimages that draw numerous participants of diverse political and social affiliations

The relation of monumental constructions and spectacle derives from their large labor investment; the construction of such architecture in itself creates spectacle with planning and managing organizations. As monuments provide stages for theatrical events, their physical presence creates ordered space that defines social relations of participants. These monuments mediated the construction and negotiation of the meaning associated with landscape and time in a unique manner comparable to spectacle because of its extraordinary nature distinct from buildings tied to daily lives (*Ibid.* 14-17). Securing effective theatrical spaces for mass spectacles was an important motivation for many construction projects, and laborers were probably aware of the activities that would take place in these loci (Inomata 2006: 206). In an architectural approach, the physical space plays a critical part in performance rituals. The scale, location, and distribution of buildings in relation to other structures point to the political importance of theatrical events, and the size and configuration of space provides a basis for estimating the number of performers and audience, which is a critical parameter in examining the political implications of theatrical events (*Ibid.* 30).

Ritual was definitely the most common form of performance, with a strict protocol that held participants in a formalized situation that allowed no options to

challenge authority except by its total refusal. Rituals imposed a certain type of power relations among participants, not by transmitting specific messages, but by the formalism of its acts (*Ibid.* 206). Royal viewing was also a form of display, one that connected the royal personage to the ritual while underlining his unique status (Sarro 2006). Certain ritual activities can be viewed as performance even when they do not involve the physical presence of an audience, if gods, supernatural beings, or performers take the real or symbolic role of an audience (Inomata and Coben 2006: 14).

In terms of analysis, it is important to study the forms, settings and physical qualities of theatrical events, and the specific meanings of performance. However, we must focus on how they shaped social relations among participants (Inomata 2006: 191). In general, the analysis of theatrical performances poses a challenge to archaeologists, because they cannot directly observe human actions. For that reason it depends on the study of space, iconography, and material objects. (Inomata and Coben 2006: 33). For those reasons, architecture makes ritual present and living even when it is not being performed (Miller 1998). The term “architecture of expectation” has been used by Houston (1998) to define the study and reconstruction of what the designers expected the buildings to signal and how they expected the buildings to function.

For the Maya, the main expression of their courts was performance (Jackson 2005: 596, Jackson 2013: 69-73), and courtly life was an expression of political theater developed in the Late Classic, corresponding with the construction of the great palace complexes (Houston 1988). The strong emphasis of practices such as bloodletting implies the primacy of kingship as an institution over kings as individuals, and the tradition of dynastic ceremonialism enhanced the power of elites (Inomata 2006: 211). The notion of

theatrical performance in Maya society was first suggested by Eric Thompson, who thought that much of Maya architecture functioned as a sort of stage set (Miller 1998).

It is now generally accepted that in Classic Maya society the ruler was a focus of theatrical display, which is suggested by stone monuments and ceramic paintings. Plazas and temples created theatrical spaces where the ruler could communicate with a large audience and royal palaces were stages for theatrical interactions among rulers, their subjects, and foreign visitors (Inomata 2001b: 358). There was an explicit theatrical performance of dances and various courtly events, including diplomatic meetings and royal audiences (Inomata 2006: 203), as well as divination, coronation, sacrifice, initiation and cycle ending rituals (Demarest *et al.*, 2003).

Theatrical performance was carried out in large public areas or in more exclusive settings. At large centers, the visibility of and access to courtly meetings in royal palaces were limited, indicating varying degrees of exclusivity for gatherings in courtly settings (Inomata 2006: 203). Palaces were smaller and more restricted than plazas, providing different types of theatrical space. Their smaller spaces and limited access defined who could participate and how these participants interacted with each other (Inomata 2001b: 345)

The Classic Maya appear to have emphasized the visibility of the ruler strongly, meaning that the deeds of the ruler had to be constantly checked and approved by his council, nobles, and even by commoners. That is why most Maya palace complexes were not as closed and shielded as those in other parts of the world (Knossos, China, Chan Chan), suggesting that a certain degree of the ruler's visibility was maintained, and the political interactions at the royal palace involving the ruler were probably meant to be

witnessed by a specific audience, as it is reflected in the richness of the corpus of painted courtly scenes (Inomata 2001b: 355, 358, Inomata 2006: 212). Ceramic paintings were rendered from the point of view of an audience occupying areas in front of the meeting room, and it was typical that palaces faced a patio that could house a moderate-size audience. These depictions suggest that such diplomatic and political meetings needed to be witnessed (Inomata 2006: 203). It is thus important for analyzing theatrical space to see such spaces, not only from the position of the “God’s eyes” (plan views), but from those of performers and spectators (Inomata and Coben 2006: 30).

Apart from the visual and spatial aspects of theatrical rituals, the most important part of performance theory is to find how systems of design, patronage, and construction shaped –and were shaped by– elite and non-elite behavior (Houston 1998):

“Theatrical events probably defined the boundary of a community, *at least temporarily*, as those who gathered made a community. The cohesion of a Maya polity may have been rooted deeply in its aspect of a real, albeit temporal, community with its physical qualities. This implies that the continuation of its imagined moral unity required constant physical gatherings of its members” (Inomata 2006: 206).

Jackson (2005:421, 2013:73-4) adds that courtly performances created arguments for a practice-based elite identity, marked by particular forms of behavior. Theatrical events thus served to define social categories, ranks and hierarchies through the right and duty of participation (Inomata 2006: 206-210).

Based on Erving Goffman studies, a “phenomenological architecture” can be defined for the Maya (Houston 1998), indicating the “dramaturgical” nature of buildings such as stepped platforms and ball courts. Flat areas were the locations for the audience, and the ascending levels of platforms marked the place for focal activities, such as tribute presentation, the arrangement of visitors in court ritual, or the display of captives. The

existence of such physical levels allowed placing the participants in their appropriate level of verticality in relation to the audience. Many chambers or passageways near platforms could be interpreted in dramaturgical ways, in that they may have served as dressing chambers or places for the sudden appearance of new actors.

In conclusion, for the Maya, the symbolism of rulership was expressed not only through the mere presence of architectural settings, but also through practices and interactions among the individuals who occupied or visited them. According to Goffman and Turner, their interactions can be seen as performance, and theatricality can be thus defined as an integral part of the social lives of the Classic Maya. Although theatrical performances range from relatively unstructured daily interactions to highly ritualized spectacles, the Maya relied largely on spectacles that were a critical aspect of the governmental institution, in which the ruler and his court were made visible, being constantly on display (Inomata 2001b: 343).

8.2.7 Cognitive and ideological analysis

Architecture can often be read as a metaphor for a mental outlook, a period in history, or an ethnic or societal identity (Miller 1998). Hence, the planning of Maya architecture had transcendental ideological and symbolic implications, such as cardinal orientations and relation to ancestor places (Ashmore 1989, 1991, 1992; Ciudad Ruiz 2001: 333). Also, in a cognitive perspective, living in a city is a mental state, and it is necessary to explore the Maya indigenous mind in relation to memory and meaning expressed through monumental architectural configuration and public display (Miller 1998, Ciudad and Iglesias 2001: 21).

Ideology is hard to detect through archaeological findings, including architecture. However, buildings can be conceived as material manifestations of ideal systems that condition actions. The reconstruction of these mental systems can thus be done by examining the mechanism that translates them to the formation of material objects. Nevertheless, this process is difficult to understand only through material effects and it is always influenced by concepts taken from other civilizations and our modern symbolic perceptions (Prem 2000: 58-9, 63).

For example, buildings like Mesoamerican palaces cannot be explained only as religious spaces, because they were monuments related with a royal ideology, as they represented the symbolic meanings and expressions of the cosmic order that the rulers promised to execute over their kingdoms (Inomata 2001a, Inomata and Houston 2001a: 14-15, Prem 2000: 61, Webster and Sanders 2001: 59). That ideology was not restricted to a city or a region, but extended beyond individual polities and served as a link between them. Ideology was not absolute too, as there were temporal variants that shared most of its elements and differed in some (Prem 2000: 63). In addition, architectural designs and decorations expressed the same symbol system that is found in other obvious ritual spaces, reflecting the shared symbolism and function of the ruler and royal court. Palaces and temples became exemplary centers of society, symbolizing societal integration and a liminal space distant from the mundane of the rest of society (Inomata 2001b: 342, (Martin 2001).

In terms of human behavior, Inomata (2001b: 342) has pointed out that the size and elaborateness of palaces impressed the viewers and users of these buildings, causing

unique emotional responses that may have been either positive (awe or respect) or negative (envy and resentment).

8.2.8 Epigraphic-Iconographic Analysis

The study of ancient Maya built environments is supported by the interpretation of images, symbols and texts found in polychrome ceramics, carved inscriptions and other contexts directly related to the buildings themselves or the spaces associated with the king and royal courts.

Reents-Budet (2001) has analyzed the iconography of 137 palace scenes in polychrome pottery (including 3 illustrations of plazas), finding similarities in the architecture, rituals and images associated with royal courts, but at the same time, showing that court buildings had more than one function. In a more analytical perspective, she suggests that these painted scenes reflect a single conceptual-emic model of a royal court, meaning that they are representations of idealized portrayals as opposed to the physical reality (*Ibid.* 205-224).

Regarding glyphic inscriptions, they have been related to the elite emics of ancient Maya politics and a form of institutionalized view of the state, creating a semiotics of civic buildings (De Montmollin 1995: 288, LeCount and Yeager 2010b: 28). Recent interpretations of specific glyphs associated with buildings have found that the ancient Maya had well defined concepts concerning the nature and function of architectural spaces. One of these is the foot-ascending-steps glyph (*t'ab'*), which worked as a general dedicatory statement for the inauguration of buildings, perhaps as “his house went up,” referring to its actual construction (Stuart 1998: 416). Another is the “water

house” glyph, which is part of mythological time and space, and has been identified at particular buildings in Comalcalco, Copan, and Altun Ha (Houston 1998).

Related with the last one is the quatrefoil motif, which is the most common element marking piers on scenes painted in pottery. For Reents-Budet (2001: 209-10) it means *ol*, a portal to the supernatural realm. More recently, the quatrefoil glyph and its appearance as an iconographic motif has been defined as an important symbol that represents a cave with water inside, certainly related to portals to the underworld but also with actual buildings, plazas and other forms of built environments (Houston *et al.*, 2004, Fash 2010, Miller and O’neil 2010). It is a symbol that appears as early as the Middle Preclassic period in sites such as La Blanca (Love *et al.*, 2006) and Chalcatzingo (Groove and Angulo 1987), and has been documented in Early Classic altars such as the one in Aguacatal (Houston *et al.* 2004) and in some Late Classic inscriptions at Ceibal, Copán, Quirigua and Dos Pilas (Looper 2000, Houston *et al.*, 2004). The best representations of the quatrefoil glyph can be found at the site of Machaquila, where large quatrefoiled toponyms appear in most of the stelae dated to the Terminal Classic. Interestingly, the main plaza of Machaquila had a representation of a quatrefoil, made with stone masonry and measuring 8.7 x 8.7 m (Graham 1967: 59, Lacadena 2006).

As a glyph, the quatrefoil symbol has been identified by Looper (2000) as the sign catalogued by Thompson as T510cd, which sometimes carries the *Witz’* sign (mountain) inside. Looper reads it as *ch’e’en* or *ch’en*, a Yukatekan and Ch’olan word that refers to both caves and wells. When it includes or precedes the glyph *ha’* (water), it probably means *ch’en ha’* (cave of water or cenote). According to David Stuart, the quatrefoiled or four-lobed watery cave was named *pan ha’* (Finamore and Houston 2010: 87)

The quatrefoil was thus a mythical place, a portal to the underworld where some gods could have been invoked, especially Chaak, the god of rain (Houston *et al.* 2004). As it will be discussed later, one of the best representations of the quatrefoil is the one found in Cancuen Panel 3. It appears as a frame for the main scene, as well as a glyph. Its association with the foot-ascending-steps glyph (*t'ab'*) suggests that it refers to a particular building that had a strong symbolism with water and caves.

The two main terms associated with buildings are *naah* and *yotoot*. The first one is associated with “building”, or the physical structure of a house, and the second one as the concept of dwelling or home (McAnany and Plank 2001, Stuart 1998, Plank 2004). Indeed, the logogram for *otoot* seems to represent an actual hut with a palm roof. In terms of context Stuart (1998), indicates that the use of the glyph *naah* was related to the name of the structure, and not to its function, while the word *yotoot* was used in a possessive form, indicating who was the owner, builder or occupant of a house or building, whether a person or a deity. Furthermore, Plank (2004) also points the difference of a habited structure by animate entities (*otoot*) and a possessed building (*naah*) (Figure 8.1).

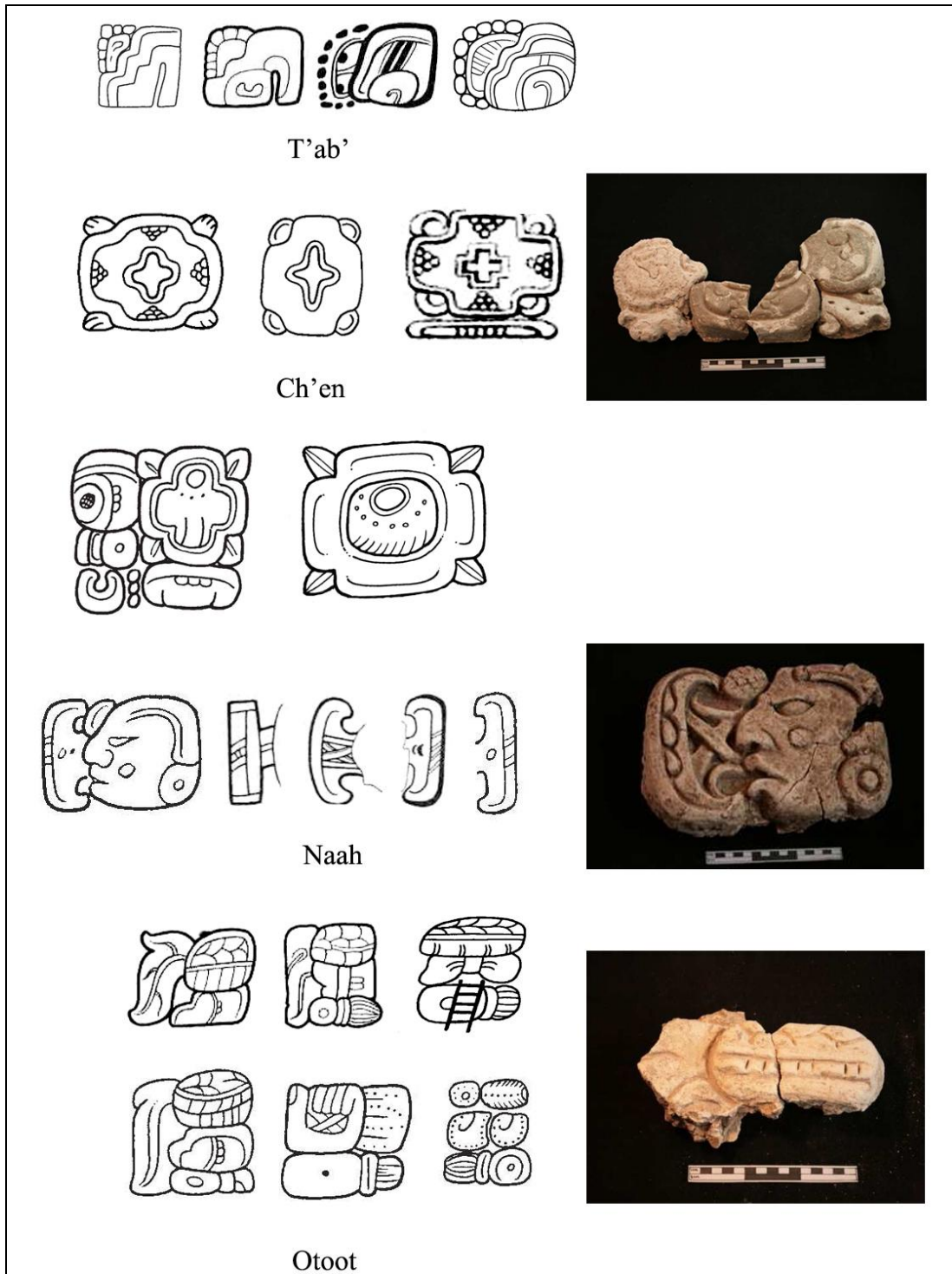


Figure 8.1 Glyphs associated with architecture (After Coe and Van Stone 2008, Loper 2000, Houston *et al.* 2004, Stuart 1998, Plank 2004). The photos to the right are stucco glyphs from Cancuen Structure M7-1 (East Plaza Ballcourt) (Photos by C. Fernández)

8.3 Characteristics of Maya Palaces

After reviewing the general interpretive trends applied to Maya architecture, I will present data from studies of individual Maya palaces, in order to define their main characteristics.

First, it is important to note that in other ancient civilizations, such as the Aztec empire, rulers lived in palaces that were separate structures, as opposed to Maya palace complexes, which grouped various structures and spaces less unified, with different functions, and more subject to growth and adaptation (Sarro 2006).

Some of the basic characteristics that have been traditionally defined for Maya palaces are their larger size, location in the site core, and the use of particular materials and techniques, such as stone masonry, corbelled vaults, and sculptural decoration (Christie 2003a). They are also commonly found as gallery-like, multi-roomed structures, located on low platforms that surround courtyards. Nevertheless, these traditional definitions combine morphological and functional concepts, causing confusion because they try to give functional meaning to simple descriptive terms for a more-or-less constant building types. To avoid misunderstanding, the term “range-type structure” has been proposed to describe any multi-roomed long building, independently from its function (Kowalski 1987: 77).

Maya palaces are also characterized by a neutral functional quality, because rooms are often similar in size and rarely contain built-in furnishings that could evidence their use as daily living headquarters or a different function (*Ibid.* 81-2).

8.3.1 *Types of Maya palaces*

Following a morphological perspective, Maya palaces could be analyzed typologically, in order to recognize the different spatial forms that can be related to the functions associated with Maya royal courts, whether of residential, ritual, political or administrative nature. It is then important to understand that Maya palaces existed in all styles and epochs, with distinct constructive techniques and aesthetic forms (Rivera Dorado 2001: 146).

One of the advantages of identifying palace types with significant architecture and patterns is to contextualize them with detailed archaeological data, in order to explain the foundation, growth and change processes of a city (Chase and Chase 2007: 42). For that reason, specific types of Maya palaces have been defined by different authors:

Harrison and Andrews (2004) argue that instead of thinking of one large and enclosed architectural building, we should understand the Maya palace as an entire compound that include special purpose constructions, such as dance and ceremonial platforms, shrines and other multifunction buildings that served domestic, administrative, and ritual purposes for the royal court (Inomata and Houston 2001a: 17). They see the differences between a *palace compound* and a *complex of palaces* in the way that multiple functions are associated with architectural spaces. In addition, not all buildings exhibit the complete “palace function set”, and they suggest that we must consider the existence of temporal changes in the distribution of the multiple functions within a compound.

In the same line, Webster (2001: 141) considers that palaces could be single structures or complexes of buildings. The *palace complex* or *court complex* is defined as:

“the whole set of court facilities that maintained the royal family and its closest associates, as well as the larger institution of rulership in all its political, ritual, and ideological dimensions”.

They include all the structures and spaces accommodating the varied activities of the court throughout its history. These complexes can extend to the entire epicenter or they could be spatially dispersed, including royal compounds that served as noble houses. One of the best representations of the palace complex is the *acropolis*, perhaps the best architectonic expression of the meaning of an urban complex. Because an acropolis rests on a single platform, the homogeneity of its component buildings are features that give it a sense of singularity, reflecting the relation between buildings and social groups (Rivera Dorado 2001: 176).

Marcus (1983) has defined the term *agglutinated palace* as the long, narrow structure consisting of modular units set in sequence, each facing outward and generally without the inter-connecting doorways (as in Central Mexico).

More recently, Christie (2003c) has classified Maya palaces in four basic types:

1. Type I: Palace located around a courtyard, with large number of rooms
2. Type II: Isolated palace with large number of rooms
3. Type III: Open palace with colonnaded galleries and patios
4. Type IV: Presentation palaces with thrones

The latter has been associated with administrative rather than residential purposes:

“There is only one type of palace building which is approached by an important stairway leading to a central doorway and to an axially placed throne. This palace type faces outward towards a public area, and at least in the throne room was probably not intended to be lived in. It was, instead, the principal public room of the palace” (Kowalski 1987: 85).

Another typology is the one proposed by Harrison (1999), which is based on three types: 1) courtyard palace, 2) single palace, and 3) passage palace. These different types of palaces were, together with the temple, the most abundant representative of public architecture in Maya centers until the 16th century. The latter type is analogous to the *gateway palace* defined by Runggaldier (2009) and the *long house* type defined by Arnauld (2001), consisting of a wide large room, or gallery, whose interior space is not adequate for a household. In a functional level, it is a building category associated with different private or public activities, of ritual, administrative, military or economic nature.

Marie Charlotte Arnauld has proposed a morphological and chronological classification for the long and narrow palaces. In a general sense, the *long house* is a long building that lacks internal divisions, settled over a low platform and had multiple doorways in its main façade. Her morphological analysis defined four types, correlated with political traditions of different cultural origins that evolved from the early Late Classic to the Late Postclassic (Arnauld 2001: 364-7):

1. Class 1 corresponds to Late Classic *open halls*, galleries and portals, generally integrated in palace complexes in sites of the Central Lowlands. Because of the limitations of the corbelled vault, most palace structures were long and narrow. However, some have no internal masonry divisions. In terms of access, they tend to have more than three doorways in their long facades and the entrance from the exterior was through monumental staircases (Figure 8.2). That basic spatial plan suggests a basic function of filtering the access to the interior palace complex, as a transition between exterior and interior. Instead of closing the access, the halls were portals to control it.



Figure 8.2 Open halls surrounding the palace of Palenque (above) and the Central Acropolis of Tikal (below) (Photos by T. Barrientos)

Such function was basically to restrict circulation spaces where certain classes of ritual, social and economic exchanges could take place in the vicinity of the royal residences and throne rooms. They are a type of “antechambers” where the members of the royal court meet formal or informally, but could have been used as a temporal residence to certain people in the back rooms that face the interior patios, or places for royal guards that protected the king and his family day and night (*Ibid.* 366-71). Because of their relation to both interior courtyards and exterior stairways, these halls were an integral part of the palace complexes. However, in the Northern Lowlands these open halls are smaller and more integrated to residential groups, probably functioning individually as collective houses for noble lineages (Figure 8.3). The variety of distinct cases in the north suggests certain degree of experimentation in ruling systems more or less hierarchical and more or less shared. (*Ibid.* 395).

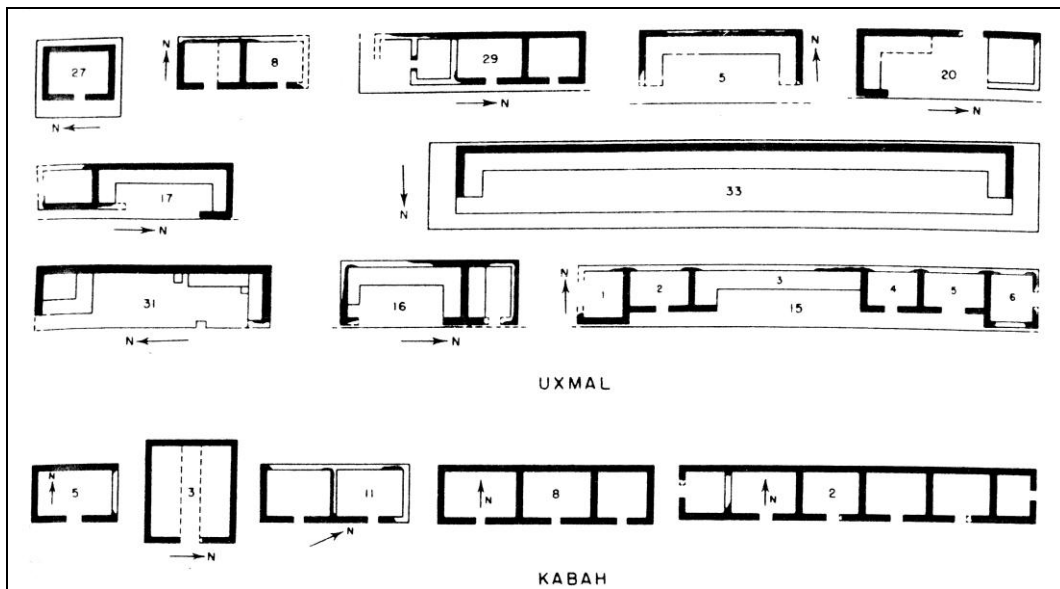


Figure 8.3 Variety of Terminal Classic *open halls* from Uxmal and Kabah (from Ruppert and Smith 1957: figs. 3-4)

2. Class 2 corresponds to Terminal Classic rooms with benches, also known as *C shaped* structures. These appear in the northern and central lowlands during the Terminal Classic and last through the Postclassic, with the more elaborate forms in the Late Postclassic. Their function could have been public, collective, ritual, social or military, but also residential, given the presence of a bench (Figure 8.4). Narrow benches indicate a reunion function, and their association with elite residential groups suggests that they were early lineage meeting houses (*Ibid.* 381-4, 393).

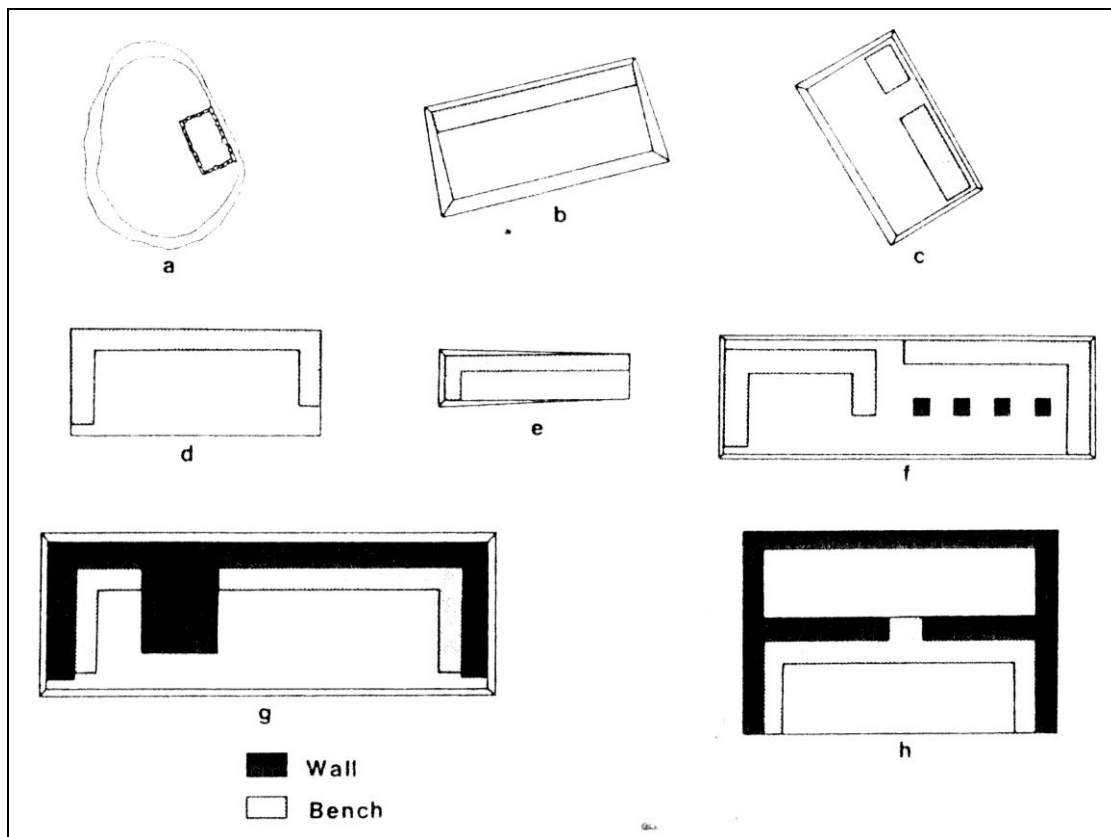


Figure 8.4 C-shaped bench structures from Postclassic Peten sites (Arnauld 2001: 383)

3. Class 3 long houses are specifically the Early Postclassic colonnade galleries from Chichen Itza (Figure 8.5). They represent a marked innovation and break in the Maya socio-political dynamics. Both the institutions and architectonic forms have a military character that linked noble lineages with a superior authority (*Ibid.* 386).

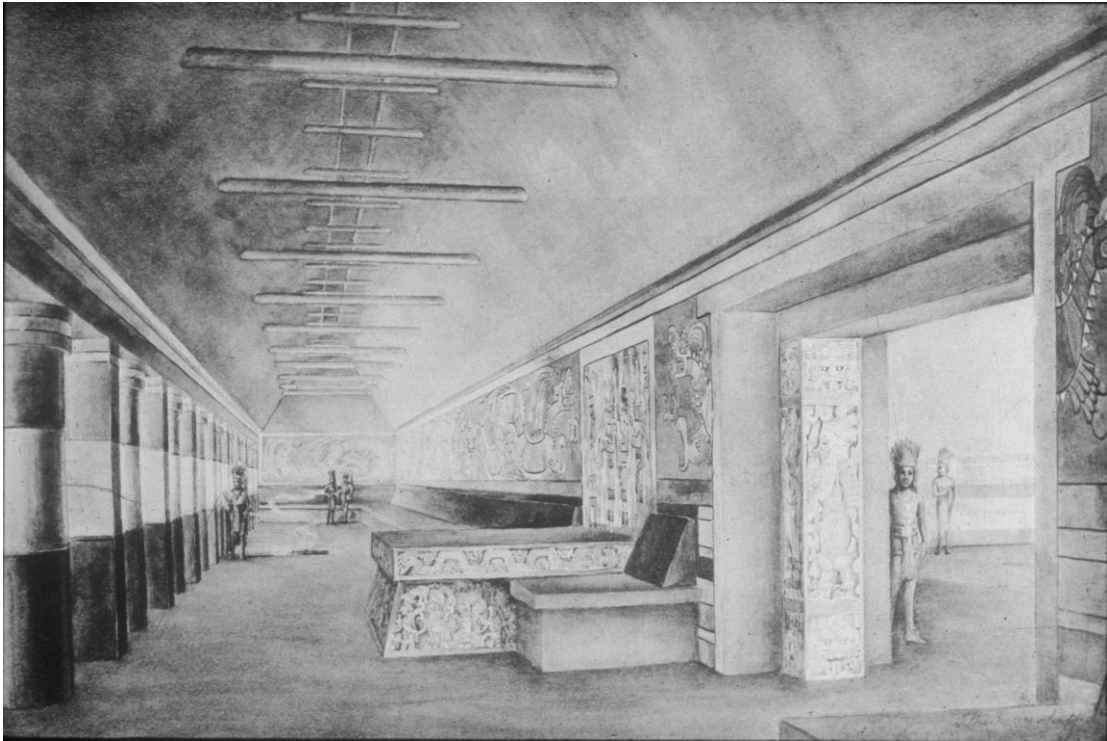


Figure 8.5 Reconstruction of the Mercado colonnade gallery interior at Chichen Itza
(From Proskouriakoff 1963: 105)

4. Class 4 are the *nim ja* houses that include the Late Postclassic colonnade rooms from Mayapan, and other long and narrow structures found in Peten, the Guatemalan Highlands and Chiapas. In the lowlands, they seem to have originated in Mayapan, because that site contains 21 “basic ceremonial groups” composed of a colonnaded hall, a shrine and oratory (Figure 8.6).

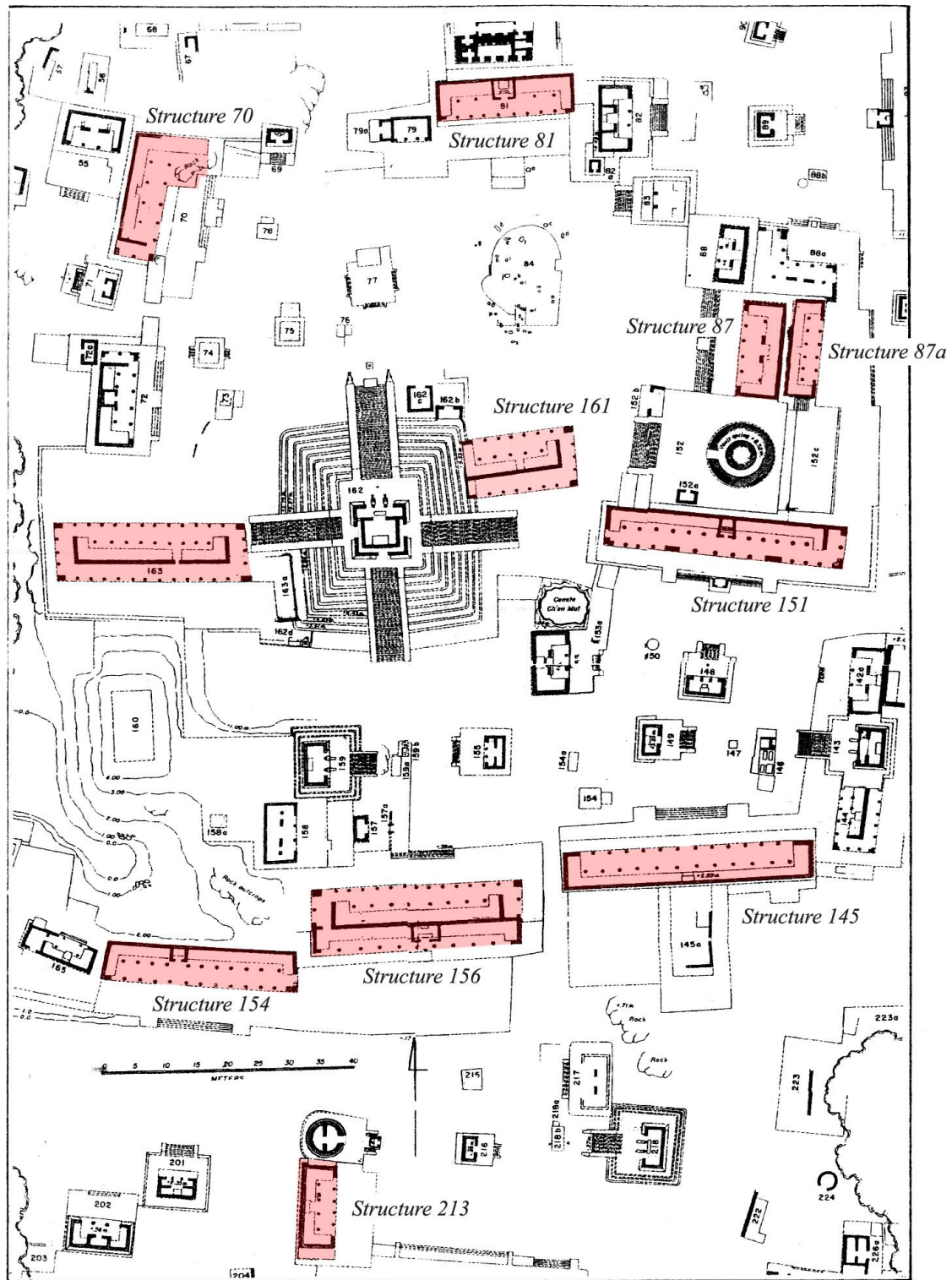


Figure 8.6 Distribution of colonnade long houses in Mayapan
 (After Arnauld 2001:388, from Pollock *et al.* 1962)

According to Proskouriakoff, the main element in these groups was not the shrine, but the colonnaded hall, which could have the shape of double halls or single halls with two small lateral rooms. During the Postclassic, the *nimja* was the most abundant representative of public architecture in Maya cities and towns, being equivalent to the dynastic temple and as important as the Classic palace complex. In terms of function, they were collective buildings linked to each of the noble lineages with political importance in the city, also known as the *calpul* or *chinamit*, and were used for any private or public use that gathered their members for religious or political motives. Ethnohistorical accounts indicate that these were council houses, but were also used for lectures, bride-price giving, feasting, marriages, and judgments. Even young people could occupy the rooms during the day, probably for learning purposes. It is important to note that the Postclassic civic-ceremonial groups include various halls that were separated from elite residential units, although they also appear individually in smaller sites. It has been proposed that these halls also had a defensive function, especially if they were located at spots with good view. In all cases, the distribution of halls reflects a hierarchy of groups (the longer halls in the larger groups), indicating an escalated system of lineage alliances.

In the highlands, architectural compounds included a hall and a temple that was linked to a residential barrio of grouped households, also indicating the existence of social groups subordinated to one or two rulers (*Ibid.* 363, 386-395, Braswell 2001) (Figure 8.7).

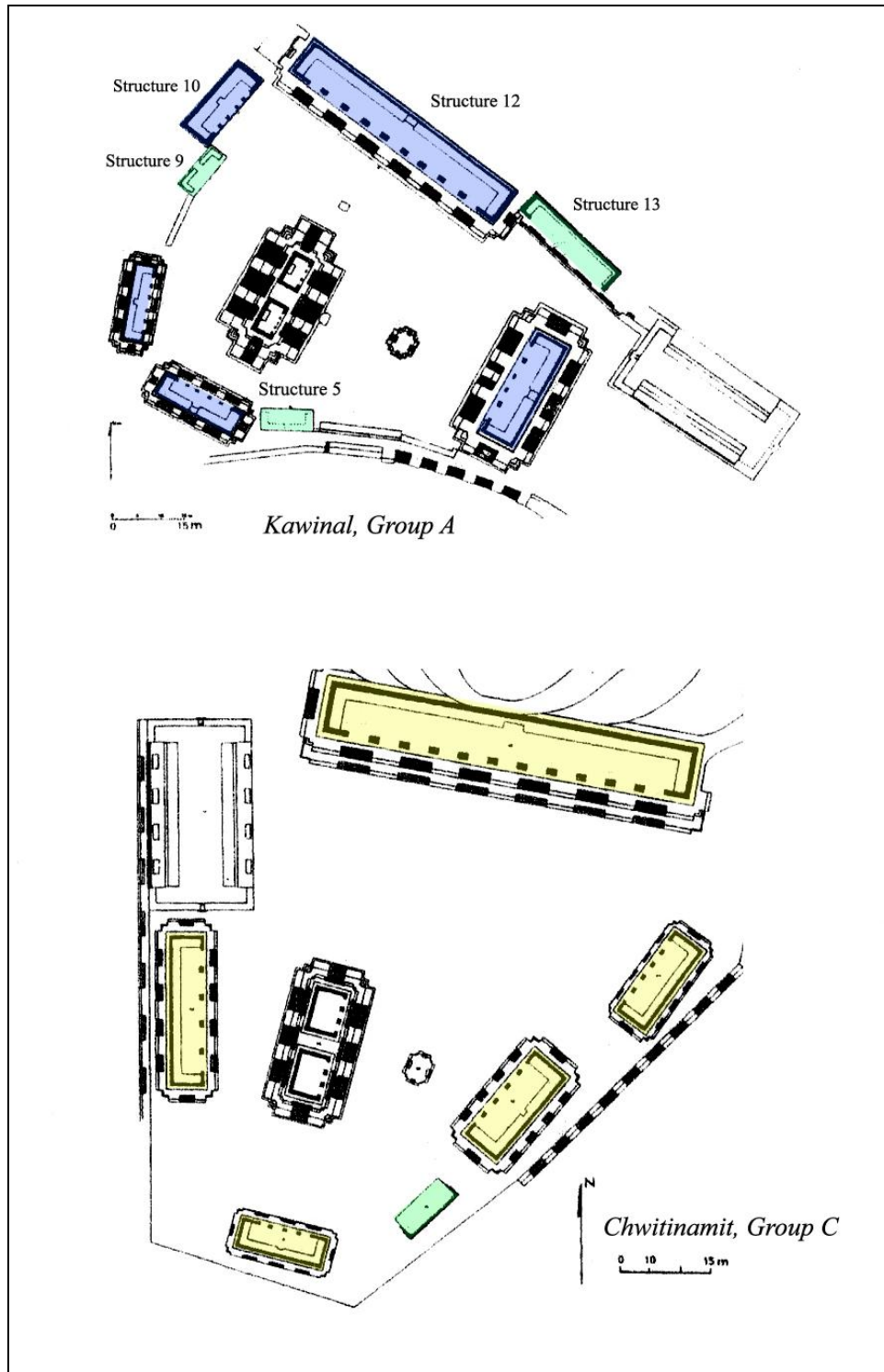


Figure 8.7 Plans of Postclassic Highland sites of Kawinal and Chwitinamit, showing the presence of a long hall associated with a main temple, as well as other smaller halls and C-shaped houses (after Arnould 2001: 389, fig. 15, from Ichon *et al.* 1980: fig. 5 and Smith 1955: fig. 112)

As indicated above, these four classes of long houses represent four cultural-political traditions of distinct origins that appeared successively in the Maya area. The socio-politic dynamics associated to them was fundamental to the transformation of the general political system of Maya cities (*Ibid.* 394). Hence, the evolution of long houses and open halls reflect the general transformation of the political dynamics at the end of the Late Classic period, which changed from the *K'uhul Ajaw* one-royal lineage system to an aristocratic and militarized system of various noble lineages sharing the power and legitimating authority under the more or less formal supremacy of one or two rulers (Arnauld 2001: 396, Ciudad and Iglesias 2001: 27).

8.3.2 *Centrality of the Maya Palace*

It has been generally acknowledged in Mesoamerican studies that the palace was the political and ritual capital of a city (Marcus 1983). For the Classic Maya, cities were also courtly centered, but that centrality was represented by the palace, not the court itself. However, there was a dynamic relationship between palace and court, each generating the other (Webster 2001: 161). The palace thus represents the material expression of the religious, political, and economic administrative components of the court; it was the substance and symbol of the state, embodying the collective hierarchical structure that defined Late Classic Maya society (Reents-Budet 2001: 223). In a more practice-oriented interpretation, the courts could also be conceived as actors in their own right, showing personalized histories and roles (McAnany and Plank 2001: 84, Jackson 2013:61-80).

Royal palaces had a central role in ordering Maya cities. They had a formative character in the urban planning and ordering, in the same level reached by other constructions such as pyramids, plazas and E groups. Hence, they were not isolated functional units, but a complementary part of a set that included lineage sanctuaries, public plazas, public ritual spaces and other specialized structures (Ciudad and Iglesias 2001: 25). The central function of palaces has even been considered as a plaza on a larger scale, where lineage worship shaped powerful vertical links between rulers and ruled (Hammond 1991: 283-4). For that reason, they were spaces belonging to a leader that centralized the power and resources of a given area. Their monumental size, central location, building materials, artifact contexts and decoration had transcendental symbolic implications, designed to reflect the power and wealth of the ruler and his family group, as well as his particular accomplishments (Ciudad Ruiz 2001: 332-3).

It has also been considered that the base of organization for Maya building groups is the palace, because it has been present with more temporal and spatial extension than the pyramid. Similar to Minoan and Mycenaean cases, the Maya had a palatial system that correlated urban order and sociopolitical power, integrating the palace and its dependencies in a set of constructions closely related and interdependent (Rivera Dorado 2001: 148). The Maya political system was thus centered almost exclusively in the royal institution and its palace, as well as in public and private spaces where the praxis of royal power was executed. From this perspective, Maya palaces functioned as the court seat, which was itself an expression of the royal institution (Ciudad and Iglesias 2001: 16).

8.3.3 *The Maya Palace as a Residence*

The analysis of Classic Maya bureaucracy done by Takeshi Inomata (2001a) has shown that it was highly undeveloped and based on personal, not legally funded, relations. For that reason, the Maya royal court has been defined as small, decentralized and very non-bureaucratic in character, reflecting an undifferentiated, household form of governance (Webster 2001: 135) or a system that did not separate residential from political or judicial functions (Christie 2003b).

Therefore, some authors suggest that Maya palaces resemble large, extended family residential compounds (McAnany and Plank 2001). If palaces were not strongly differentiated from other households except by scale, they were a form of politically, socially, economically, and ideologically dominant household in a socially and administratively well integrated settlement. Nevertheless, palaces exhibit unanticipated spatial and functional arrangements unrelated to domestic functions (Webster 2001: 146-8). In addition, Maya palaces did not engage in the role of ancestors as validation of power, as evidenced by the general lack of royal tombs in palatial contexts. Yet, they reinforced the physical association of the dynastic family with religious institutions, ritual objects, and the use of thrones as symbolic seats of power, diplomacy and jurisprudence (Harrison 2003). Settlement studies have also shown that as Maya society became more complex, the royal residence moved to more private spaces, separated from the court (Ciudad Ruiz 2001: 334)

Proponents of the close relation between households and palaces have relied strongly on the house society model, which explains social organization through the idea of a metaphorical household or an idealized domestic space, characterized by the

existence of physical and symbolic structures as its ordering principle. A complementary social and political dynamic affects both the nature of the house itself and the type of settlement associated with it, especially through the relative positioning of a house relative to the others. As an extension of practice theory concepts, the house model applies metaphorical understandings of social structures in order to interpret royal palaces, defining palatial context remains as similar to less elite households (Jackson 2005: 59-71, Ringle and Bey III 2001).

8.3.4 Problems in Functional Analysis of Maya Palaces

Unlike common residences, palaces tend to leave little domestic debris, as buildings of such status were often well-maintained, cleaned and serviced (Pillsbury and Leonard 2004). Although it is very common to find few artifacts on the floors, it does not imply that the building was never used or lived in. Cleaning would account for the scarcity of waste materials that would provide certain evidence for long-term habitation or use (Kowalski 1987: 76).

Our limitations in the knowledge of Maya cities' internal functions have been also motivated by methodological limitations of surveying and research objectives. The perception of the social, political and economic structure of Maya communities has conditioned our positions to analyze their complex settlements (Ciudad and Iglesias 2001: 12-14). For example, the regal-ritual model considers that few people occupied the monumental cores of Maya cities, creating social interactions that were highly personalized to an impossible degree for a true metropolis (Webster and Sanders 2001: 59, 64).

In order to face these problems and limitations, we have to go beyond the exclusive attention to domestic and public spaces as functional indicators. A more structural analysis allows using aspects of intimacy, visibility and frequency of circulation as important variables for understanding the spaces and buildings in a site (Ciudad and Iglesias 2001: 19). In addition, a multifunctional perspective will also help to cope with the difficulty of defining palaces as residences, and the ambiguity between dwelling and ritual (Christie 2003a). Maya palaces were then multifunctional, which could include their use as permanent and temporal residence, but not restricted to that (Harrison 2003b: 195).

8.4 Origins and development of Maya palaces

The chronological development of palaces constitutes a material evidence of the changes in the sociopolitical structures that occurred in the Lowlands since the early stages of Maya civilization. During the Classic period, the size and plan of palaces show different variations between sites and regions, but most important, there seems to be an overall pattern through the end of the eighth century, which is directly related to the proliferation of small independent sites like Cancuen.

It is now generally accepted that Maya civilization began during the Middle Preclassic period. In the lowlands, sites like Nakbe and Cival represent the earliest stages that could be associated with a complex organization, especially evidenced by the construction of monumental buildings, some of them arranged in symbolically loaded plans such as the triadic groups, E groups, ball courts and acropolis. Although it is difficult to think of “royal houses” at this moment, it has been proposed that Group 66

could have been the first elite residential group at the Nakbe. During the Late Preclassic, the residence of the ruler could have been located in Group 18, and Structures 4, 13 and 31 seem to be elite residences, thus evidencing a process of court and elite proliferation (Ciudad Ruiz 2001: 309) (Figure 8.8).

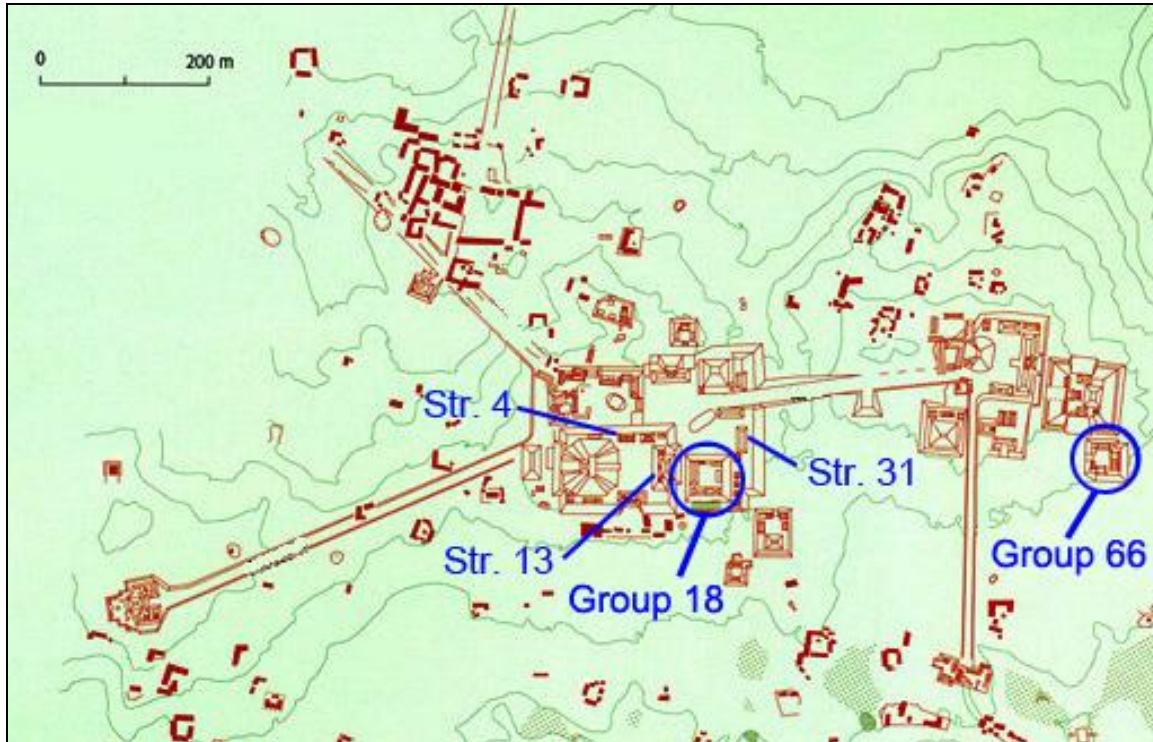


Figure 8.8 Location of possible palaces and/or elite residences at Nakbe (Map after Hansen 2001)

Close to Nakbe, the site of El Mirador became the largest and most complex site during the Late Preclassic. Its monumental constructions reflect an advanced ruling system that organized thousands of people, but due to the lack of inscriptions at that time, it is still difficult to prove the existence of dynastic rulers.

The Central Acropolis, located in the East Group, could have been a royal palace that served as the seat of authority and probably the residence of the ruler (Figure 8.9).

However, the layout of the complex suggests a more ritual function than administrative or residential, due to the presence of pyramidal temples arranged in courtyards, and a complex hydraulic system associated with stucco friezes (swimmer frieze) that show a complex iconography.

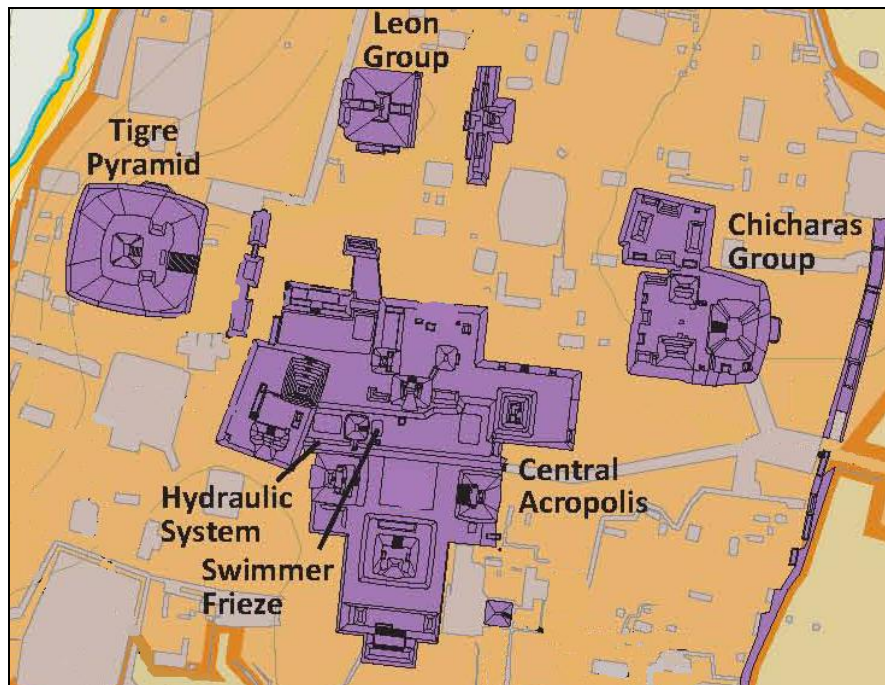


Figure 8.9 El Mirador Central Acropolis (after PACUNAM and MCD 2011: 65)

In general, the concept of the administrative palace seems to be missing in the main Preclassic cities. However, recent research at San Bartolo has defined the existence of a royal palace, known as the Tigrillo Complex, located in the west portion of the group Las Ventanas, which is located in the main plaza of the site (Runggaldier 2009). In its final Late Classic phase, the Tigrillo complex consisted of a raised platform that supported two long multi-chambered structures, and two lower platforms that supported other smaller structures, which descend westward towards the main plaza (Figure 8.10). This building was initially built around 400 BC, as a 4 m high platform that grew

gradually throughout the Late Preclassic period, reaching 11 m in height in its final Preclassic phase. Interestingly, this complex was modified and reoccupied in the Late Classic, perhaps by the descendants of the original population and as a form of social memory. Excavations found no remains of the Preclassic superstructures that were built on top of the platforms, but the evidence suggests that there was an initial pattern of stepped terraces that restricted visibility and access towards the upper buildings, and that the Late Classic stages did not modify it (*Ibid.* 281-5). Also, no domestic refuse was found in association to the complex, suggesting a non-residential function. Instead, it has been interpreted as an audience and presentation space (*Ibid.* 306).

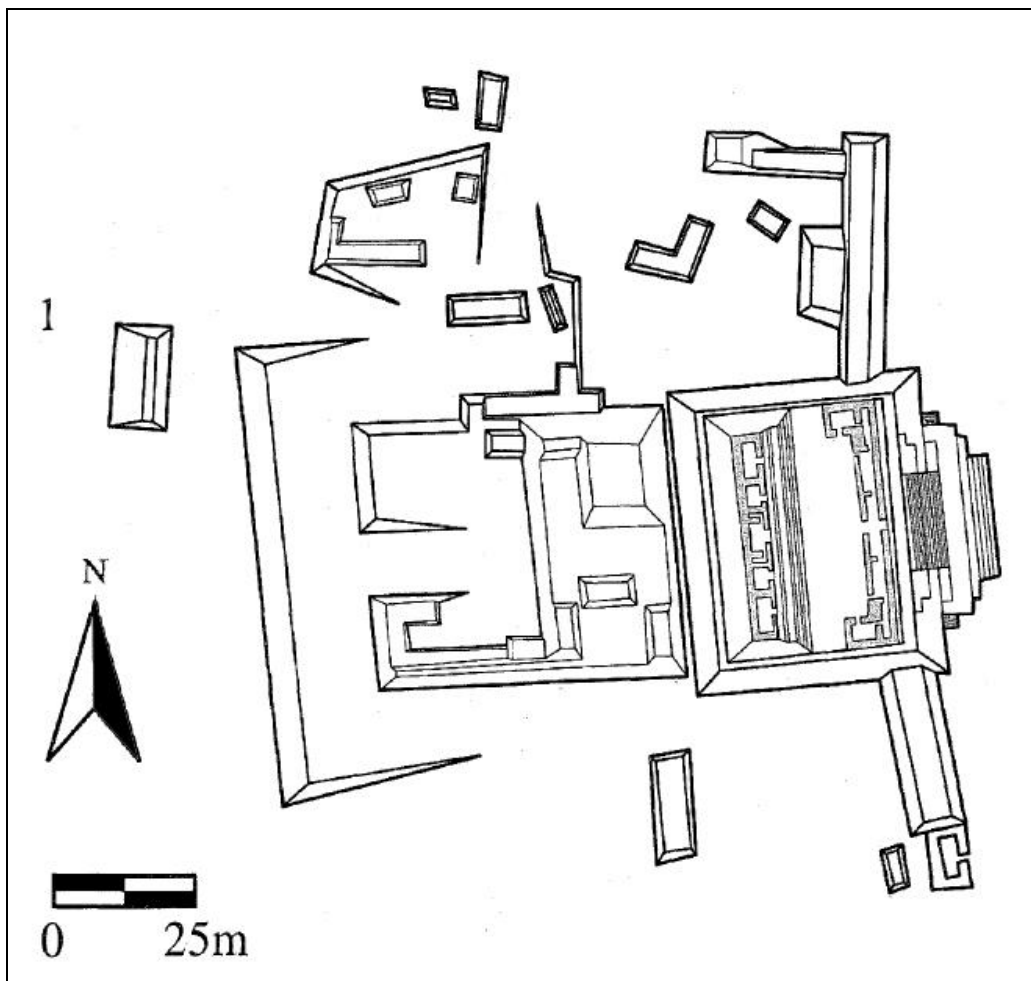


Figure 8.10 El Tigrillo Complex, San Bartolo (After Runggaldier 2009: 347, Fig. 3.9)

The evidence at San Bartolo constitutes one of the best insights into the development of palaces in the Maya lowlands, because it clearly indicates that the early palaces did not grow as a form of “aggrandized versions of private residences” (*Ibid.* 326). Instead, the palace was created as a separate institution located in public places that mediated the social relations that connected the ruler with the population, and the ritual with the management of the city.

Uaxactun is one the best studied sites that show the transition from the Late Preclassic to the Early Classic, thus presenting evidence on the evolution of palaces during the Classic period. Group H, excavated by Juan Antonio Valdes during the 80’s, constitutes an acropolis type compound that could hold early masonry palaces that were used for non residential functions (Structures H-Sub-2, H-Sub-3 and H-Sub-4). Later on, in the final part of the Preclassic, vaulted palaces were built in Group E (E-IV, E-V and E-VI) and Group B (B-Sub 2C, Sub 4 and Sub 5), also indicating the growth and expansion of elite groups (Ciudad Ruiz 2001: 307)

According to Chase and Chase (2007: 57-8), the political foundations in the Maya lowlands follow a specific temporal order. First, during the Middle Preclassic, the ideological center was established, followed by dynastic governments at the end of the Late Preclassic and, finally, a reordering with the development of an administrative focus in the Classic period. This latter administrative function corresponds to the construction of palaces and is dated specially at the end of the Early Classic and beginnings of the Late Classic. During this process, the private projects of the royal family –whether temples or residences- were transformed in public enterprises and they became a reference for urban planning (Ciudad Ruiz 2001: 308), and the emergence of special and

sumptuous residences signals a change in the nature of Maya society (Adams 1974). In these early stages, Maya city-states grew in scope and complexity mostly through the aspirations and achievements of the individual dynasts (Fash 1998).

Marcus (1993: 166) defined the rise of true archaic states by 534 C.E., but this date seems to correspond better with the construction of the first palace complexes in the Maya Lowlands. Valdes (2001) has also noted that interior benches in palace structures appear only after 600 C.E., thus indicating important changes in the function of these buildings at the end of the Early Classic. However, some Early Classic palaces have been dated before 500 C.E., especially Structures A-XVIII, B-XIII and B-II at Uaxactun and Structure 5D-46, Group H and Group 6C-XVI at Tikal (Valdés 2001) (Figure 8.11a). In Piedras Negras, excavations have also identified an Early Classic royal residence beneath the West Group Plaza (Ciudad Ruiz 2001).

Uaxactun's Structure B-XIII has been dated between 426 and 456 C.E., during the reign of Ruler A-31, and consists of a palace with 14 rooms in two stories, built over 3 construction stages (Figure 8.11b). Structure A-V also constitutes a good evidence of the development of true administrative palaces in the Early Classic. In this matter, Runggaldier (2009: 326) believes that the Preclassic foundations of the acropolis did not have the same function as its Classic period developments. The evidence suggests that the earliest phases at Structure A-V represent a residential compound, and later on, a triadic temple arrangement. This would indicate that the Early Classic palace had a different function, probably associated with the construction of Structure A-XVIII, which has been interpreted as the ruler's residence.

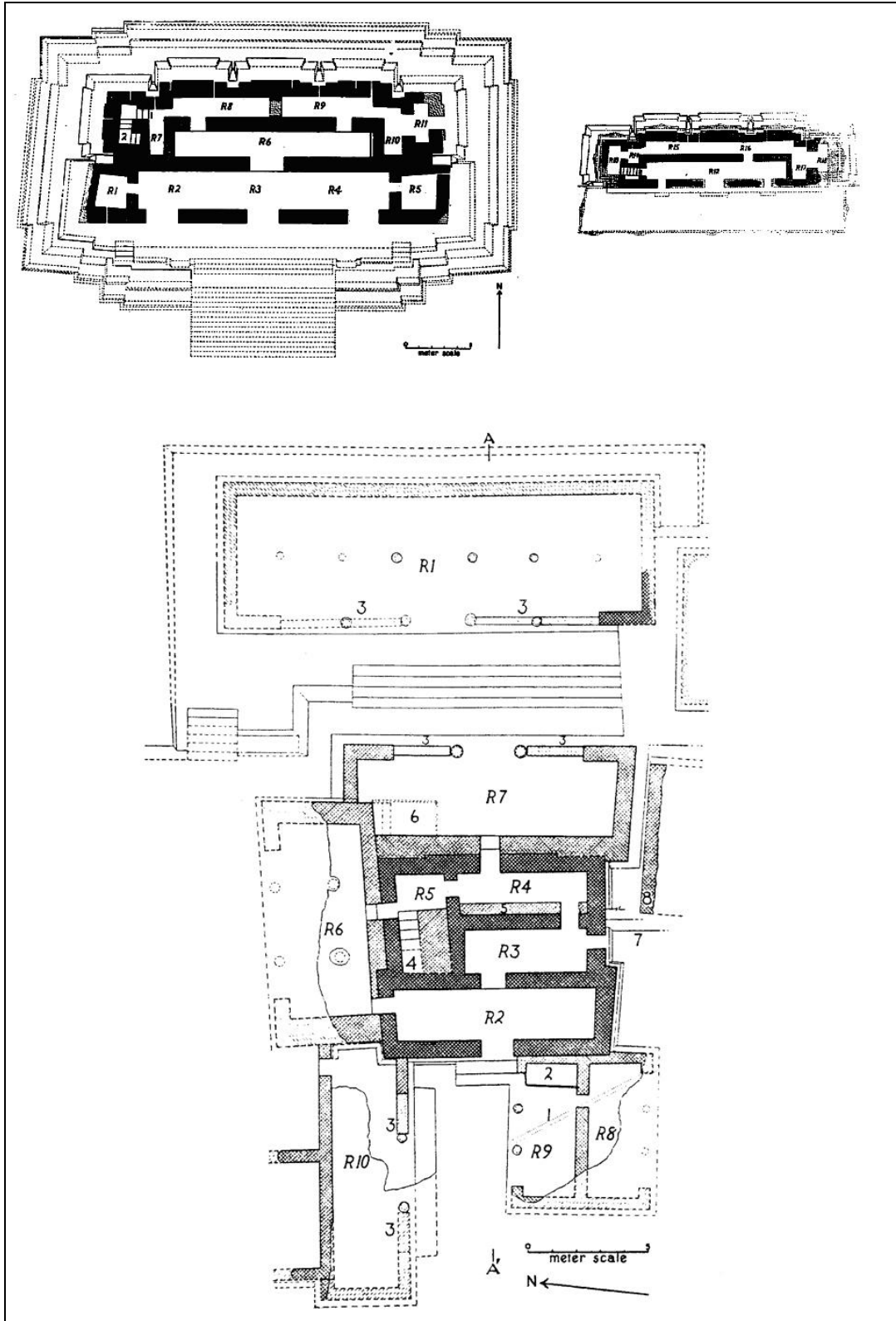


Figure 8.11 a. Plan of Palace A-XVIII (above), b.Palace B-XIII (below) at Uaxactun (After Smith 1950: Figs. 85, 86, 92)

Another important Early Classic city is Río Azul, which shows two important palace complexes: Structure C-5 and Structure B-8. The latter was a palace acropolis connected through a causeway to the site's largest temple, Structure A-3. The small Structure C-42 was the earliest royal palace, probably used by Ruler X between 417 and 460 C.E. In addition, there are 16 small palace complexes at the site, exemplified by Structure B-56, which is located around Patio B-48 and consists of 22 small platforms that supported structures for food preparation, storage, religious and funerary activities and residence. Excavations suggest that each of these residential buildings could represent a residential unit and a family (Ciudad Ruiz 2001: 321, 330).

In sum, the growing process of palaces is closely related to the social, economic and political development of the ruling groups that became dynastic at the end of the Late Preclassic period. One consequence of this power transformation was the political control of a city and its territory:

“the superior energetic expenses used in the construction of royal complexes, as compared with other residences, is a reflex of the success obtained from that political control where the size and grandiosity of the palace proclaimed the greatness and power of the rulers in front of the nobility and the rest of vassals; as well as in front of trade caravans, visitors, diplomats and other rulers invited to attend their celebrations.” (Ciudad Ruiz 2001: 334)

8.5 Palaces in Major Centers During the Classic period

After reviewing the general rise and evolution of royal Palaces in the Maya Lowlands, I will present data from specific cases of palaces in the best studied and major centers of the Classic Period: Tikal, Calakmul, Caracol, Uaxactun, Palenque, Copán, Piedras Negras and Dos Pilas.

These large centers were political and territorial capitals characterized by spatial boundaries that were well defined, with elevated locations and tight control of access (Inomata 2001b). In most cases, their palace complexes were the products of the contingent decisions of many generations of builders acting on the dictates of their particular elite patrons:

“Such aggregations were not the result of any sort of master plan involving predetermined final forms... [There is an] extraordinary variety displayed not only by individual buildings that presumably had the same purposes but also by the larger layouts of court centers. What we are left with is simply what existed when the builders finally stopped, rather than the original form.” (Webster 2001: 159)

8.5.1 Tikal

Tikal offers one of the best documented construction histories in the Maya region. More than fifty years of research have provided detailed architectonic data from its monumental buildings, especially the North Acropolis, Central Acropolis and the Lost World Complex. These studies have shown that most of the city monumentality can be attributed to a brief but vigorous construction episode during the eight century, which is closely related to the military successes of the 26th and 27th rulers (Martin 2001: 186). Earlier buildings buried beneath these Late Classic structures correspond to previous episodes related to Early Classic rulers and even Late Preclassic stages. Few inscriptions have allowed precise dating for particular buildings, but the majority of architectonic studies have dated buildings by masonry style, such as the East Plaza Ballcourt, which corresponds to the sixth century (Jones 2003).

A wide variety of palaces have been identified at Tikal, which show different sizes, shapes, number of rooms, platforms, and other spatial variables (Harrison 1999, 2003).

These are the Central Acropolis, Group F, Group G, Group 7F-1, Structure 5D-15 (West Plaza), Structures 5C-11, 12 and 13 (Bat Palace//Palace of the Windows), Structures 6D-42 to 6D-62, some buildings of the Lost World complex, and possibly the South Acropolis and the North Group (Figure 8.12).

According to Harrison's typology (1999), some palaces have a courtyard and an open plaza facing to the east. Among these are the Bat Palace, Group F, Group G, and Structures 6D-42 to 6D-65. Another type are the single palaces facing in one direction, such as Structure 5D-15 in the West Plaza, Structure 5D-77 of the Lost World, Structure 5D-105 near Temple V, and Structure 5E-51 in Group G (*Ibid.*). The Passage palaces, defined previously, are exemplified by Structure 5D-91 in the Seven Temples Plaza, and Structures 5D-71 and 5D-44 of the Central Acropolis. A particular type of "tripartite building" has been defined by Christie (2003b), characterized by a division of three modules that could have had cosmological implications. They are represented in Tikal by Structure 4E-31 and the Central Acropolis.

During the Late Classic, single-roomed structures with side arm benches appeared throughout the site. These have been identified as throne/reception buildings, exemplified by Structure 5D-59 of the Central Acropolis, Structure 5D-123 in Group G, Structure 5D-118 of Group F and the west addition of Structure 5D-61. The separation of this function from the larger adjacent buildings was likely part of the generally late increase in security and privacy at the site (Harrison 2003b, Harrison and Andrews 2004).

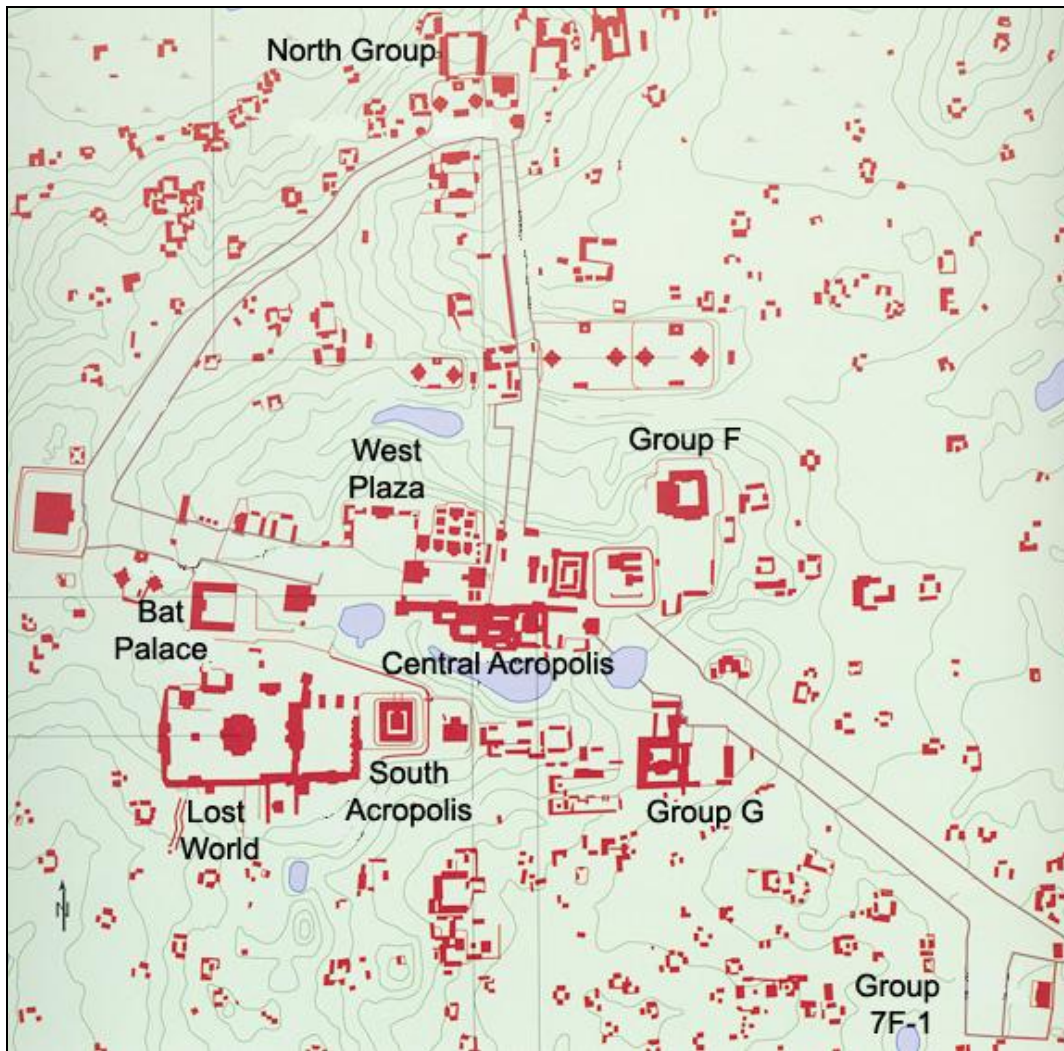


Figure 8.12 Location of palaces in Tikal

Harrison (2003b) has also proposed a chronology of palaces in Tikal, based on archaeological and epigraphic data. The earliest Palace identified is Structure 5D-46 of the Central Acropolis, related to the reign of ruler *Yich'aak K'ak* during the late fourth century. Structure 7F-32 was probably built around 520 C.E. by *Kaloomte' B'ahlam*, and it's very similar to Structure 5D-46, but without benches (Ciudad Ruiz 2001). For the Late Classic, *Hasaw Chan K'awiil* could have resided in Structure 5D-57 in the Central Acropolis, while his son *Yik'iin Chan K'awiil* may have built Group G. Structure 5D-65 (Maler's Palace) in the Central Acropolis dates to the reign of *Yax Nuun Ayiin II* during

the final years of the eighth century, and Ruler 28 (the Temple III ruler) could have finished the Bat Palace in the beginning of the ninth century.

Among the palaces of Tikal, the Central Acropolis stands out as a *Palace Complex* formed by 46 structures distributed in 6 courtyards (Figure 8.13). Its location on the southern end of the Great Plaza suggests that it was the seat of authority for most of Tikal's history. The acropolis had a direct access to the Great Plaza and the East Plaza, and a more private entrance on its eastern end. To the north, buildings present a false façade, and the access to inner courts was closed and well controlled (Harrison 2003b). Royal residences were located in the inner core of the compound, surrounded by other buildings, making the visibility of the ruler relatively low and “shielded” from outside view. However, despite its closed arrangement, these royal quarters still functioned as a theatrical space, holding exclusive meetings involving only the highest echelon of the community (Inomata 2001b: 356, Inomata 2006).

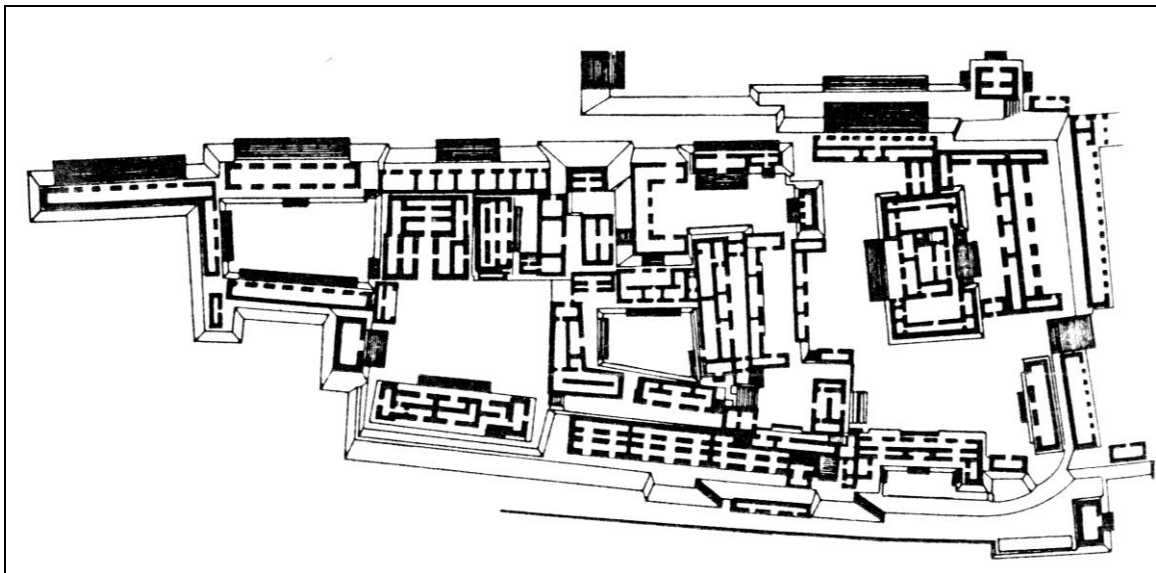


Figure 8.13 Plan of the Central Acropolis at Tikal (Andrews 1975: fig. 13)

All structures of this complex were vaulted with masonry roofs, some of them decorated with carved mosaics, inscriptions, portraits, and masks. The acropolis also had a three dimensional quality where vertical differentiation was important, since the six courtyards were all at different levels and connected by a complex stair system (Harrison 2003b). Earliest constructions seem to center around a single building (Structure 5D-46), that eventually became part of a complex of multifunctional buildings. Towards the end of the Late Classic period, the acropolis grew towards the west part, and the general pattern of remodeling was always in the direction of increased restriction of access and more regulated privacy (Harrison 2001, Harrison and Andrews 2004).

Of the 46 structures in the Central Acropolis, Harrison excavated almost all of them (41), and carried out complete excavation of 25 structures (58%), taking 40 months of excavation between 1962 and 1967 (Harrison 2003b). All the architectural data collected was used to define a palace typology based on variables such as floor plan, distribution of tandem (parallel length) and transverse (perpendicular) walls that formed room alignments, and additional features like secondary beams, stories, and 13 different types of benches that varied in size and shape. He thus defined four types: 1) single room, 2) two or three rooms, 3) multiple rooms without transverse rooms, and 4) large number or room arrangements (Figure 8.14). These structures grew by addition of windows, alterations for privacy, direct traffic flow, bed benches, etc. The tandem/transverse type is exemplified by Structure 5D-46, which could have functioned as the royal family residence, given the large numbers of rooms and the presence of a cached vessel with an inscription naming the ruler *Yich'aak K'ak* as its owner (Harrison 2001, 2003a).

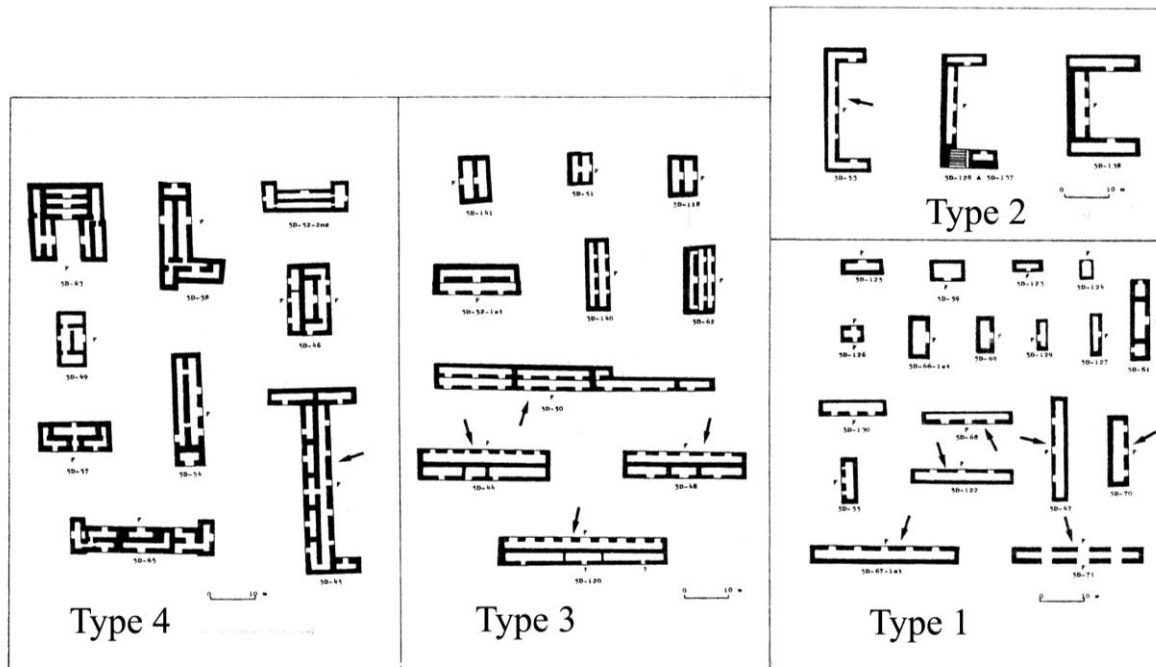


Figure 8.14 Types of structures in the Central Acropolis of Tikal (Arnauld 2001: 370)

In functional terms, Adams (1974: 294) noted a lower percentage of residential buildings, and Harrison interpreted only 17 buildings as permanent or temporary residences (37%). Residences were identified based on the presence of long sleeping benches, wall holes for curtains, and burials (Harrison and Andrews 2004). Also, in a general perspective, benches at Tikal are quite simple compared with other Maya cities like Copan, Palenque or Piedras Negras (Harrison 2001).

The other buildings of the acropolis were devoted to administrative and ceremonial functions, although few had specific ones (4 shrines or oratories, 13 storages and 1 kitchen). Hence, more than half of the acropolis buildings had a multifunctional character, probably used for temporary activities such as men's ceremonial houses or pre-marriage houses (Andrews *et al.*, 2003). The scarce presence of burials also suggests that funerary function was not important (Webster 2001). Some single room structures, such

as 5D-123, were originally interpreted as storage rooms, but now they have been identified as throne or reception buildings, given the presence of benches with side arms. Their dimensions average an area of 3 x 6 meters, and are exemplified by Structure 5D-59 (Harrison 2001, Harrison 2003b).

Arnauld (2001:368-71) has also noted that Harrison's type 2 and 3 fall into the category of "long open halls", represented by 12 structures located in the periphery of the acropolis, specifically in the northern and eastern sides. Six of them surround Palace 5D-46, forming a type of "antechambers" for the royal residence (*Ibid.*).

Spatial analysis of the Central Acropolis has suggested some population estimates for the palace complex. Kowalski (1987) has proposed a maximum of 200 people by 750 C.E., while Harrison (2003) calculates a maximum of 300 temporal and 200 permanent residents. Temporal residents could have participated in rituals, learning activities (boys) and religious retreats, thus being ballplayers, servants, scholars, dignitaries and diplomats, guards, and artisans.

The detailed excavations carried out by Harrison produced significant data that allowed a reconstruction of the acropolis construction history, which has also been correlated with all the recent epigraphic decipherments. The earliest structures have been dated to the Chuen and Cimi phases of the Late Preclassic (350 B.C.E. –250 C.E.), and were identified in the form of postholes directly located on top of a modified bedrock elevation, beneath structures 5D-71, 5D-50, 5D-65 and 5D-46. The first masonry buildings were erected during the Manik phase (AD 250-550), when the acropolis included Patios 1, 2, 3 and 6 (Figure 7.29). Structure 5D-46 was the most important of this Early Classic stage, given its identification as the royal residence of ruler *Yich'aak*

K'ak. This building is the only structure of the acropolis securely identified as a permanent residence, which could have been used by different rulers, as it remained almost intact throughout the entire acropolis history. Unlike most of the structures of the acropolis, Structure 5D-46 contained four burials, supporting a residential function (Harrison 2003, Harrison and Andrews 2004). The first phase of Structure 5D-46 dates around 330 C.E. (Cauac phase), and its major change was a second floor with a “caracol” staircase, added around 500 C.E. The building is open to the east and west sides, though the west side was sealed later, separating the east residential half and the small closed patio to the west. The east side went “through a series of progressive constructions, came to be totally enclosed, providing a degree of residential privacy similar to that of a fortress” (Harrison 2003b). Schele and Mathews (1998) have interpreted this building as a *wi te nah* or foundation house, whose function could have been similar to House E of Palenque, where royal accessions maybe took place. A later text on 5D-141 could indicate that ruler *Nuun Yax Ayiin II* still used this building for that purpose.

Another important building of the Early Classic that has been interpreted as a royal residence is the Palace of the Red Dado (Structure 5D-52). Also, Structure 5D-58 was decorated with masks that resemble the name glyph of ruler *Yax Nuuu Ayiin*, thus having been interpreted as his residence. It is important to note that none of these royal residences have masonry benches and thrones, indicating that these features did not appear until the Ik phase. Other structures dated to this period are 5D-50, 5D-54, 5D-57, 5D-122, 5D-120, and 5D-71, the two later ones being “passage” palaces that offer transit from one absolute level to another, not just from a public to a private space (Ciudad Ruiz 2001, Harrison and Andrews 2004).

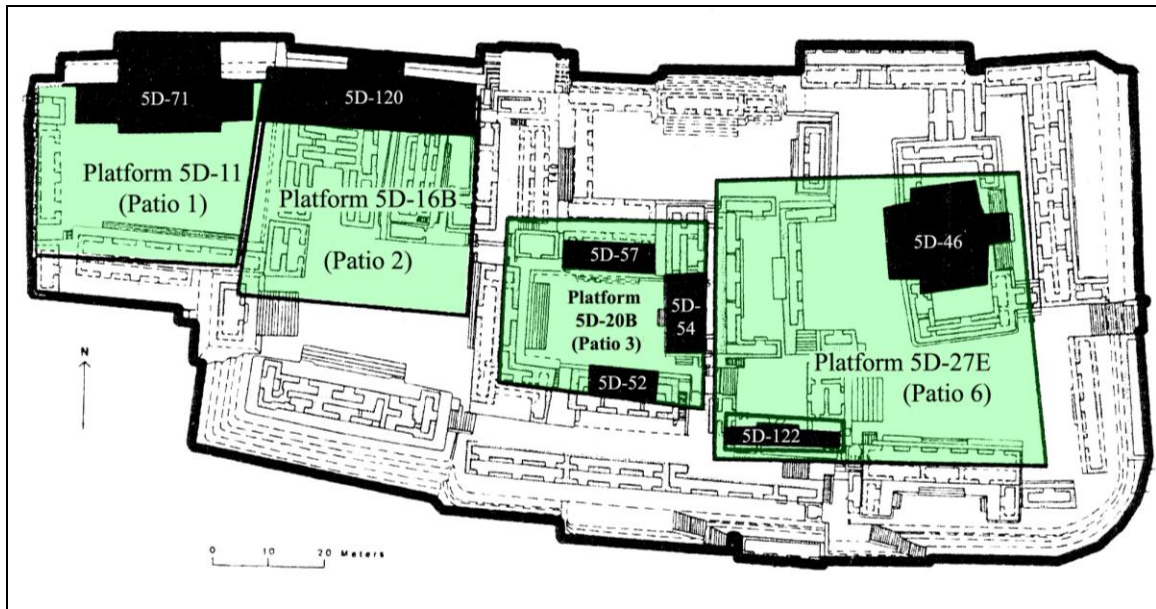


Figure 8.15 Early Classic palace structures in the Central Acropolis of Tikal (After Ciudad Ruiz 2001, from Harrison 1970)

The Ik and Imix phases of the Late Classic (550-850 C.E.) began with the remodeling of structures 5D-54 and 5D-57 in Patio 3. The latter was decorated with Teotihuacan related imagery and a portrait that has been identified as the 26th ruler, *Jasaw Chan K'awiil* (Figure 7.30). If Structure 5D-57 was the royal residence of that ruler, the small Structure 5D-59 located on its west side, could also be a throne room (Harrison and Andrews 2004). Nonetheless, the major renovations in the acropolis' history were carried out by his son and successor, *Yik'in Chan K'awiil*, who was responsible for modifying Patios 4 and 6, with the addition of structures 5D-141, 5D-49, 5D-52, 5D-53, and 5D-55. Structure 5D-42 contains a date of 741 C.E., confirming its association with this phase (Harrison 2003b). Schele and Mathews (1998) have interpreted Patio 6 (structures 5D-53 and 5D-54) as a as part of a dancing and feasting space, while Patio 4 probably served to restrict access through structure 5D-49. Structure

5D-51, located next to the staircase leading to Patio 3, could have been an *Itzam Nah* or sorcery house, but later used as a captive pen or prison (Figure 7.30).

The last constructions of the acropolis are located in Patio 2, which have been dated to the reign of *Yax Nuun Ayiin II*. The main building of the patio is Structure 5D-65 (Maler's Palace), which has been interpreted as a temporary residence that could have had multiple functions like receptions or teaching activities, given the presence of many benches (Figure 8.16). Structure 5D-63 forms a u-shaped courtyard in the opposite side of the courtyard. Given the presence of 11 long benches, it has been interpreted as a ceremonial guesthouse, probably for ball players (Harrison 2001, 2003b, Harrison and Andrews 2004).

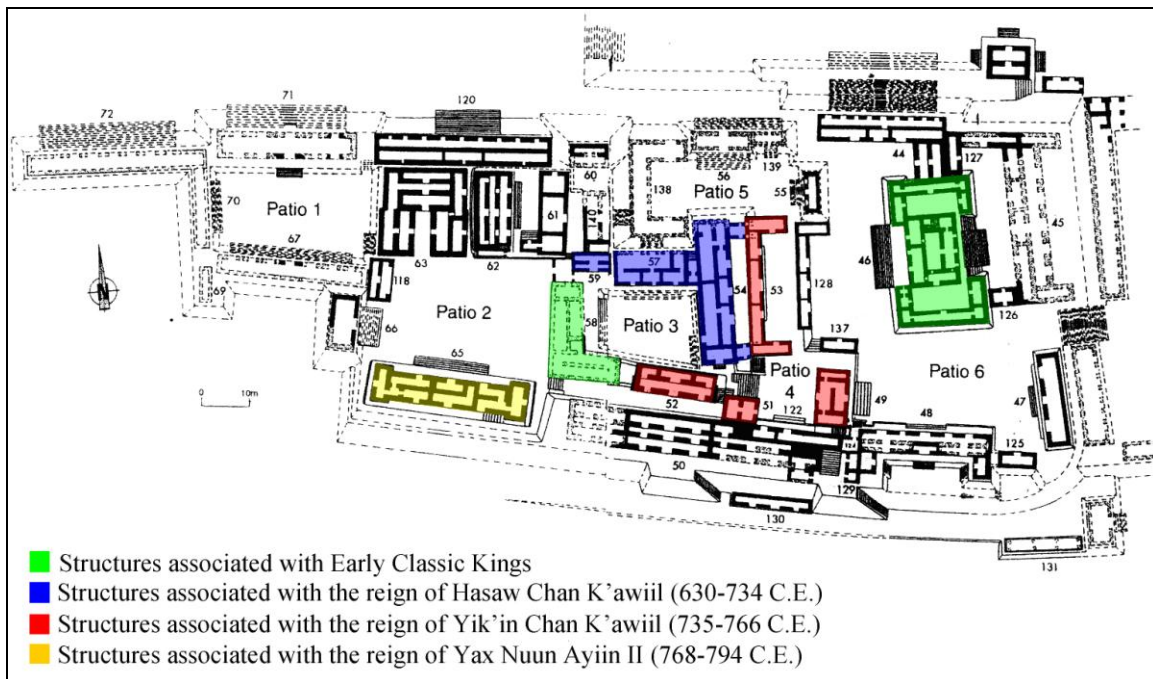


Figure 8.16 Royal residences in the Central Acropolis of Tikal (After Harrison 1999)

8.5.2 Calakmul

This is one of the larger Classic Maya cities, if not the largest, due to the presence of massive structures and hundreds of residential compounds that extend for various square kilometers around the site ceremonial center. Excavations at Calakmul have defined two main palaces in the site core: Structure II and Structure III (Figure 8.17). However, the site has a monumental acropolis to the northwest of the main plaza that undoubtedly had palatial functions, but it has not been investigated until recently.

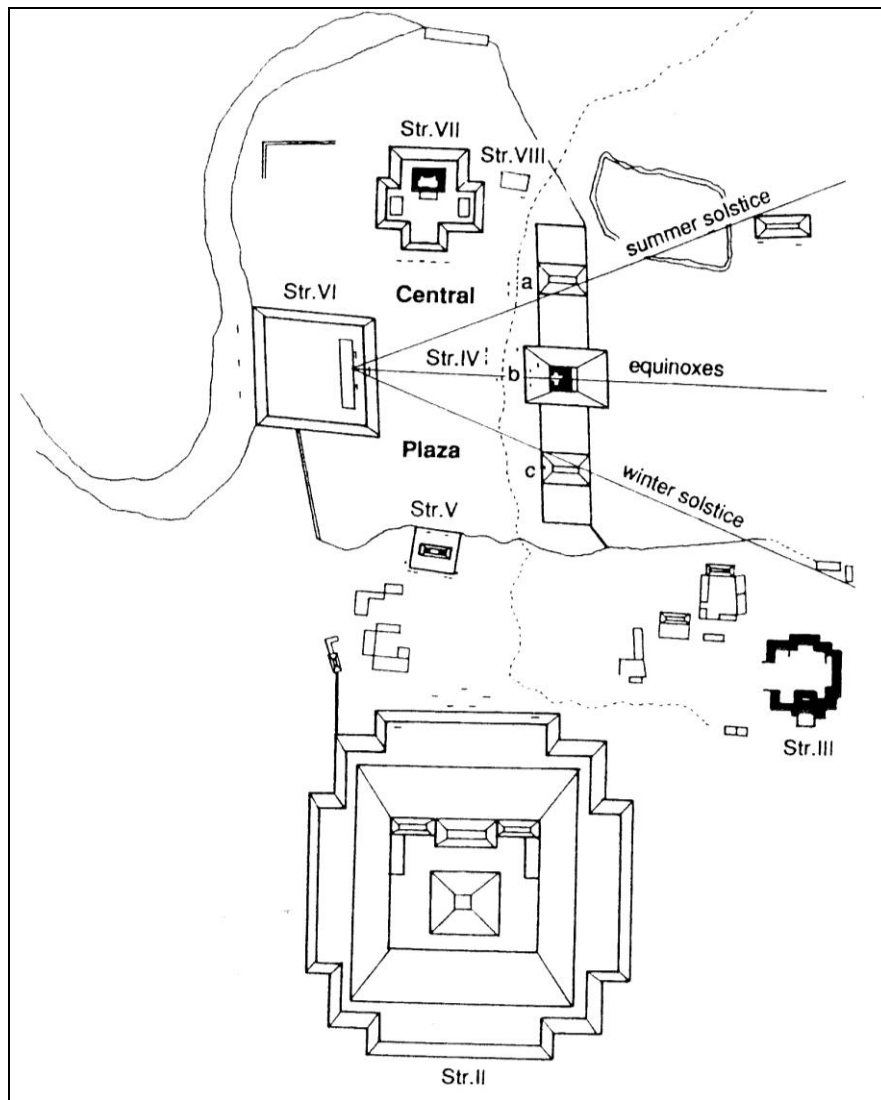


Figure 8.17 Location of main structures in Calakmul Main Plaza (Ciudad Ruiz 2001: 316, after Folan *et al.*, 2001)

Structure III, also known as Lundell Palace, presents a general private design, holding a total of 12 rooms. Its layout contains three main structures, arranged in a triadic pattern, which resembles the first stages of Uaxactun's Structure A-V (Figure 8.18). For that reason it has been proposed that this structure could have inspired the name *ox te tuun* as the main toponymic of Calakmul (Glassman and Anaya 2011: 113).

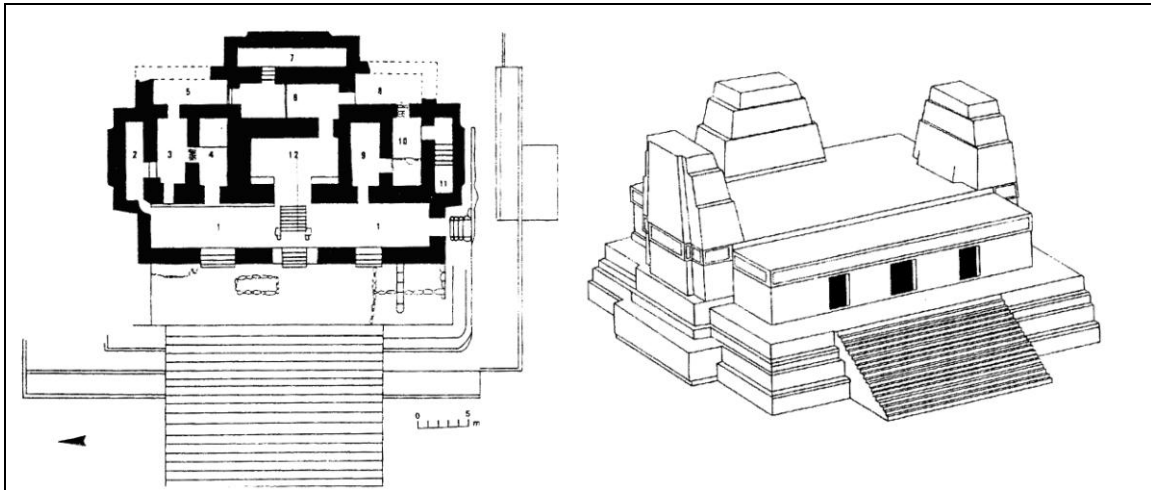


Figure 8.18 Plan and reconstruction of Calakmul Structure III (Ciudad Ruiz 2001: 317, fig. 17, after Folan *et al.* 2001)

It is important to note that this building remained almost unchanged from its initial construction in the fourth century until the last occupation stages of the site during the Terminal Classic (ninth century). The first construction phase contained a royal burial that could represent the remains of an early king or even the dynastic founder of the site. The excavation of this structure also recovered food remains, lithic artifacts, and a high amount of polychrome ceramics, indicating the presence of a royal household (Folan, *et al.* 2001, Ciudad Ruiz 2001). Even when the evidence suggests that the palace had a residential nature, it seems that the original layout of the building was associated with a more ritual function, maybe related to the origins of the ruling dynasty. Because Structure

III was not largely modified in later phases, (contrary to Uaxactun's A-V), a larger and more complex palace had to be built during the Late Classic occupation, probably the northwestern acropolis.

Structure II is the largest structure at the site, and most of its construction dates to the Late Preclassic. Given its size and location, this building had a clear public and ritual function; however, its upper portion has been interpreted as a residence for the ruler or other nobles of lesser status, evidenced by the presence of rare polychrome specimens. The lower façade was also modified at the end of the Late Classic, adding crude rooms for household activities and artifact production (Figure 8.19). The evidence does not reflect squatter activities, but an occupation associated with the original inhabitants of the site (Folan, *et al.* 2001). This late modification reflects a pattern observed in various sites that have Terminal Classic occupation, where temple-pyramids served as palace compounds (Braswell *et al.*, 2004: 179).

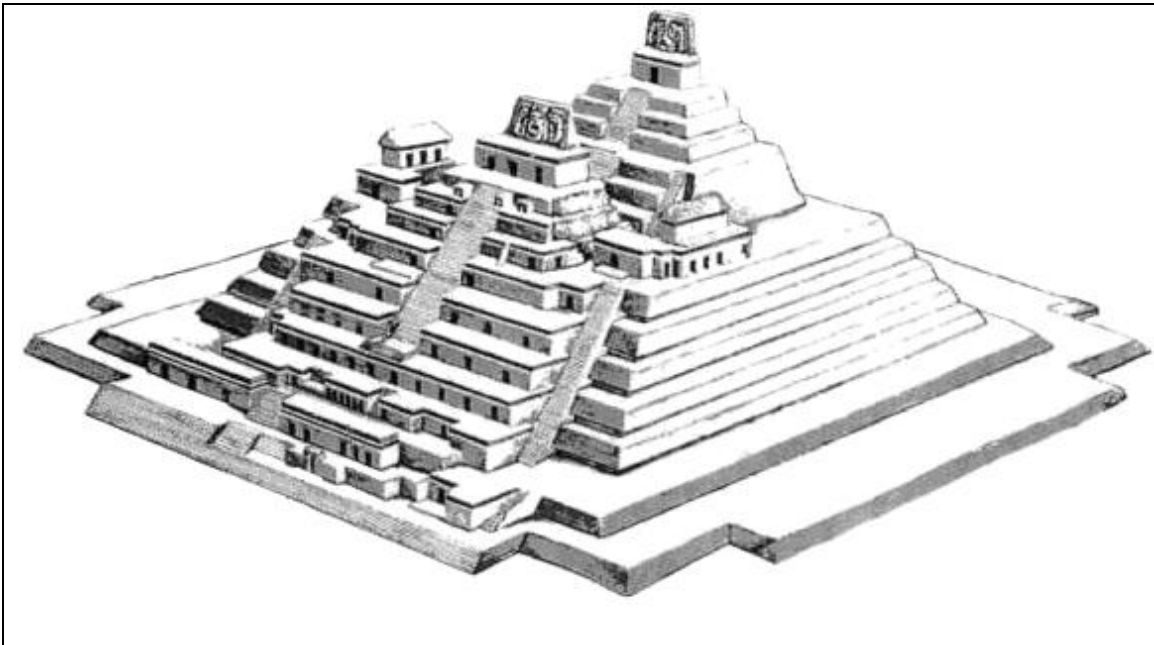


Figure 8.19 Reconstruction of Calakmul Structure II (After Mumary 2009)

8.5.3 Caracol

Caracol became one of the largest lowland centers during the final part of the Early Classic period, especially after the second half of the sixth century. The site core was remodeled, as a result of the development of an entirely new economic and administrative system that served as basis for the city (Chase and Chase 2007: 57). These architectural changes included various palace compounds, nine in the epicenter and 12 outside (Chase and Chase 2001a).

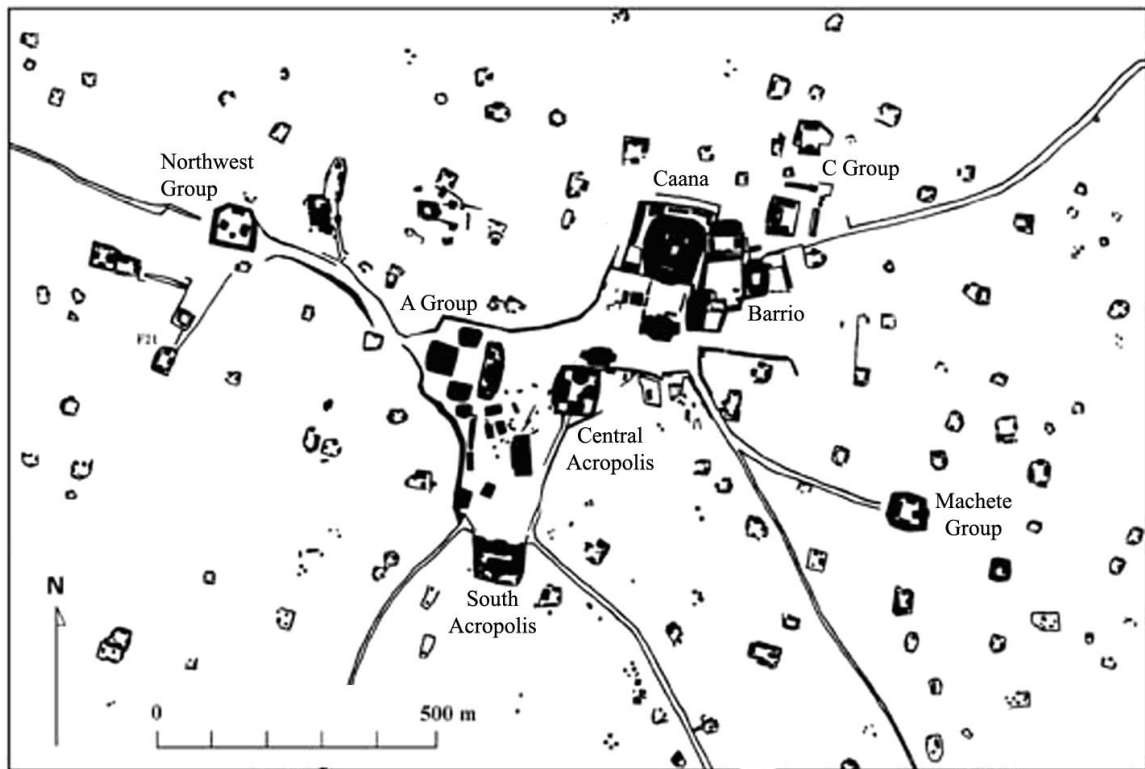


Figure 8.20 Location of the most important palace groups at Caracol
(After A. Chase and D. Chase, n.d.)

The epicentral palaces consisted of temple-palace groups, each one with both ritual and burial components. These are the Central Acropolis, the Northwest Group, Plaza B, Caana, and possibly the South Acropolis (Figure 8.20). Group C could also represent a residential barrio (Chase and Chase 2001a). These were contemporaneous complexes, representing an approximate total of 190 vaulted rooms. They were occupied by different elite families, and it has been proposed that Caana was the house of the dynastic ruler. Other palaces are close or distant from the settlement, and some times they are located in residential groups associated with their own causeways (Chase, *et al.* 2001: 108).

Caana is the largest building at the site, with 4 “palace units” containing a total of 66 rooms, and up to 45 benches (Chase and Chase 2001a) (Figure 8.21). The Main Court holds the earlier construction, dated around 680 C.E., while the “Midrange palace” is dated after 760 C.E., containing 13 rooms in the front and directly related to Group B to the south. Its frontal rooms were used for public displays while the back rooms were used for activities such as private audiences or guard residences. The Upper-Range Palace is more private, and could have served as a “shield” for the upper main court. The Northeastern Court presented substantial quantities of storage jars, metates, animal bones, and serving vessels, suggesting its use for food preparation and other services related to the royal house, which could have been located at the Northwestern Court. According to Chase and Chase (2007: 55), during the Late Classic the upper part of Caana was the Ruler’s palace, being full of vaulted buildings with multiple chambers, storage rooms and temples (Figure 8.21b).

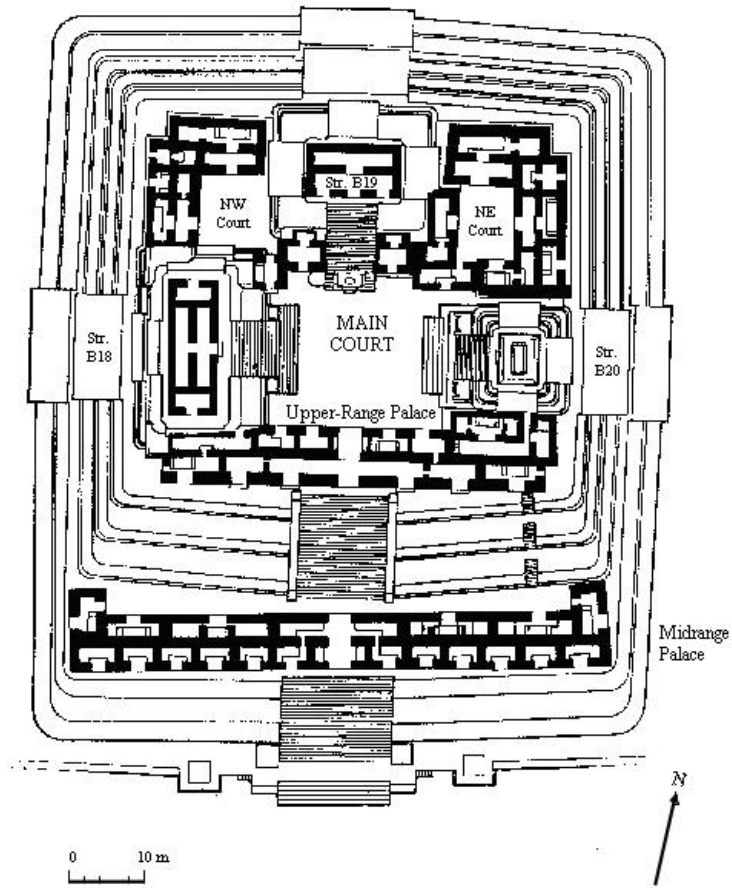


Figure 8.21 Caana Structure, Caracol. a. Restored (photo by T. Barrientos) (above)
b. Planview(Chase and Chase, 2001b: figure 18) (below)

Structures B4 and B6 were added to the Temple B-5 during the Early Classic. The presence of various atlatl points suggests some sort of military function, although it was used as an elite residence during the Terminal Classic. The Central Acropolis contains 1 or 2 palaces and 3 temple/shrines, indicating that it was used as an elite residence, probably by some part of royal the family (Figure 8.22). The South Acropolis could have a more administrative function for the royal court, while the Barrio residential compound has areas for display and reception, probably used by artisans (Figure 8.23). Group C also has characteristics of high elite compound, though the presence of a throne room may indicate its use by the royal family (Chase and Chase 2001).

The construction of outlying palaces were independent of the central administrative or court function, especially at the end of the Late Classic, when carved monuments started to be erected outside the epicenter. Regarding context, most palaces in Caracol present evidence of food preparation outside the buildings, though metates and animal bones found in interior spaces have been interpreted as evidence of feasting. In addition, no caches or burials were found in any palace (*Ibid.*).

Contextual analysis of burials and construction offerings, combined with the stable isotope analysis of bone materials, suggest clear status differences in Caracol, with uneven access to basic resources. In this context, the worse diet in Caracol appear in the area immediately outside the epicenter, in a zone of modest houses related with evidence of production of jade, bone and wood artifacts. This suggests a city model where a zone of low status individuals occupied places adjacent to the central areas, while the more distant palaces where occupied by a middle status elite (Chase, *et al.* 2001: 116).

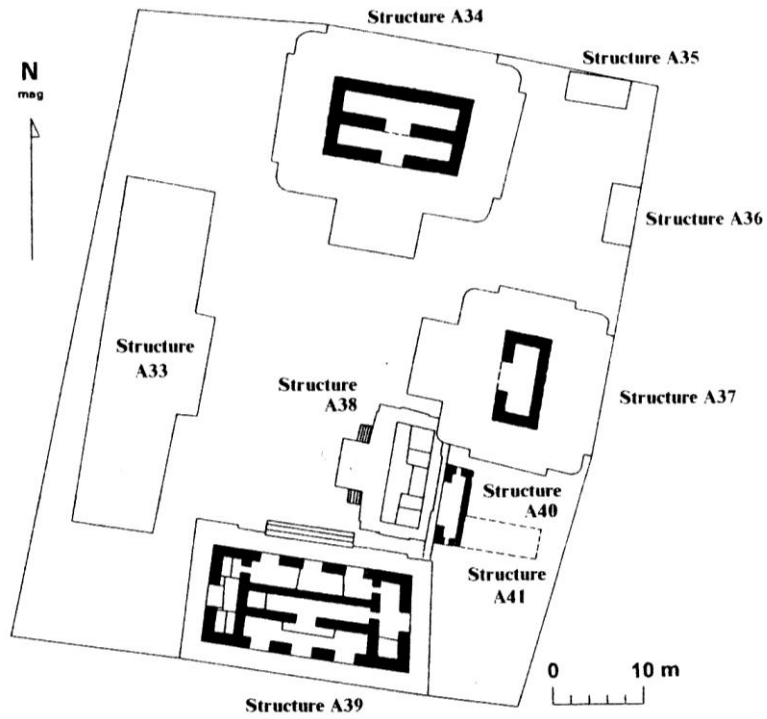


Figure 8.22 Plan of Central Acropolis, Caracol (Chase, *et al.*, 2001: 114, fig. 6)

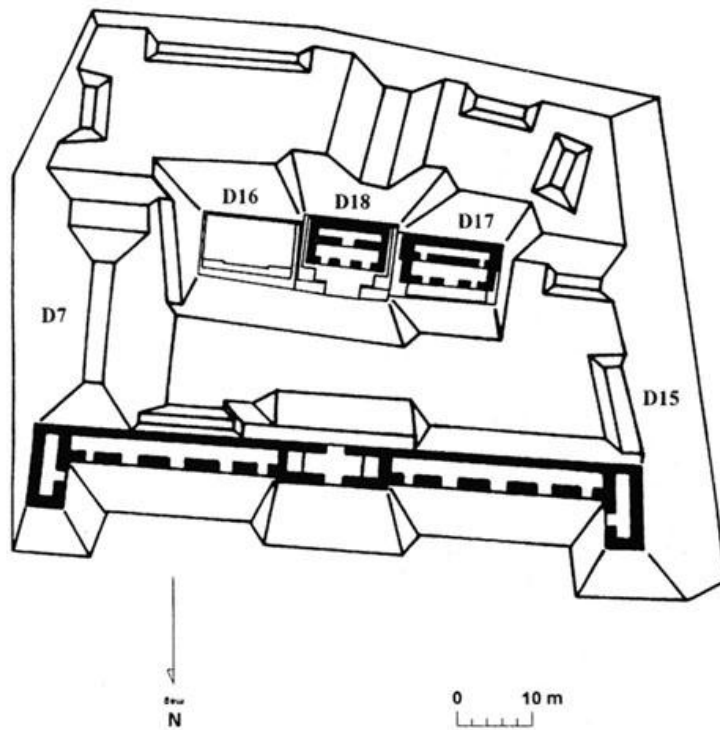


Figure 8.23 Plan of South Acropolis, Caracol (Chase and Chase 2001a)

Administrative functions of palaces are suggested by architectural design and iconographic details. The administrative system housed in the royal court at Caracol was a functional entity, especially in the Late Classic period, when there was a site-wide focus on shared identity, through an effective system of communication and transportation, and an intensive agricultural system (Chase and Chase 2001a).

8.5.4 Uaxactun

The palaces of Uaxactun were the first ones to be excavated and analyzed in the Maya lowlands. Juan Antonio Valdes interpreted the layout of the Late Classic stages of Structure A-V in terms of possible functions. The central area of the palace complex was dedicated to administrative and ritual activities associated to three areas (Figure 8.24).

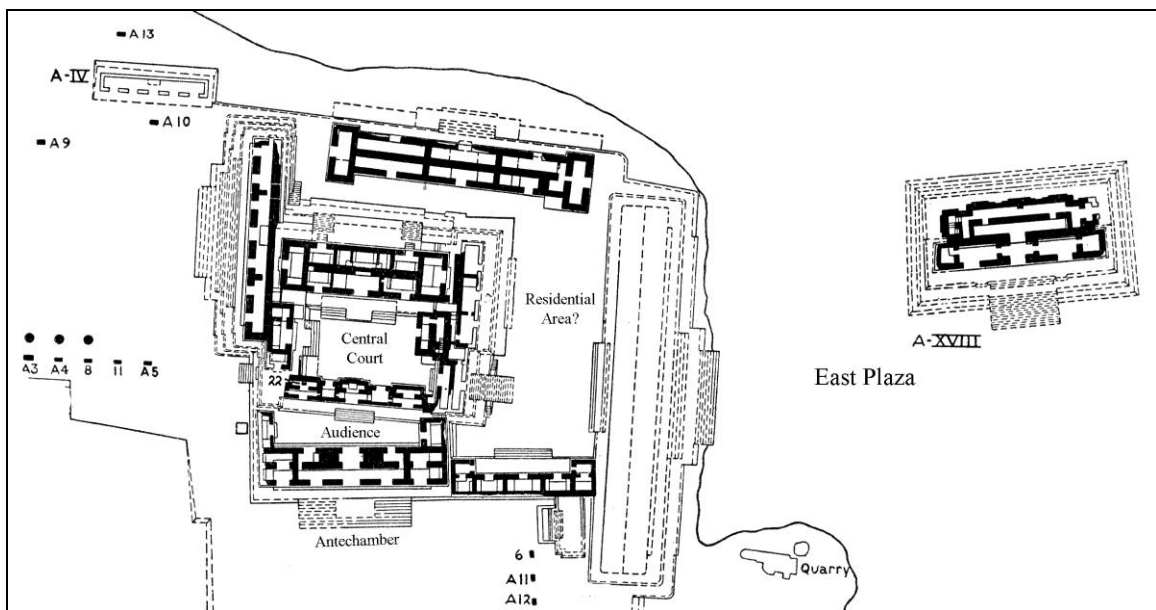


Figure 8.24 Plan of structures A-V and A-XVIII, Uaxactun (After Smith, 1950)

The first one is an antechamber with a narrow door that conducted to the second one, which was a semiprivate space or audience where the ruler probably received visitors. The third chamber was the Central Court, reserved to the ruler, probably to perform rituals related with the sacred ceremonies of kingship, including meditation, abstinence and bloodletting. The lateral areas that surround the central part could have been of residential use, because they consist of five long rooms each one and restricted access doors in the front and rear of the building (Rivera Dorado 2001: 149-150).

Using a formula of about 10 square meters per person, Adams (1974: 287-9) calculated an estimate of 214 persons in terms of maximum accommodation for Structure A-V. Also, according to length/width measurements, there are only 95 adult-sized sleeping places. As a result, he came out with a population of 114 people, consisting of 76 adults and 38 children.

Group B has various small palaces that had a total of 34 rooms, and 20 of them had a possible residential function. Using an average of 2.53 persons per room, the possible maximum capacity of Group B is 51 people. While Groups C and G only have house mounds, Group D contains Structure D-XX as the only formal palace structure. Groups E and F also have one single palace each one, being structures E-X and F-XIV. Group H contains two palace structures: H-III and H-XI. Using the same average per room, Adams calculated a maximum of 19 additional persons for the elite residential rooms of groups C to H. Adding the numbers of Structure A-V, Group B and the other possible residential palaces, the total number of elites at Uaxactun is 184, although it could have been less than 150 persons. In any case, the elites correspond to less than 2% of the population and possibly less than 1% (Adams 1974: 292-4).

8.5.5 Palenque

Although the palace of Palenque has been documented for more than two centuries, few spatial and functional analyses have been carried out. Arnauld (2001: 371) defines its layout as a system of double open halls (House A, House D and House AD) that lead to the interior and exterior spaces, with only two or three doorways in the axial wall that separate them, and internal divisions form rooms in the interior gallery. Two large staircases served to control the access to these portals, thus combining public and private functions (Figure 8.25). Liendo (2003) indicates that the residential area was located in the southeastern sector, which is more restricted, though not that well preserved as the ritual-administrative areas.

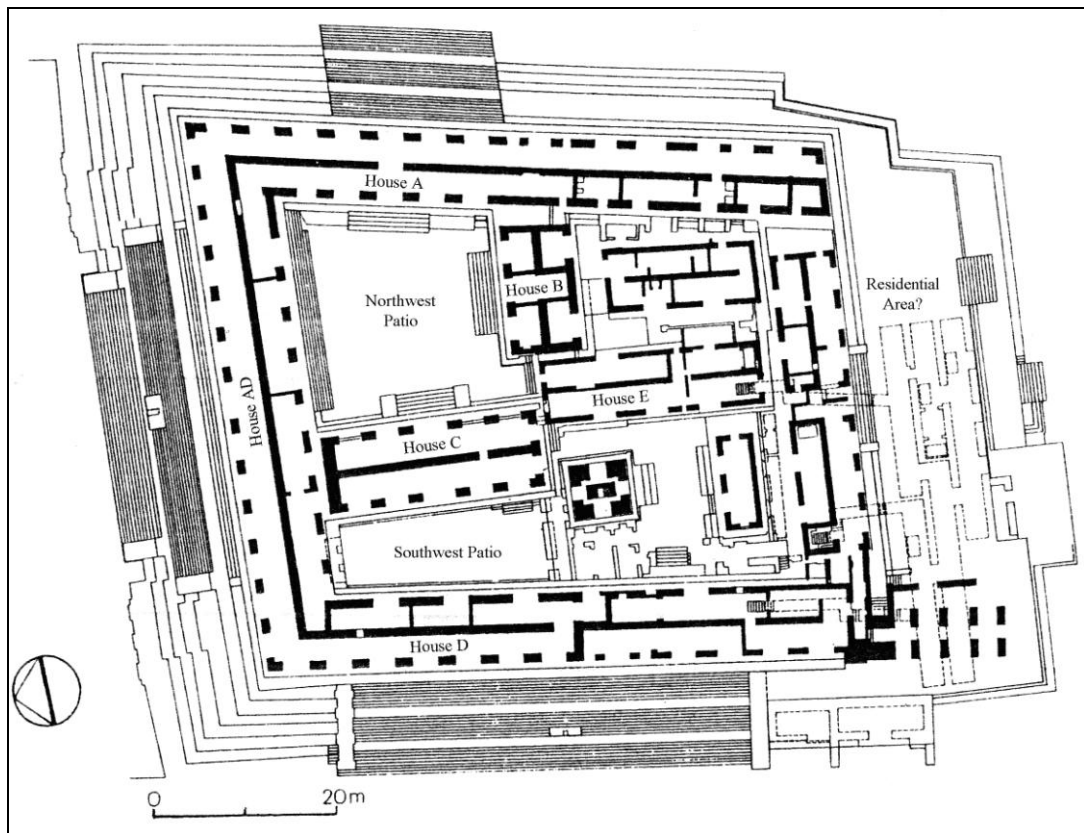


Figure 8.25 Plan of the Palace of Palenque (Arnauld 2001: 372, fig. 4, after Andrews 1989, fig. 127)

Based on iconography, Miller (2001) has identified specific motifs that relate some structures with their function. House E contains different forms of maize iconography and could have emulated a peasant house, while House B has predominant mat designs. However, given the epigraphic evidence, it is known that these two buildings were directly associated with accession rituals and other forms of dynastic activities. On the other hand, the Northwestern courtyard is surrounded by captive portraits, suggesting its function as a presentation area, though more private, given its reduced dimensions. Runggaldier (2009: 320) defines the northwest and southwest patios as reception areas that restricted the access to a throne room in House C, especially through the “gateway structures” known as House D, House A and House AD.

8.5.6 Piedras Negras

The acropolis at Piedras Negras contains various palace structures, with a total of 13 range structures grouped into 6 courts, that elevates 40 m above the plaza floor and almost 100 m above the Usumacinta River (Golden 2002: 105) (Figure 8.26). A monumental stairway leads up to the Acropolis, where Structure J-2 conducts to Court 1, and from there to J-6, which has a megalithic stairway and a richly decorated stucco façade. In its interior, a stone throne carved with glyphs was located in a vaulted niche, and could have been used as an audience chamber by the ruler (Kowalski 1987: 85).

Arnauld (2001: 371) has defined three different “passage” palaces in the acropolis: Structure J-2, which controlled the access to Patio 1, J-12 the access to Patio 2, and J-18 to Patio 3. The three have lateral rooms in their ends and constitute open halls with multiple doorways, a plan that has been defined by Golden (2002: 119) as the

“typical palace” of the site, consisting of a double-galleried central space, flanked by two side rooms. However, Structure J-18 contained a masonry throne with a stucco decorated bench, similar to the well-known Throne 1 found inside Structure J-6 (*Ibid.* 122)

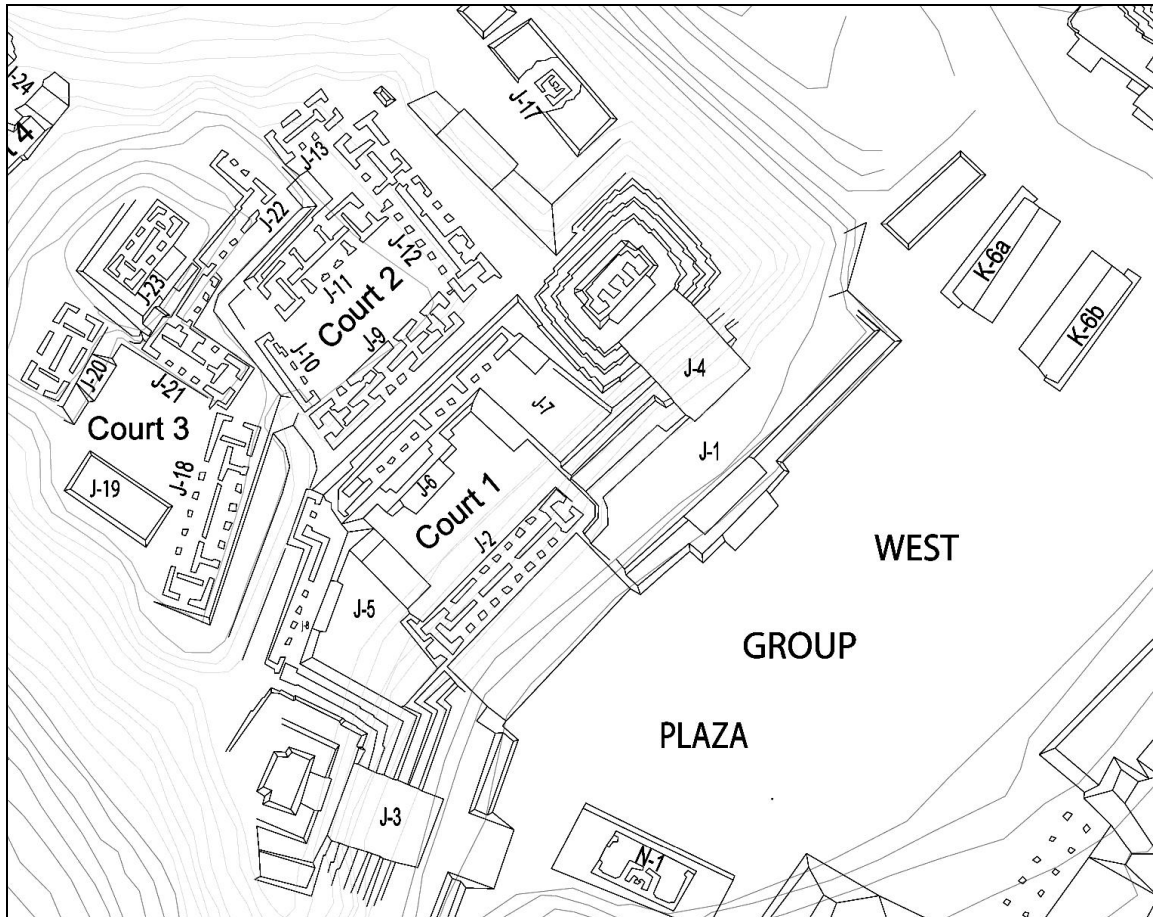


Figure 8.26 Map of the Acropolis of Piedras Negras (Golden 2002: 192)

Excavations carried out by the University of Pennsylvania project in the 1930's defined at least six construction phases in the Acropolis, beginning in the Early Classic and ending in the ninth century. This sequence was confirmed by the most recent excavations of the Piedras Negras Archaeological Project, directed by Houston and Escobedo between 1997 and 2001. Excavations in Court 3 and Court 4 defined a first

construction phase dated to the mid fifth century (*Ibid.* 185, 297), followed by at least three major construction episodes, where the function of the buildings could have changed from ritual to more residential-administrative oriented. This seems to indicate that the first royal palace was located in the West Group Plaza, and not in the Acropolis. During the seventh century, most structures of the Acropolis were demolished and ritually terminated, probably as a way to overcome a military defeat by the neighbor site of Pomoná around 554 C.E. As a result, a new palace of monumental proportions was built in the Acropolis, as part of a general construction program throughout the site associated with the reign of Ruler 2 and Ruler 3 (*Ibid.* 348, 354, 368-9) (Figure 8.27). The last phase dated during the end of the eighth century is characterized by a reduction of “living space” and restrictions of view and access, especially in Court 3 (*Ibid.* 190-1).

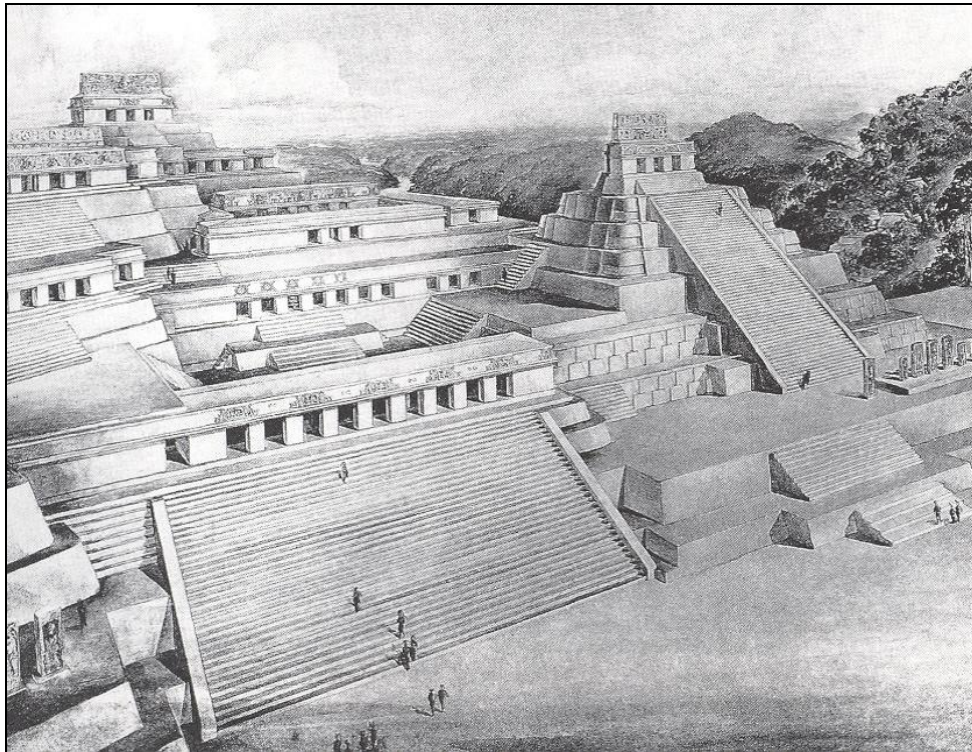


Figure 8.27 Reconstruction of the Acropolis of Piedras Negras as it appeared in the eight Century (Proskouriakoff 1963: 17).

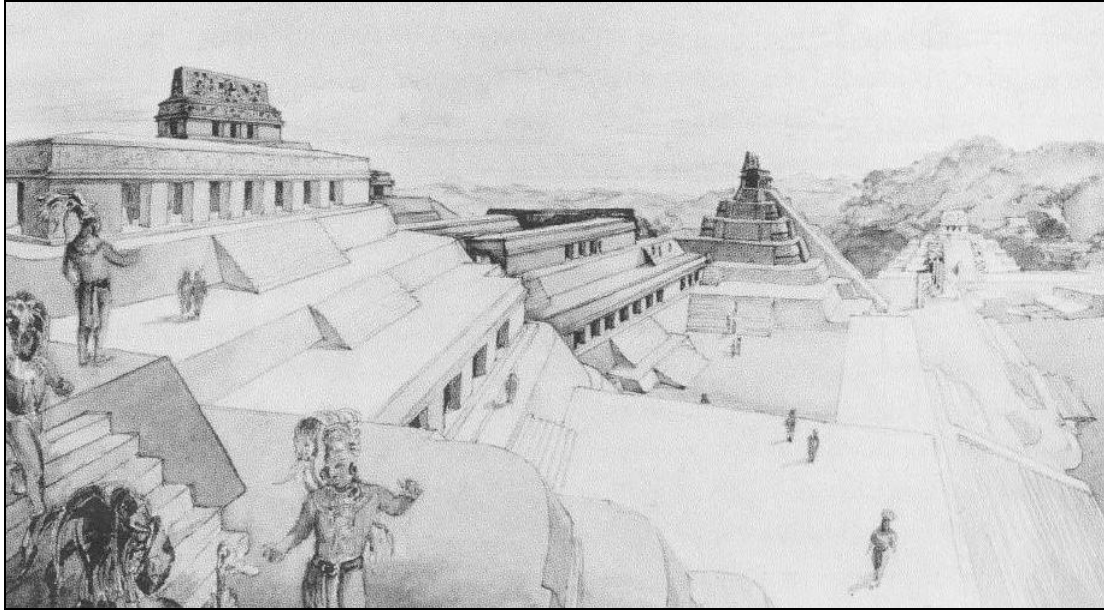


Figure 8.28 Reconstruction of the Acropolis of Piedras Negras as it appeared in the 8th Century. Structure J-18 is in the foreground (Drawing by T. Proskouriakoff, Edwin M. Shook Archive, CDS-Universidad del Valle de Guatemala)

8.5.7 Copán

The acropolis of Copan is undoubtedly one of the most studied Maya buildings, which holds a complex construction history that spans over four centuries. However, it was not built as a single unit, because it was developed through different periods of time (Miller 1988: 153). In functional terms, the acropolis shows a variety of royal and elite architectural types, including temples and different types of palaces, used for ritual, administrative and residential activities. The general plan of the site is highly centralized, because there are few palaces located outside the acropolis and its immediate surroundings, such as Structure 6, which is an open hall located west of the Main Plaza (Arnould 2001) and Structure 10L-223 of the Great Plaza (Andrews *et al.*, 2003) (Figure 8.29).

The earliest phases of the acropolis are constituted by adobe buildings covered with plaster, which were in use until 475 C.E., although some adobe structures of the Main Plaza were still used in 575 C.E. (Traxler 2003: 54). Initially, the southern portion of the acropolis was the burial place for rulers, and the northeastern zone was their residential compound between 420 and 540 C.E., until the royal residence could have been moved to Group 10L-2 (Ciudad Ruiz 2001: 318, Andrews and Bill 2005: 252).

During Late Classic times, the acropolis was remodeled by different rulers, until reaching its final layout by the time of Ruler 16th, *Yax Pasaj Ch'aan Yopaat*. This last stage has been analyzed in terms of accesses, where the monumental Structure 11 plays an important role in restricting the direct passage from the Main Plaza. Access between the East and West courts (passage between Structure 16 and 17) is also extremely limited, creating separated identities of functions (Figure 8.29).

Among all the acropolis buildings, Structure 10L-22, along with 21, 21A and 22A are the most private of all. The plan of the acropolis also has an iconographic orientation for the viewer, supplicant or lord, guided through the structures in prescribed order (Miller 1988: 153). Standing in Structure 10L-11, the king could be involved with either the most inclusive or the most exclusive ceremonies simply by walking out the north or the south door. To the north, Structure 11 faced the most inclusive space of the site, formed by the great open plaza that incorporated the ball court, the hieroglyphic stairway, and the public entrance and Great Plaza beyond (Figure 8.30). To the south, it faced the exclusive theatre space of the West Court, called the Reviewer Stand (Fash 1998). Everyone entering the central plaza area by means of the *sacbeob* would have seen the

imposing Structure 10L-11 and its giant Pawahtuns and crocodilians, surely one of the most dazzling visual displays of its day (*Ibid.*).

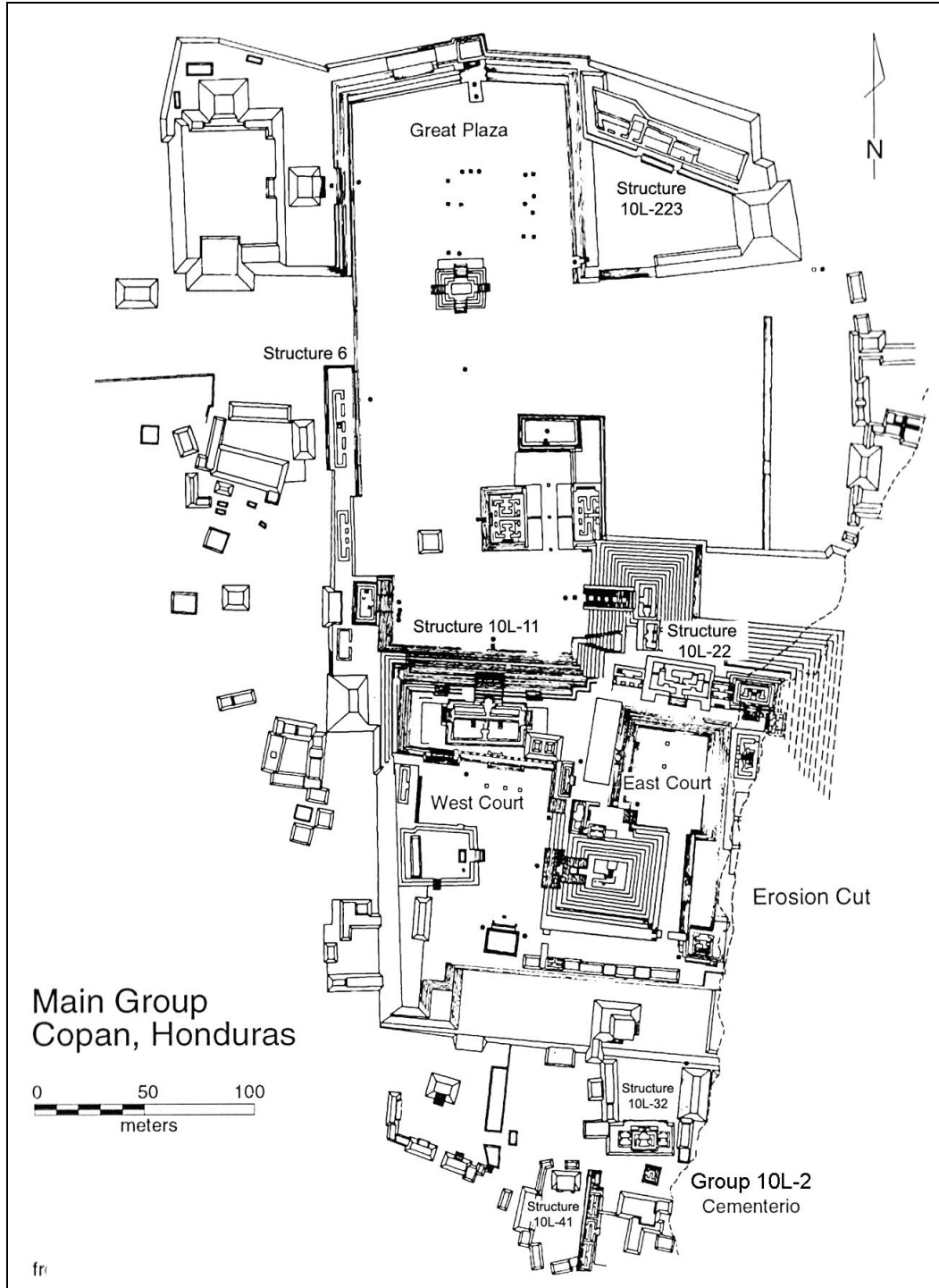


Figure 8.29 Plan of the Main Group of Copan (After Fash 1991)



Figure 8.30 Reconstruction of the view from Temple 10L-11, Copán
(Painting by Tom Hall, National Geographic Society)

Symbolically, Structure 10L-11 probably represented a two-headed dragon, whose body was formed by the occupants and Altar 41, which is a bicephalic dragon that could have been a throne located somewhere in the interior temple. At the same time, it was a saddle and mountain, passage and summit, and the work of man in harmony with natural topography. It was a place for private and public commemoration, affirmation and reenactment of royal kingship (Miller 1988: 153-158, 185).

The West Court has a public imagery emphasizing accession, sacrifice and ancestor worshipping, similar to Yaxchilan Structures 21 and 23. On the other side, the East Court contains Structure 10L-22 that could have a similar function to Structure 10L-11, but more private. The East Court was also a form of symbolic ball court that could have been the setting for captive sacrifice, which reinforced some aspects of rulership,

showing the ruler as the occupant of supernatural space, promoter of agricultural fertility and victorious warrior (*Ibid.* 168-9). Nevertheless, both courts are similar because they are related to the ball game and agricultural fertility, portraying a sacrificial deity presiding over a staircase designed for human sacrifice, placed directly besides a building honoring rulership. The two courts are then nearly mirror images of each other, with the West Court somewhat condensed. In addition, the West Court and the Hieroglyphic Staircase Court represent mirror images, rotated along Structure 10L-11 (*Ibid.* 181-4).

The final and most dramatic changes in the acropolis were carried out by Ruler 16th, who reigned from 763 C.E. to ca. 820 C.E. By this time, there was a complete abandonment of the carved stela as a vehicle for aggrandizement of the ruler. Henceforth, information was recorded primarily on buildings (Fash 1998).

Another important change was the location of the royal residence separated from the Main Group, in the residential group 10L-2, known as El Cementerio (Figure 8.31). This group contains two main courtyards: Courtyard B is a semipublic and residential complex, dominated by Structure 10L-32. The presence of Altar F', Altar G', and the altar of Structure 10L-30 suggests that this was the house of *Yax Pasaj* Schele (Andrews and Bill 2005, 1990a, 1990b), and the surrounding structures conformed a royal compound that spread over a series of separate buildings (Harrison and Andrews 2004, Andrews *et al.*, 2003, Doonan 2010: 1). Courtyard B is dominated by Structure 10L-41, a multi-room "palace" structure that possibly functioned as a Men's house or a Lineage house, given the sculptural decoration of the façade (Andrews *et al.*, 2003).

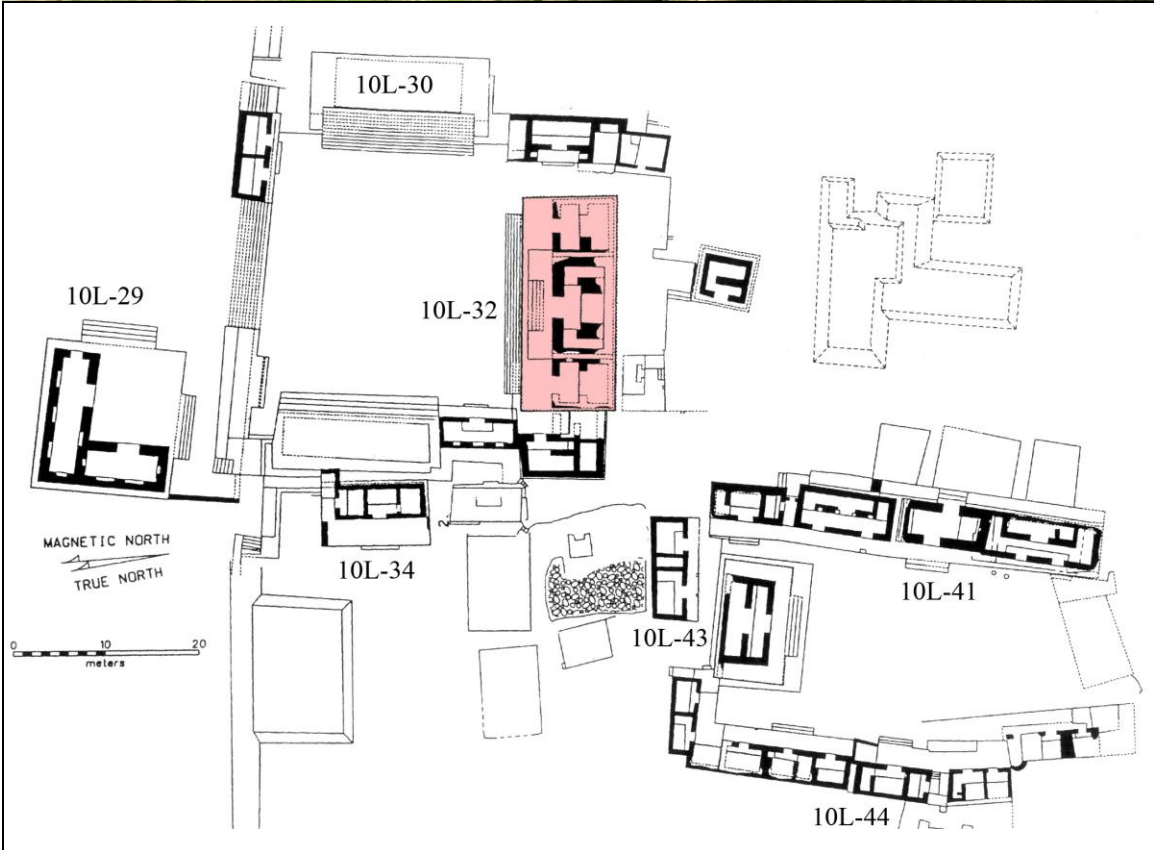


Figure 8.31 a. Cementerio Group, Copán: Str. 10L-29 in front, Str.10L-32 in the background (Photo by t. Barrientos) (above), b. Plan of Courts A and B, Copan Group 10L-2 (Doonan 2010:4) (below)

Las Sepulturas is the other important residential compound of the site, holding 10 dominant structures or small residential palaces in Groups 9N-8, 9M-22, and 9M-24 (Hendon 1987). Among them 8 have a tripartite layout (Christie 2003b). Their residential function has been interpreted based on their archaeological context; though rarely does domestic refuse remain associated with important rooms in high-ranking residences such as these compounds (Sanders and Evans 2006). Given that El Cementerio is not that different from some structures in Las Sepulturas (9N-8, 8N-11 and 9M-22), it has been proposed that during the final stages of the Late Classic period, rulers shared power with other nobles (Webster 2001).

8.5.8 *Dos Pilas*

Dos Pilas is characterized by a late and somewhat “secular” history, because its rulers could not draw as easily on a deep local ancestry and revered ancient architecture, like the long-lived structures of Tikal and Copán (Demarest *et al.*, 2003). However, the spatial organization of the site is intrinsically connected to cosmological concepts of sacred landscape, such as the location of springs and caves (*Ibid.* 125-6, Heyden 1973, 1975, 1981; Vogt 1981).

The Main Plaza of the site has few monumental temples, and the Palace complex was probably built in Ruler 4 time. The other palace compound is the one related to the Cancuen queen, probably built by architects from that site during Ruler 3 reign.

The Murcielagos Group is the best studied at the site, and it is located at the center of the settlement, between the Main Plaza and the Duende Group, in the middle of an architectural layout that aligns the three compounds in an east-west axis (Figure 8.32). The Murcielagos Principal Palace Group, also known as the Southern Complex, consists of two funerary pyramids, one throne room (Structure N5-3A), two presentation palaces (structures N5-3 and N5-1), and three residences (structures N5-4, N5-1A and N4-7) (Figure 8.33). Its general function was to create an intimate stage for rituals and processions, while the Northern Plaza Group was more restricted and residential, maybe holding the royal house. This compound was built directly on top of a cave, whose importance is reflected by the construction of Structure N4-6 (Demarest *et al.*, 2003).

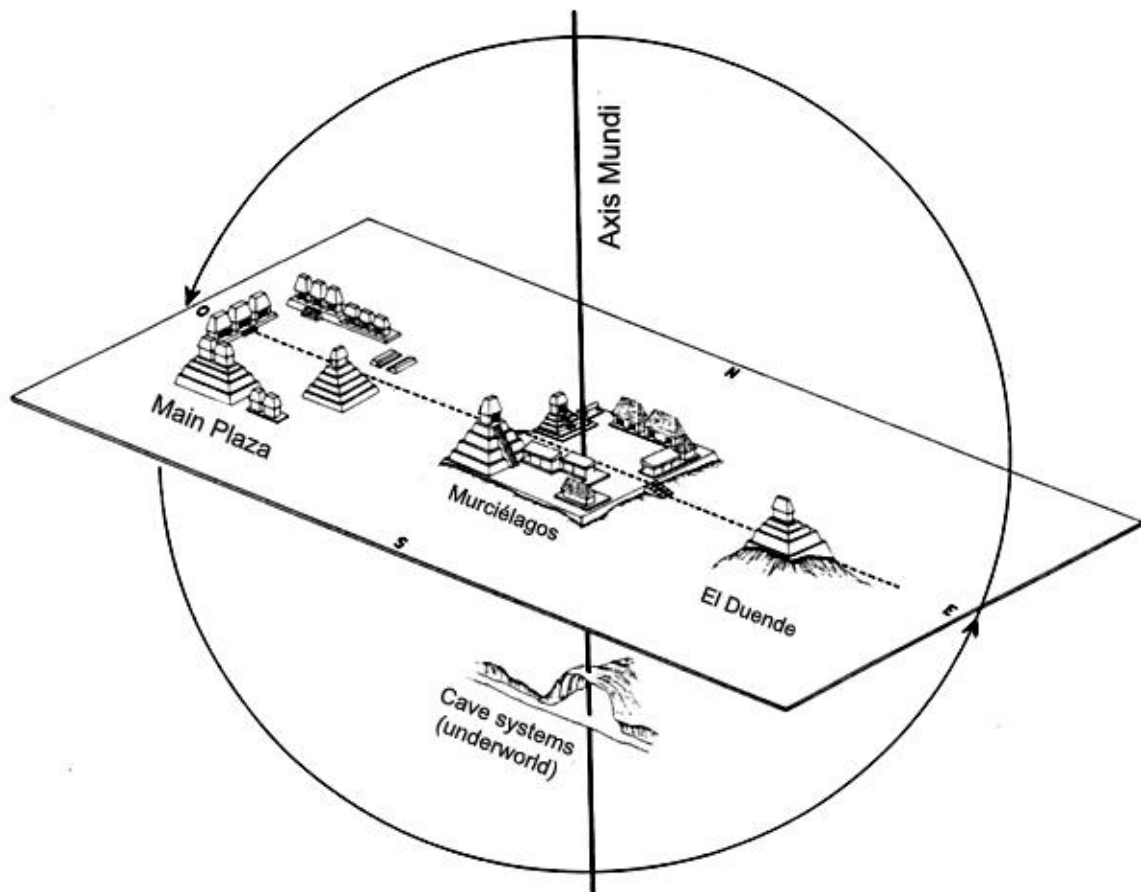


Figure 8.32 Cosmological distribution of the three main plazas at Dos Pilas
(Drawing by Luis F. Luin)

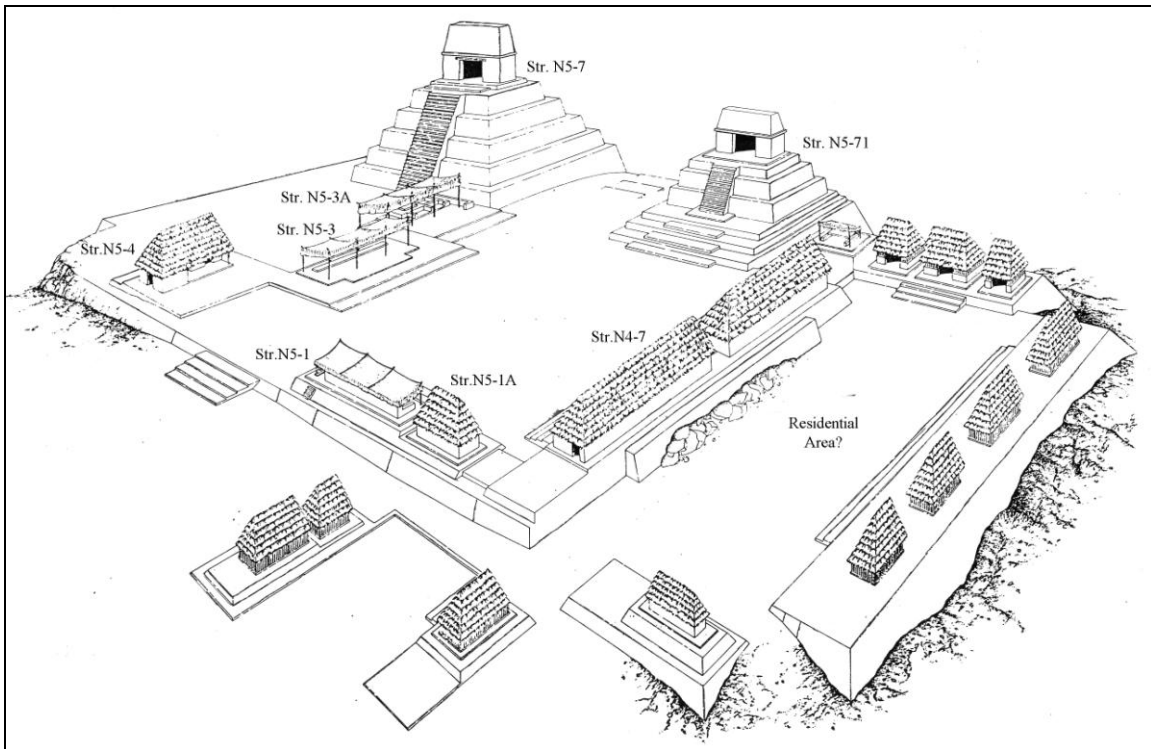


Figure 8.33 Reconstruction drawing of the Murcielagos Group, Dos Pilas
(Drawing by Luis F. Luin)

8.6 Maya Palaces in Late and Terminal Classic secondary centers

The so-called “minor centers” are problematic in terms of function and purpose, especially the reasons for their existence and foundation. In the diverse political models, secondary sites could have been independent or they depended from urban nodes that served economic and administrative purposes as part of extended polities or large cities (Chase and Chase 2007:41). Small and medium sized sites contain elite residential structures and other buildings that usually are located in the immediate vicinities of royal palace complexes, which suggest that face-to-face contacts with the ruler were more often than in the larger centers (Inomata 2001b). In addition, smaller sites developed particular architectural compositions, such as the western centers, whose inscriptions increasingly focused on the staircase as opposed to standing stelae (Miller 1998).

These “satellite” rulers flourished in the last part of the Late Classic, when central control broke down, and many of them arrogated to their own communities symbols of power formerly controlled by a larger ruling dynasty. Such balkanization can be seen in the appearance of stelae and public architecture at previously insignificant sites such as Xunantunich, Baking Pot and Cahal Pech in the Belize valley, Comalcalco in the western periphery, and Jimbal, Xultun and Ixlu near Tikal (Arnauld 2001: 373, Hammond 1991: 282, Hermes and Zralka 2008: 94, LeCount and Yaeger 2010a). In addition, the increase of subsidiary sites and non-royal elites at 9.12.0.0.0 was a premonition of the fall of powerful large centers (Houston and Stuart 2001), because this decentralized pattern has been viewed as indicative of changing political conditions and the stresses that were soon to cause the Maya collapse. These sites were granted the prerogatives of stela erection and emblem glyphs by larger sites to which they were subservient, although it might also mean that lesser sites claimed their independence from their overlords (Yoffee 1991: 325-6). In terms of architectonic analysis, second-level sites in the Puuc and Río Bec regions also offer important evidence; because they were late and short-lived centers that show comprehensible design patterns contemporaneous with the southern sites (Webster 1998).

8.6.1 Nakum

This is one of the best studied sites that have documented intensive construction activity for the Terminal Classic period, also indicating a demographic growth that could have been the result of a socio-political crisis of nearby large centers such as Tikal and Naranjo. The occupation for this period has been found in 86% of all the residential compounds at the site (Hermes y Zralka 2008: 51, 81, 93-95, Zralka and Hermes 2012).

The general layout of the site is conformed by three main architectural groups, where the Acropolis stands out as the larger construction, located in the southern sector of the site (Figure 8.34). The North Group contains a palace with 14 rooms (Building W) and the residential East Group in its southeastern corner. The Central Plaza is delimited on its south side by the northern façade of the Acropolis, formed by Building D, which is a palace structure that measures more than 100 meters in length, very similar to other long halls, such as San Clemente Building III, which has 21 doorways. The Acropolis contains mostly palace structures, distributed in 16 interior courtyards, each one showing a unique plan, proportion and size (Figure 8.35). The center holds a compound known as Central Acropolis or Interior Acropolis, whose Terminal Classic layout includes a raised platform that held a group of five buildings that could have functioned as the royal house of the Nakum dynasty (Hermes y Zralca 2008: 49-50, Quintana 2013: 210).

Nakum was first occupied during the end of the Middle Preclassic, and the first version of the Interior Acropolis dates to this time, consisting of a 2 m high platform that sustained a triadic compound. By the Late Preclassic, the Interior Acropolis was expanded, and some structures were added in the Patio 1 area, as well as the first version of Structure D. Although the Acropolis suffered some modifications during the Early Classic (including buildings with talud-tablero style), it is during the Late Classic when different construction events shaped the Acropolis as a complex palace compound. Vaulted buildings appeared in the first half of the Late Classic, and the interior courtyards were gradually privatized throughout the second half, as more structures closed the accesses. By this time, no building of the Acropolis seemed to have a specific religious or ceremonial function (Hermes y Zralca 2008: 53-60).

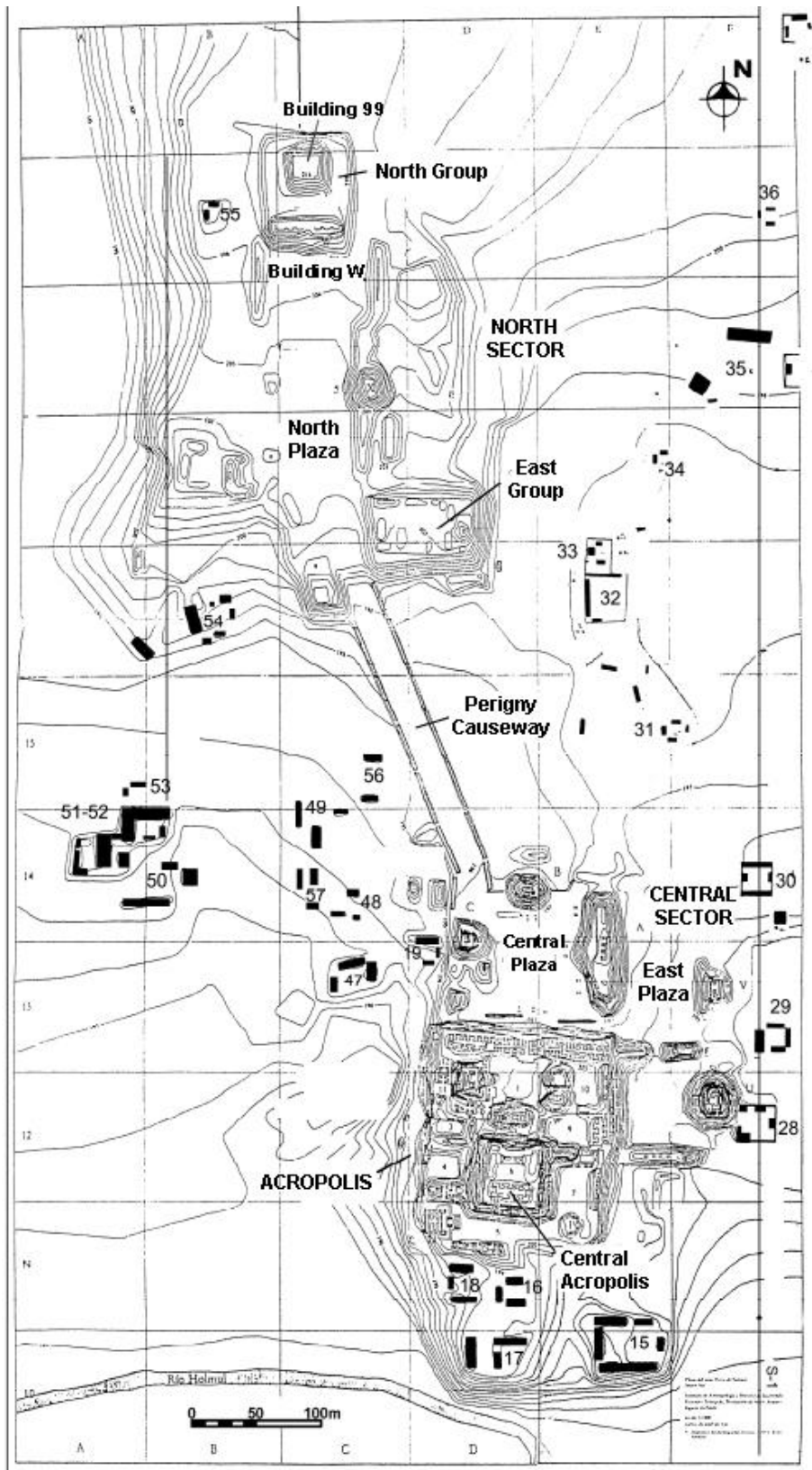


Figure 8.34 Map of Nakum (Hermes and Zalka 2008: Figure 2)

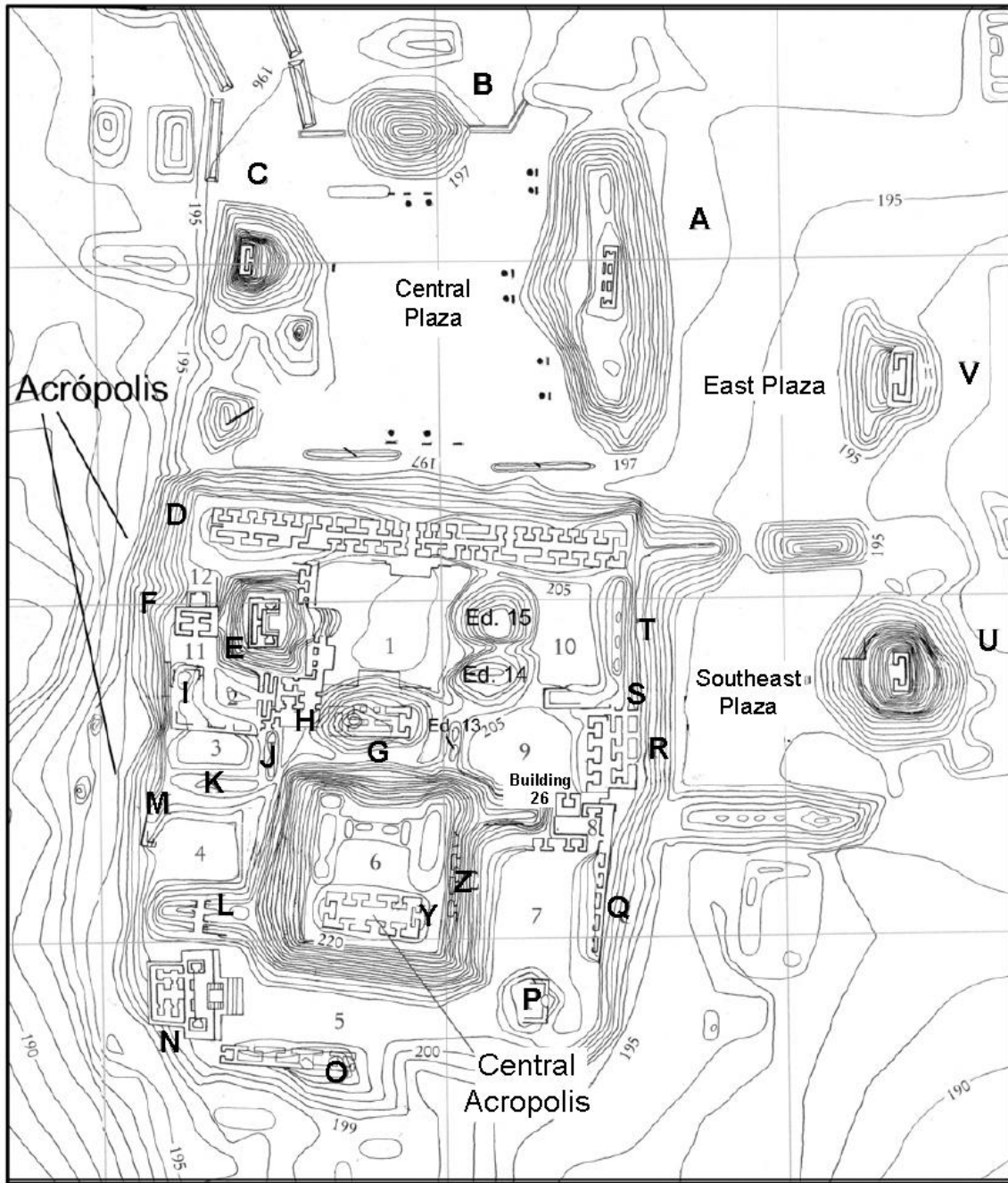


Figure 8.35 Plan of the Central Plaza and Acropolis, Nakum (Hermes and Zralka 2008)

During the Terminal Classic construction intensified in the North Group, where Building 99 was modified in a way similar to the Interior Acropolis, probably to house servants for the royal family. In the Central Plaza, all buildings were modified during this period, and some monuments were erected: Stela C in 815 C.E. and Stela D in 849 C.E. However, the areas with major Terminal Classic construction activity are the inner courtyards of the Acropolis, where 12 new buildings were erected in order to increase the divisions between patios (Figure 8.36) (*Ibid.* 64-73).



Figure 8.36 Main Acropolis, Nakum (Reconstruction by Breitner Gonzalez and Telma Tobar, Nakum Archaeological Project)

In Patio 1, Building E stands as a triadic pyramid, and Building D, which defines the northern façade of the Acropolis, was enlarged from 19 rooms to 38 rooms in both the east and west sides. Building G, located in the southern side of the patio, was one of the most important structures in this phase, being a platform that supported 8 vaulted rooms grouped in two stories, and decorated with sculpted panels depicting bounded captives

and a hieroglyphic staircase. In a similar way, Building H was added in the southwestern corner of Patio 1 and was decorated with a hieroglyphic frieze (Zralka and Hermes 2012: 172).

The access to the Interior Acropolis was almost closed with the construction of Building G, and Patio 6 included a new palace of 8 vaulted rooms (Building Y), becoming the highest structure of the site and the residence of the royal family. Buildings 63, 64 and 65 closed the patio, containing small rooms and passageways with benches and round columns, similar to the “tandem” structures found in Chichen Itza. These were probably used as residences and working places for servants or lesser officers (Hermes and Zralka 2008: 64-73).

Patios 2, 3 and 4 are located in the western side of the acropolis, containing buildings F, I, M, K and L. Building N, located in the west extreme of Patio 5, was built in previous stages, given its triadic pattern. This patio constitutes the southern extreme of the acropolis and was also surrounded by buildings O and P. To the east, Building Z was added in the western side of Patio 7, containing 13 rooms divided in two stories; Building Q was added in the eastern side of the patio, containing 7 rooms; and to the north, Building 24 had a single long chamber. Patio 9 included a sweat bath (Building 26) in its southern extreme and Building R in the east side. Patio 10 was limited by buildings S, T, and the southern side of Building D. The other remaining patios were small spaces, located between buildings D and F and around Building G (Quintana 2013: 210-214, Zralka and Hermes 2012).

8.6.2 Quirigua

The history of Quirigua also exemplifies the process of secondary sites becoming independent from larger centers, the latter in this case corresponds to Copan. Sharer (1991) proposes that Quirigua was founded in the first half of the fifth century by an establishment of a minor ruling elite, distinct from the local population. This event was contemporaneous with the dynastic foundation in Copan by *Yax K'uk Mo'*, and was recorded retrospectively in the inscription of Zoomorp P and Stela 3.

During the Late Classic period, there is a close relationship between construction activity and military success, given that most buildings correspond to the period after the defeat of *Waxaklahun Ubah K'awiil* of Copan by *K'ak Tiliw Chaan Yopaat* of Quirigua, in the year 738 C.E. (Martin 2001: 186). Tall stelae were the main expression of the power acquired by such military victory, and monumental buildings were a secondary index of that political status. It is thus interesting that the main buildings of the site were directly related with the commemorative monuments of *K'ak Tiliw*:

...The monuments of Platform 1A-1 face the acropolis, staring perpetually toward its north face. Through this spatial and visual correspondence, the stelae and zoomorphs maintain symbolic ties with the acropolis, which is the “true” center of the realm, where the king actually lived. This intimate dialogue between monumental portraits and the politico-religious center of Quirigua may be interpreted as a fundamental aspect of charisma which emanated from the king's performances in the acropolis and which was refracted and propagated through monument groups (Looper 2003: 202).

Quirigua reached its apogee around 780 C.E., during the final years in the reign of *K'ak Tiliw* (Looper 2003: 186). The site grew in size, especially the acropolis, which reached its second construction stage (Figures 8.37, 8.38). It has been suggested that Structure 1B-2, located on the southwestern corner of the Acropolis, was the residence of *K'ak Tiliw* (Sharer 1990: 87), and it was contemporaneous with Structure 1B-3, which

closed the western side of the main courtyard. Structure 1B-3 was decorated with mosaic sculptures in Copan style. Nevertheless, the major enlargement of the Acropolis was commissioned by the ruler known as Jade Sky, in the first decade of the ninth century. He built Structure 1B-5 on the northern end of the Acropolis, probably as his residence (*Ibid.* 92), and Structure 1B-1, on the southern end. The latter measures 32 x 5.5 m and seems to have functioned as a three-room presentation palace, because its cornice and benches were decorated with sculptures and carved glyphs.

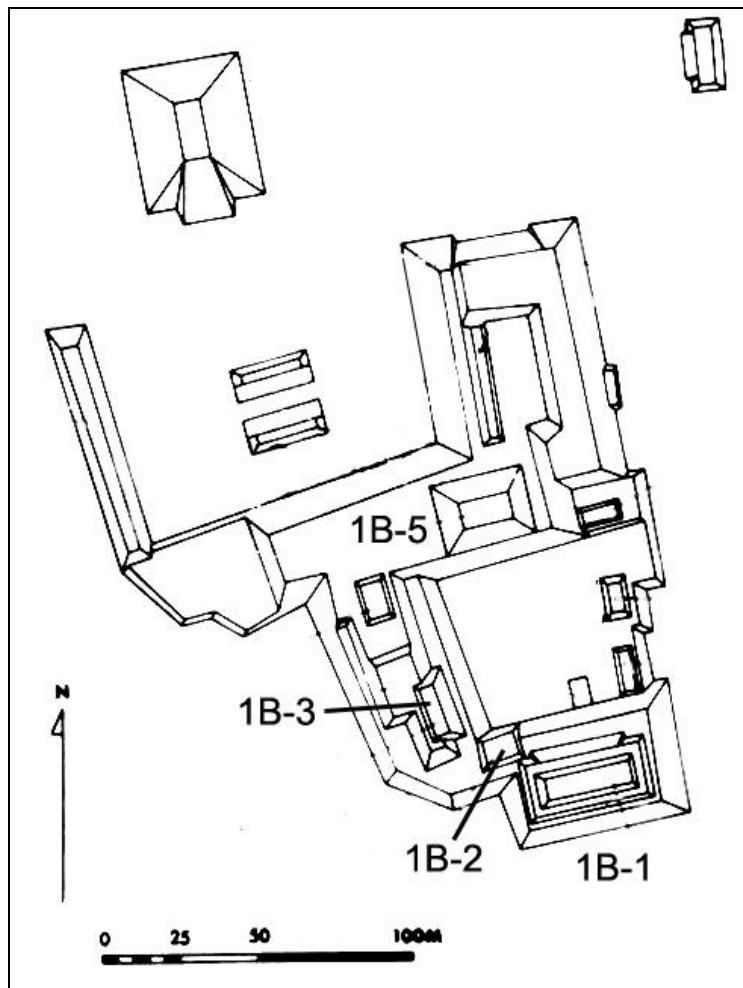


Figure 8.37 Plan of the Acropolis at Quirigua, showing structures that functioned as ritual, administrative or residential palaces (After Sharer 1990:3)

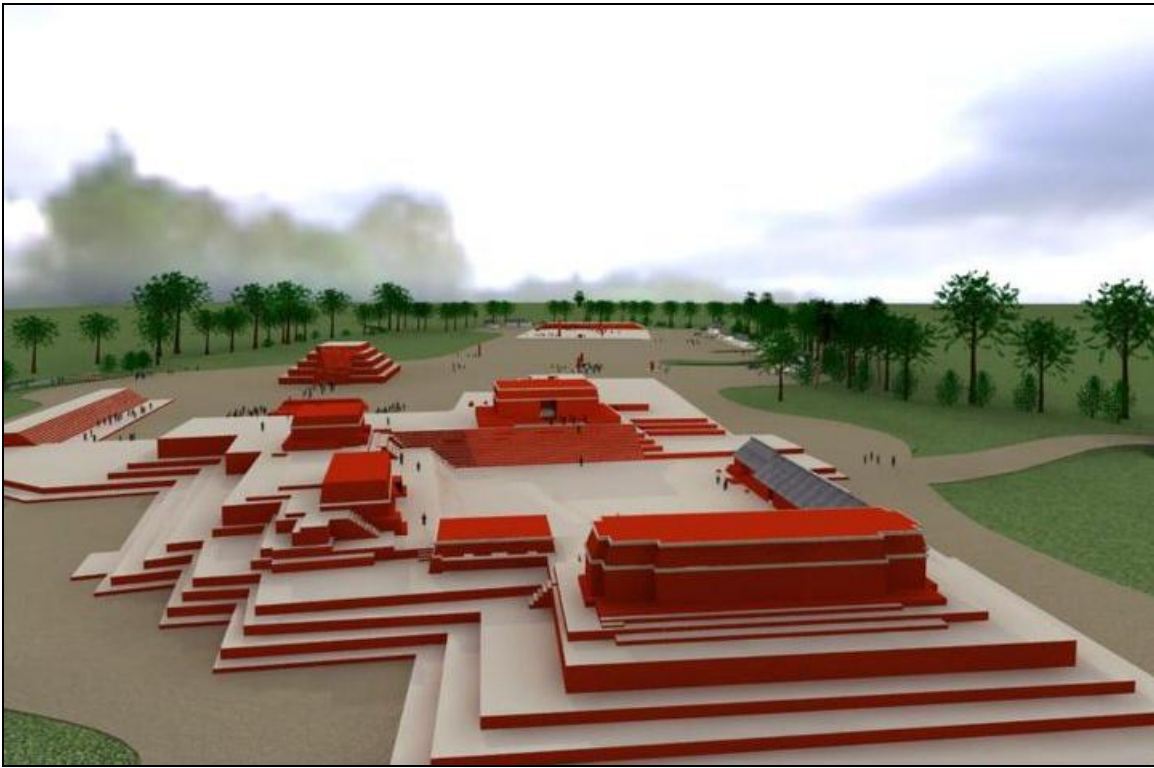


Figure 8.38 Reconstruction drawings of the Acropolis at Quirigua in the early ninth century. Structure 1B-1 (above) in the south side of the acropolis and Structure 1B-5 on the background (below). Drawings by Cristina Peralta

8.6.3 *Aguateca*

Unlike centers that have long architectural histories, Aguateca is characterized by a short occupation and the lack of rebuilding processes, thus being advantageous for the study of synchronic patterns that link architectural remains with social organization and behavior at a given time. In addition, the structures at Aguateca present an unique archaeological case because they were rapidly abandoned, causing their inhabitants to leave most of their belongings, thus providing clear contexts for interpreting rooms and structures that were used for gatherings, feasting, daily work, administrative duties, and so on (Inomata 2001a: 42, Inomata 2001b: 347, Inomata and Triadan 2003).

The Palace Group or Sunken Plaza is located southeast of the natural chasm that divides the site in two halves (Figure 8.39). Detailed excavations in each structure have allowed interpretations according to the function evidenced by the material remains found after their rapid abandonment: structures M7-34 (House of the Metates) and M8-11 were communal houses; structures M8-2 and M8-3 were used for manufacturing handcrafts; structures M7-22 (House of the Masks) and M7-32 were royal residences; M8-10 was a scribe residence; structures M7-35, M8-4 (House of the Mirrors), and M8-8 (House of the Axes) were elite residences; and M8-13 was a low status residence (Inomata and Triadan 2003; Emery and Aoyama 2005, 2007). Among these, structures M7-35, M8-4, M8-8 and M8-10 present a tripartite layout (Christie 2003b).

Structure M7-22 has been identified as the royal residence, based on its defensiveness and direct relationship with the causeway. Its interior was found clean, with artifacts stored in specific places. This evidence and the presence of a termination ritual indicates that the royal family left with anticipation, as opposed to other nobles,

whose residential contexts suggest that they remained at the site until the end (Inomata and Triadan 2003). The Sunken Plaza was most likely an important space for theatrical performance, although it was smaller and had more limited access than the Main Plaza. The audiences and meetings that the ruler held in front of M7-22 may have been visible even to those who were not allowed into the patio. In any case, Structure M7-22 had a role as a stage, where their occupants participated in distinct ways, as actors and observers of the palace life. Some activities of the king were designed to be viewed by a specific audience of higher elites, while others were designed to hold all people as participants (Inomata 2006, Ciudad and Iglesias 2001: 27).

Given the elaborate construction of M7-32, its center room can be interpreted as the primary throne room of the ruler (Figure 8.40). This structure and M7-22 had side rooms that were directly connected with the central one through a doorway and were probably used for private or domestic activities by the ruler. Other structures had side rooms but they were not directly connected with the center room, suggesting that they may have been used by his family members or servants (Inomata 2001b: 350-1, Ciudad and Iglesias 2001: 27).

Structure M7-26 is located at the eastern end of the Sunken Plaza, and probably functioned as audience or reception area. It contains a long double hall that could also had defensive functions. Structure M7-9 or a nearby building have been interpreted as the most probable location of the kitchen for the royal family (Inomata 2001b: 351).

The Main Plaza of the site is located on the northwestern side of the chasm and had a more public nature, mostly because that is the location of all stelae and small

pyramidal temples. On its north side, Structure L8-4 is a presentation palace that does not have masonry vaults but has 7 wide doorways and an interior bench (Arnauld 2001: 374).

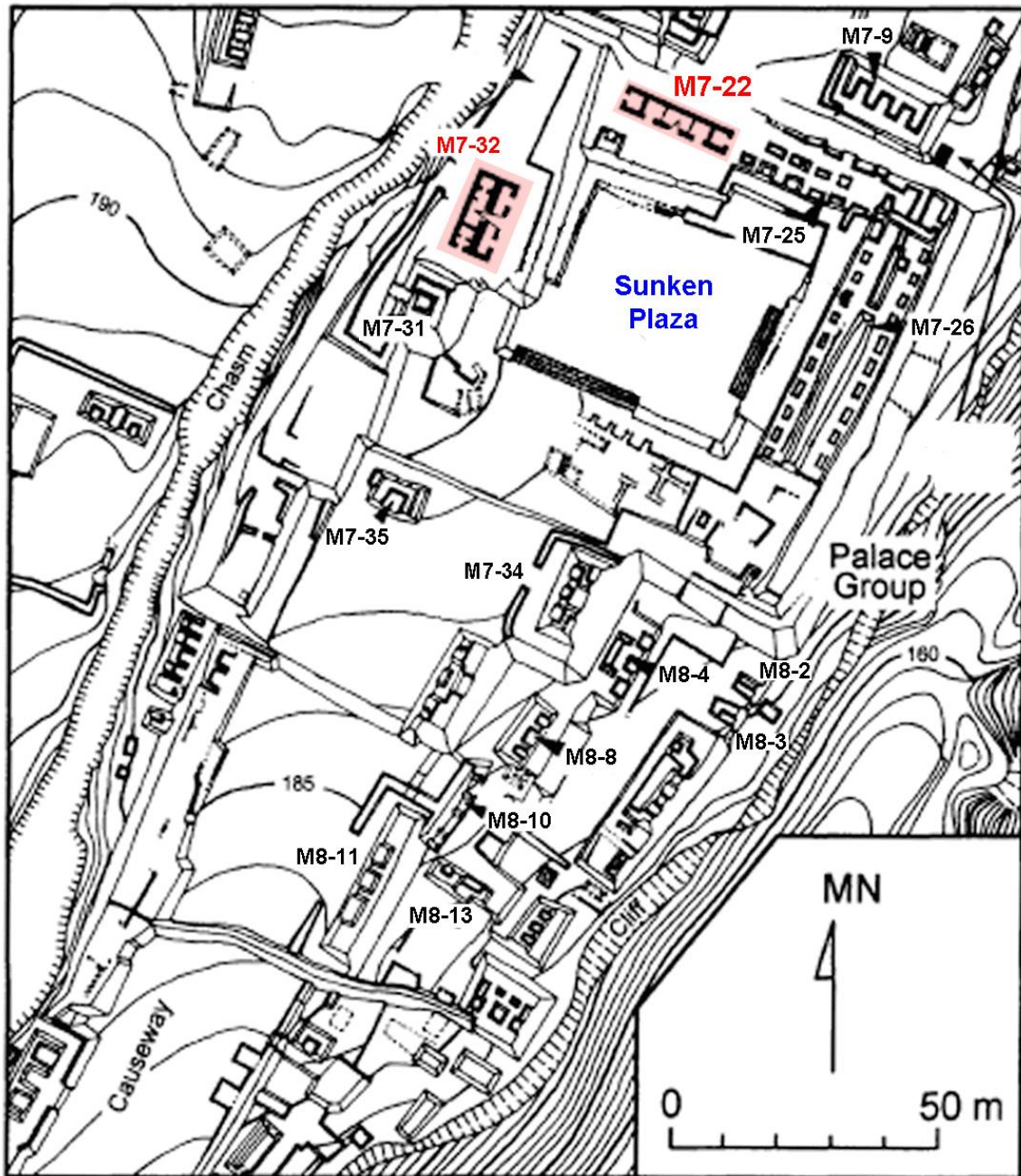


Figure 8.39 Map of Aguateca, showing the Royal House M7-22 and M7-32, and other elite-related buildings (From Inomata *et al.* 2001)



Figure 8.40 Sunken Plaza, Aguateca, showing Structure M7-32 (Photo by T. Barrientos)



Figure 8.41 Aguateca Structure M8-11, a possible “communal house”
(Photo by T. Barrientos)

8.6.4 Bonampak

Data from the Bonampak murals (791 C.E.) has provided important information about palace life in secondary sites at the end of the eighth century, in a similar way to the depictions painted in polychrome vessels (Figure 8.42). They show a reality constructed visually, which is different from the material evidence found in the ground. These colorful depictions were imbedded with ideology and meaning by their makers, projecting a noble ideal rather than a direct portrait of reality. Some details found in the murals are helpful to study the activities carried out in palaces; for example, the scene in Room 1 includes a bundle with cacao beans, indicating that tribute presentation was one of their primary functions (Miller 2001)



Figure 8.42 Detail of Room 1, Structure 1, Bonampak. Replica in the Museo Nacional de Antropología, Mexico City (Photo by T. Barrientos)

8.6.5 *Xunantunich*

This site, located in the upper Belize River Valley, developed late and intrusively into a well-developed social landscape, thriving when polities and networks farther west were losing their power. Hence, its developmental sequence supports a balkanization model that postulates the rise of secondary centers at the expense of failing primary capitals (LeCount *et al.*, 2002: 41, LeCount and Yaeger 2010b: 24).

Initially, Xunantunich was dependent to Naranjo, located only 15 km to the west, but the demise of the latter after 744 C.E. brought an opportunity to become politically autonomous. This process did not happen without competition, as it is suggested by the presence of other nearby sites like Actuncan, Buena Vista and Cahal Pech. The success of Xunantunich during the Tsak' ceramic phase (780-890 C.E.) probably depended on its defensible setting and the development of a prominent sacred space loaded with royal iconography that included the emulation of building design and form from more powerful cities, especially Calakmul and Groups B and D of Naranjo (Ashmore 1998, 2010, LeCount *et al.* 2002, Ashmore, *et al.* 2004: 306). Much like Nakum, the scarcity of glyphic texts at Xunantunich provides an opportunity for studying the local and regional built landscape in order to understand its sociopolitical structure during its occupation in the 8th and 9th centuries. Regional studies have shown that Actuncan was the regional capital during Preclassic times, and Buenavista could have been Xunantunich's major regional rival during the Late Classic. This pattern suggests a decentralized sequence in authority, where power was weak, fluctuant, and placed in different places with ruling families, much like the political structure of other river regions like the Upper Grijalva and Upper Mopan (Ashmore 1998: 173-5).

The archaeological evidence has shown that the site was rapidly constructed during the beginning of the Late Classic period. The site in general follows a main north-south axis and it has been proposed that the northern group was devoted to ancestor veneration, similar to Calakmul Structure VII (Ashmore 1998: 173-5). An east-west axis was added later, represented by the two main causeways that created a large cruciform layout with the center in front of El Castillo (Figure 8.43).

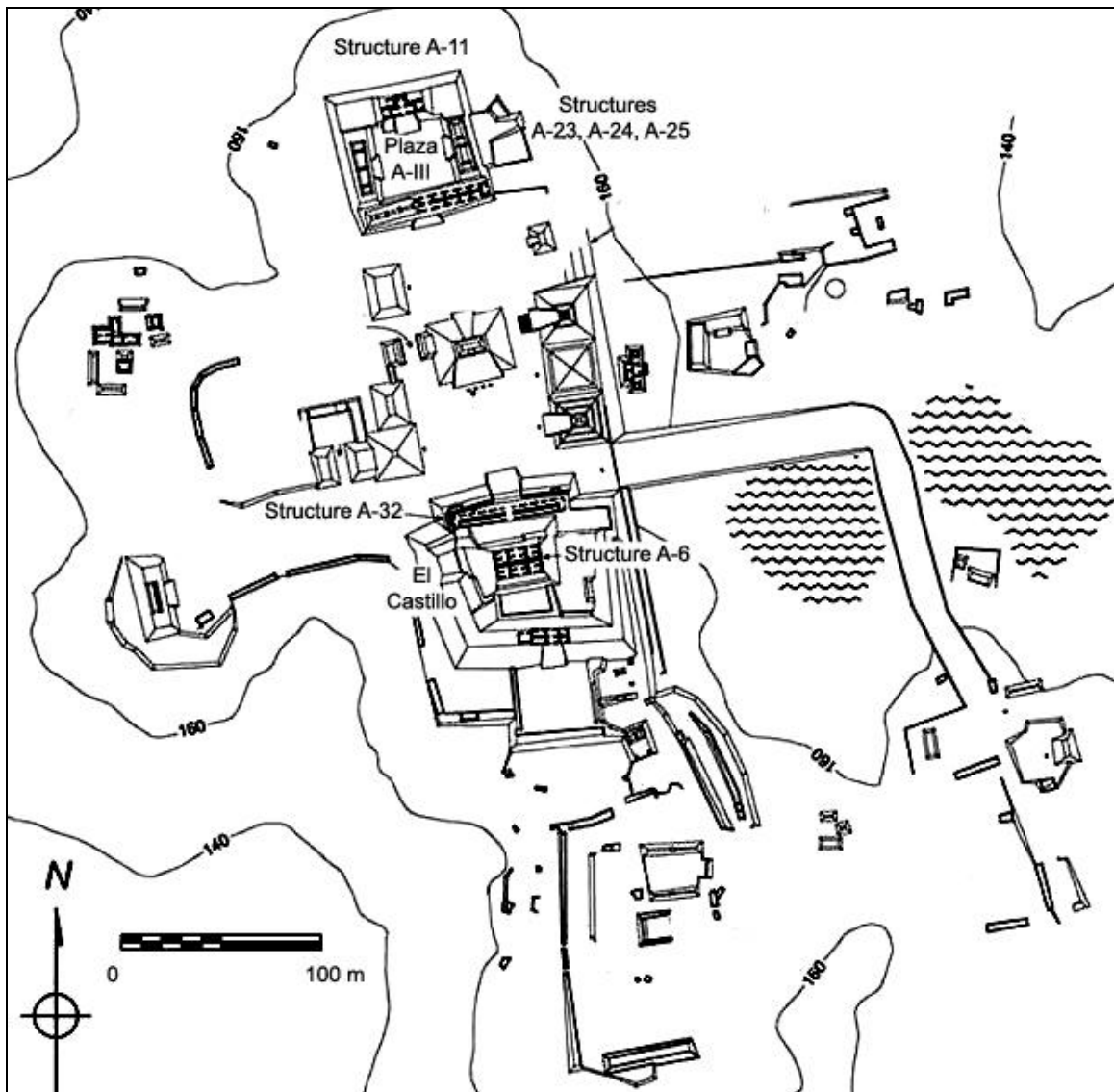


Figure 8.43 Map of Xunantunich (after LeCount and Yaeger 2010b: 68, fig I.1)

The earlier deposits lay under Structure A-6, El Castillo, which is an acropolis type building that functioned as the primary ceremonial structure at the site throughout all its history (Leventhal 2010: 81). An earlier version of the medial terrace contained a sub-structure named Quetzal (later covered by Structure A-32), which could have been functioned as a passage palace or an “audiencia” that led to an inner courtyard that was probably the first royal residential of the site (*Ibid.* 85-7). During the final portion of the Hats’ Chaak ceramic phase (Late Classic, ca. 744 C.E.), Xunantunich grew in size and political power. As a result, El Castillo was converted to a multi-platform, multi-structure architectural complex elevating 45 m from the main plaza, including the long building known as Structure A-32, located in its northern facade (Figure 8.44).

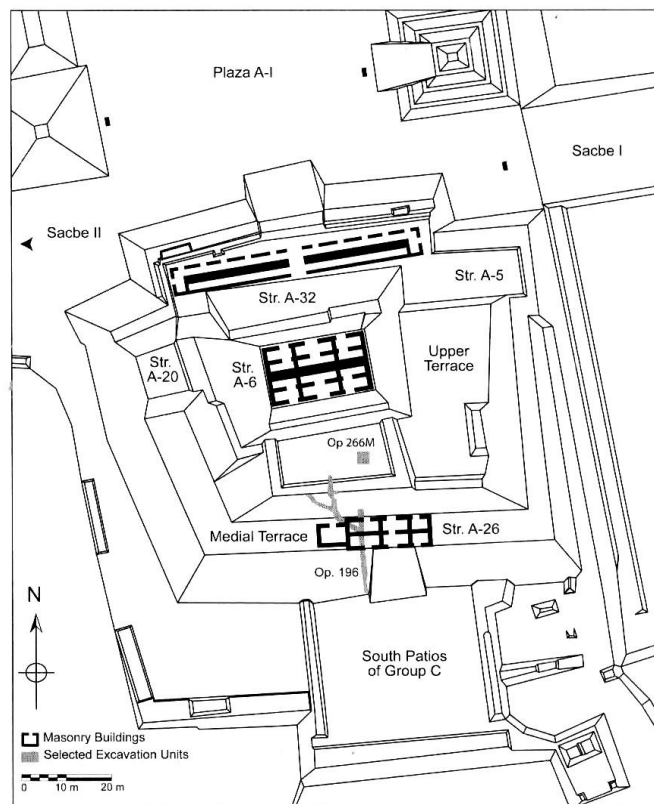


Figure 8.44 Plan of El Castillo, Xunantunich (after Leventhal 2010: 81, fig 4.1)

At the same time, Plaza A-III was built as the new palace-acropolis, built on a platform rising 2 m above the Main Plaza. Structure A-11 was the royal residence, located on the northern side, while structures A-12, A-13 and A-10 enclose the interior courtyard. Structure A-13 functioned as a passage palace or “audiencia” in the southern limit of the compound. In addition, a service area was added to the east, with structures A-23, A-24 and A-25 (LeCount *et al.*, 2002: 42) (Figure 8.45). The construction of this compound represents a break in continuity in the location of the royal palace, and has been associated with the establishment of a new political order, probably a new ruling family (Yaeger 2010: 147). However, this palace is relatively smaller than the ones in the nearby sites of Buenavista and Cahal Pech, probably because they have longer histories or because of their close ties with the ruling lineage of Naranjo (*Ibid.* 153).

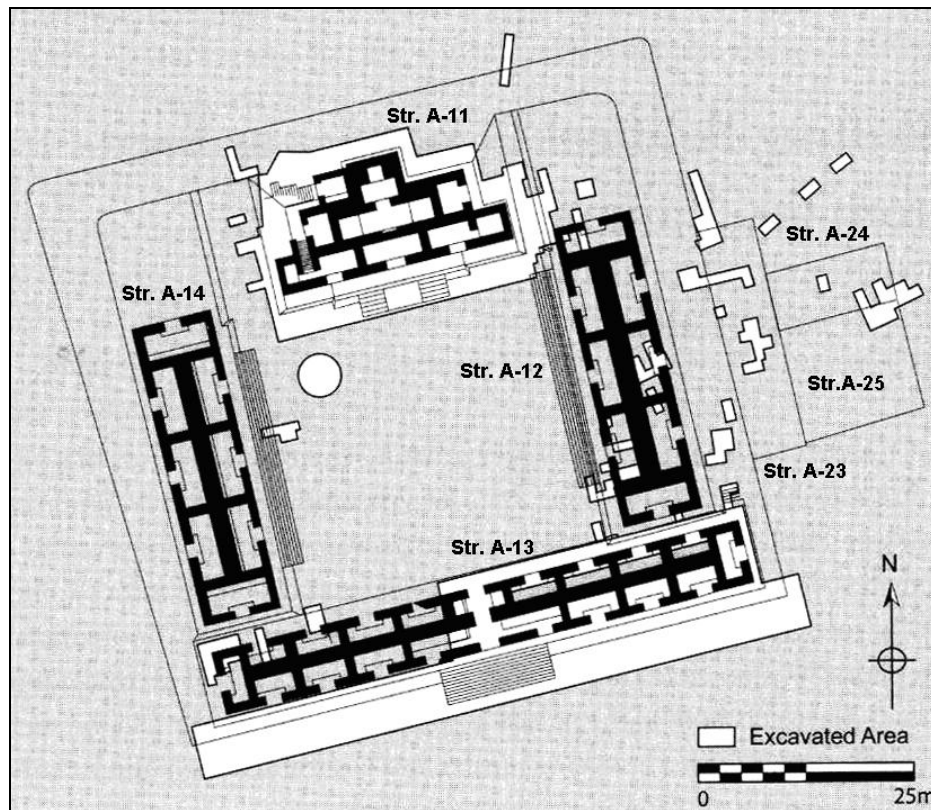


Figure 8.45 Plan of the Palace at Xunantunich (after Yaeger 2010: 146, fig 7.1)

8.6.6 *Buenavista - Cahal Pech*

Buenavista was a ritual and administrative center located in the upper Belize River Valley that flourished during the Late and Terminal Classic periods. Very close is Cahal Pech, a contemporaneous center that could have been part of the Buenavista polity. Both sites contain palaces that show almost identical configuration, style, construction, pottery types and other artifacts. The main layout of these palaces, which is similar to Nakum, consists of a main interior patio surrounded by different types of structures, including a long passage palace that communicates with the main Plaza and a pyramidal temple (Figure 8.46). Secondary courtyards in both palaces contain residential structures and semi-private areas, probably used for presentation and religious rituals. Research at both sites suggests that these two sites functioned as “twin capitals”, very much like the relationship between Dos Pilas and Aguateca. Cahal Pech was a larger site with more residential functions, while Buenavista had a more multifunctional and public nature. It is also possible that there was a rivalry between them or that they constituted a regional rival for Xunantunich during Terminal Classic times (Ball and Taschek 2001).

8.6.7 *La Milpa*

La Milpa is another site that experienced a political and demographic expansion at the end of the first half of the eighth century, probably under the reign of the ruler *Ukay*. During this time, several structures were enlarged (Group A), and new buildings were added in the Acropolis (7 patios), Group C, and two ball courts (Tourtellot and Hammond 1998, Hammond and Tourtellot 2004).

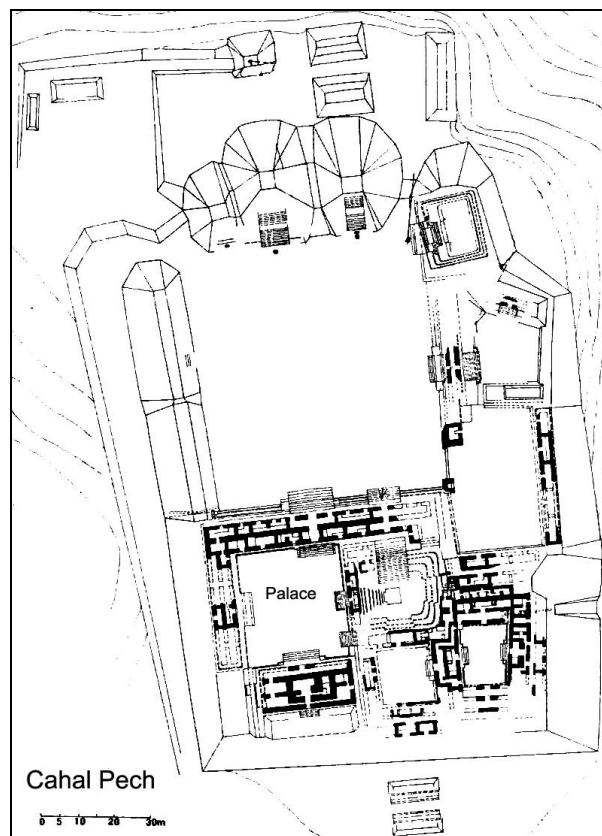
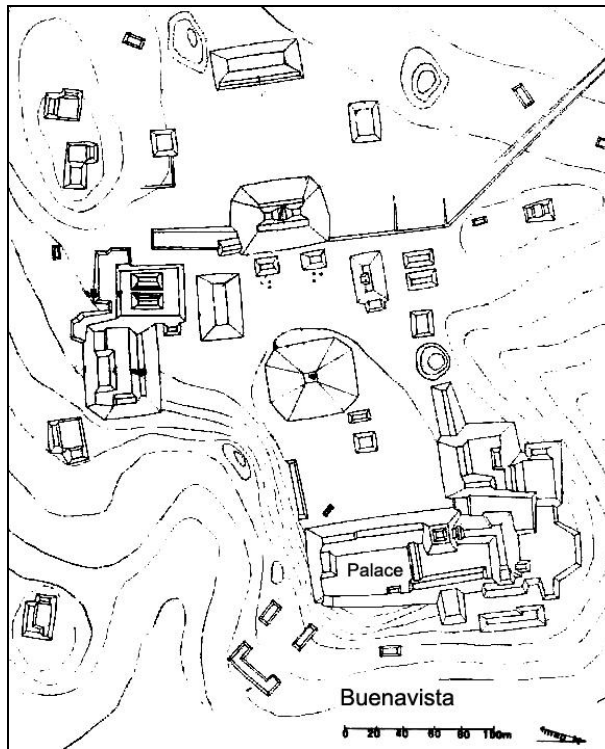


Figure 8.46 Plan of the palaces at Buenavista (above) and Cahal Pech (below)
(After Ball and Taschek 2001: 172-3, figs 6.2, 6.3)

In the Great Plaza, a multi-functional palace was added (Structure 8) and the South Acropolis could have functioned as a Royal Palace, given the presence of various throne rooms (Figure 8.47). However some buildings and a causeway were left unfinished, indicating that this florescence was short lived (Tourtellot and Hammond 1998, Hammond and Tourtellot 2004).

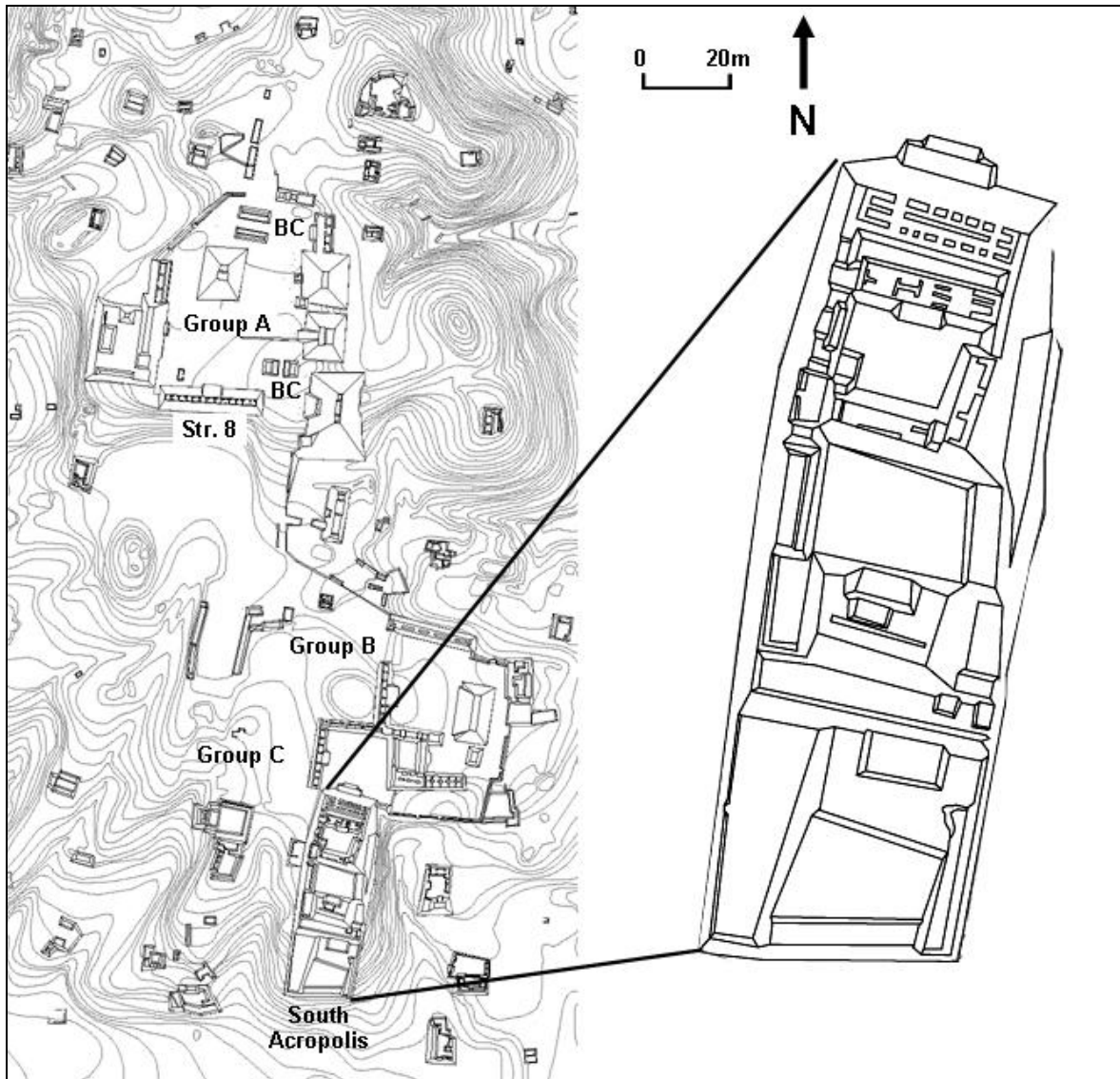


Figure 8.47 South Acropolis at La Milpa (After Estrada-Belli, 1999)

8.6.8 La Blanca

La Blanca is a Terminal Classic site located in the Mopan River Valley, whose settlement pattern is characterized by the presence of a monumental palace acropolis and the lack of major pyramidal temples (Muñoz 2005). The site has a general north-south axis, with the palace in the middle; a closed plaza to the north; and a water reservoir to the south, whose level descends from the palace through a series of terraces (Figure 8.48). To the west, a wide and short causeway communicated with the rest of the site, extending to an open residential area to the southwest (*Ibid.* 32).

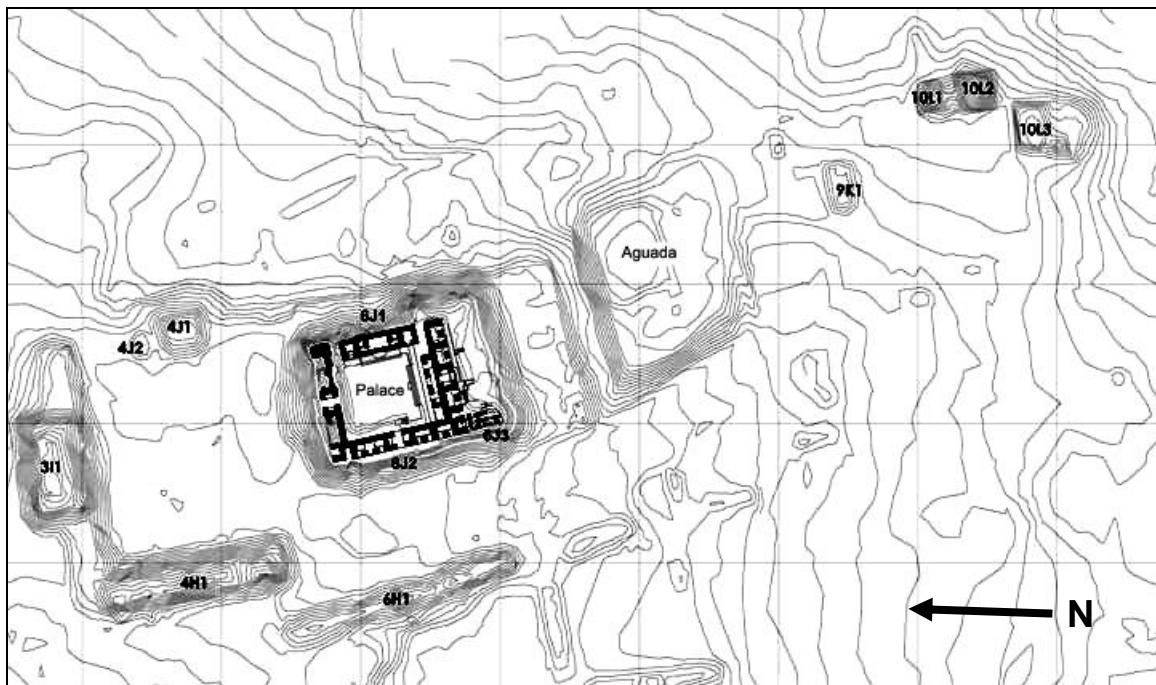


Figure 8.48 Map of La Blanca
(Map after Proyecto La Blanca, 2008)

The palace has a symmetric quadrangular plan with a clearly defined central patio measuring 36 m in each side. Its north, west and south sides are closed, formed by long multi-chambered structures (Figure 8.49). The eastern Structure J6-1 is smaller, with rooms that face the interior side, and probably represented the royal household (*Ibid.* 29). The construction of the palace is of good quality, including large masonry blocks that allowed the creation of high vaulted rooms, measuring 4 m wide and probably 4 m high. Their interior walls were filled with different graffiti, probably by their last occupants.

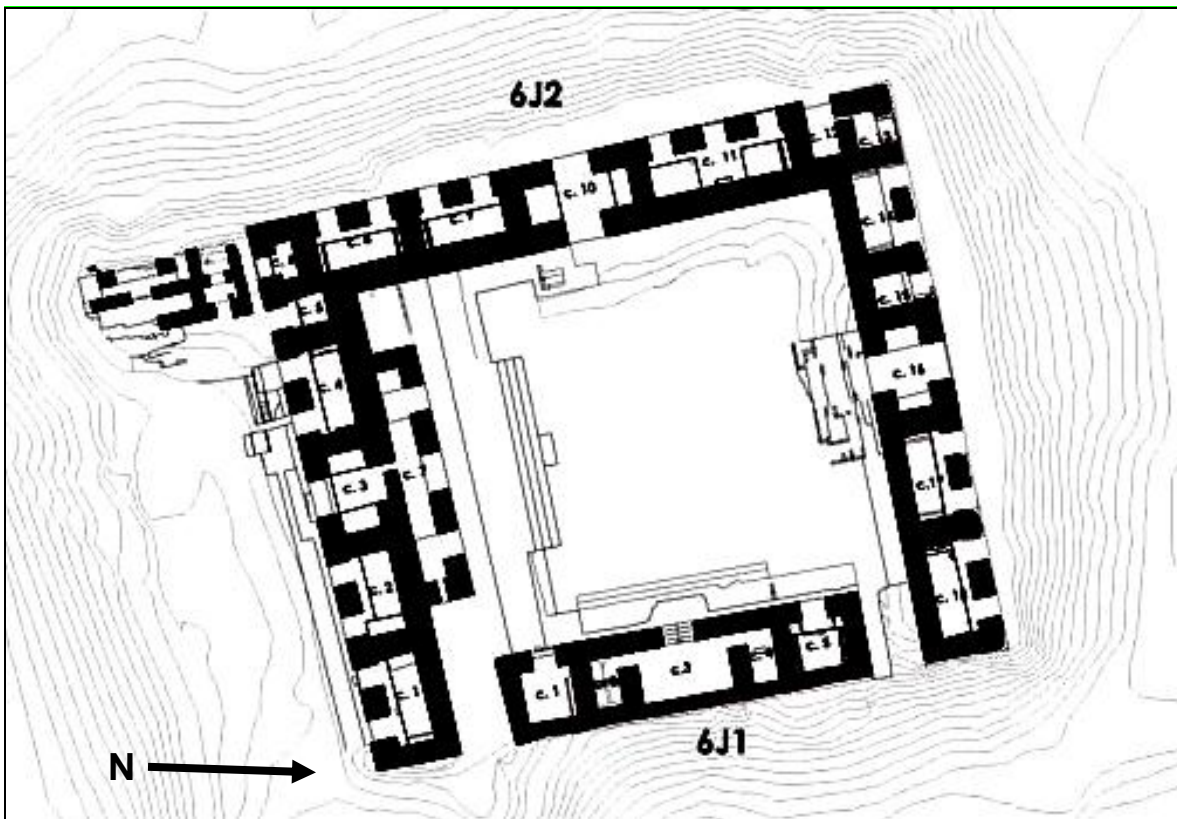


Figure 8.49 Plan of the palace of La Blanca
(Drawing after Muñoz 2010)

8.6.9 Southeastern Peten

Investigations in the Dolores-Poptun area of Peten have identified a series of sites that show an intense construction activity dated to the Late and Terminal Classic periods, indicating the rise of various small and independent kingdoms, such as Puublito, Ixtonton, Ucanal and El Chal. All these sites have previous occupations, but experienced large remodeling activities that included the construction of massive temple-acropolis buildings that probably functioned as residential and administrative palaces (Figures 8.50, 8.51) (Laporte 2004: 212).

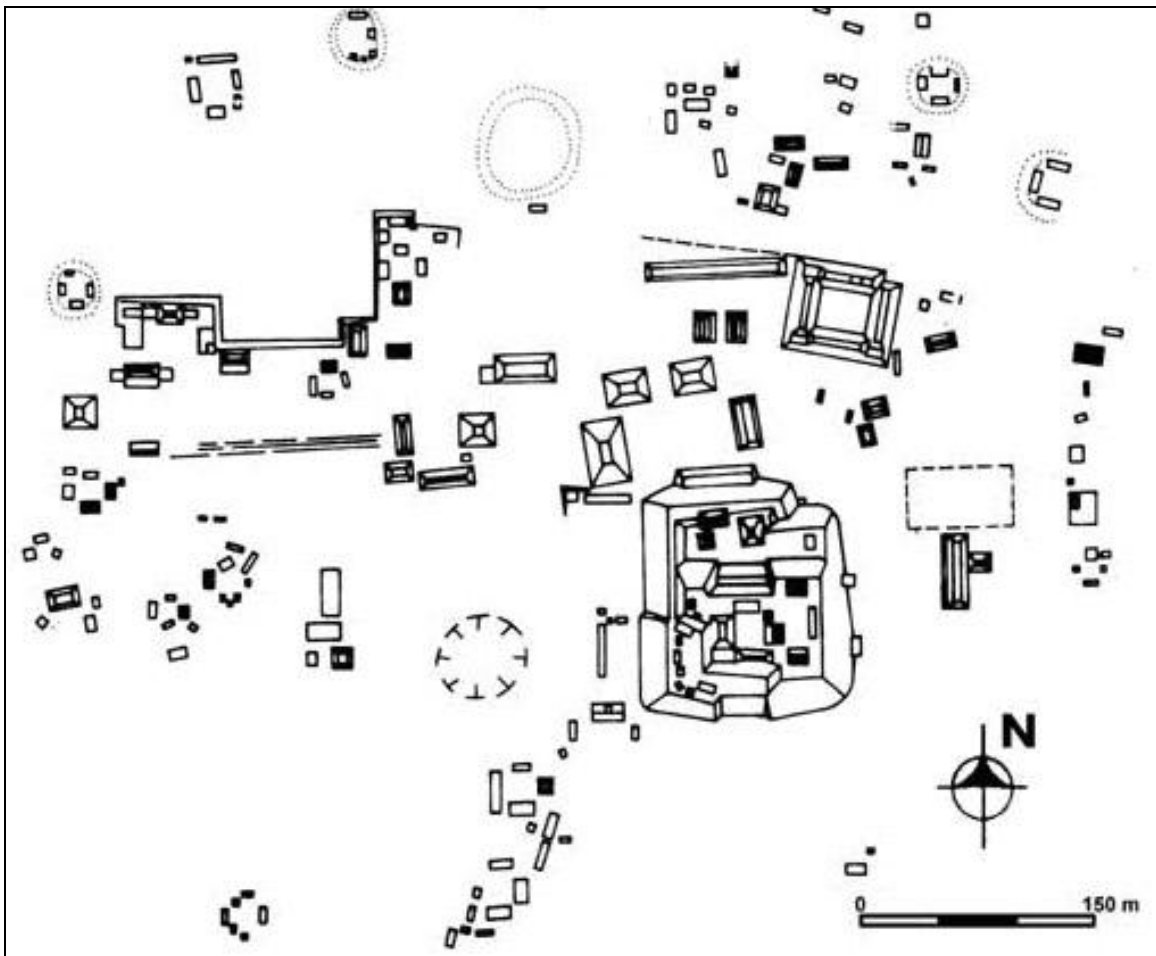


Figure 8.50 Map of El Chal, showing the monumental temple-acropolis (Map by Paulino Morales, Proyecto Atlas Arqueológico de Guatemala)

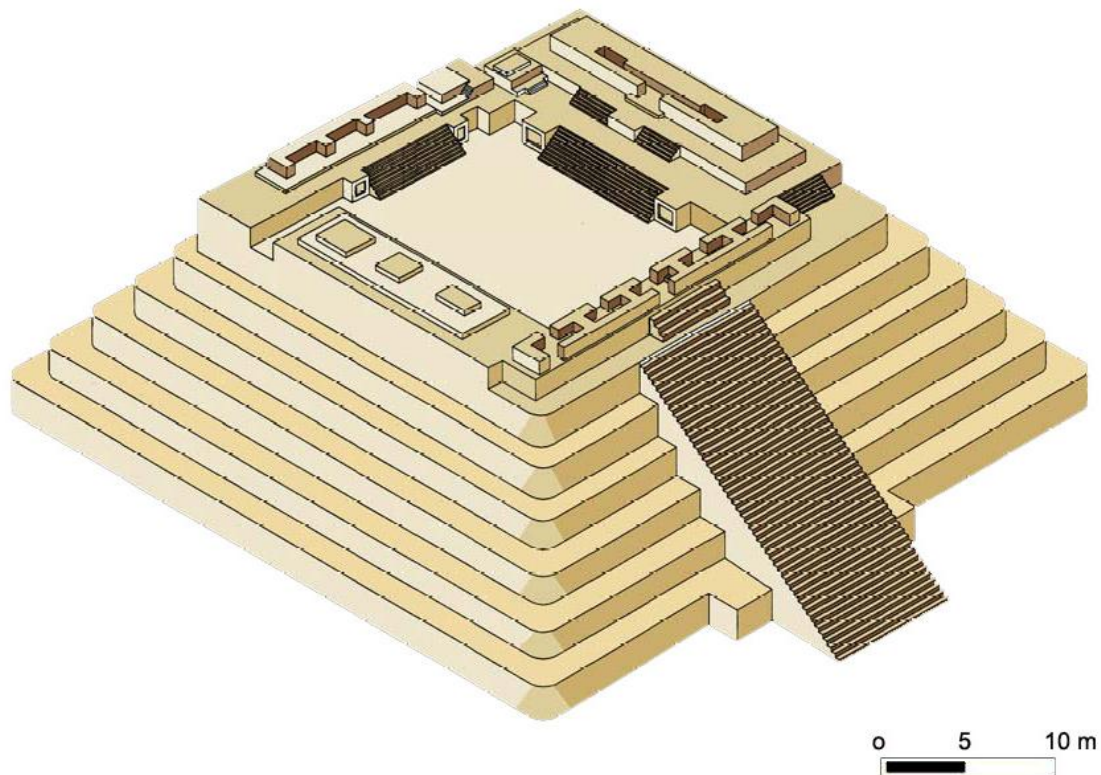


Figure 8.51 Reconstruction of the Central Acropolis in Pueblito, Dolores
(Drawing by J. Chocón, after Laporte *et al.* 2006)

8.7 Palaces of the Northern Lowlands

The end of the Late Classic period was a time of architectural growth for many regional centers in the Northern Maya Lowlands, as they experienced a political florescence, maybe due in part to the decline of the major sites to the south.

8.7.1 Edzna

Among the most important structures of Edzna dated to this period is Structure 424, also known as *Nohochna* (Figure 8.52). It consists of a long structure that closes the Main Plaza in its western side, in front of the Five Stories Building, and next to the

Building of the Knives. Its location is directly associated to the main public plaza and could have functioned as some sort of monumental entrance or portal to the plaza, creating a lateral control of access through the four open galleries that could hold numerous men, warriors, guards or vassals. It does not have interior bench, which is similar to the Peten palaces, indicating a function related to council assemblies and other types of activities involving large numbers of persons. Its layout is also similar to Ceibal Structure A-14 (Arnauld 2001: 380).

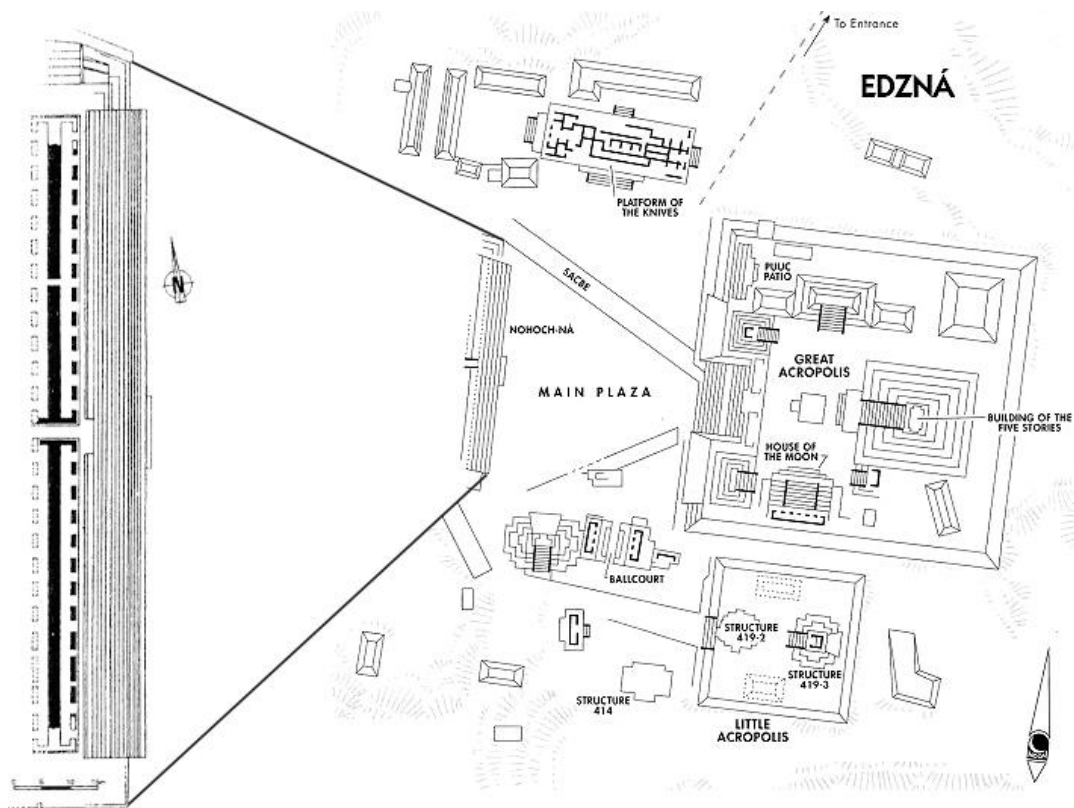


Figure 8.52 Structure 424 (Nohochna). Above: Plan and location (after Benavides 1997, fig. 14), Restoration (Photo by T. Barrientos)

8.7.2 *Becan*

Various authors have identified Structure IV as the Royal Palace of Becan. The building was initially constructed in the Late Preclassic as two separate buildings, which grew to become a three-level building that rises 16 m above the plaza (Figure 8.53). This allowed an increase in the number of persons who used the rooms for residence and other activities (Hohman 1998:109). Runggaldier (2009: 312) has defined a basic arrangement that consists of a public entrance to the north that reaches a closed courtyard on the top, through a series of passage palaces. The third level has rooms with built-in benches and other domestic features such as fireplaces and drains that could be used as baths, suggesting a more residential nature (Andrews 1995a) (Figure 8.54).



Figure 8.53 North façade of Structure IV, Becán (Photo by T. Barrientos)

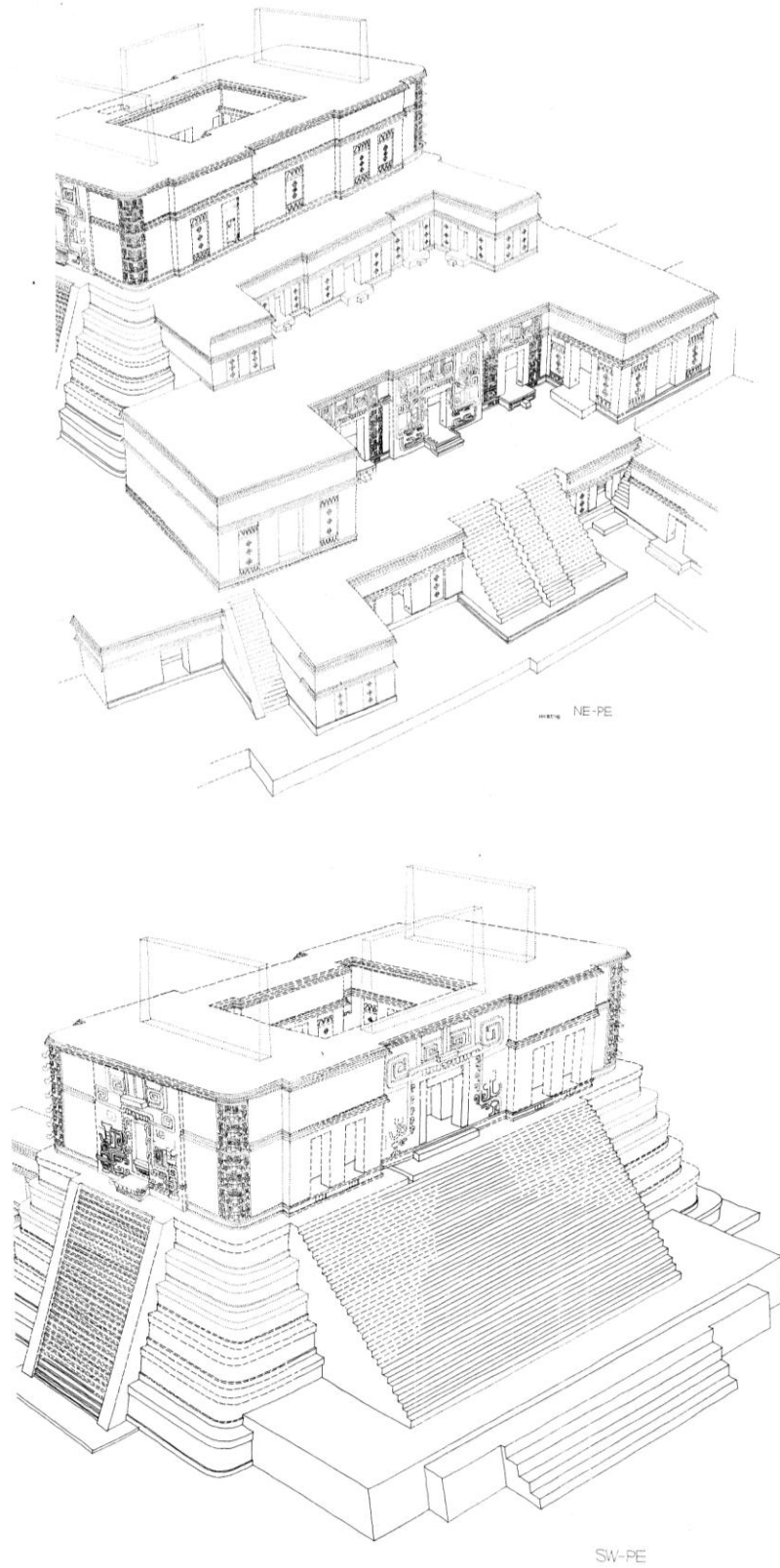


Figure 8.54 Reconstruction drawings of the north (above) and south (below) facades of Structure IV, Becán (Hohman, 1998)

8.7.3 Dzibilchaltun

Very similar to Edzna's *Nohochna*, Structure 44 of Dzibilchaltun was a long palace dedicated to public and semi-public activities (council house) (Figure 8.55). It measures 118 m in length and 26 m wide, holding 35 doorways and only three long rooms (Kurjack 2003). This layout is atypical in the northern lowlands because its extraordinary length, lack of columns, vaulted roof, and internal divisions (Arnauld 2001: 379). Kowalski (2003) also notes that its design evokes the central room of the royal throne in the Governor's Palace in Uxmal.

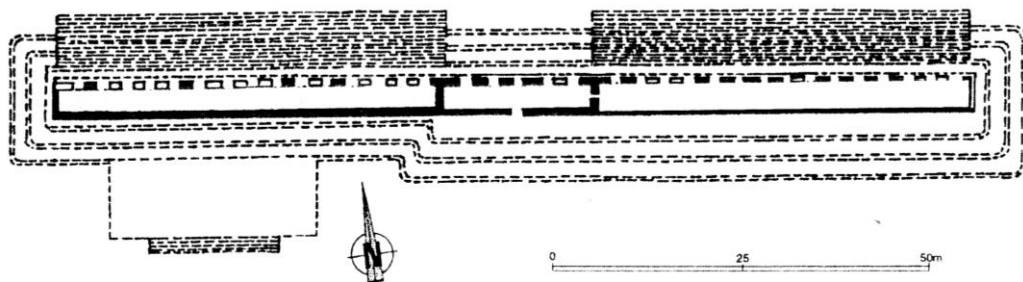
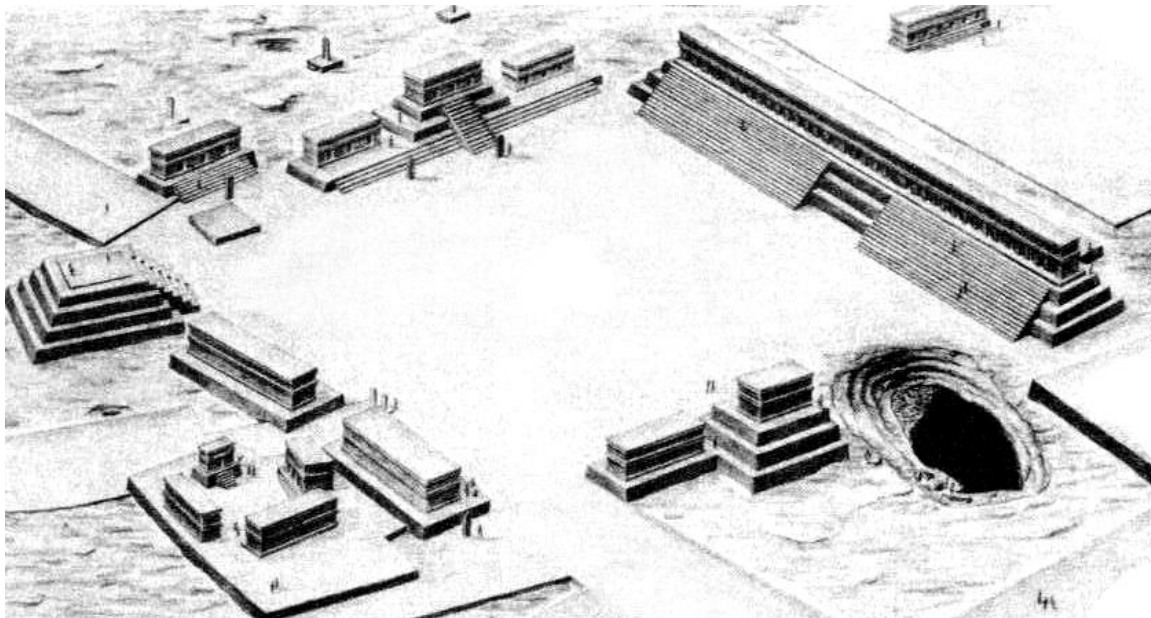


Figure 8.55 Structure 44 at Dzibilchaltun. Above: Reconstruction (Andrews IV and Andrews V 1980: 171, fig. 181). Below: Plan drawing (Stuart and Kurjack., 1979).

8.7.4 *The Chenes-Puuc region*

All major sites in this area have common features related to architectonic types, but they also manifest notorious differences from region to region. One of these shared characteristics is the absence of great palaces, except the ones in Uxmal and Sayil. For that reason, these cities have been interpreted as decentralized centers of political and religious nature, whose palaces were more related to large public ceremonies and councils, instead of residential functions (Ciudad and Iglesias 2001: 22, Kowalski 2003). However, it is interesting that lower class Puuc dwellings exhibit formal parallels with larger, more permanent palace buildings such as the House of the Governor and the Nunnery Quadrangle. This similarity implies a functional similarity, though the smaller residential clusters at Uxmal, Kabah, Sayil and Chacchob do not present benches, indicating that they were not considered indispensable for daily living (Kowalski 1987:82-3) (See Figure 8.3, page 231 in this chapter).

In terms of spatial analysis, Ringle and Bey III (2001) suggest that the size of the court evolved through time as the nature of rulership changed. For the Puuc sites of the Terminal Classic, the plaza was a socially and ritually charged field where buildings were built. The site layouts were based on “temple assemblages” consisting of two sides of the plaza delimited by a pyramidal mound and a long house (*popol na*), and the center occupied by an *adoratorio*. In sites such as Ek Bakam, the architecture reflects a segmentary organization, while the Puuc and Western Yucatan sites present a system of palace-sacbe-quadrangle courts. The quadrangle rooms were separated from elite residences, and seemed to be only occasionally fully utilized by court officials.

The palatial architecture in the Puuc area indicates that social organization was expressed in spatial terms. Palaces are not adjacent or concentrated in a single place, and elite dwellings are deliberately separated from each other. This creates a pattern of strong divisions within and between elite and domestic groups, also indicating that political authority and control derived from this alliance between palatial establishments (Kurjack 2003: 286).

Yaxuna Structure 6F-68 is one of the palaces studied in the Yucatan region. The absence of residential contexts have led to its interpretation as a council house (*Popol Nah*), that was abandoned after a termination ritual (Ambrosino 2003). In Oxkintok, Structure CA-7, located in the Ah Canul group, has been identified as a palace, whose characteristics are similar to some buildings at Uaxactun (Rivera Dorado 2001).

In the Western Puuc area, palaces have been identified and studied at Xcalmukin, Xculoc, Chunhuhub, and Xcochkax. However, the palace of Xkipche stands out as the third largest of the entire Puuc Area, containing 38 rooms (Figure 8.56). This site is located 10 km southwest of Uxmal, and was probably political dependent to that center, given its close location (Kowalski 2003). Another important palace is the one at Labna, containing a total of 67 rooms that could have accommodated 116 persons or 58 families (Figure 8.57). The site of Chac II contains a three-story palace with 22 rooms, whose function seems to have been residential (*Ibid.*).



Figure 8.56 Reconstruction of the palace at Xkipche (from Müller *et al.* 2006, fig. 10)



Figure 8.57 The Palace at Labna (Photo by T. Barrientos)

The palace of Sayil (Structure 2B-1) is the largest of the Puuc palaces, consisting of three levels and a total of 94 rooms (Figures 8.58, 8.59). It has been interpreted as the palatial residence for the site's paramount lineage. Another palace in Sayil is Structure 4B-2, located south of the main causeway, and could have been an administrative center or residence of a secondary powerful family (*Ibid.*).

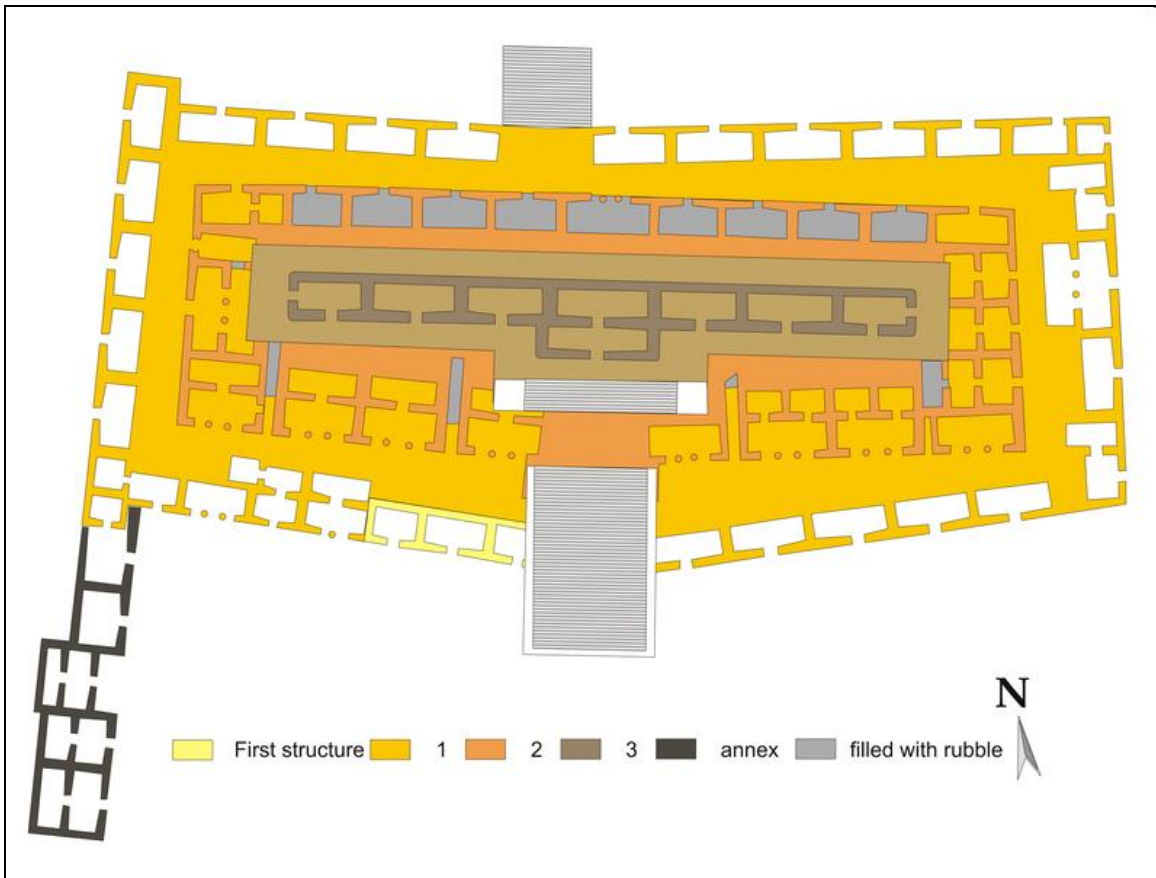


Figure 8.58 Plan of the Palace at Sayil (Wikimedia Commons 2012)



Figure 8.59 Restored Palace at Sayil (Photo by T. Barrientos)

8.7.5 *Xcalumkin*

Structure D5-15 at Xcalumkin is an open hall considered to be the main palace of this site, although there are a total of seven buildings of this type at the main plaza (Figure 8.60). It contains columns but masonry vaults are absent, as well as the double parallel room pattern found in other contemporaneous sites of the region. However, the most important feature is that the length of the single room is proportional to the architectonic size and importance of the group where the hall is located, suggesting a function of public meeting places. The seven halls at Xcalumkin are thus the architectonic expression of a system of shared lineage powers, very distinct to the dynastic system monopolized by the king. There is a close relation between an open hall and a non-royal but noble lineage, because they are small and appear in small and medium size sites. They also appear in a dispersed pattern, associated with elaborate residential groups (Arnauld 2001: 377-9).

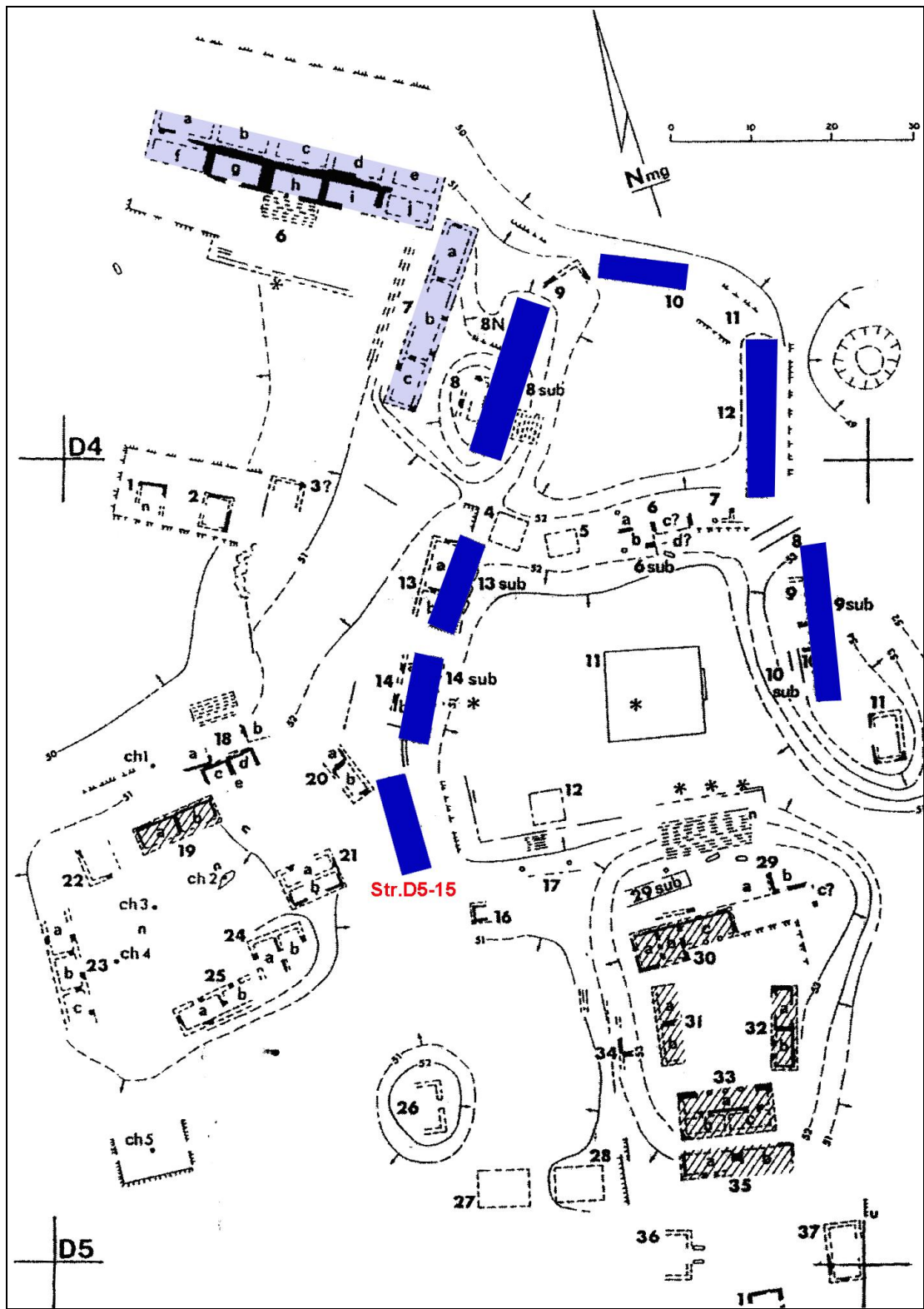


Figure 8.60 Distribution of the seven open halls (long houses) in the Main Plaza of Xcalumkin (Arnauld 2001: 378, fig.8, after Michelet 2002, fig. 4)

8.7.6 *Santa Rosa Xtampak*

This site contains the largest palace in the Chenes region, whose unique size and layout has no real counterparts in this area. It has three levels and a total of 44 rooms, 27 rooms on the ground floor, 12 rooms and two free-standing structures on the second floor, and five rooms on the third level (Andrews 1995a: 79) (Figures 8.61, 8.62, 8.63).

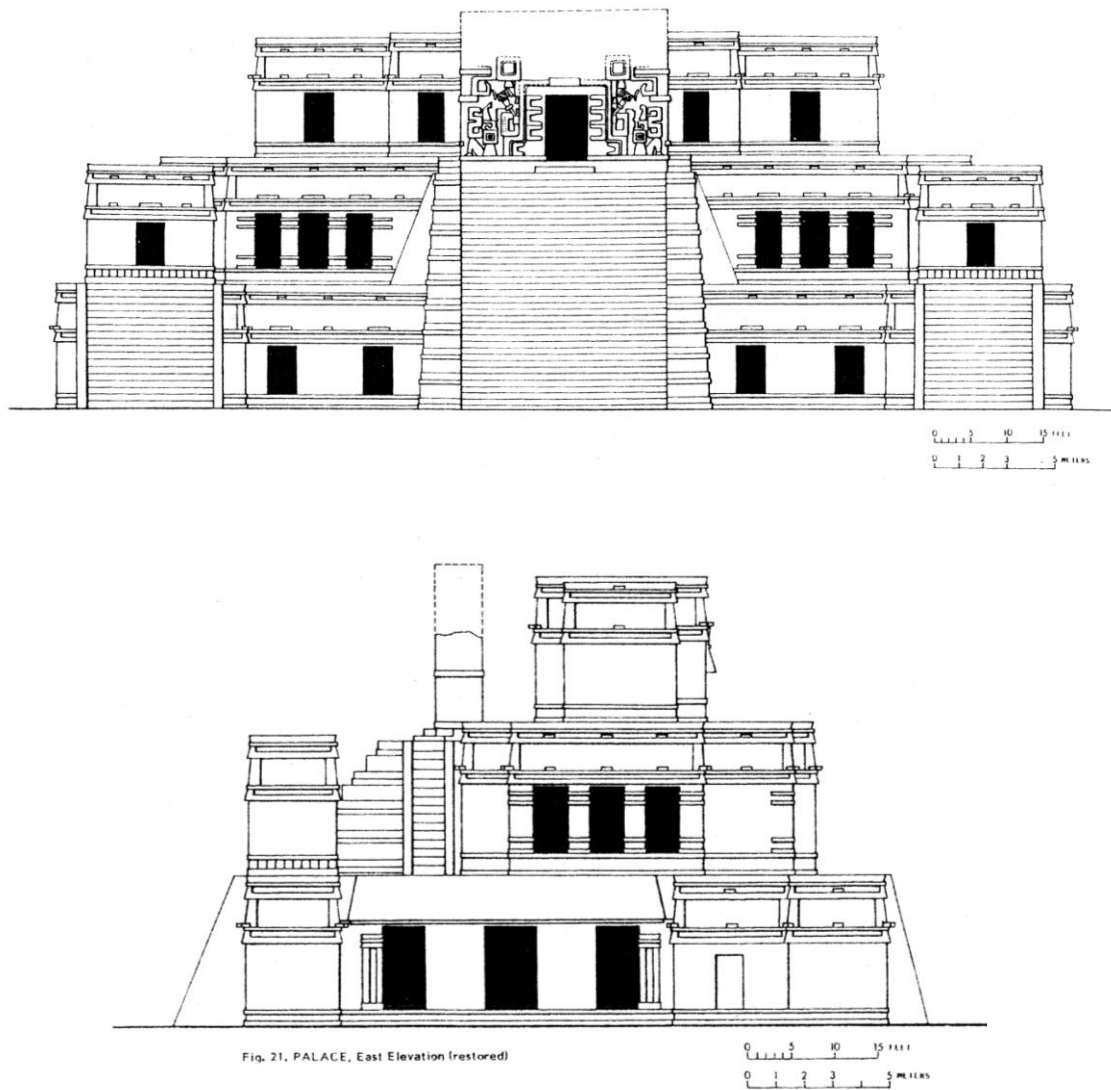


Figure 8.61 South (above) and East (below) elevation of the palace at Santa Rosa Xtampak (Andrews 1995a: 84)

Its central section is similar to the south side of Structure IV at Becan, because it presents a monumental stairway leading to a portal in a free-standing wall on the upper level with an open courtyard behind. The whole composition is intended to convey the impression of a traditional pyramidal temple. The integration of “symbolic” pyramid temples with buildings that have residential or administrative attributes is indicative of a societal condition in which these separate activities have been combined into a single entity. It is relevant that the entire building represents a single visualization and construction phase, as opposed to most multi-level buildings elsewhere in the Maya area that represent accretions over long periods of time. Therefore, the unquestionable “palatial” appearance of this building represents an “overlay” of religious and dynastic symbolism (*Ibid.* 89-92).

In addition, the plan organization and the circulation system establish a fairly clear hierarchy in terms of the degree of privacy or difficulty of entry into the rooms on the different levels. The rooms on the ground floor, particularly the outer rooms, were the easiest of access and the least private. The rooms on the second level are the most difficult to reach, because their access is easily controlled at both sets of stairways. The lack of benches in these two levels suggests a non residential function, and the rooms seem well suited for administrative activities. The rooms on the third level which can be reached by three different stairways seem to represent the “ceremonial” portion of the building. Nevertheless, it is difficult to imagine this palace as not having a residential function for the highest ranking members of the site, combined with the administrative-ceremonial complex (*Ibid.*).

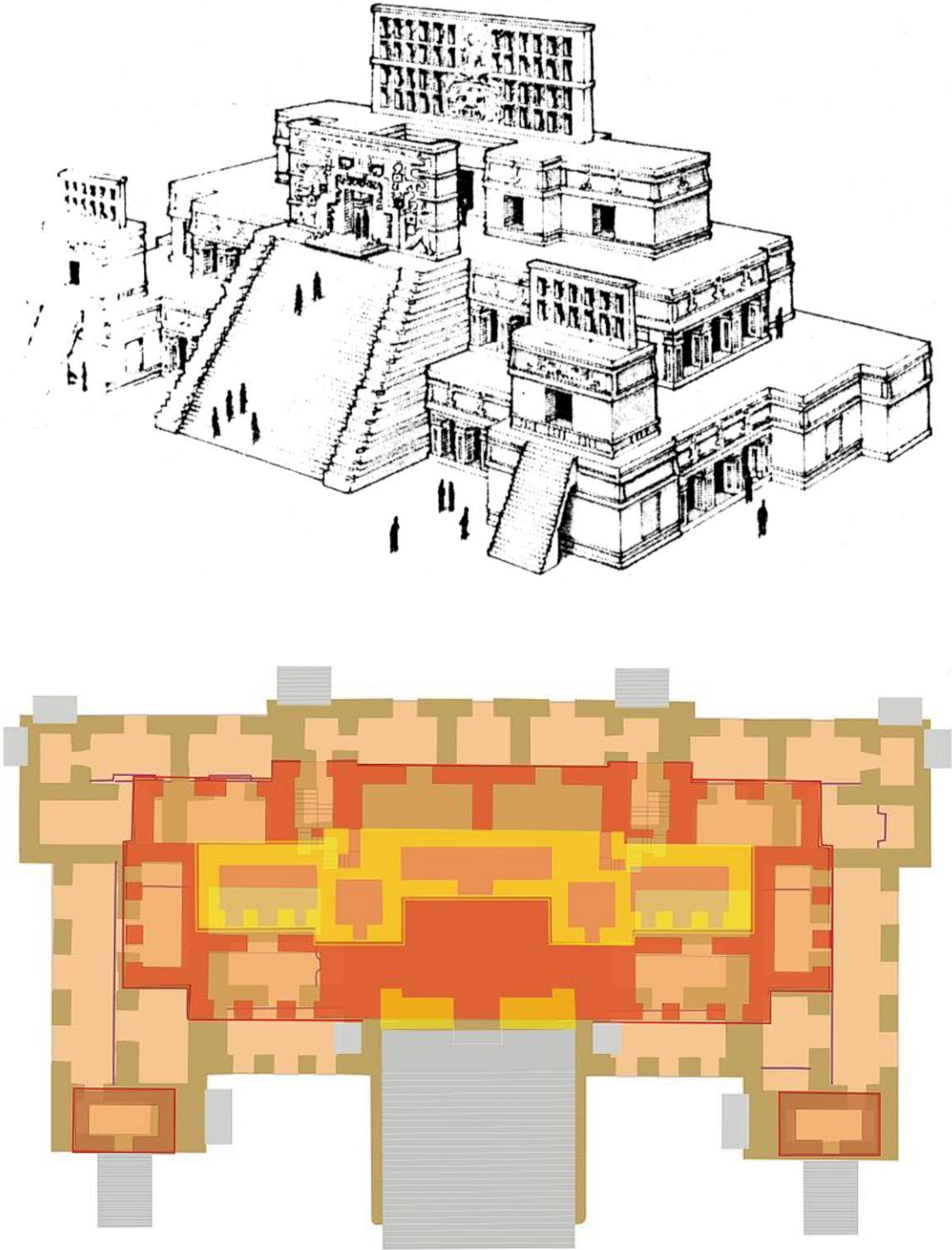


Figure 8.62 The palace at Santa Rosa Xtampak. Above: Hypothetical reconstruction (drawing by P. Gendrop, in Andrews 1995a: 92). Below: Plan drawing (Wikimedia Commons 2009)

8.7.7 Uxmal

The most impressive of all the palaces in the Puuc region is the House of the Governor of Uxmal. The building has a basic tripartite layout (Christie 2003b) (Figure 8.63) and it is the palace associated with the reign of Lord Chaak, together with the Nunnery quadrangle and Group 16 (Kowalski 2003).

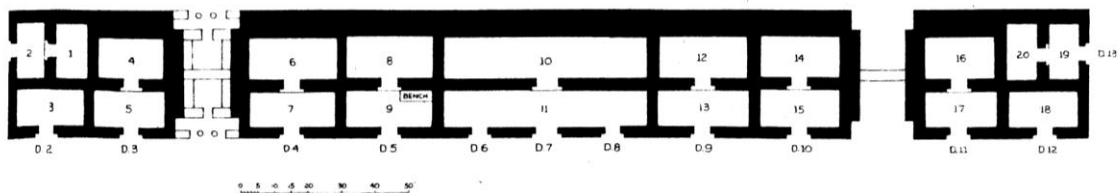


Figure 8.63 The House of the Governor, Uxmal. Above: Restoration (Photo by T. Barrientos). Below: Plan drawing (Kowalski 2003: 77)

The House of the Governor measures 99 m in length, and it is a grandiose version of the typical Puuc house, which probably served as a dwelling for the ruler of Uxmal and his family, though combined with broader and more public-administrative functions. It also seems to have been designed as an astronomical observatory associated to the cult of Venus. However, the presence of a large open space and a complex iconography also suggests that this building was the major seat of power and administrative center or even a council house. If that was the case, Group 16 could have been the residence for Lord Chaak and the royal family (Kowalski 1987: 83-86).

The Nunnery quadrangle shows a cosmological design that is not related to residential functions, thus suggesting its use as a *tancabal* or meeting place (Kowalski 2003) or as “conjuring houses” (Schele and Mathews 1998). According to its iconographic motifs, the North House could have been the most important of the four structures, probably the “lineage house” (Figures 8.64, 8.65).



Figure 8.64 Restored Nunnery quadrangle, Uxmal (Photo by T. Barrientos)

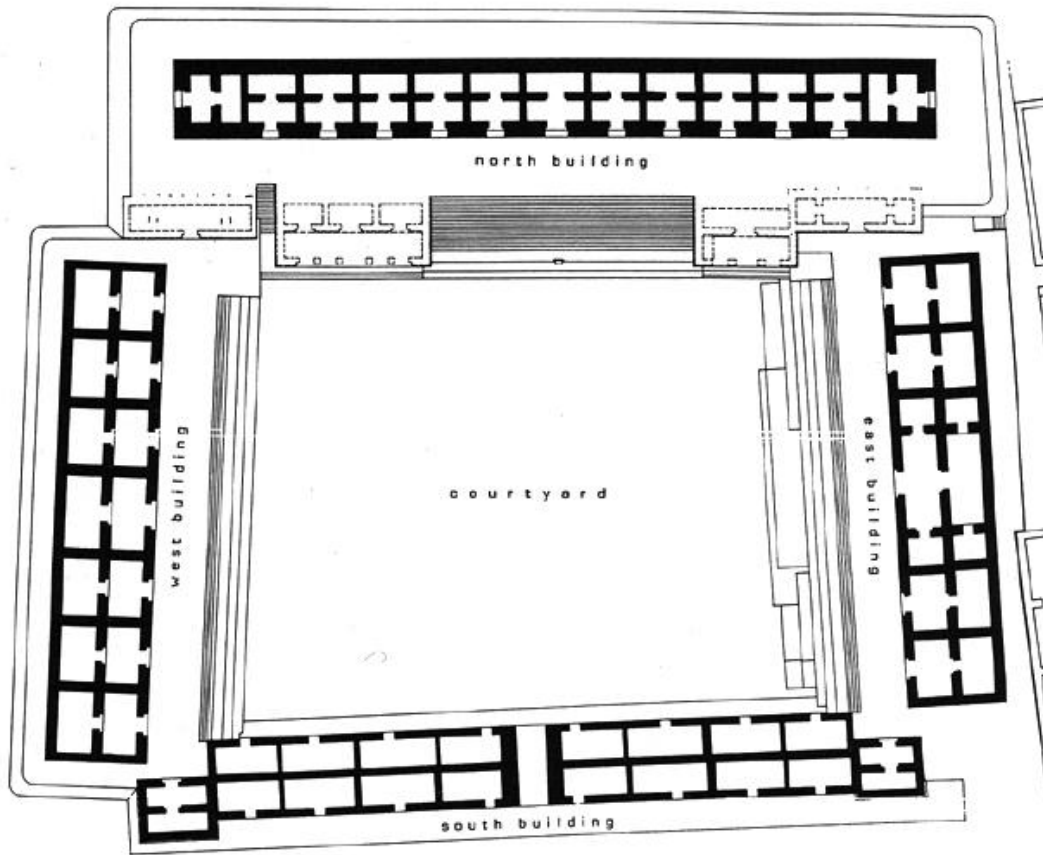


Figure 8.65 Plan view of the Nunnery quadrangle, Uxmal (Andrews 1995b)

8.7.8 Chichen Itza

As the larger center in the northern lowlands, Chichén Itzá contains different types of palaces. The most complex one is the Monjas building, probably dated to 880 C.E., which had a multifunctional character, as was probably used for dedication ceremonies, residence, council house or even as a founder's house for accession rituals (Figures 8.65, 8.66). Some palaces show a more residential nature, such as the Akab Dzib structure, while the gallery patios of the Group of the Thousand Columns were designed for council-meeting activities (Kowalski 2003) (Figure 7.84).

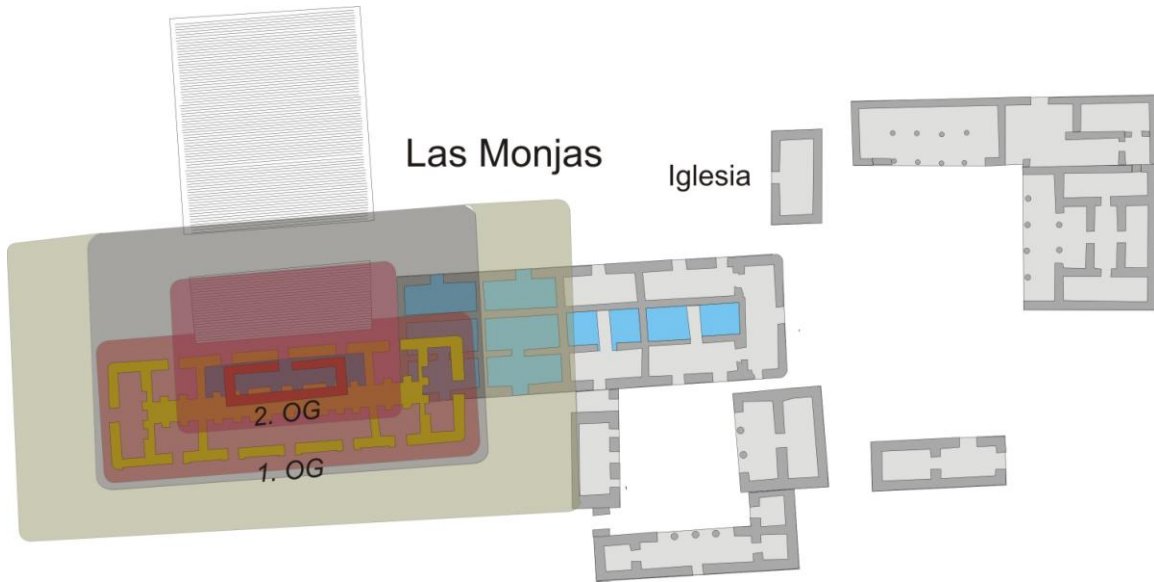


Figure 8.66 Plan view of Las Monjas, Chichen Itza (Wikimedia Commons 2009)



Figure 8.67 Restored buildings in Las Monjas, Chichen Itza (Photo by T. Barrientos)

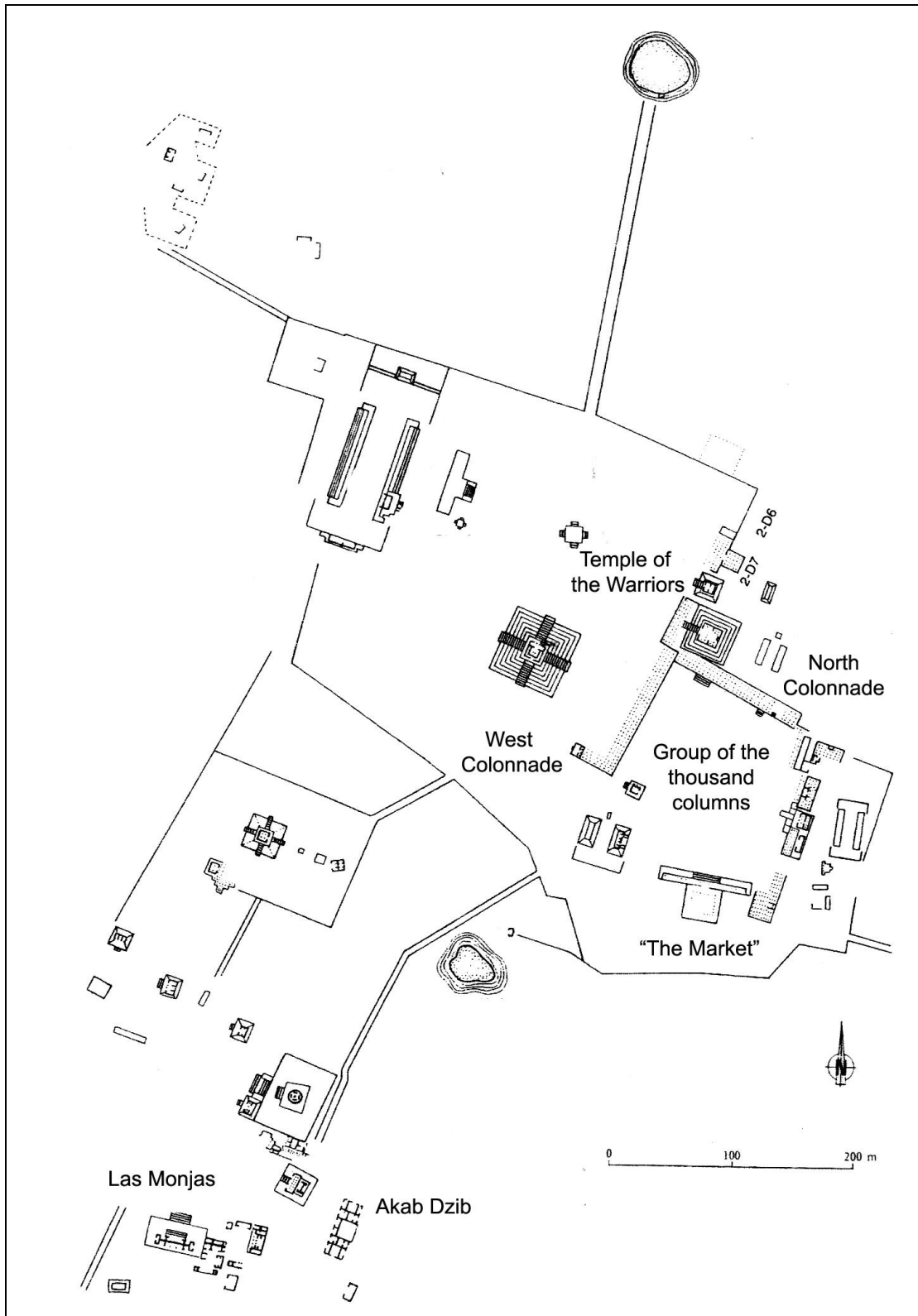


Figure 8.66 Map of Chichen Itza, showing the distribution of the different palace buildings (Arnauld 2001: 385, after Ruppert 1943)

8.8 Summary: Defining Maya Palaces as multifunctional political landscapes

After revising the historical and architectural data from palaces in the Maya region and other parts of the world, it is possible to define some general characteristics and concepts that will help to understand and analyze the royal palace of Cancuen.

First, the most important characteristic of ancient palaces from the all the different civilizations, including the Classic Maya, is that palaces were not just residential. They have to be defined as multifunctional buildings, given that the activities carried out in their multiple interior and exterior rooms vary according to the particular characteristics of each society, which reflect their own sociopolitical system. In addition, the existence of numerous palaces at different sites represents “contextual variants” of a basic architectonic organization.

The general characteristics of Maya palaces discussed in this chapter can be summarized as follows:

- a. The palace was an institution. Maya kings and elites created a particular social and palatial design at their sites, but always based on a shared ideological structure. Given that palaces were central to that structure, the evolution of palace buildings reflect how power institutions changed from the Late Preclassic to the Late Postclassic periods. Palaces were not significant spaces in the Late Preclassic cities, as the monumental triadic temples and E-groups were the main expression of power. With the development of royal dynastic states during the end of the Preclassic and the beginning of the Early Classic, the palace started to become a more sophisticated construction, but still reserved for royal residence. During the Late Classic, the palace soon came to be the central architectural effort of Lowland Maya cities, even at the

expense of pyramidal temples. This process is more evident in the rising new regional capitals during final decades of the eighth century and Terminal Classic. As a royal institution, the palace became the court seat, the political and ritual capital, and the material expression of the religious, political, and economic administrative components of the court. It was the substance and symbol of the order and the state, and a visible representation of a world-view that embodied a hierarchical structure and a notion of collectivity, where the praxis of royal power was executed through an officialized set of activities.

- b. Palaces were active players in politics and royal strategies, related to theatrical display and feasting of a more private nature than public plazas and temples. They help to interpret Maya political structures, specifically in terms of elite hierarchies, the nature of royal courts, and the creation of social structures through practice.
- c. It is difficult to separate residential, ritual/religious and political/economic functions in Maya palaces. Nevertheless, it seems clear that palaces did not engage in the role of ancestors as validation of power, as evidenced by the general lack of royal tombs.
- d. Establishing functions for Maya palaces should not follow only morphological attributes, and it is necessary to complement it with the study of iconographic and epigraphic analysis. However, a structural approach to the study of archaeological contexts related to palaces is a viable form of understanding their architectural design and in turn, to establish its original functions and later modifications. The archaeological study of Greek palaces demonstrates the utility of structural analyses versus morphological ones, in order to define a sociopolitical system. They question

the simplified residential interpretations and have defined complex processes of hierarchy that are expressed in spatial arrangements.

- e. Maya palaces show the evolution from small building arrangements (Early Classic) to complex acropolis (Late Classic), as well as the proliferation of small elite palaces during the Terminal Classic and the construction of open halls during the Early Postclassic. These changes serve as material evidence to interpret the transformations of the political systems that were developed in Maya cities throughout their pre-Columbian history.
- f. Variability in palace architecture shows flexibility in how Maya courts expressed a political structure that was common to all sites (the *K'uhul ahaw* system). Palaces express either different types of organization or variants of similar structures.
- g. The accumulative variation of architectural elements in palaces created a continuum of urban designs that allows the construction of a structural concept of the Maya palace. Also, there is an advantage of analyzing short-lived palaces, because they represent a particular stage in time, an opportunity of performing a synchronic study of Maya sociopolitical structure.
- h. Morphologically, there are four ways to classify Maya palace structures:
 - 1. Number of chambers: Single / multi-chamber
 - 2. Number of stories: One story / multi-leveled
 - 3. Number of buildings: Palace structure / Palace complex - Acropolis
 - 4. Special arrangements: Temple-palace, colonnade, etc.
- i. According to spatial-structural analysis, there are four main variables for studying Maya palaces in comparison with other types of buildings:

1. *Size and elaboration:* Palaces tend to have finer architecture and decoration, concentrating the largest amounts of construction volume at Maya cities.
2. *Location:* Administrative palaces were located at the center of Maya cities, but residential ones show a more variable location.
3. *Architectural elements:* Combination of walls, doorways, benches and other elements tend to be highly variable, showing multi-functionality, though maintaining basic patterns of construction and planning.
4. *Structural and spatial arrangement:* I propose seven types of Maya palaces:
 - 1) Single palaces: Tikal 5D-77, 5D-15, and 5D-105; Uaxactun Structures D-XX, E-X and F-XIV; Copán structures 6 10L-41 and 10L-223; Nakum Building W.
 - 2) Passage-gateway palaces (previously discussed by Arnaluld and Runggaldier): Tikal 5D-91, 5D-71, 5D-44 and 5D-120; Piedras Negras J-2, J-12 and J-18; Copán Structure 10L-11; Nakum Building D; Edzna Structure 424; Dzibilchaltun Structure 44.
 - 3) Presentation-throne palaces: Tikal 5D-59, 5D-123, 5D-118, and 5D-61; Piedras Negras J-6; Dos Pilas Structure N5-3A, N5-3 and N5-1; Aguateca M7-32. They always show an “antechamber” and have well defined access patterns or routes if they form part of a palace complex.
 - 4) Residential palaces: Tikal 5D-46, 5D-52?, 5D-57?, 5D-58?; Copán 10L-32; Aguateca M7-22. Despite the identification of royal households in monumental buildings, they seem to be restricted to small palaces that were adjacent to public palaces. Until now, the only form of identifying royal

households is through epigraphy or particular contexts like the ones at Aguateca, because fine ceramic middens do not necessarily reflect a household. Instead, they could represent service areas, feasting areas or ritual ones. Royal households were probably very private, with restricted view and their remains are generally clean archaeological contexts.

- 5) Palace complexes: Tikal Central Acropolis; Uaxactun Structure A-V and Group H; Palenque Palace; Piedras Negras Acropolis; Copán Acropolis; Dos Pilas Palace; Nakum Acropolis; Xunantunich Structure A-11; La Milpa South Acropolis; Becan Structure IV; Sayil Structure 2B-1; Xcalumkin Structure D5-15; Santa Rosa Xtampak Palace; Uxmal Monjas Palace.
- 6) Temple palaces: Calakmul Structure II; Caracol Central Acropolis, Northwest Acropolis, Plaza B, Caana, and South Acropolis; Xunantunich Castillo; El Pueblito Acropolis; El Chal Acropolis.
- 7) Tripartite palaces (defined by Christie): Tikal Structure 4E-31 and Central Acropolis; Calakmul Structure III; Aguateca M8-8 and M8-10; Uxmal House of the Governor.

Finally, it is also important to note that a structural approach to Maya architecture relies heavily on the conception that culture is a system of meanings embodied in symbols, which describe the world as perceived by a particular society. These symbols can take material form in architecture, art and iconography, which specialists analyze to reveal aspects of that imagined or conceptual universe—ancient culture—that these encode. Described as “ancient idea systems” (Ashmore 1991: 218) and “the conceptual

systems of ancient civilizations” (Tate 1992: xi), culture in this highly symbolic view closely resembles Geertz’s notion of worldview:

“a people’s picture of the way things in sheer actuality are, their concepts of nature, of self, of society . . . their most comprehensive ideas of order” (Geertz 1973: 127).

As a result, previous structural models of Maya culture emphasized the search of rules, patterns, and conceptual regularities in the elaboration of social life. With the development of post-structuralist theory, the role of architecture, art and symbols has become more sensitive to the concept of social structure as a dynamic process, instead of fixed systems. In this context, palatial architecture is defined as an active player in the processes that shaped the social reality of Maya cities from the Preclassic to the Postclassic periods.

Some Mayanists have also resisted structural approaches to architectural analysis when religion, cosmology, worldview, and the political ideology of the ruling elites are analyzed as *formal* and *unambiguous* expressions in royal art, architecture, and inscriptions. In addition, scholars have also defined practical impediments in the application of structural methods, especially the variability in the degree to which meanings are recoverable archaeologically. If preservation of symbols is a direct product of socioeconomic variables, then it has to be acknowledged that there will always be a biased lack of balance between our understanding of elite and commoner symbolism.

In conclusion, the structural analysis of Maya palaces offers a window to know the ways in which political power was exercised by the elites that ruled Maya cities since the Preclassic period. Despite the lack of considerable archaeological evidence of ritual and household activities in Maya royal palaces, their architectural designs constitute

material evidence of how social structures were created according to a shared ideology and how they were recreated constantly through the manipulation of multiple private and public spaces. For that reason, it is important to consider some previously unattended variables in architecture, such as privacy and boundary construction and maintenance. When performing structural analyses in Maya palaces, it is also important to recognize that its results will offer an incomplete vision of the social structures that existed in each ancient Maya city. The limitations of the archaeological record makes impossible to visualize the perceptions of the common people, especially the ways in which the official ideology was reenacted by individuals. Nevertheless, the structural study of palatial architecture offers an opportunity to define the intentions of rulers and elites to create an officialized version of the cosmovision that was present in all Maya cities, but always changing, according to the particular aspects and needs of each city. This concept has been discussed by Hohman (2000: 38-40) as the “structural similarities” between the built environment and the intentions of human beings. Hence, studying the structural similarities between Maya palaces could be productive in trying to define some general conventions of the elite culture that ruled Maya cities. In the case of Cancuen, it is proposed that its royal palace shared some structural aspects with other palaces of its time, which could in fact be helpful to define some general trends that were present in Maya cities during the final decades of the eighth century.

CHAPTER IX

THE ROYAL PALACE OF CANCUEN: RESULTS OF INVESTIGATIONS 1999-2012

9.1 General Description

Since the beginning of the Vanderbilt Cancuen Archaeological Project, explorations in the ancient Maya city of Cancuen were focused on its acropolis or royal palace, because it represents the core of the entire site. After its formal investigation, now we know that it is the best testimony of the city's apogee under the reign of ruler *Taj Chan Ahk*. After fourteen years of field and laboratory research, our knowledge of Cancuén advanced in a significant way, and just as it was predicted, the data recovered in the royal palace holds the most complete record of the site's local history and regional development.

The excavations directed by Tomás Barrientos and Rudy Larios in the royal palace have provided enough data to understand this building in terms of chronology, construction and function. Its architectural stages have been correlated with the epigraphic record in a convincing form, thus supporting the interpretations of the role that Cancuen played in the Upper Passion region and the Western Peten trade route.

The architectural studies in the palace have also been correlated with data from other buildings at Cancuen, defining an important interaction between its center and the surrounding sub-royal elite residences and workshops.

More recently, data recovered from new excavations have followed such interpretations, not only verifying the original ideas for the palace functions and chronology, but adding data concerning areas that were not excavated previously.

Even with its monumental size, the building remained unnoticed for almost seven decades until the Harvard University Seibal Project team published the first map of the site epicenter in the late seventies (Tourtellot III *et al.* 1978). Their map was detailed in the central and east sections, but incomplete in other parts, especially the western sector, due to time constraints of such preliminary study (Figure 9.1). Without its surrounding settlement, the palace didn't appear monumental.

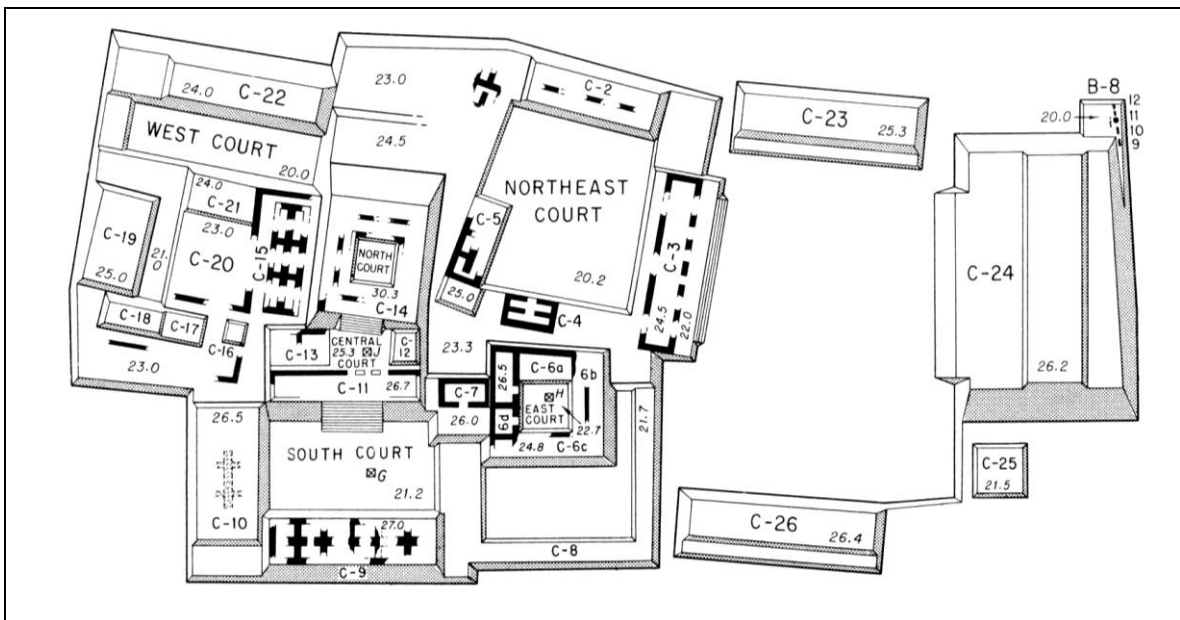


Figure 9.1 Initial map of the royal palace of Cancuen (Tourtellot et al. 1978: 201)

The first field season of the Vanderbilt Project in 1999 was very short and the time constraints did not allow working in the palace enough time to update its map. As a result, it was until the 2000 field season that the necessary efforts were directed towards recording and understanding its complex layout.

It took various weeks to define a walking path through its different courtyards, in what seemed to be a green labyrinth of vegetation. After several surveys, the new version of

the palace map was completed by Matt O'Mansky in 2000 and 2001 (Figure 9.2), and later improvements were added by Marc Wolf between 2003 and 2006 (Figure 9.3). Architectural details were added to the palace plan by Luis Fernando Luin and Tomás Barrientos, as the excavations exposed more walls and other features (Figure 9.4). With the new and recent map of the site it is clear that the palace is very prominent over the eastern peninsular epicenter and the densest settlement of the site (Figure 9.5), reflecting the supremacy and control that Cancuen played at the head of navigation of the Pasión River and the frontier with the highlands.

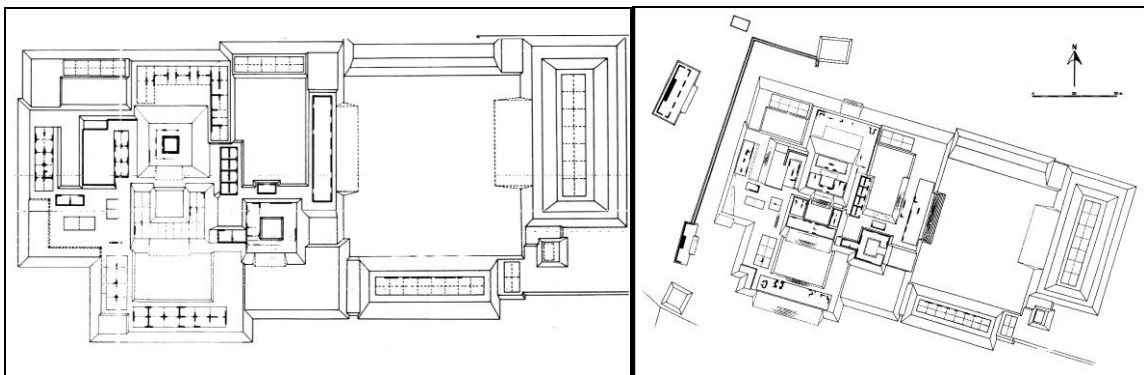


Figure 9.2 Left:: Map of the royal palace made in 2000 (Map by M. O'Mansky, VCAP)
 Right: Map improved in 2001 (Map made by T. Barrientos and L. Luin, VCAP)

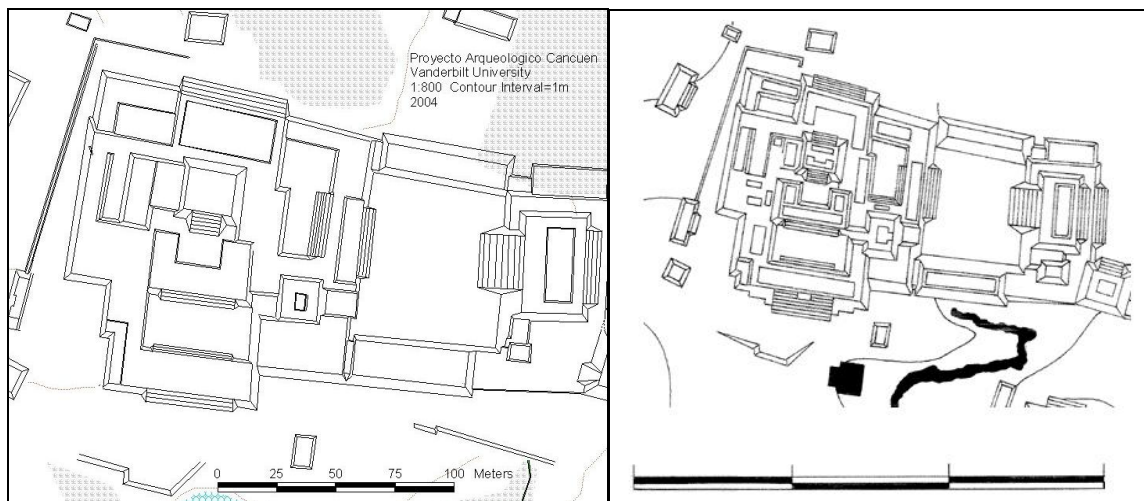


Figure 9.3 Left: Map of the royal palace made in 2004 (Map by M. Wolf, VCAP)
 Right: Map improved in 2005 (Map by T. Barrientos and L. Luin, VCAP)



Figure 9.4 Map of the royal palace made in 2013 (Map by T. Barrientos and L. Luin, VCAP)

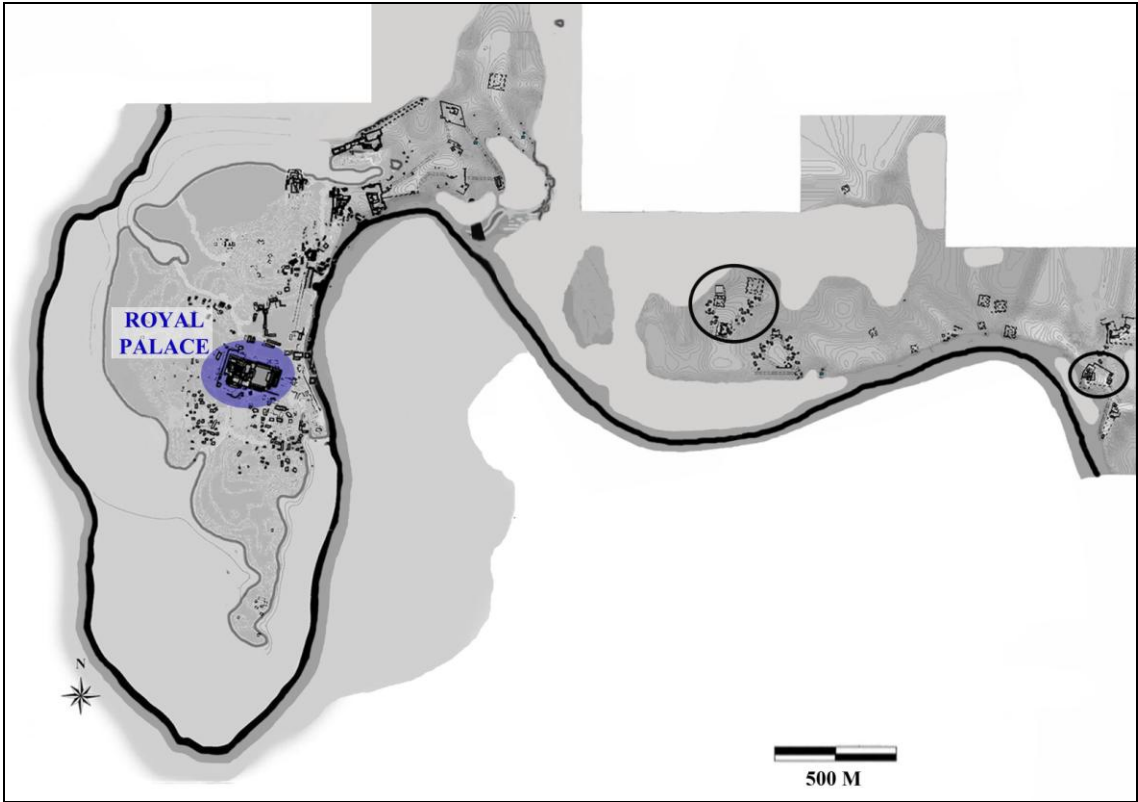


Figure 9.5 Map of Cancun showing the location of the royal palace (Map by M. Wolf, VCAP)

Excavations in the royal palace have exposed buried plazas, rooms, benches, staircases, walls and other features, including thousands of stucco fragments that once decorated cornices and walls (Barrientos and Luin 2001, Barrientos *et al* 2000, 2002a, 2002b, 2003; Larios and Barrientos 2002). Thirteen years of excavations have provided enough information and discoveries to define it as one of the largest and more important buildings of its type in the Maya world (Figure 9.6), and its architecture revealed a unique beauty and quality that can be compared to the palaces of Tikal, Palenque and Piedras Negras (Barrientos *et al* 2002a).

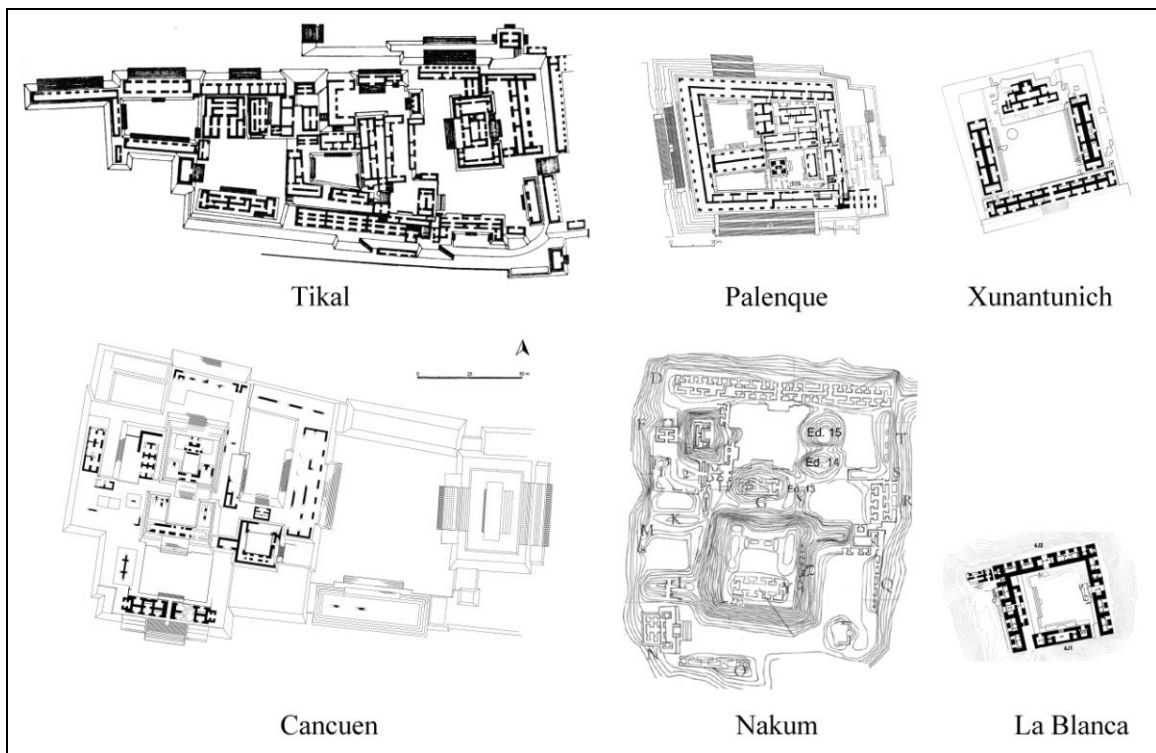


Figure 9.6 Comparative size of Cancuen royal palace and other Maya palatial compounds (After Andrews 1975, Andrews 1989, Yaeger 2010, Hermes and Zralka 2008, and Muñoz 2010)

After these mapping and excavation activities, the royal palace can now be defined as an acropolis-type building whose total area covers almost 32,000 m² (235 x 135 m). Its main layout is based on a three leveled set of platforms that compose 11 courtyards and 23 structures of different sizes, some of them reaching 50 m in length and built with masonry walls and facades of 6 to 8 m high. Excavations and surface analysis suggest an approximate of 130 vaulted rooms, but it is probable that it had more than one hundred of them. The palace complex has a general orientation that oscillates between 13 and 16 degrees east of north, though some buildings, possibly the later ones, are orientated directly to the magnetic north (Figure 9.4). The highest courtyard is elevated 11.35 m above the plaza floor located south of the complex, meaning that the entire acropolis could have had a total height of 17 m. The complexity of the palace acropolis makes it necessary to analyze structures and patios in four main sections (Figure 9.7).



Figure 9.7 Map of the royal palace of Cancun showing its four sections (Map by T. Barrientos, VCAP)

The first one is the largest of the palace courtyards, named “Main Plaza” and located in the easternmost part of the compound. It is formed by four long range structures: L7-27 to the east, L7-24 to the west, and L7-25 and L7-26 to the north and south, respectively (Figure 9.8). This patio corresponds to the lower level of the entire compound, and its plaza floor is located slightly above the floor of the East Plaza, where the East Ballcourt and other important ceremonial buildings are located.

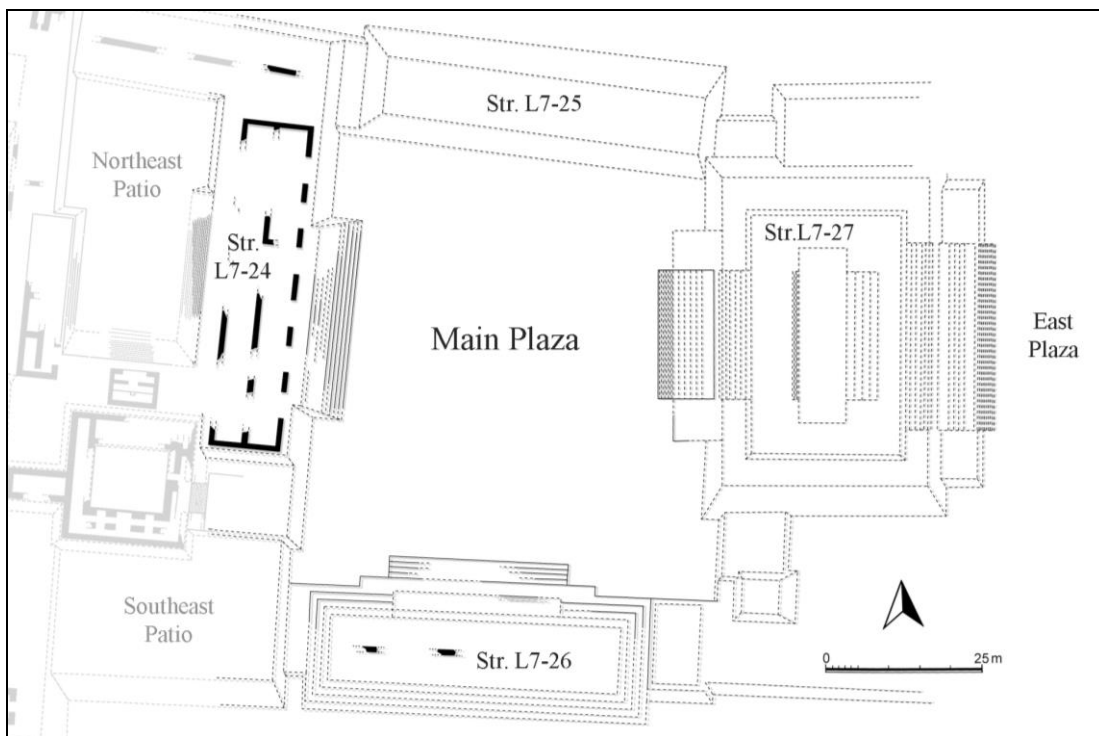


Figure 9.8 Map of the “Main Plaza” of the royal palace (Map by T. Barrientos, VCAP)

The other three sections of the royal palace are located within a main platform that forms the core of the compound and rises well above the plazas that surround it. The eastern section is divided into three patios (Figure 9.9). The northern one is the Northeast Patio, a sunken courtyard delimited by structures L7-23 to the north, L7-24 to the east,

L7-22 to the south and L7-15 and L7-16 to the west. To the south, the Southeast Patio corresponds to a small open area without structures. Within the two previous ones, the small and enclosed East Patio is formed by structures L7-20 and L7-21. An additional small area is the Southeast Corridor, where Structure L7-17 is located, communicating the Northeastern Patio with the southern sections of the acropolis.

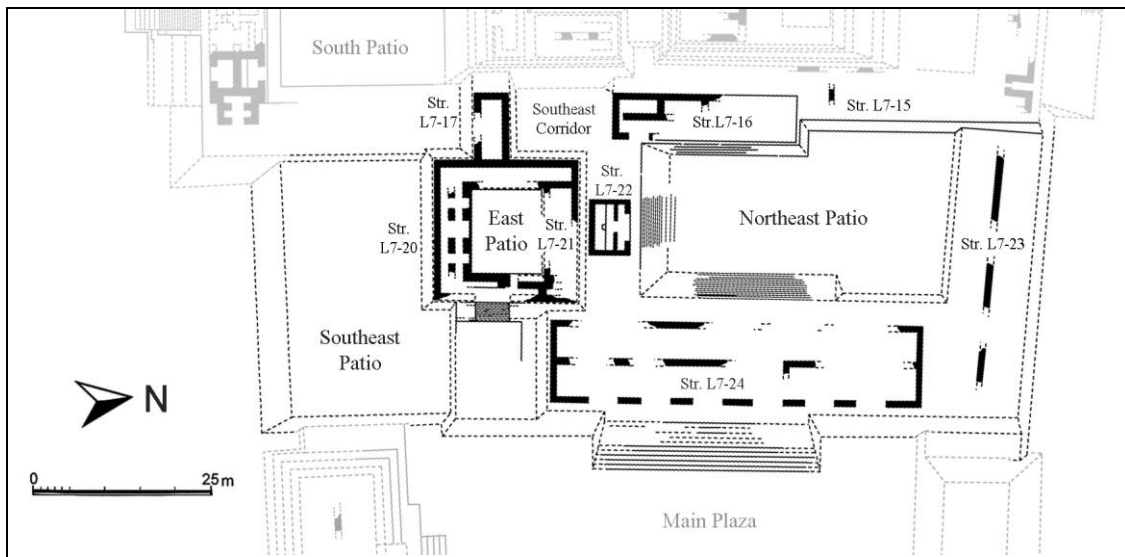


Figure 9.9 Map of the East Section of the royal palace (Map by T. Barrientos, VCAP)

The central section is also divided into four courtyards (Figure 9.10). The South Patio is formed by structures L7-9 to the south, K7-36 to the west, and L7-8 to the north. To the east, a low platform separates this courtyard with the Southeast Patio. The Central Patio is formed by structures L7-8 to the south, L7-6 to the west, L7-7 to the east, and L7-4 and L7-5 to the north. The highest part of the palace is the North Patio, also being the smallest of its courtyards. It is located north of the Central Patio and formed by structures L7-1, L7-4 and L7-5. The northernmost part of this section is the Lower North Patio, defined as the space above structures L7-14 and L7-15.

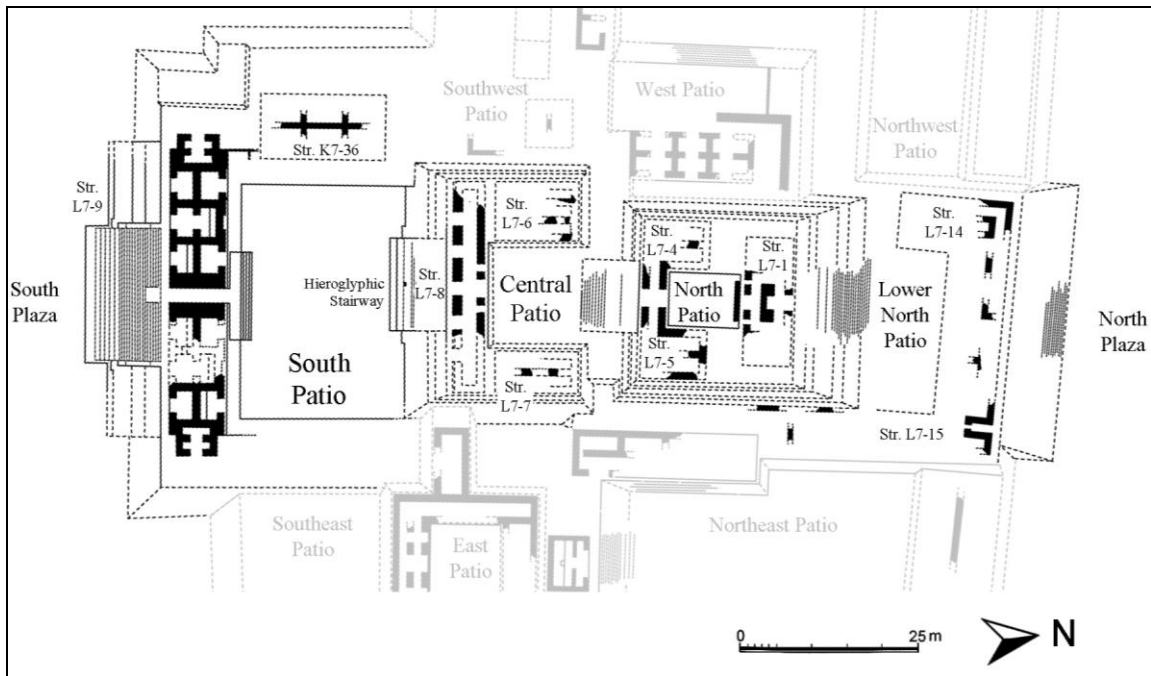


Figure 9.10 Map of the Central Section of the royal palace (Map by T. Barrientos, VCAP)

Finally, the western section also has three interior courtyards and an exterior one (Figure 9.11). To the north, the Northwest Patio is defined as a sunken court south of Structure L7-10. The West Patio is the highest one of this section, and it is defined as the open area west of Structure L7-12 and south of the small Structure L7-11. A lower courtyard is located east of Structure K7-33 and north of K7-34. The Southwestern courtyard is a flat platform which contains structures K7-34, K7-35 and L7-13. This is the only area of the palace where the superstructures are not arranged around a closed courtyard. The Southwest Exterior Patio corresponds to the enclosed area delimited by structures K7-1, K7-3, K7-36, and the southwest corner of the acropolis platform.

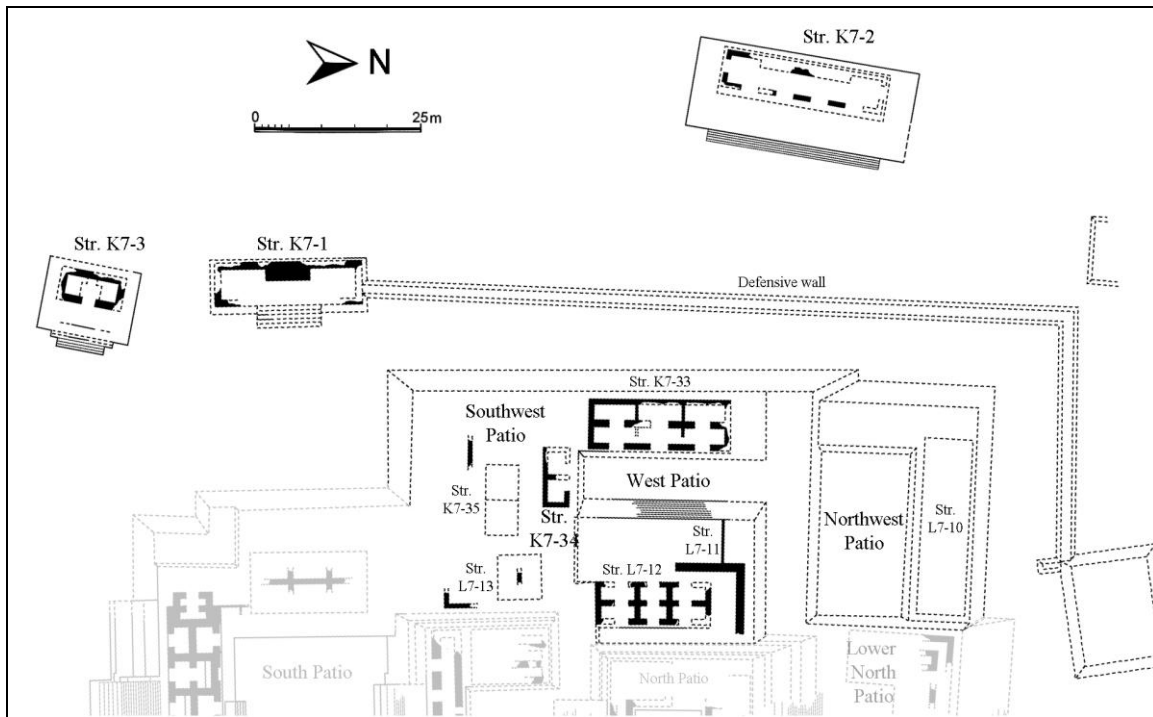


Figure 9.11 Map of the West Section of the royal palace (Map by T. Barrientos, VCAP)

In order to describe the different excavations carried out in the royal palace, all the specific results will be presented according to the division presented above. It will start with the central section, given that it was the area where most of the investigations took part and where the most important results were obtained between 1999 and 2005. The presentation of excavation results will continue with the Main Plaza and the east section, finishing with the western section, which was the one less studied in these years, although it has been the focus of the more recent excavations.

In addition, it will be important to add the description of some investigations carried out in structures and other features located in the palace immediate surroundings, especially in its southwestern portion. These were directly associated with the events that took part inside the palace itself and could be defined as part of the compound, even

when they were physically separated. This latter part will include a brief description of architectural features and monuments from the East and North plazas of the site, which were also directly related to the structures that delimited the palace perimeter.

9.2 Central Section

The Central Section of the royal palace of Cancuen (Figure 9.10) is composed by four courtyards arranged in a south-north axis, each one communicated with the others through staircases. The definition of a central area as separated from the rest of the acropolis reflects the intention of the architects of Cancuen to keep this section with a restricted access. After a detailed analysis of accesses, it was noted that these courtyards did not communicate directly with the ones located to their east and west sides, thus marking an important physical division within the compound and also suggesting a difference in functions. These four areas will be presented in a south to north order, trying to follow the possible routes that directed towards the north patio, the highest and most important courtyard of the palace.

9.2.1. The South Patio

The South Patio is a medium sized enclosed plaza that covers an area of 30 x 20 m (600 m²), which is delimited by Structure L7-9 to the south, Structure L7-8 to the north and Structure K7-36 to the west, which according to the Harvard map, consisted of a double row of three or four vaulted rooms (Tourtellot III *et al* 1978:201). Its eastern limit is defined by a low platform that separates this area and the Southeastern Patio (Figure 9.12).

It is important to note that this was the first area of the palace to be intensively investigated. This was due to the presence of various looters trenches in Structure L7-9, which exposed some of its fine masonry interior walls, and the remains of the looting that took place in the Hieroglyphic Stairway. The decision to study this building was also driven by the effects caused by the pass of tropical storm Iris in October 2001, which resulted in the fall of several large trees that left some buildings exposed and unprotected.

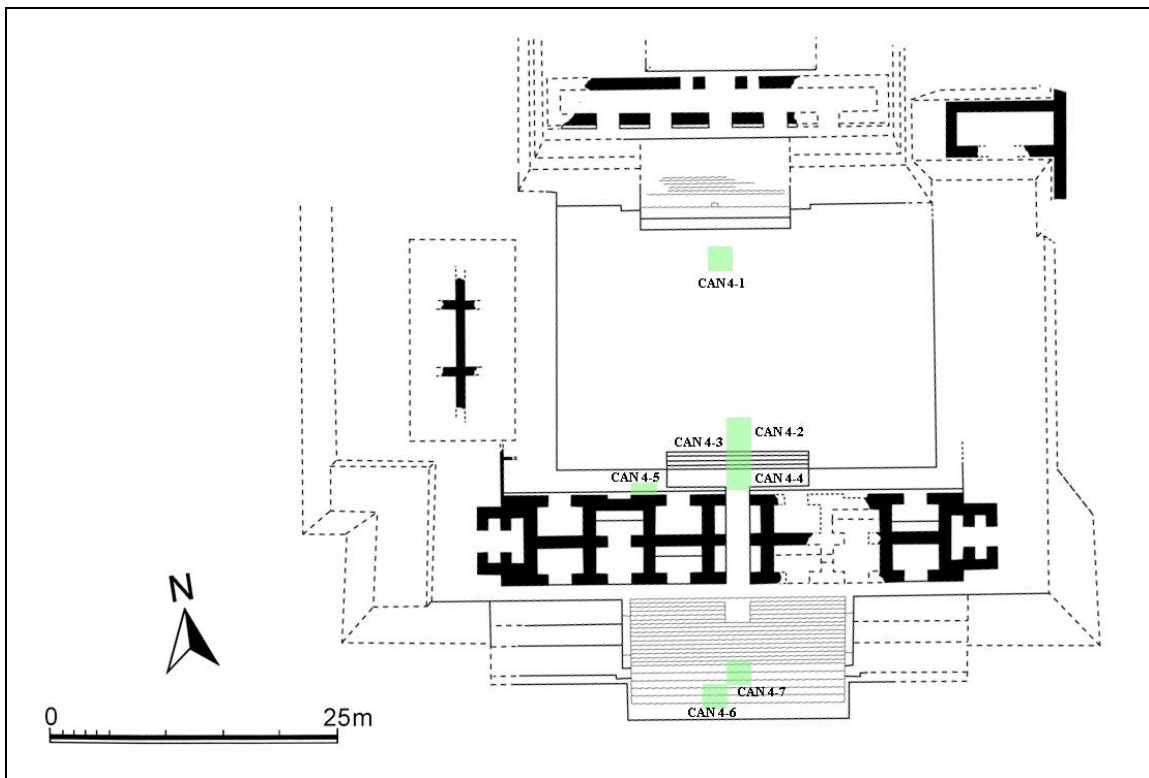


Figure 9.12 Map of the South Patio and initial excavations (Map by T. Barrientos, VCAP)

The first excavations carried out in the South Patio were part of the first field season of the project, in 1999. The operation number assigned was Operation CAN 4, and only one test pit was excavated that year, directed by Brigitte Kovacevich (1999). Two years later, more excavations were assigned to Operation CAN 4 as part of a test trench program that covered the north-south axis of the acropolis (Barrientos and Luin 2002).

Later on, as part of the 2002, 2003 and 2004 field seasons, Rudy Larios and Tomás Barrientos directed extensive excavations in Structure L7-9 (Barrientos *et al.* 2003; Larios, *et al.* 2004; Barrientos *et al.* 2005), whose western section was restored during the 2003, 2004 and 2005 field seasons (Larios and Barrientos 2003, Larios and Barrientos 2004; Barrientos *et al.* 2005). In addition, the Hieroglyphic Stairway, which is part of Structure L7-8, was excavated in 2003 (Barrientos *et al.* 2004) and 2007 (Romero *et al.*, 2008), being restored the same year (Luin 2008, 2009).

Patio Floor

The only excavation carried out in 1999 corresponded to CAN 4-1, a 2 x 2 m test pit located near the center of the patio. After exposing the humus layer, it was followed by some traces of the plaza floor, formed by small river pebbles mixed with light brown soil. The traces of the floor disappeared at 55 cm below the excavation surface. From this point, a dense reddish brown clay fill covered the entire test pit, until the unit was finished at 120 cm below the surface (Figure 9.13). Although the density of ceramics diminished, no sterile level was reached. Due to time constraints the test pit was finished in this point (Kovacevich 1999: 54).

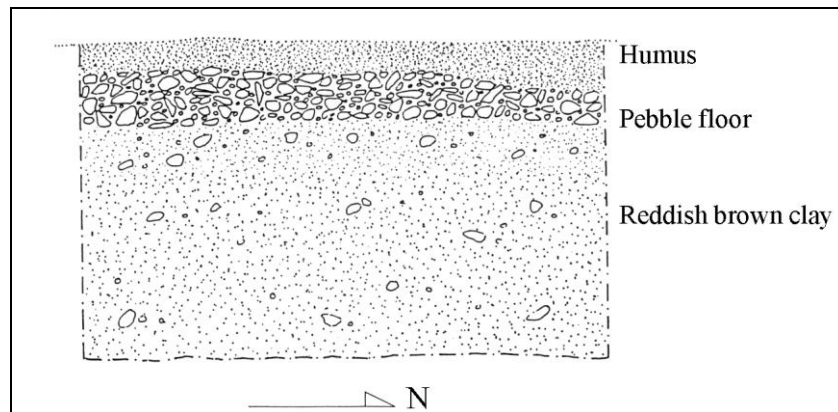


Figure 9.13 West profile, unit CAN 4-1 (Drawing by B. Kovacevich and L. Luin, VCAP)

Structure L7-9

During the 2001 field season, two test trenches were laid out following the two main axes of the royal palace. The north-south axis covered the entire central section, starting in the North Patio and finishing in the main access stairway of the South Patio. The trench was divided into 2 x 2 units, which were numbered according to the different operations assigned to each structure. As part of these exploratory excavations, seven test pits were excavated in 2001 (Barrientos and Luin 2001: 41-3) (Figures 9.12, 9.14).

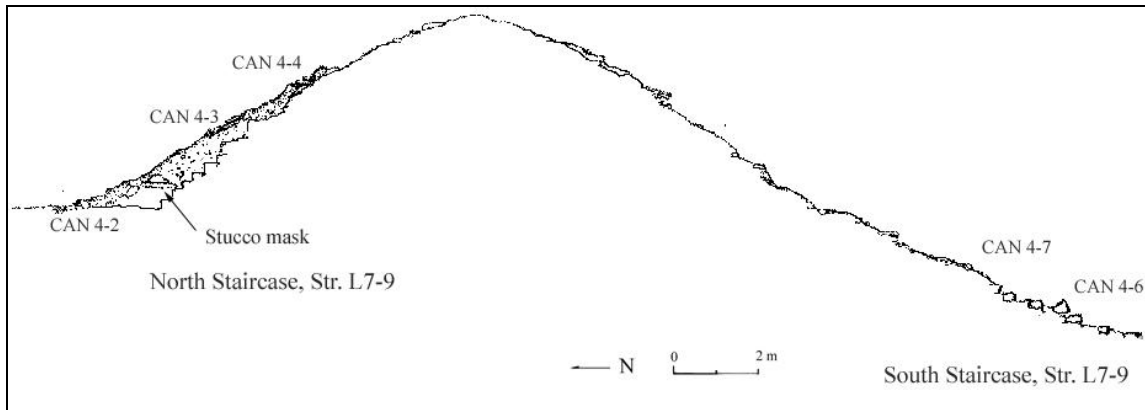


Figure 9.14 West profile, North-South trench (Drawing by R. Larios, L. Luin and T. Barrientos, VCAP)

Units CAN 4-2, CAN 4-3 and CAN 4-4 were laid out in the north façade of Structure L7-9. The first one exposed the patio floor at only 10 cm below the surface, consisting in small river pebbles. On top of the floor, ceramics and architectural rubble were recovered as evidence of the site abandonment episode. Unit CAN 4-3 was located directly to the south, and after the removal of wall collapse, six steps were uncovered as part of the staircase that led from the structure to the South Patio. The excavation of this test unit marked an important turning point in the investigations of the palace and the entire site, because it exposed for the first time the remains of stucco sculpture that once decorated the façade of this building and most of the royal palace. A stucco frieze 1 m

long was found upside down on top of a flat stone, and a deity mask was also found lying directly on top of the stairs, near the remains of feathers modeled in stucco, possibly as part of a headdress (Figure 9.15).

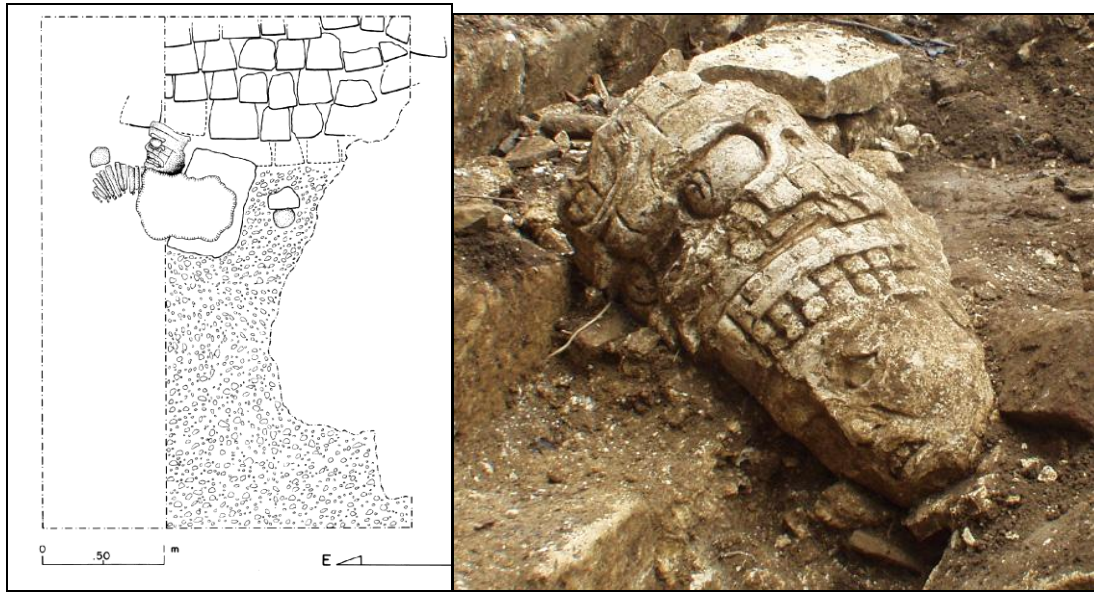


Figure 9.15 Left: Plan view of units CAN 4-2 and CAN 4-3 (Drawing by L. Luin, VCAP)
Right: Stucco head found on top of staircase (Photo by T. Barrientos, VCAP)

These features were left *in situ* in order to be removed later by specialist Constantino Armendariz. For that reason, unit CAN 4-4 only exposed the architectural rubble, removing only the thin humus layer. However, the context of the architectural debris indicated that this unit was located on the floor of the platform that supported the structure, as no stairs were evident. For that reason, unit CAN 4-5 was located west of the previous one, in order to uncover a partially exposed wall of the north façade of Structure L7-9. After the excavation, the exposed wall measured 2.25 m in length and 2.2 m in height, and functioned as a division for two doorways of the building façade. A small step was uncovered at the base of the wall, as well as much more stucco sculpture fragments, indicating that they decorated the entire façade.

Units 4-6 and 4-7 were located in the southern staircase that leads from the South Plaza to Structure L7-9. A very thin humus layer was removed in order to expose the six initial steps in the bottom part of the staircase.

These exploratory excavations indicated that Structure L7-9 was relevant for the interpretation of the entire palace complex, especially because it was clear that it functioned as its main southern access. The decision to intensively explore this building was also driven by the conservation measures that were defined to protect the areas affected by looting and the loss of the forest cover due to the hurricane Iris.

Given the previous scenario, the 2002 field season started with a detailed recording and analysis of the architecture exposed in four rooms of Structure L7-9. A preliminary assessment of its interior design identified a total of 18 rooms, which were numbered from west to east. Also, in order to carry out extensive and controlled excavations, a grid of 400 2 x 2 m units was laid out to cover the entire building. In 2002, 73 of these units were excavated (CAN 4-8 to CAN 4-81) with the aid of Alejandro Seijas and stucco conservator Constantino Armendariz (Barrientos *et al.*, 2003). Other 41 units were excavated in the 2003 field season, also with the assistance of Alejandro Seijas (CAN 4-81 to CAN 4-122) (Barrientos, *et al.* 2004). The last units to be excavated were another 29 units as part of the 2004 field season (CAN 4-123 to CAN 4-152), with the participation of Claudia Arriaza and Paola Torres (Barrientos *et al.*, 2005). In total, 152 excavations units were completed by the end of the 2004 season, covering half of the building, its two complete staircases, and some portions of the adjacent plazas (Figure 9.16).

After three field seasons of extensive excavations, the general layout of Structure L7-9 was finally known in full detail. The building measures 45 m long and 10 m wide, with 18 rooms distributed in a symmetrical pattern both in east-west as in north-south directions. Its southern façade has seven doorways and a monumental staircase 18 m wide that descends to the exterior South Plaza, while the northern façade only has five doorways and an 18 m wide small staircase that descends to the interior South Patio. It also has a doorway in its east side and another one in the west side (Figure 9.17). The southern stairway reaches a basal platform 6 m above the plaza floor, and the superstructure had an approximate elevation of 8 m, creating a total height of 14 m in its southern facade.

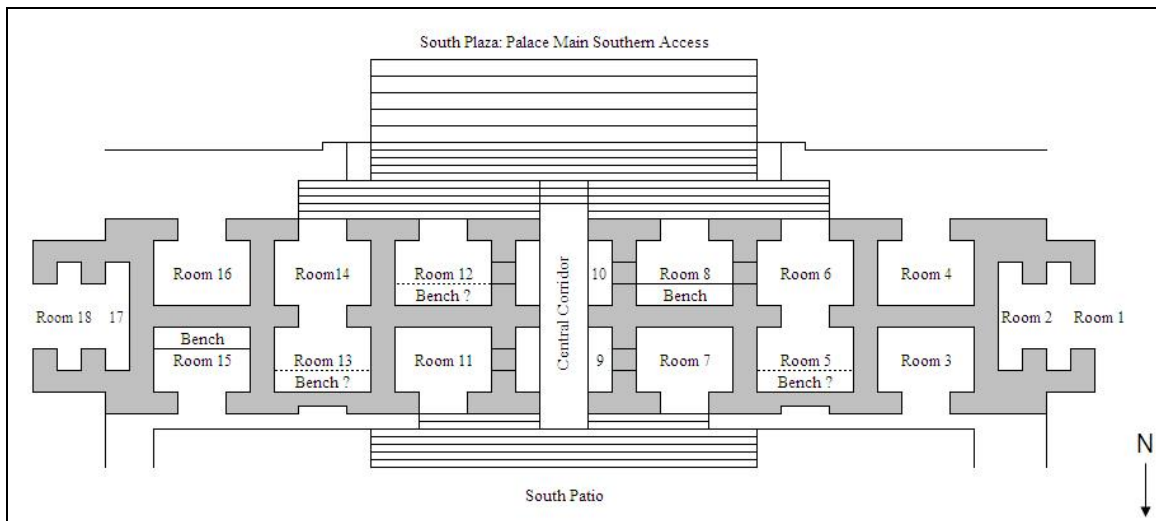


Figure 9.17 Layout (not to scale) of Structure L7-9 (Drawing by T. Barrientos)

The description of all excavations carried out in Structure L7-9 will be divided into the north platform, the two main staircases, sets of paired rooms, and other architectural features:

North Platform and North Stairway:

The northern façade of the building presents an elevated platform with a staircase that communicates the interior of the building and the plaza floor of the South Patio. Stratigraphic excavations in rooms 17 and 5 indicated that the structure was not built on top of the platform. Instead, the platform was added to the original building on its final construction stages. This conclusion was supported by the depth of the interior walls, which is deeper than the platform floor, thus indicating that the platform was added to the façade when the interior floor of the building was raised to its final and actual level.

The central staircase of the platform was initially identified in 2001 by units CAN 4-2 to CAN 4-3, which were part of the north-south test trench. Later on, in the 2002 field season, the majority of the staircase was exposed with grid units CAN 4-9 to CAN 4-24, and CAN 4-26. These excavations defined 5 steps made with soft limestone almost-cubic blocks, and two plastered steps that led from the platform top surface to the structure central corridor floor. The rest of the staircase was finally defined during the 2003 excavations; with grid units CAN 4-82 to 84, 4-104 on its eastern limit, and grid units CAN 4-86 to 89, 4-118 and 4-119 on its western limit. Unit CAN 4-104 defined the east wall of the staircase and its juncture with the platform façade. In this corner, and directly above the plaza floor, various stucco sculpture fragments were discovered, including an arm and hand. As part of this context, several large ceramic fragments were also recovered, that were part of a deposit found in units CAN 4-29 to 4-34 and CAN 4-104. This deposit also contained a large amount of obsidian and chert flakes, a greenstone celt, and many obsidian micro-flakes embedded into the plastered plaza floor; according to Andrieu (pers.com.), the presence of these flakes could indicate an abandonment deposit.



Figure 9.18 Excavation of Northern Staircase, Structure L7-9 during 2003 field season
(Photos by T.Barrientos, VCAP)

It is important to note that the highest concentration of stucco sculpture fragments in the entire building was on top of this staircase, indicating that the central entrance of the north façade was the most decorated.

The northeastern end of the platform (which also forms the southeastern corner of the South Patio) was investigated in five 2 x 2 m units of the main grid, corresponding to units CAN 4-29 to CAN 4-34. These excavations revealed that the platform façade was made with soft limestone masonry, which is typical of the later additions of this building and the entire palace complex. Within unit CAN 4-29, the platform façade presented a small square drain hole at the level of the plaza floor, and another plastered square hole in the upper section of the platform (Figure 9.19). At the time of the excavation, it was interpreted as a ventilation hole for a possible room. However, after the excavations in the opposite end of the platform (unit CAN 4-41), seems that this hole is part of a small “checkered” decorative wall made with sandstone narrow blocks (Figure 9.20).

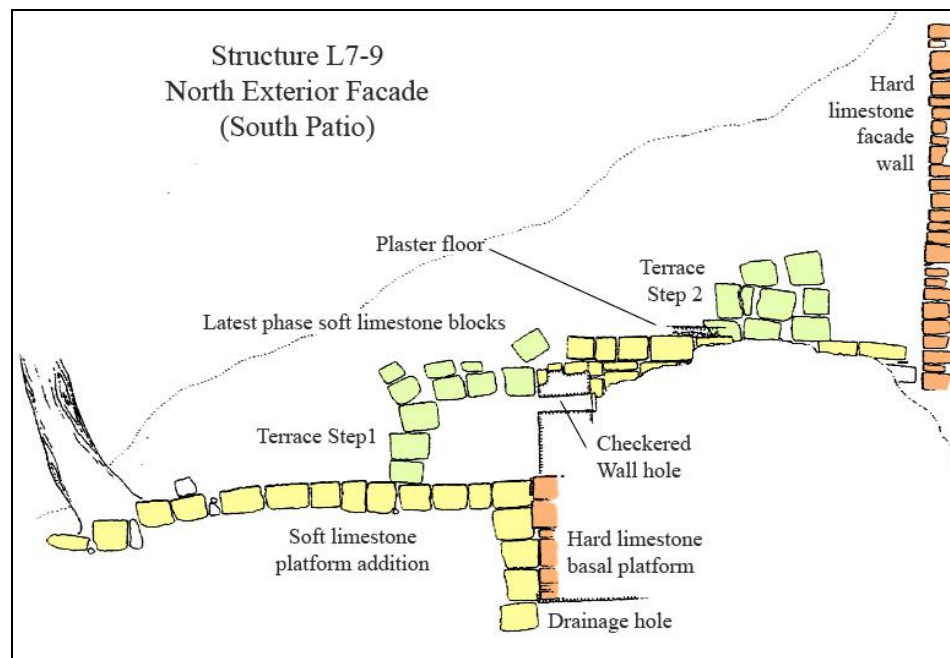


Figure 9.19 West profile of North Exterior Façade, Structure L7-9
(Drawing by L. Luin and T. Barrientos,VCAP)



Figure 9.20 Excavation of Southwest corner of South Patio, Northern façade, Structure L7-9
(Photos by T. Barrientos, VCAP)

In front of the platform, there was a large amount of ceramics found on top of the plaza floor, including a semi-complete fine gray vase, a polychrome plate with hollow supports, and a fine orange vessel. This deposit also included some utilitarian striated jar fragments, which are very rare at Cancuen, but common in almost all lowland sites. The presence of three fine incised shell fragments and some beads suggests that this feature corresponds to a deposit or termination ritual dated to the site abandonment.

The northwestern end of the platform was also uncovered as part of grid units CAN 4-41, and CAN 4-44 to CAN 4-47. This excavation exposed the soft limestone façade, with some areas still with plastered finish. Also, on top of the platform, a small and peculiar decorative wall was uncovered, with a perforated “checkered” pattern that resembles the roof combs of the temples in the Usumacinta river region. This “checkered” wall was made with small rectangular burnt sandstone blocks that were plastered in all sides, including the interior of the quadrangular holes that they form (Figure 9.21).



Figure 9.21 “Checkered” decorative wall in west end of Northern Platform of Structure L7-9
(Photo by T. Barrientos, VCAP)

In front of the staircase northwest corner, another stucco headdress was found lying on top of the plaza floor, within unit CAN 4-93. This headdress contained short feathers and designs of crossed bands in its frontal part (Figure 9.22a). Given its location far from the building façade, it is difficult to identify its original location, though it is probable that was part of the sculpture decorating the cornice above the entrance of Room 7 or the back wall of Room 5. Unit CAN 4-86 exposed the northwestern corner of the staircase, where a small stucco human head was found. Its eyes were made with small and very fine circular obsidian inlays (Figure 9.22b).



Figure 9.22 Stucco sculpture fragments found in front of the Northern Platform of Structure L7-9
(Photos by T. Barrientos, VCAP)

The northwest corner of this platform also corresponds to the southwestern corner of the South Patio, because the platform of Structure L7-9 joins the platform of Structure K7-36, located in the west side of the plaza, thus creating an enclosed area that was only accessed from the central staircase of Structure L7-9. The South Patio was probably more open in its original layout, but these later soft limestone platforms and additions were clearly intended to restrict access and visibility.

The exploration of the north platform chronology was carried out in 2003, with grid unit CAN 4-118. This unit was located on the platform floor level, just outside the base of Room 5 north wall, which was still visible after cleaning the looters trench (Lot 1). From the platform floor level, the unit was reduced to a 1 x 1 m area due to space limitations. Below this floor, a construction fill was found (Lot 2), made with yellowish sandstone blocks. This lot was finished at 40 cm below the platform level, when a previous plaster floor was found. This floor was the top surface of a first version of the platform. A third lot was defined below this second floor, exposing another construction fill also made with yellowish sandstone blocks. This fill was part of the first version of the platform, which continued until reaching a depth of 140 cm, when a third plaster floor was revealed (Figure 9.23).

Hence, the first version of the platform was built on top of this early floor, whose level corresponds to the South Patio plaza floor. The stratigraphic context of these floors and architectural features proved that the two versions of the north platform were added to a previous stage of Structure L7-9, which was built on top of the plaza floor level or related to an earlier one.

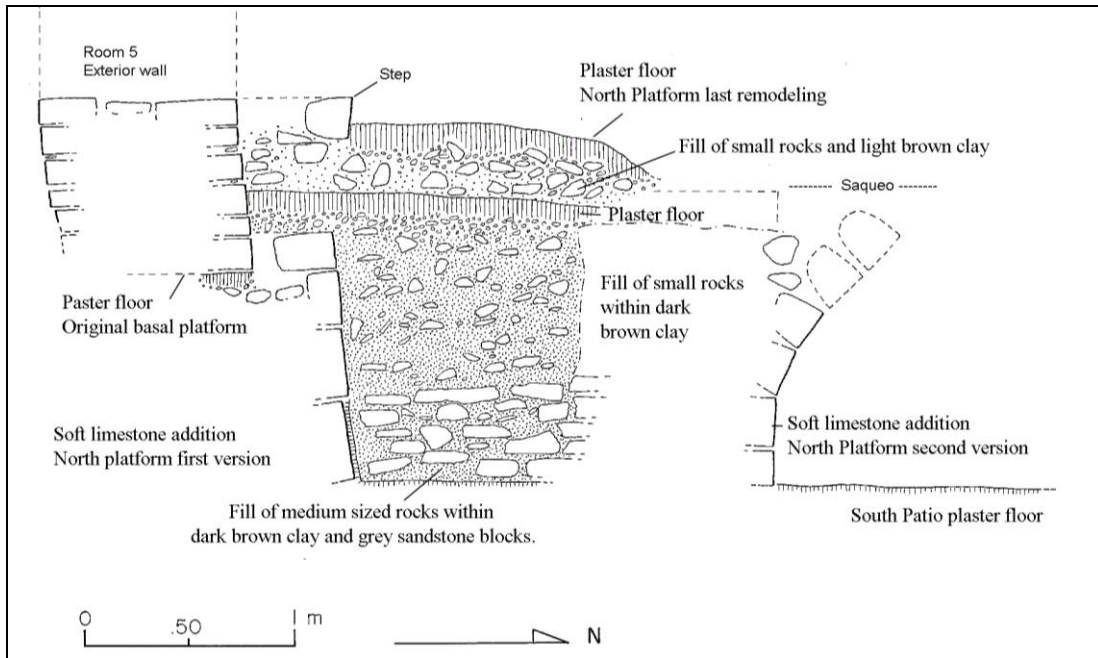


Figure 9.23 East profile of unit CAN 4-118, North Platform, Structure L7-9
(Drawing by L. Luin and T. Barrientos, VCAP)

In sum, the entire north façade of Structure L7-9 was exposed through units CAN 4-4, 4-5, 4-16, 4-20, 4-27, 4-28, 4-35, 4-38, 4-84, 4-85 y 4-90. All of them presented high densities of stucco sculpture fragments, given the complexity of its original cornice decoration, which collapsed directly on top of the northern platform and its staircase.



Figure 9.24 North Platform and staircase of Structure L7-9, restored in 2004 (Photo by T. Barrientos)

These excavations revealed the doorways and two small steps that led to rooms 3, 7 and 11, showing that the floor level of these rooms was higher than the north platform surface. However, these two steps were interrupted in the central corridor (Room 9) entrance, suggesting that it was a later addition that involved the rising of the floor level on all the interior rooms, with exception of rooms 9 and 10, which form the central corridor. Units CAN 4-39, 40 y 41 exposed the exterior walls of rooms 2 and 3, showing areas with good evidence of the original thick white plaster layer that covered the walls. The excavation of the northern façade reached the northwestern corner of the superstructure, revealing an inset corner, corresponding to rooms 1 & 2.

South Platform and South Stairway

This monumental staircase was used as one of the two public entrances to the palace complex. It was formed by two sections: a lower section with five wide steps made with large hard limestone blocks, and an upper section comprising 18 narrow steps made with small soft limestone blocks.

During the initial test excavations, units CAN 4-6 and CAN 4-7 defined the five lower steps of the staircase, made with blocks of hard limestone. During the 2002 field season, this lower part was entirely exposed by thirty 2 x 2 m grid units (CAN 4-48 to CAN 4-77), given that the humus layer in this area was very shallow and almost no stucco sculpture fragments were found in top of it. However, another stucco human head was found in units CAN 4-36 and CAN 4-37, lying directly on top of the fifth step. This sculpture measured 75 x 50 cm. and the headdress showed zoomorphic features and

abundant feathers. It is possible that this human head was part of a full figure located above the doorway lintel of Room 12.

The lower part of the stairway was restored in 2002 (Barrientos *et al.*, 2003: 50, Larios y Barrientos, 2003: 70), and the excavations in 2003 finished defining the dimensions and characteristics of the staircase and the southern façade of the basal platform (Figure 9.25).



Figure 9.25 Lower steps of southern staircase, Structure L7-9, as restored in 2003 (Photo by T. Barrientos)

In the southeastern corner of the stairway, unit CAN 4-70 exposed the first terrace of the platform and the first evidence of an *alfarda* or balustrade in the upper section of the staircase. This feature was entirely exposed in 2004 through units CAN 4-143, 4-146, 4-147 and 4-152. (Figure 9.26)

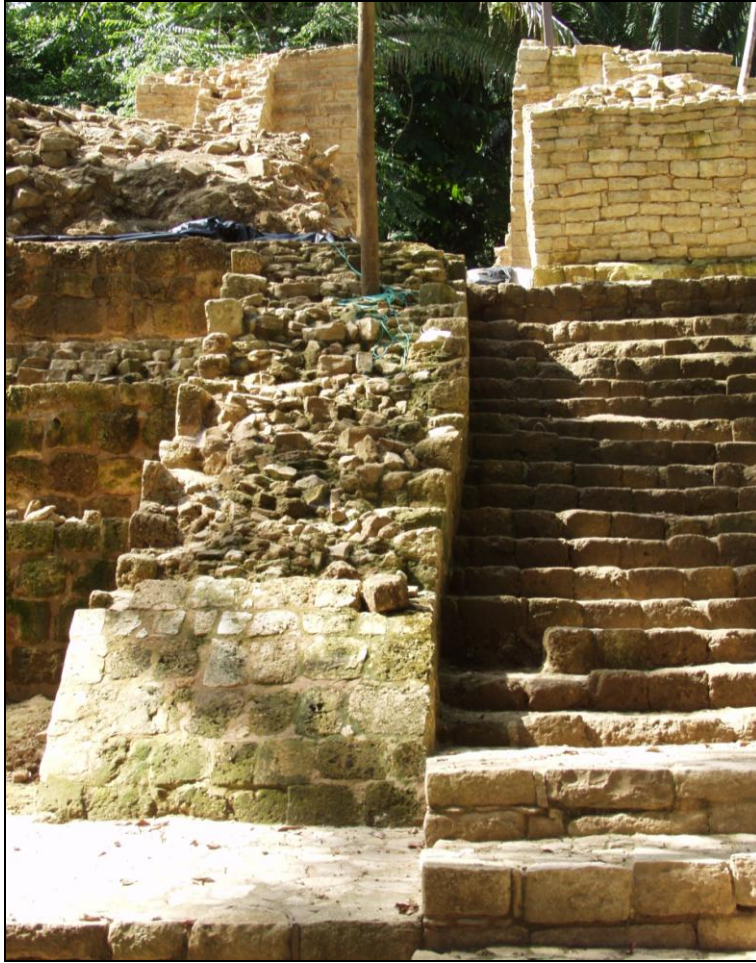


Figure 9.26 Restored balustrade, south staircase, Structure L7-9 (Photo by T. Barrientos, VCAP)



Figure 9.27 Southeast (left) and southwest (right) areas of Structure L7-9, showing terrace walls (Photos by T. Barrientos, VCAP)

In the west side of the staircase, its southwestern corner was exposed by unit CAN 4-57, and the wall of the first terrace was exposed in a 5 m area in units CAN 4-58, 4-68, 4-69, 4-97 and 4-98. These units revealed that the platform has two inset corners before joining the staircase, but they were probably added to the original wall, which has a total height of seven rows of medium sized limestone blocks (Figure 9.27).

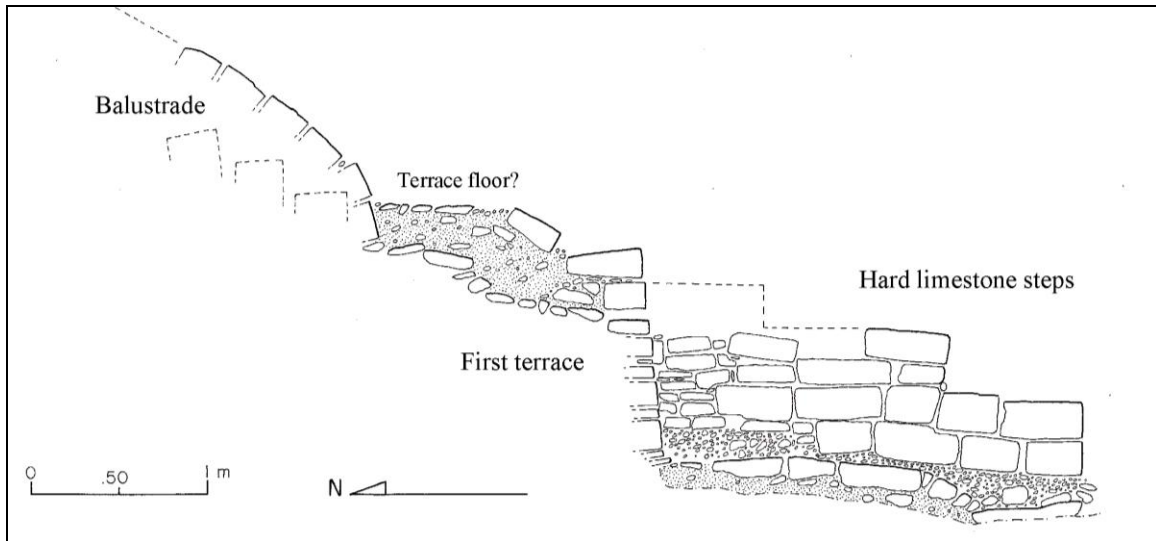


Figure 9.28 West profile of southern staircase, CAN 4-57, Structure L7-9
(Drawing by L. Luin and T. Barrientos, VCAP)

At the base of the staircase, a *corozo* tree palm had to be cut in order to restore the entire first step. Given that the tree destroyed part of the staircase, a 2 x 2 m test pit was located in that spot in order to investigate the chronology of the South Plaza. The first level of unit CAN 4-81 consisted in 40 cm of debris located on top of the stone plaza floor. Beneath the floor, the second level was defined in a reddish soil mixed with river pebbles, where two bags of ceramic sherds were recovered. Also, in the northeast corner of the unit, a complete jar neck of the Tinaja Rojo type was found. However, the presence of other large fragments of the same jar, several pieces of a Saxche Palmar polychrome plate, and some carbon remains, suggest that these are the remains of a dedicatory

offering that involved the ritual breaking of two vessels that correspond to Lowland ceramic types (Figure 9.29). The third lot (CAN 4-81-3) consisted in a dark brown clay fill with pebbles, which reached a depth of 70 cm, where the sterile soil was found. The east profile of the unit clearly revealed the construction sequence of the stairway, consisting of three stages. The first one was laid on top of the stone plaza floor, in steps formed by thin cut stones, which were later covered by a staircase built with square soft limestone blocks. These two were covered by a fill of yellowish sandstone blocks that supported a floor made with plaster and small pebbles. The third and last one is the staircase visible today, built on top of a fill made with irregular stones.

This sequence was also registered in units CAN 4-54 and CAN 4-65, which covered an area of 4 x 2 m in the center of the lower staircase. The profile revealed the previous version of the staircase, made with soft limestone blocks, as well as the reddish fill mixed with pebbles (Figure 9.30). However, no ceramics were recovered.

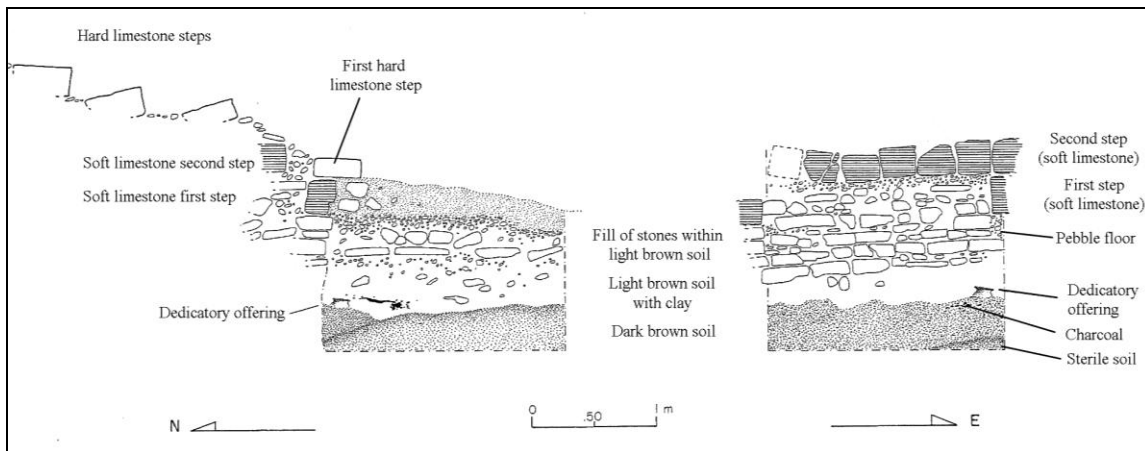


Figure 9.29 West and north profiles, unit CAN 4-81, showing chronology of Structure L7-9 south staircase (drawing by Luis F. Luin)

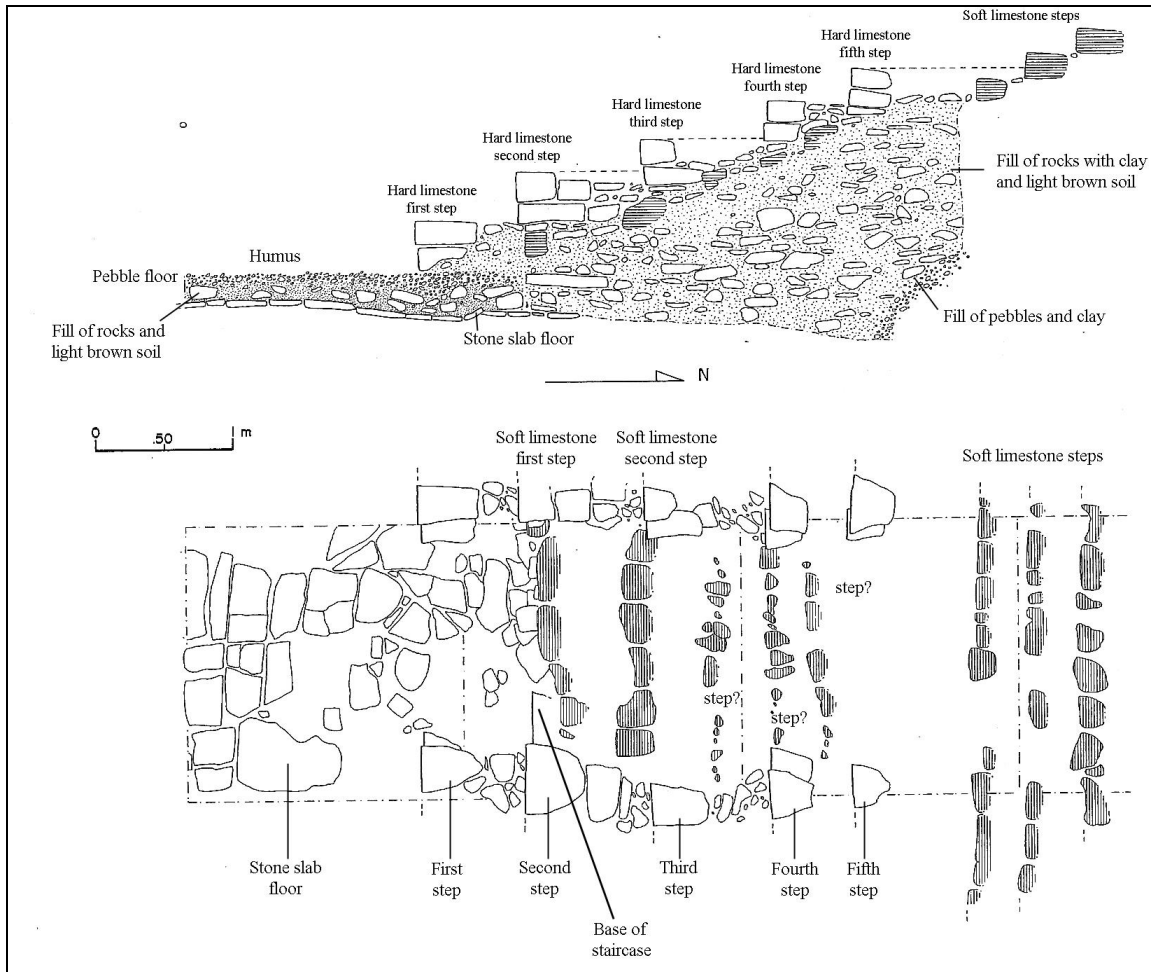


Figure 9.30 East profile and plan view of Structure L7-9 south staircase
(Drawing by L. Luin and T. Barrientos, VCAP)

The last section excavated in 2003 was a portion of the upper staircase consisting in 10 steps, which were covered by units CAN 4-71 to 4-77, and CAN 4-111 to 4-117. Among the materials recovered, two pseudo-glyphs made in stucco were found in unit CAN 4-122, on top of the staircase (Figure 9.31). Other materials found in these units included a stone bark beater and various grinding stones. The excavation of these steps was not completed, and was followed in 2004 with units CAN 4-122, 4-128, 4-129, 4-131 to 4-139, 4-143, 4-146, 4-147 and 4-152 (Figure 9.32).



Figure 9.31 Decorative “pseudoglyphs” found on top of southern staircase, Structure L7-9
(Photo by T. Barrientos, VCAP)

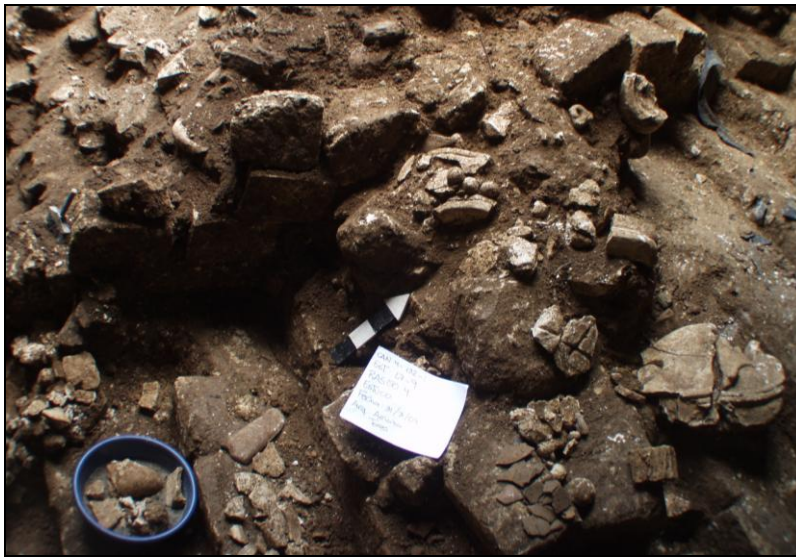


Figure 9.32 Excavation of southern staircase of Structure L7-9, 2004 field season
(Photo by T. Barrientos, VCAP)

The excavations in 2004 were started with unit CAN 4-122, located in the western end of the south platform, in front of rooms 6 and 8. Although the unit was started in the previous season, the excavation removed all the rubble from wall fall, until exposing the plastered floor of the platform and the two steps leading to Room 8. On top of the floor, a human stucco sculpture fragment was found, containing a water lily motif and measuring 23 x 26 cm. Unit CAN 4-128 uncovered the western end of the stairway, and unit CAN 4-129 was located south of the previous ones, and exposed several soft limestone steps,

some still covered with plaster. Another large stucco sculpture fragment was found at 1.2 m from the surface, on top of the first step. Other sculpture fragments were found in units CAN 4-131, 4-132, 4-133, 4-137 and 4-138. The most notorious fragment was a 50 cm long human profile head found in CAN 4-132, whose style is very similar to the sculptures of the Usumacinta region, just like the ones from Palenque and Yaxchilan (Figure 9.33).



Figure 9.33 Stucco human face *in situ* (Photo by T. Barrientos, VCAP)

The southern stairway presented a small quadrangular platform or altar in its upper central part, which was investigated with unit CAN 4-139, a 1 x 1 m test pit located on top of its flat upper surface. Its objective was to find out if this platform was added to the original stairway, and to look for a possible dedicatory offering. The first level broke the stucco floor, which was 11 cm thick in the west profile. Below the floor, the fill was conformed by yellowish brown clay with small stones that continued until 1.45 m from the surface. This proved that the platform was part of the original stairway.

South Plaza

The South Plaza is defined as the open space located south of the southern stairway of Structure L7-9, which also functioned as one of the main accesses to the palace complex. This floor constitutes the surface of a wide terrace from the immense leveling that supported the palace and its surrounding buildings. The terrace descends further south through a small staircase, very close to where the south pool or cistern was discovered (see description below) and communicating with the residential groups in quadrants L6, K6 and K7.

The plaza floor was first exposed in 2003 with units CAN 4-59, 4-77 and 4-48, as part of the excavations at the base of southern staircase of Structure L7-9. These pits revealed a floor made with flat stone slabs, just as it has been documented in other plazas that surround the palace (Kovacevich 1999: 49-51). Later on, during the 2003 season, other units were located in the plaza under Operation CAN 42, in order to locate a modern PVC pipe drainage system that descends from the South Patio, which started its restoration plan at that time.

The first excavation was a narrow trench of 36 x 1 m, where the PVC pipe was going to be located. The trench was designed “west trench”, and also unit CAN 42-1. To the east, a similar trench was opened, named unit CAN 42-2. Both trenches revealed that the stone floor extends south 12 m from the base of the southern stairway of Structure L7-9 (Figure 9.34). As the PVC pipe was being placed under the stone floor level, it was clear that the original plaza floor had a slight slope that allowed water to flow to the south. These excavations also revealed that the fill under the floor consisted of yellow sandstone mixed with brown soil. Finally, at the southern end of trench CAN 42-1, a 4 x

2 m unit was laid out (CAN 42-3), in order to investigate the southern end of the platform-terrace of the plaza. Unfortunately, the preservation of this part of the terrace did not show any evidence of a formal wall or staircase, only the yellowish sandstone fill.



Figure 9.34 Excavation of trench CAN 42-1, showing the flat stone floor of the South Plaza
(Photo by T. Barrientos, VCAP)

Rooms 1 & 2

Room 2 was first documented in 2000 because the looters exposed a large amount of its interior walls that surpassed 4 m in height (Barrientos and Luin 1999: 37) (Figure 9.35). It seems clear that the looters dug into some of the rooms of the building, but they found nothing more than construction fill and empty rooms. After drawing one of the tall masonry walls, this room was initially stabilized through wooden beams, as a temporary measure, but they were entirely backfilled at the end of the 2002 season, in order to

stabilize this part of the building. In 2003 the room was re-excavated through unit CAN 4-105, and that allowed a better understanding of its layout, which corresponds to a long and small room that communicates to the west to Room 1, which also has a doorway to the west. The upper parts of its northern wall were consolidated, and at least a third part of its eastern wall was restored, given the high degree of destruction by the looting.

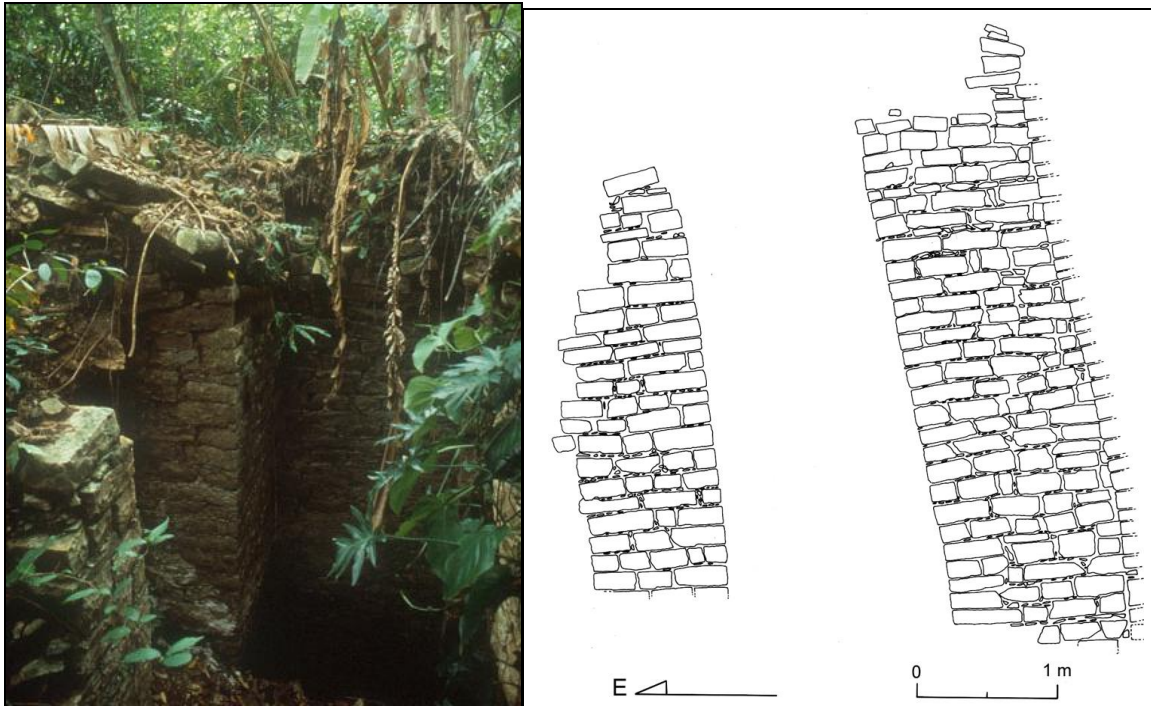


Figure 9.35 Walls of Room 2, Structure L7-9 as they were found in 1999
(Photo by T. Barrientos and drawing by L. Luin, VCAP)

The western access to rooms 1 & 2 was explored in 2004 through 17 grid units that exposed the entrance and the 4 m high exterior walls. Of great importance is the discovery of the most complete human sculpture that decorated the building, whose remains were located directly on top of the platform floor, in front of Room 1 entrance. Several sculpture fragments, especially feathers, were found dispersed in units CAN 4-126, 4-127, 4-141 and 4-144, and the entire torso made in limestone, was found facing down in unit CAN 4-126 (Figure 9.36). The torso included parts of the neck, thigh,

forearm, and a belt, possibly a ballplayer yoke. The head was not found, suggesting that it rolled down to the base of the building. Nevertheless, the remains of the collapsed cornice were identified few meters to the east; in units CAN 4-127 and 4-137.



Figure 9.36 Human torso made with stone and stucco, Room 1 entrance, Structure L7-9
(Photo by T. Barrientos, VCAP)

Units CAN 4-47, 4-127 and 4-141 uncovered the two door jambs of the entrance, measuring 2 m in width. The wall of the northwest jamb was 1.55 m wide and 3 m tall (Figure 9.37). Units CAN 4-46 and 4-125 exposed two walls that were added to the western façade, which joined structures L7-9 and K7-36; the first one measured 0.6 m wide by 2.2 m in height; and the other one was 1.10 m wide by 2.4 m tall.



Figure 9.37 Restored door jambs of Room 1 entrance, Structure L7-9 (Photo by T. Barrientos, VCAP)

Another feature found in these excavations was a stone alignment found in units CAN 4-150 and CAN 4-151, just in the western end of the stucco floor located in front of Room 1 entrance. The alignment was formed by stones measuring approximately 20 x 20 cm, and a 2 m wide sloping stone floor was located directly west of it. These two features have been interpreted as part of a water drainage system.

Rooms 3 & 4

These two rooms are located adjacent to the westernmost rooms of the building (rooms 1 and 2), and were separated by a division wall. Each one has a doorway that

faces the north and south sides of the structure. Room 3 was initially investigated in 2002, through grid units CAN 4-39, 4-40 and 4-41 that exposed both door jambs of its northern entrance and its exterior wall with remains of thick white plaster (Figure 9.38).



Figure 9.38 Restored entrance of Room 3, northern façade, Structure L7-9 (Photo by T. Barrientos, VCAP)

In 2003 these rooms were more deeply investigated, liberating the upper portions of all their walls, through units CAN 4-99 to 4-102. These excavations revealed that both rooms did not communicate, given the presence of a division wall. The fill inside these two rooms contained large flat stone slabs that may have been part of the roof, and their deposition pattern did not suggest a roof collapse. Instead, the fill evidenced an intentional activity, as was observed in other rooms of this structure, probably as result of

a remodeling episode that was left unfinished, or a termination activity (Figure 9.39). The interior fill was not removed, and was consolidated as it was found, in order to leave visual evidence for the final construction episode of the building. However, the upper part of the division walls (0.50 m) and room fill were restored to prevent water filtration.



Figure 9.39 Fill of Room 3, showing remains of collapsed flat stone roof (Photo by T. Barrientos, VCAP)

Rooms 5 & 6

These two rooms communicated via a doorway between them, and their only entrance was located in Room 6 doorway, as part of the southern façade of the building. A looters trench penetrated the northern wall of Room 5, destroying most of it (Figure 9.40). During the 2002 season, units CAN 4-38 and CAN 4-39 registered this looting, in order to recover information from the exposed architecture. This initial exploration revealed that at this point, the northern façade contained a shallow wide niche that could have held a relief or tablet with stucco sculpture, given the high density of fragments recovered at the base of the Room 5 back wall (Barrientos *et al.*, 2003: 53) (Figure 9.41).



Figure 9.40 Northern wall of Room 5, broken by looter's trench (Photo by T. Barrientos, VCAP)



Figure 9.41 Restored northern wall of Room 5, showing original niche (Photo by T. Barrientos, VCAP)

Two large sculpture fragments were recovered; one was a fragment of an individual profile, including an ear flare and a water lily motif, measuring 20 x 15 cm; and the other one consisted of a zoomorphic eye with an obsidian incrustation that measured 15 x 15 cm. (Figure 9.42)



Figure 9.42 Fragment of stucco human sculpture with obsidian incrustation
(Photo by T. Barrientos, VCAP)

Directly on top of the platform surface a 10 cent coin was recovered, providing evidence for the date of the looting. The date of the coin is 1992, suggesting that the looting was done no less than 7 years before the starting year of the project, which is very recent compared with looting activities in other Maya sites in Petén.

In 2003, units CAN 4-79 and CAN 4-72 liberated the upper portion of Room 6 walls, revealing again that its fill was intentional. A very interesting discovery was made within unit CAN 4-79, which consisted in a limestone polisher for different sizes of ear flares. This artifact was found in the northeastern corner of the room, but only few centimeters below the mound surface (4.2 m above the room floor) and within the room fill (Figure 9.43). Very close to this artifact, a ceramic object of conic shape was also found. It is important to note that another ear flare polisher was found in Structure M9-1 (Jackson 2003: 183) (Figure 9.44). However, as it will be discussed in Chapter 10, there is no evidence of any jade working within the palace. Instead, the jade debitage found in the jade workshop area points only to a preform industry and not to finished products.



Figure 9.43 Location *in situ* of earflare polisher inside Room 6 fill (Photo by T. Barrientos, VCAP)

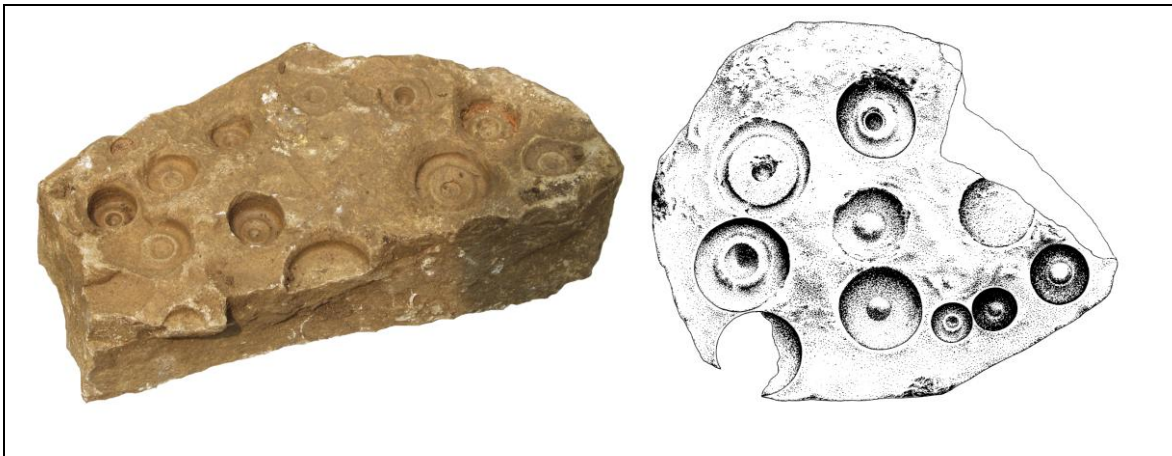


Figure 9.44 Earflare polisher from Structure L7-9 (left) and Structure M9-1 (right)
(Photo by T. Barrientos and drawing by L. Luin, VCAP)

The looting excavation in Room 5 not only busted through its northern wall, but also emptied almost the entire chamber. Nevertheless, the looting went below a plaster floor, revealing an interesting stratigraphy. Unit CAN 4-80 was a 2 x 2 m pit located in this area, in order to dig just where the looting stopped and to reveal more data related to the construction history of the building (Figure 9.45).

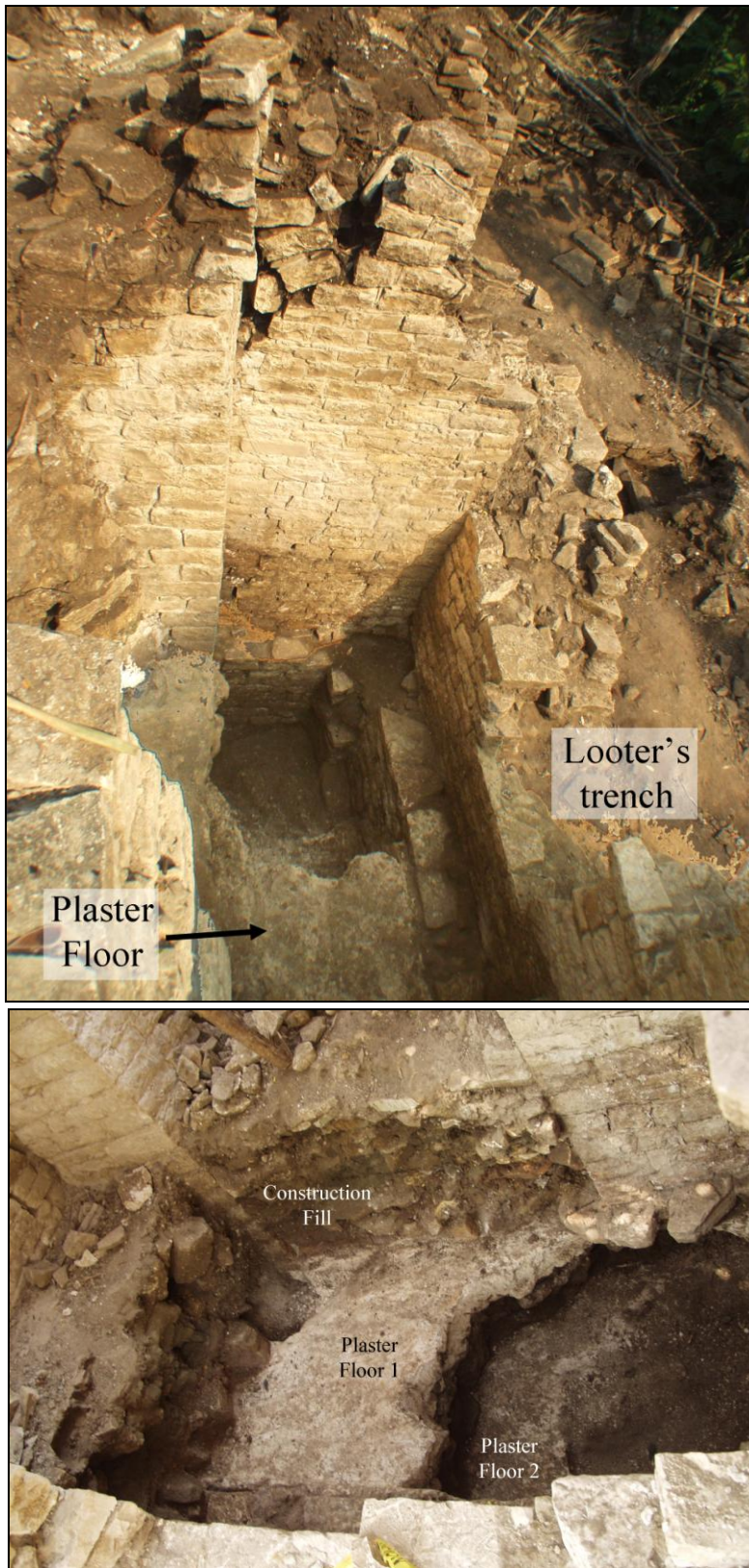


Figure 9.45 Interior of Room 5 after cleaning the looting excavation, showing sequence of plaster floors
(Photos by T. Barrientos, VCAP)

As a result, this unit constitutes until now, the best chronological and stratigraphic register of Structure L7-9, with ceramic lots well defined between floors and other sealed contexts. The first lot (CAN 4-80-1) was defined as the looting debris, which reached a depth of 1 m below the floor. After cleaning the looting excavation, another plaster floor was revealed. CAN 4-80-2 was the first controlled lot inside Room 5, which consisted in the construction fill between the two plaster floors (Floor 0 and Floor 1). The fill was made with yellowish sand stone, and it supported the last floor, which also supported a high bench that was reached from a small staircase. This seems to be part of a late remodeling episode that was also observed in Room 15 (Barrientos *et al.*, 2003: 48).

Then, it is probable that rooms 5 & 13 had the same pattern (see below). The remains of this late floor (Floor 0) were observed in the profile of the west jamb of the interior doorway that communicates rooms 5 & 6, indicating that the original room floor (Floor 1) was located 1.4 m below the looting surface. Lot 4-80-3 was thus defined below Floor 1, which was very well preserved and had a thickness of 10 cm. Below the floor, the fill was made with brown soil and contained some sherds of Saxche Palmar polychrome plates. At 1.70 m another plaster floor was found (Floor 2), which had a 20 cm thickness and was still partially cut by the looting excavation (Figure 9.46). In the west side of the unit, the floor slopes upward, indicating the presence of an architectural feature that could have been a bench lateral rest of a substructure (L7-9-Sub-1), but that was not clear (Figure 9.47).

Lot 4-80-4 was defined below the floor, in a fill made with blocks of compact brown soil (“clay stone”) that reached a depth of 2.4 m. Here, the stratigraphy changed radically to pure clay fills.

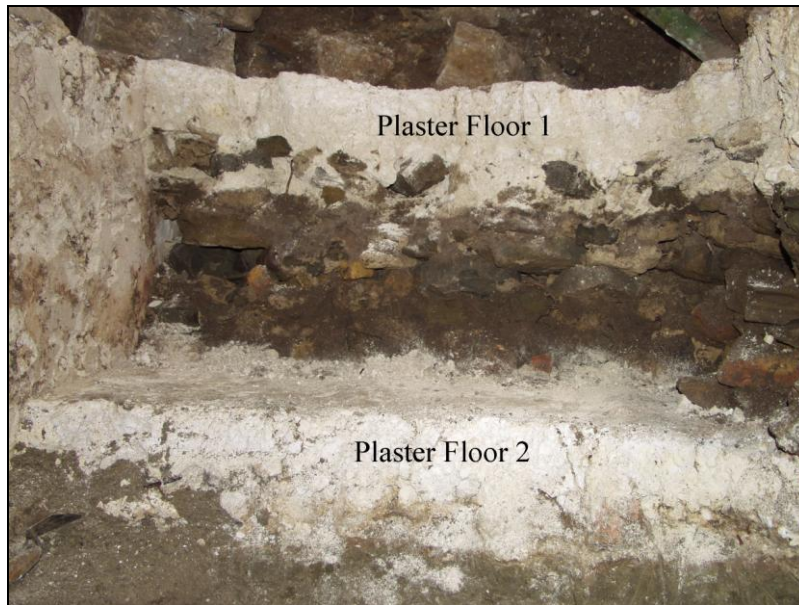


Figure 9.46 Floors 1 & 2 of Room 5, Structure L7-9 (lot CAN 4-80-3) (Photo by T. Barrientos, VCAP)

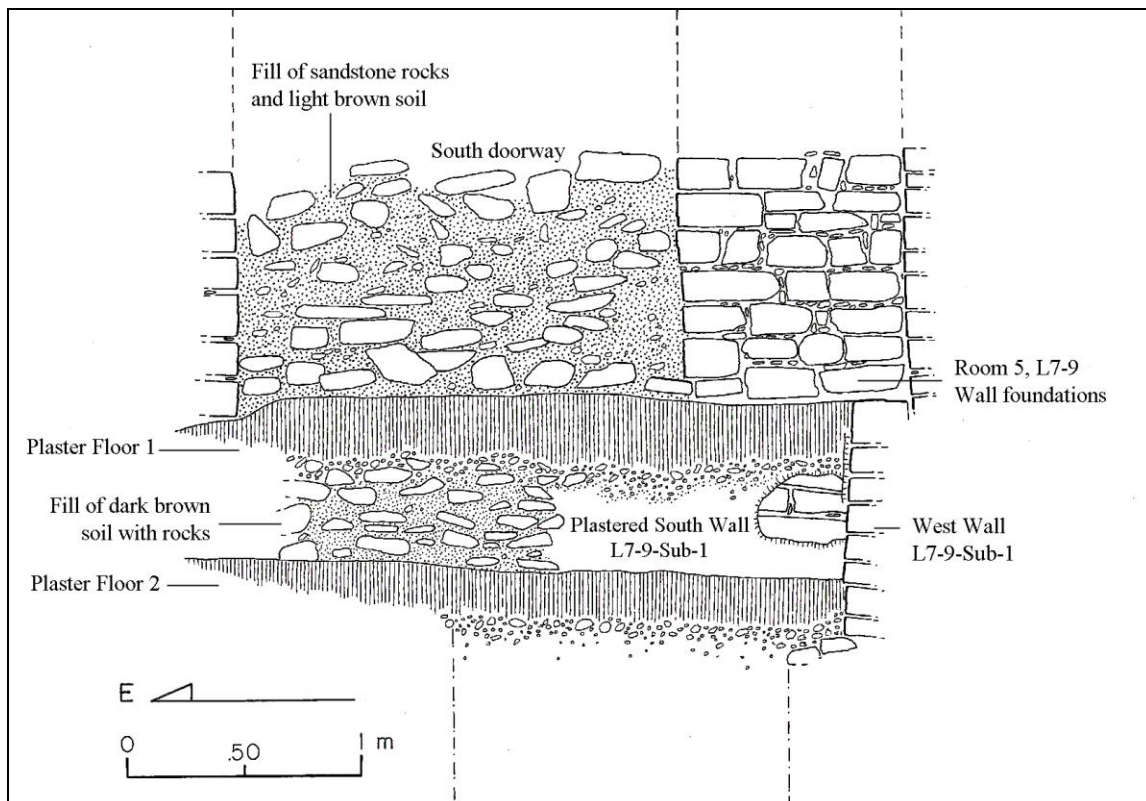


Figure 9.47 South Profile, unit CAN 4-80, Room 5, Structure L7-9 (Drawing by L. Luin and T. Barrientos, VCAP)



Figure 9.48 Sidearm of bench associated with Floor 2, Structure L7-9-Sub-1 (lot CAN 4-80-3)
(Photo by T. Barrientos, VCAP)

This was first noted by the presence of a fine reddish clay layer, and also by a horizontal division of red and brown clay in the west half of the unit (lot CAN 4-80-5) and pure brown clay in the eastern half (lot CAN 4-80-6). At 2.75 m of depth the pattern became more complicated, revealing a red clay fill delimited by an irregular stone retention wall in the west side of the unit (lot CAN 4-80-7), a reddish brown clay in the south half (lot CAN 4-80-8), and small blocks of grey compact clay in the rest of the unit (lot CAN 4-80-9). This pattern continued until a depth of 3.35 m below the unit surface, where it changed dramatically again. Lot CAN 4-80-10 was thus defined, and consisted of a mosaic or “checkered” pattern of rectangular patches of red, pink and light brown clay, divided by dark brown clay lines (Figure 9.49). This pattern had a depth of 20 cm, though the red clay portion of lot CAN 4-80-7 continued to appear in the west side of the unit until this level. At this point, it became clear that the unit was penetrating the interior of a clay substructure (L7-9-Sub-2), whose floor was made with rectangular adobes of different colors (lot 4-80-10).



Figure 9.49 Adobe bricks of Structure L7-9-Sub-1 (Lot CAN 4-80-10)
(Photo by T. Barrientos, VCAP)

The other horizontal divisions defined as lots 4-80-7 and 4-80-8 were probably the clay walls, and the gray fill of lot 4-80-9 was the interior fill of one room. Lot CAN 4-80-11 was defined below the adobe floor, and consisted of brown clay fill with white inclusions that covered the entire unit. It had a thickness of 1.05 m, because it finished at a total depth of 4.6 m. Here, the fill changed to irregular stones, and then to a brown soil mixed with pebbles (lot CAN 4-80-12) that was laid on top of a red clay fill, found at 4.8 m. The last lot was CAN 4-80-13, which went 20 cm into the red clay (5 m below surface), where no artifacts were found. It was originally thought that it corresponded to a sterile level; nevertheless, given the presence of red clay in other deep excavation units, it could represent the fill of the South Patio platform in its second construction phase.

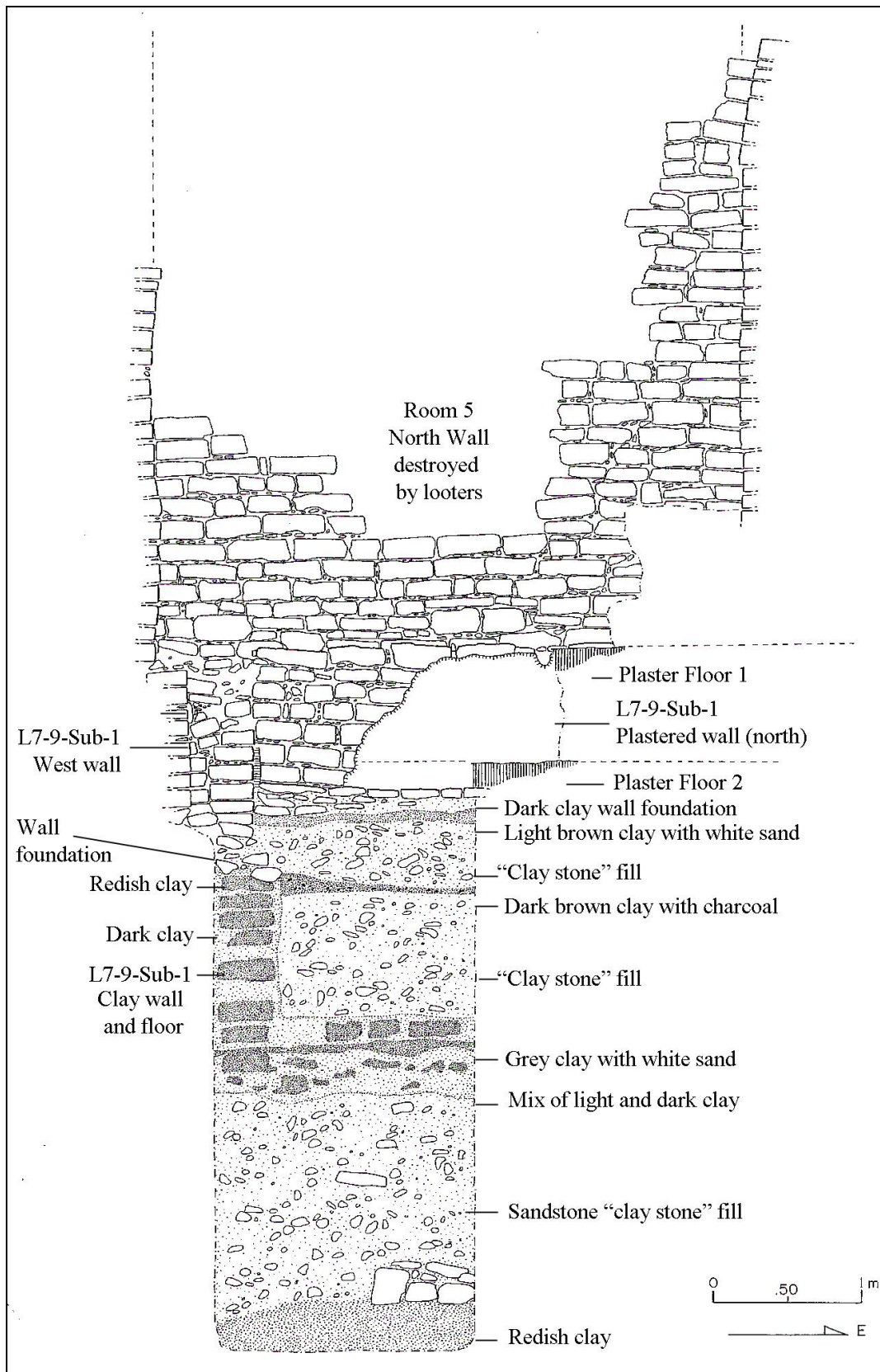


Figure 9.50 South profile, unit CAN 4-80-10 (Drawing by L. Luin and T. Barrientos, VCAP)

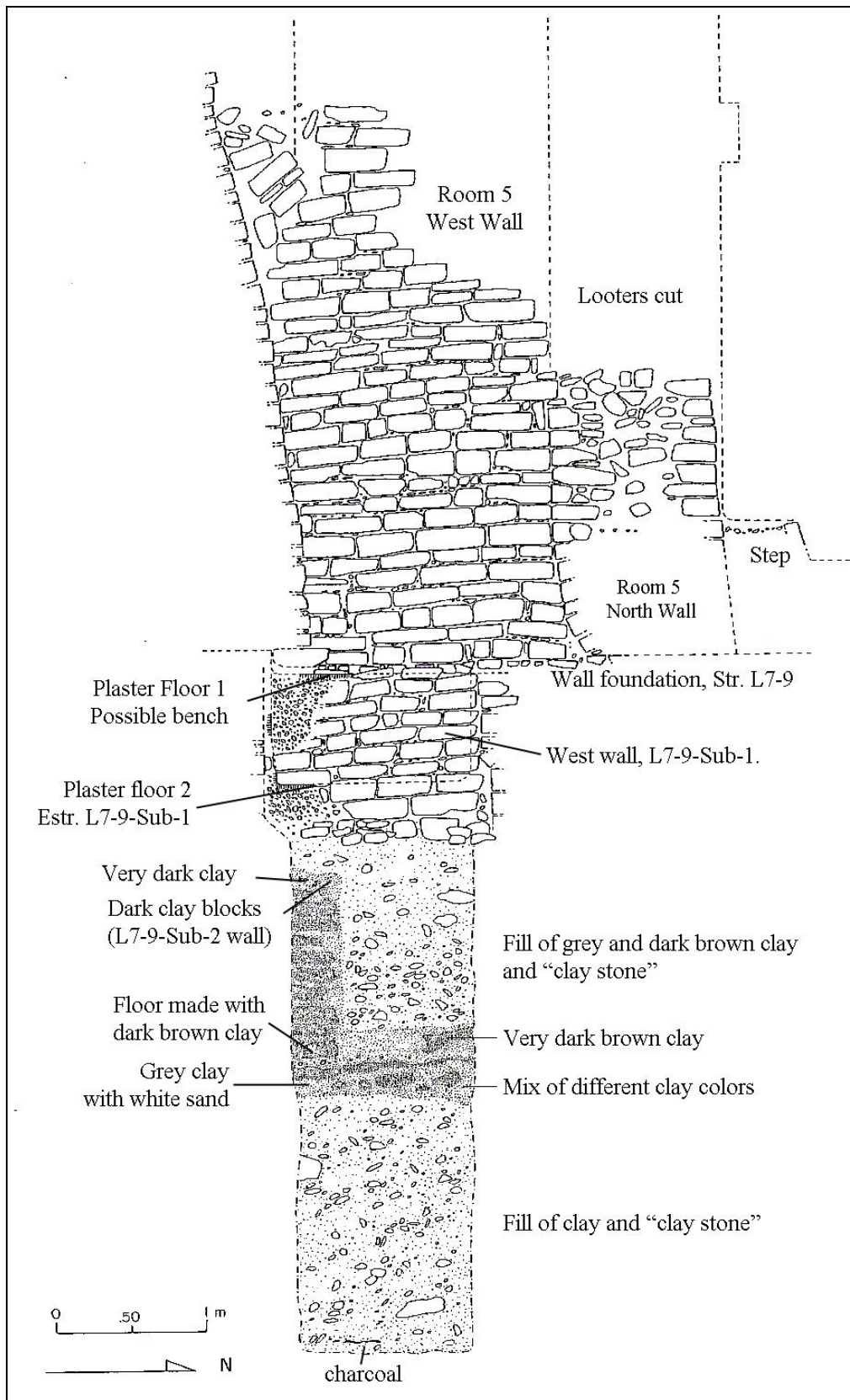


Figure 9.51 West profile, unit CAN 4-80-10 (Drawing by L. Luin and T. Barrientos, VCAP)

Rooms 7 & 8

These rooms are located directly west of the central corridor of the structure and were not interconnected; mirroring the pattern of rooms 3 & 4, where Room 7 has a doorway facing north and Room 8 has a doorway facing south.

Room 7 was initially excavated in 2002 with grid units CAN 4-5 and CAN 4-35, which exposed both door jambs of its northern doorway. During this excavation, a stucco human head was found inside the doorway (unit CAN 4-35), suggesting that the roof collapsed to the interior, including the cornice decoration. The sculpture included the human head and a headdress with diadem and feathers (Barrientos *et al.*, 2003: 53). A close inspection of the fill that covered the entire room showed evidence of intentionality, just like in the other rooms previously described.

In 2003 Room 7 was totally cleaned in grid units CAN 4-26, 4-27, 4-35, 4-43, 4-88, 4-91 and 4-92, while Room 8 was also excavated by grid units CAN 4-94, 4-95, 4-96, 4-120, 4-121 and 4-122. The excavation in Room 7 revealed the presence of large flat stones on top of the fill, but its regular deposition indicated that the roof was dismantled as part of a remodeling process and not as the result of a natural roof collapse. Beneath the fill, large amounts of stucco feathers were recovered, which originally were part of the headdress of the human sculpture found in 2002 (Figure 9.52). The excavation also revealed that originally this room had a narrow doorway that led to Room 9, which is part of the central corridor. However, this entrance was later cancelled with a wall (Figure 9.53). The wall that divides rooms 7 & 8 was found sloping to the south, but it was not possible to restore it to a vertical position due to the presence of areas with its original white plaster surface (Figure 9.54). Instead, it was consolidated as it was found.



Figure 9.52 Stucco feathers found in Room 7 fill (Photo by T. Barrientos, VCAP)



Figure 9.53 Division wall between rooms 6 & 8(left) and division wall between rooms 7 & 9 (right)
(Photos by T. Barrientos and R. Larios, VCAP)



Figure 9.54 Division wall between rooms 7 & 8 with plastered surfaces (Photo by R. Larios, VCAP)

Excavation of Room 8 was more complex than Room 7, due to the presence of a plastered bench and because its walls were less well preserved. The bench measured 0.9 m wide and showed side arm rests and was found with several parts of thick plaster, as well as the floor of the room. Both the west and east walls of the room showed evidence of being added (just as it was found in Room 7), blocking previous passages that led to Room 10 to the west and Room 6 to the east. The bench was thus added after these two walls blocked the east and west doorways. It was also noted that the room floor was higher than the central corridor level. For that reason, a small step was found leading from Room 10 to Room 8, and two steps led to Room 8 from the south platform (Figure 9.55). Room 7 measured 1.8 m in its north-south axis, while Room 8 was narrower, measuring 1.4 m.

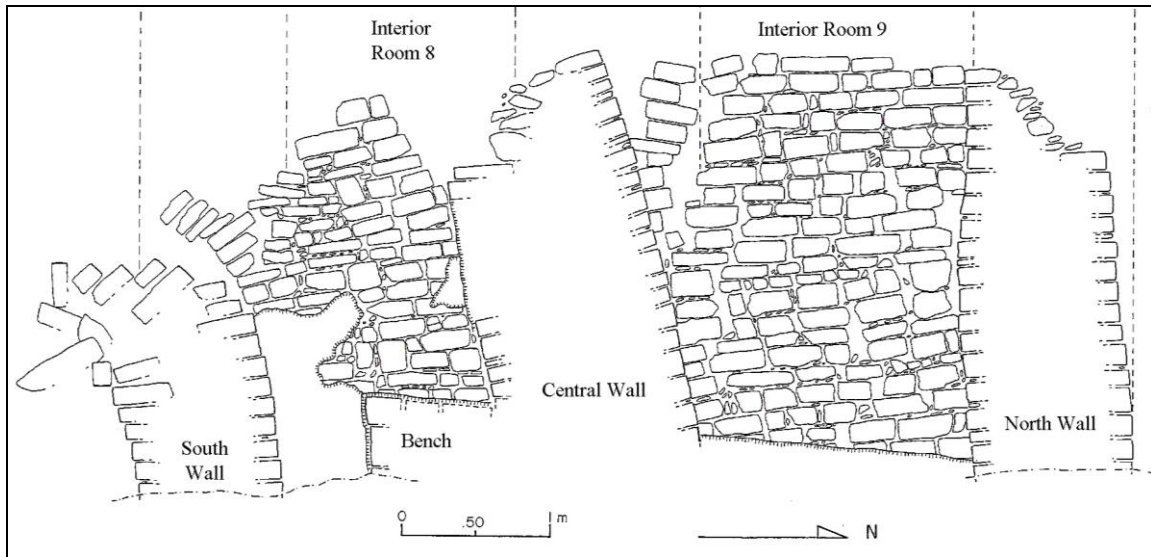


Figure 9.55 East profiles of rooms 7 & 8, Structure L7-9 (Drawing by L. Luin, VCAP)

In 2004, a small 1 x 1 m unit (CAN 4-140) was located on top of the bench, in order to find the relation between the bench and the interior floor of the room. The first level was dug within a fill of dark brown mixed with stones, until reaching the room floor at 1.15 m below the bench surface. This proved that the bench was added to the original room. The floor was 14 cm thick, and additional 40 cm were dug below it, but only three ceramic sherds were found.

In sum, these two rooms showed good evidence of small late renovations in Structure L7-9, which modified the height of the interior floor, the east-west circulation inside the building, and probably the function of Room 8, when the bench was added.

Central Corridor: Rooms 9 & 10

These two rooms constitute the central corridor that crosses the structure and served as the main entrance to the palace complex from the South Plaza, probably reserved for royalty, high nobility or important visitors. The access was from the

monumental southern staircase, and after crossing the corridor, the northern stairway led to the South Patio, in front of Structure L7-8, where the Hieroglyphic Stairway is located. From here, visitors went higher to the Central and North patios.

This area was first excavated in 2002, within grid units CAN 4-27 and CAN 4-42. These 2 x 2 units uncovered both door jambs of the northern entrance of Room 9, which has a width of 2 m. The density of stucco sculpture found in front of the corridor's north entrance suggests that this was the area most decorated of the building. The context of the fragments also indicates that the decoration was concentrated on the building cornice, because no reliefs were found in the plastered walls. This pattern is similar to other decorative styles, such as the Chenes and Puuc regions, where most of the architectural sculpture was developed as friezes in cornices. The sculpture found lying on top of the northern staircase of the structure suggests that the northern doorway of the corridor (Room 9) was decorated with a full figure human sculpture.

The remains found in unit CAN 4-3 included a deity mask and feathers that were part of the figure headdress. The human head was also well preserved, and the entire sculpture measured a total of 75 cm high, 35 cm wide and 25 cm long. In order to excavate the entire corridor, three large trees (up to 20 m tall) that grew on top of it had to be cut at the beginning of the 2003 season. The expertise of local chainsaw operators allowed the removal of these trees without damaging a single architectural feature of the building (Figure 9.56).



Figure 9.56 Cutting the tree above the Central Corridor of Structure L7-9, during the 2003 field season
(Photo by T. Barrientos, VCAP)

The excavation of the corridor showed that there was a small middle division, thus supporting the idea that originally it could have been designed as two individual rooms. Room 9, which makes the northern half of the corridor was excavated within units CAN 4-21, 4-42, 4-106 and 4-108, while the southern Room 10 was excavated within grid units CAN 4-107, 4-109, 4-110 and 4-113. As it was mentioned above, the original design of the building had open accesses from this corridor to the four adjacent rooms (7, 8, 11 and 12), but they were later blocked by adding walls (Figure 9.57). The level of the floor in these adjacent rooms was probably elevated at some point, making necessary to add steps.

One of the most interesting aspects of Room 9 is the high state of preservation in its east and west walls because they still have large amounts of its original plastered surface (approximately 75%), where mural painting can still be observed.



Figure 9.57 Excavation of walls that lead from the Central Corridor to rooms 11 & 12
(Photo by T. Barrientos, VCAP)

During the excavation, numerous fragments of painted plaster were found, mostly of yellow, light blue, black and red color. The murals slightly visible *in situ* in the east wall show a possible maize plant or a scroll motif painted in blue or green over a red background, while the west wall show traces of glyphs or other symbols painted in red over a white background. Several fragments recovered within the architectural debris also show parts of glyphs painted in red.

The fill found in the corridor presented a similar pattern with the other excavated rooms, suggesting an intentional act of roof dismantling previous to a remodeling episode. Also, a large area of the floor showed a layer of burnt clay covered with a fine layer of charcoal and ash (lot CAN 4-108-1), probably being the remains of a ceremony

performed before or during the destruction of the building. Also, large amounts of carbon were found in the lower portion of the fill, which can be the remains of the roof beams, also burned when the roof was dismantled. In lot CAN 4-106-1, an irregular wall of 1 m high was found dividing the corridor at its center, covering only its west half (Figure 9.58). It was made with thin blocks covered with a thick plaster cover, sloping downward. On top of this wall, a layer of yellowish sandstone was added, also covered with white plaster (Figure 9.59). The function of this feature is still unknown, though it could have been a retention wall, remains of a bench, or even fallen parts of the roof.

Room 10 and the southern entrance were excavated at the end of the 2003 season, showing the same features of Room 9 and the northern entrance. However, the floor showed traces of red paint.



Figure 9.58 Irregular wall found between rooms 9 & 10, Central Corridor, Structure L7-9
(Photo by T. Barrientos, VCAP)

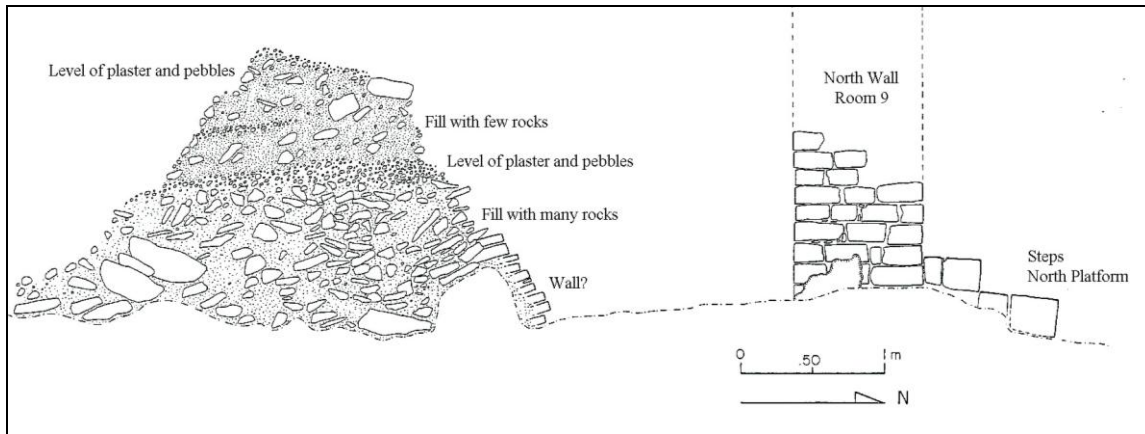


Figure 9.59 East profile of irregular wall found between rooms 9 & 10, Central Corridor, Structure L7-9
(Drawing by L. Luin and T. Barrientos, VCAP)

Room 11

These two rooms mirrored rooms 7 and 8, because they were also separated by a division wall (Figure 9.57). Room 11 entrance is part of the structure northern façade, and was initially explored by unit CAN 4-84, as part of the 2003 excavations. The amount of stucco sculpture fragments in front of the room doorway was very great, similar to what was found in unit CAN 4-16, located directly to the west. Large fragments of feathers also suggest that they were part of the sculpted human head found in unit CAN 4-90, which is the best preserved of the five human heads found in the building. Units CAN 4-17 and CAN 4-85 uncovered the remains of the entrance, exposing both jambs of the room northern doorway, as well as the two steps that led from the northern platform floor to the interior room floor.

Rooms 15 & 16

These two rooms are located east from rooms 13 and 14, but they were not interconnected, mirroring the pattern of rooms 3 and 4. They were also largely destroyed

by a wide looting trench that crossed the building from north to south. The remains of both rooms were visible in the west profile of the trench, which was registered during the 2002 field season (Figure 9.60).



Figure 9.60 Interior of Room 15, exposed by looter's trench (Photo by T. Barrientos, VCAP)

The profile indicated the existence of an interior bench in Room 15 that was accessed from the north doorway through a small staircase. Both the bench and the staircase were built on top of the first of three successive interior floors. Floor 1 seems to be the original interior floor (Figure 9.61). The evidence later found in rooms 13 and 18 (and possibly rooms 2, 4 and 5) suggest that the same pattern was repeated in the western half of the building.

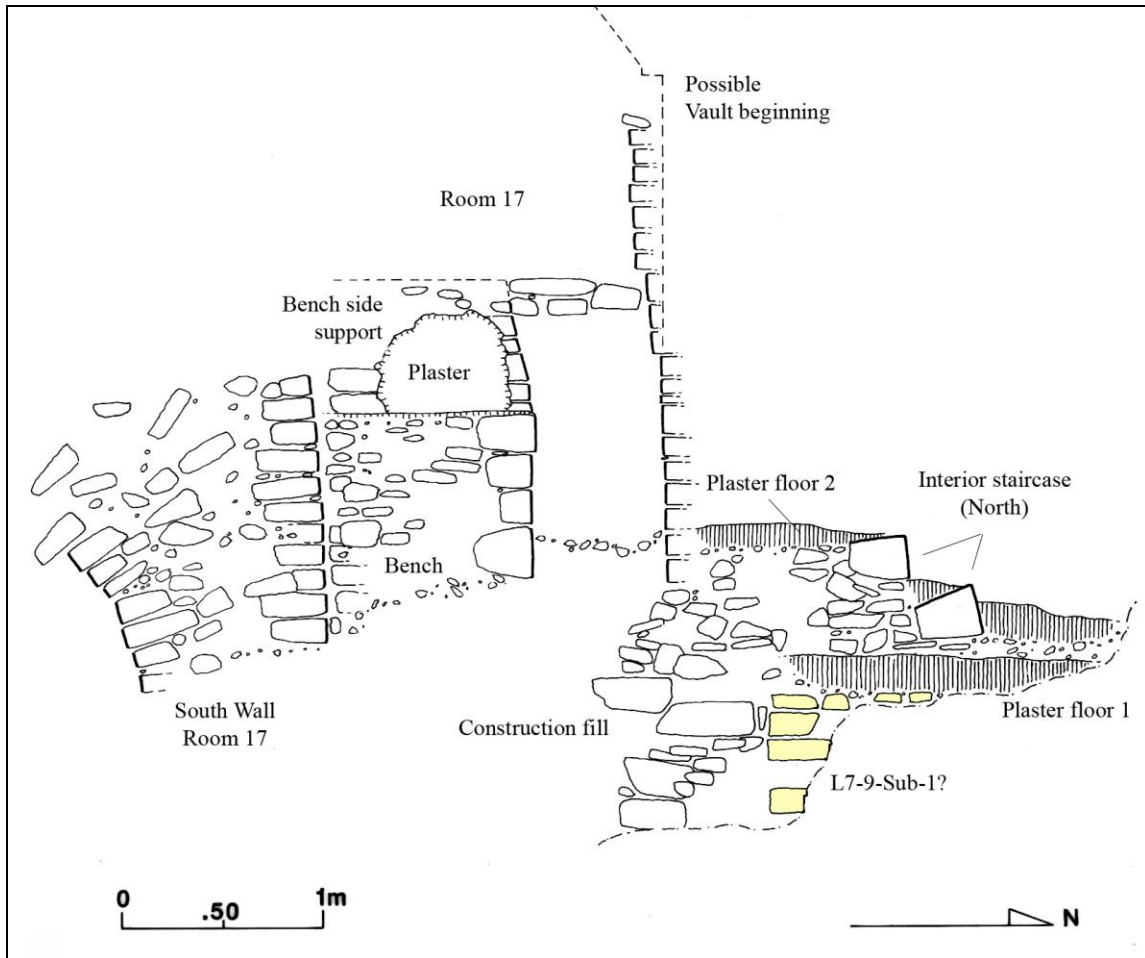


Figure 9.61 Profile of Room 15, exposed by looter's trench (Drawing by L. Luin and T. Barrientos, VCAP)

Another interesting feature in this profile was the fill of the room, because it consisted of a dense matrix of masonry blocks and clay fill, whose disposition did not resemble any type of wall or roof collapse. On the contrary, the fill of the room suggested an intentional action of filling its interior space, which was similar to the fill later found in rooms 7 and 5. The trench profile showed the presence of three remodeling episodes in the interior of both rooms, and also suggests that the final episode in the building history was an intentional fill of all its rooms, probably as part of the construction of a new platform that was left unfinished, or as part of a termination ritual (Barrientos *et al.*, 2003: 48).

Rooms 17 & 18

These rooms are located in the eastern extreme of the structure, connected by a doorway, and were accessed from an eastern entrance. Their interior space was exposed by a wide looters trench that crossed the building from north to south in this part of the building. The looting destroyed most of the division wall that separates these rooms from rooms 15 & 16, revealing important evidence for the building architectural sequence. At the beginning of the 2002 season, the trench was carefully registered, revealing evidence for five remodeling episodes in this part of the structure (Figure 9.62). At the end of the season, the entire looting trench was filled, in order to restore the stability of the building.



Figure 9.62 Interior of Room 17, exposed by looter's trench (Photo by T. Barrientos, VCAP)

The east profile of the trench showed the remains of terraces made with soft limestone that were added to the original external south façade and southwestern corner of the building. The original south façade was built with hard limestone blocks and had a small *talud* or sloping wall in its base. This was later covered by four successive terrace episodes, each one associated with a different plaster floor (Figure 9.63).



Figure 9.63 Interior of Room 17, showing remains of different façade remodeling episodes
(Photo by T. Barrientos, VCAP)

The interior of Room 18 showed some interesting patterns. First, its interior space showed the traces of five plaster floors, indicating a complex sequence of remodeling episodes (Figure 9.64). Although the base of its interior walls was not visible, their long depth suggests that the deepest floor found was at the same level or even lower than the plaza floor of the South Patio.

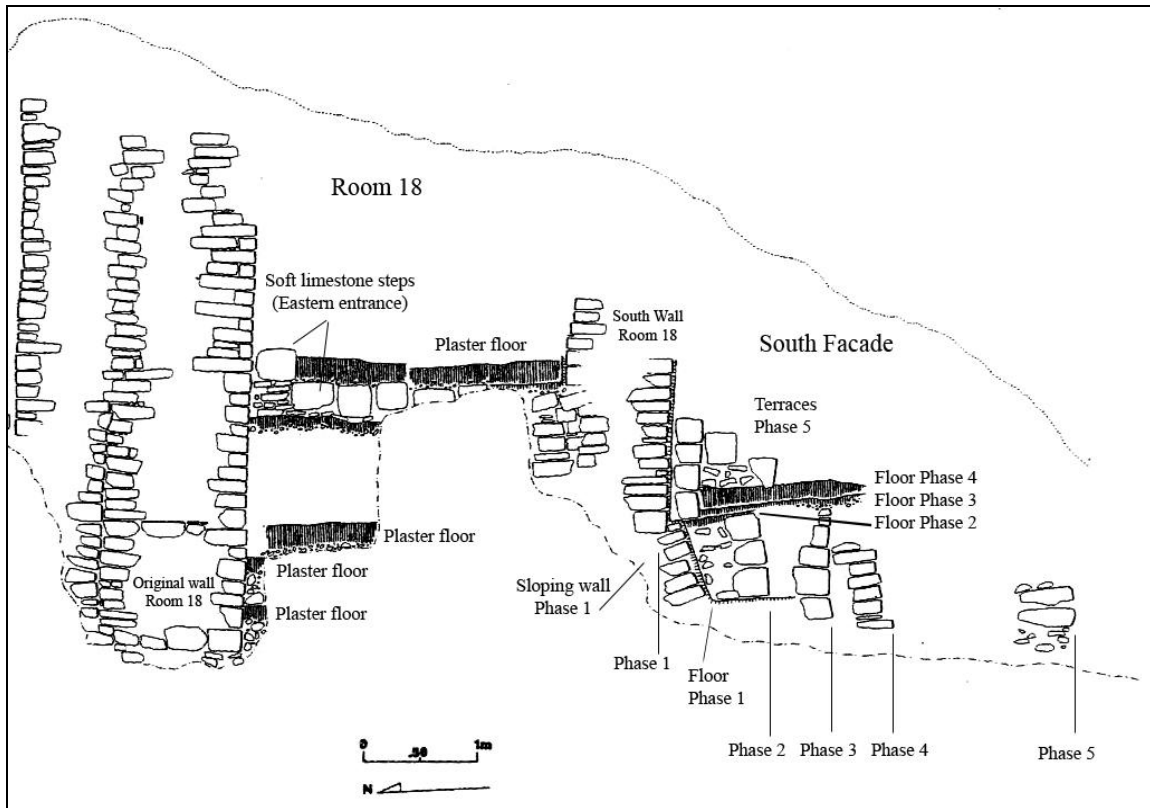


Figure 9.64 West profile of Room 18, showing remains of different floors and façade episodes (Drawing by L. Luin and T. Barrientos, VCAP)

This also indicates that the platform of the north façade and its staircase was a later addition to the building. The other pattern that was visible in Room 18 is the high location of the last plaster floor, thus suggesting the presence of a high bench that was accessed from a staircase from the eastern entrance, replicating the same pattern found in rooms 1 & 2. The level of this later bench is also clearly associated with the later version of the north façade terraces.

The north façade showed a less complex architectural history, with only one remodeling episode made with soft limestone masonry that expanded the north platform of the building. This later version took the shape of two large terraces placed on top of the platform that separates the South Patio and Southeastern Patio.

To sum up, the evidence collected in the trench profile reflects five construction episodes in the exterior south façade and two episodes in the exterior north façade. The interior room showed three episodes, being the last one associated with the addition of a high bench (Barrientos *et al.*, 2003: 48).

The architectural chronology of the eastern extreme of the building was improved through a test pit located inside Room 17, and was assigned CAN 4-78. This test pit uncovered the profile of an early sloping plastered wall and another plaster floor (Figure 9.65). Nevertheless, even when this unit was finished at 120 cm below the looter trench surface, it did not reach the base of this early version of the building. The excavation was suspended due to the poor stability of the room walls around the pit.

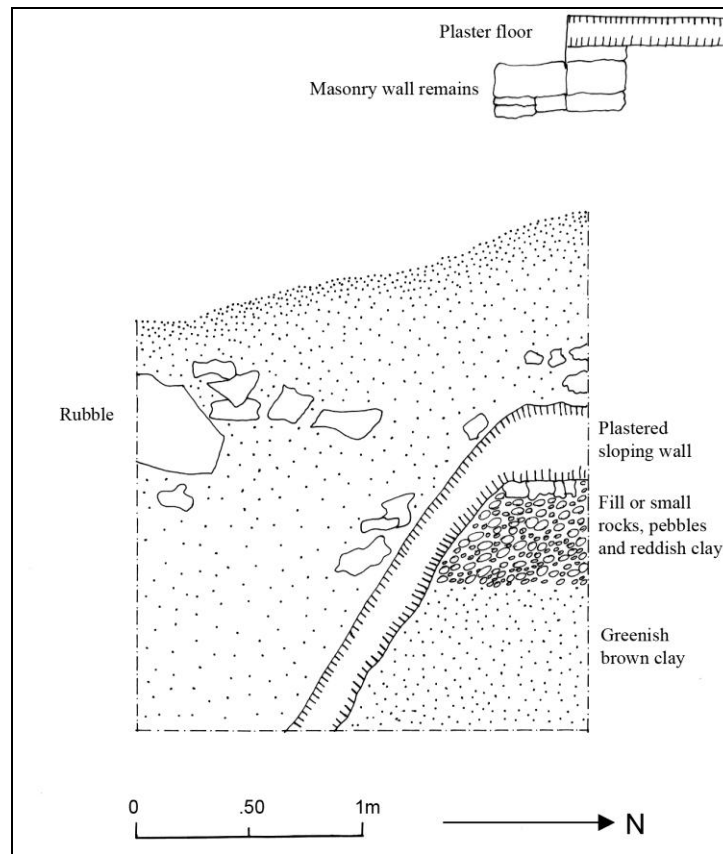


Figure 9.65 East profile of unit CAN 4-78, showing remains of a plastered sloping wall of substructure

Summary of constructive phases, Structure L7-9

- Phase 1: Fill over sterile soil, conformed by brown clay mixed with pebbles. This supported a platform with an adobe superstructure (lots 4-80-7 to 13).
- Phase 2 (*Taj Chan Ahk 1*): Grey clay fill that covered the adobe building. First stone masonry building with rooms and plastered bench (lots 4-80-4-6). South plaza floor is made with stone slabs.
- Phase 3 (*Taj Chan Ahk 2*): The interior rooms are partially filled with a new plastered floor. The north basal platform has a soft limestone addition that covers part of the South Patio. The south platform also has soft limestone walls and staircase. Probably, some soft limestone additions in the southeastern corner.
- Phase 4 (*Taj Chan Ahk 3*): A new floor is added to the interior rooms, adding also benches with interior staircases. Some interior doorways are sealed with walls, suggesting a change towards more private functions. The northern platform level is elevated; covering the lower part of the superstructure walls; and a new wall is added in the western end, closing the passageway between L7-9 and K7-36. Other soft limestone additions in the southeastern corner. The southern staircase is enlarged by five wide steps in its base, and two inset corners are added to the first terrace of the platform.
- Phase 5 (*K'an Ma'ax*): All rooms are filled with dirt, parts of the dismantled roof, walls and exterior decoration. This is part of a remodeling episode that was left unfinished, probably for building a larger platform or palace or as part of a termination ritual.

9.2.2. The Central Patio:

This patio is located directly north of the South Patio, and its only access is through the Hieroglyphic Stairway that leads to Structure L7-8. Structures L7-6 and L7-7 limit the patio in its west and east sides, respectively, and to the north, another staircase leads to the North Patio. The courtyard measures approximately 13 x 12 m (156 m²), which constitutes a quarter of the area covered by the adjacent South Patio, meaning that the people that was able to come to this patio was very selected and restricted. This area was initially investigated during the 2001 field season, as part of the test trench that explored the north-south central axis of the palace (Figure 9.66).

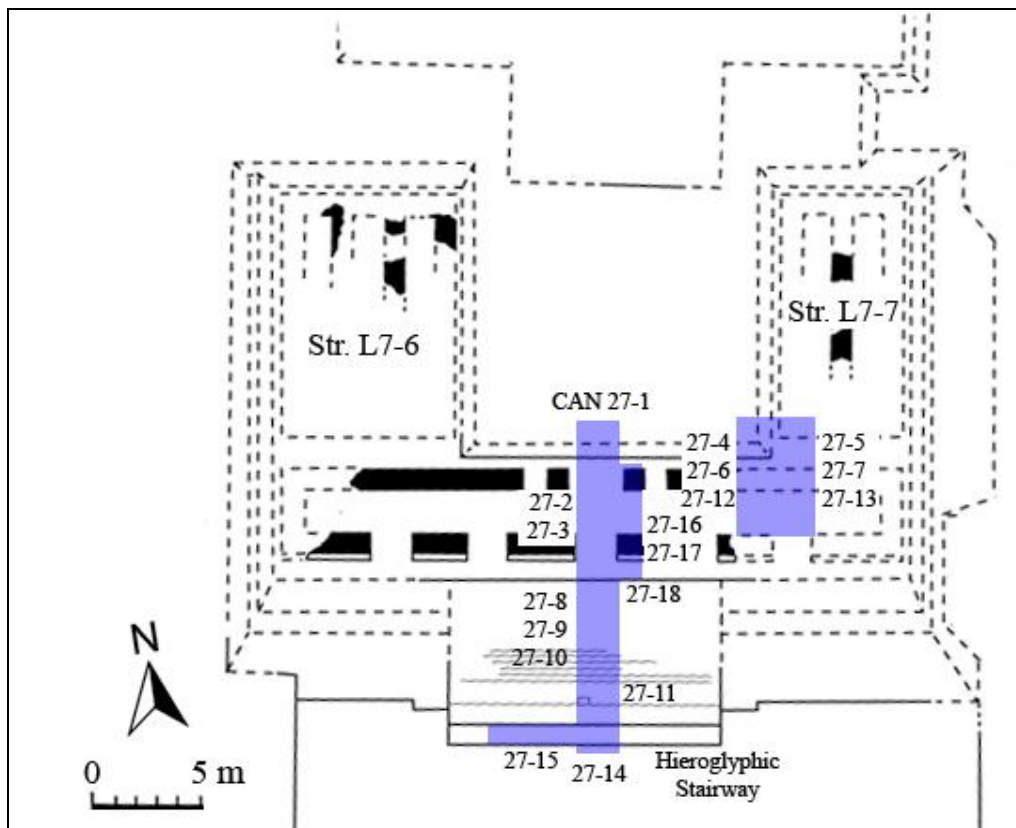


Figure 9.66 Plan view of Central Patio, showing excavations carried out in 2001
(Map by T. Barrientos, VCAP)

Operation CAN 27 was assigned to the Central Patio, and a total of 18 2 x 2 m units were excavated; seven of them placed at the center of Structure L7-8, other six at its west side and other five at the Hieroglyphic Stairway (Barrientos and Luin 2002: 8). Excavations at the Hieroglyphic Stairway continued during the 2003 season, with 18 more units (Barrientos, *et al.* 2004), and were finished in 2007 (Romero, *et al.* 2008).

According to the Harvard team, Structure L7-7 did not have masonry walls, while L7-6 probably had two vaulted rooms (Tourtellot III *et al* 1978: 201, 224-5). Given that no excavations have been carried out in these two buildings, their plans are fully hypothetical, based on superficial observations.

Patio Floor and Structure L7-8-Sub-3

Although the floor of the patio was initially found in unit CAN 27-1, located at the base of the northern façade of Structure L7-8 (see below), the courtyard area was not explored until de 2002 season, when Michael Callaghan laid out a 2 x 2 m test pit named unit CAN 27-19 (Callaghan and Bauer 2003). The test pit had the goal to find ceramic and stratigraphic data to define the constructive sequence of the palace and the site in general. This excavation was very successful, because it reached a final depth of 8 m, finding evidence of an early substructure at the bottom, after defining 17 cultural strata corresponding to two construction phases (Figure 9.67). A total of 40 ceramic bags were also recovered, and most of them were related to the early building.

According to the excavations by Callaghan (*Ibid*), this test pit identified an early structure (L7-8-Sub-3) that was built directly on top of sterile soil, which should be part the earliest version of the palace acropolis.

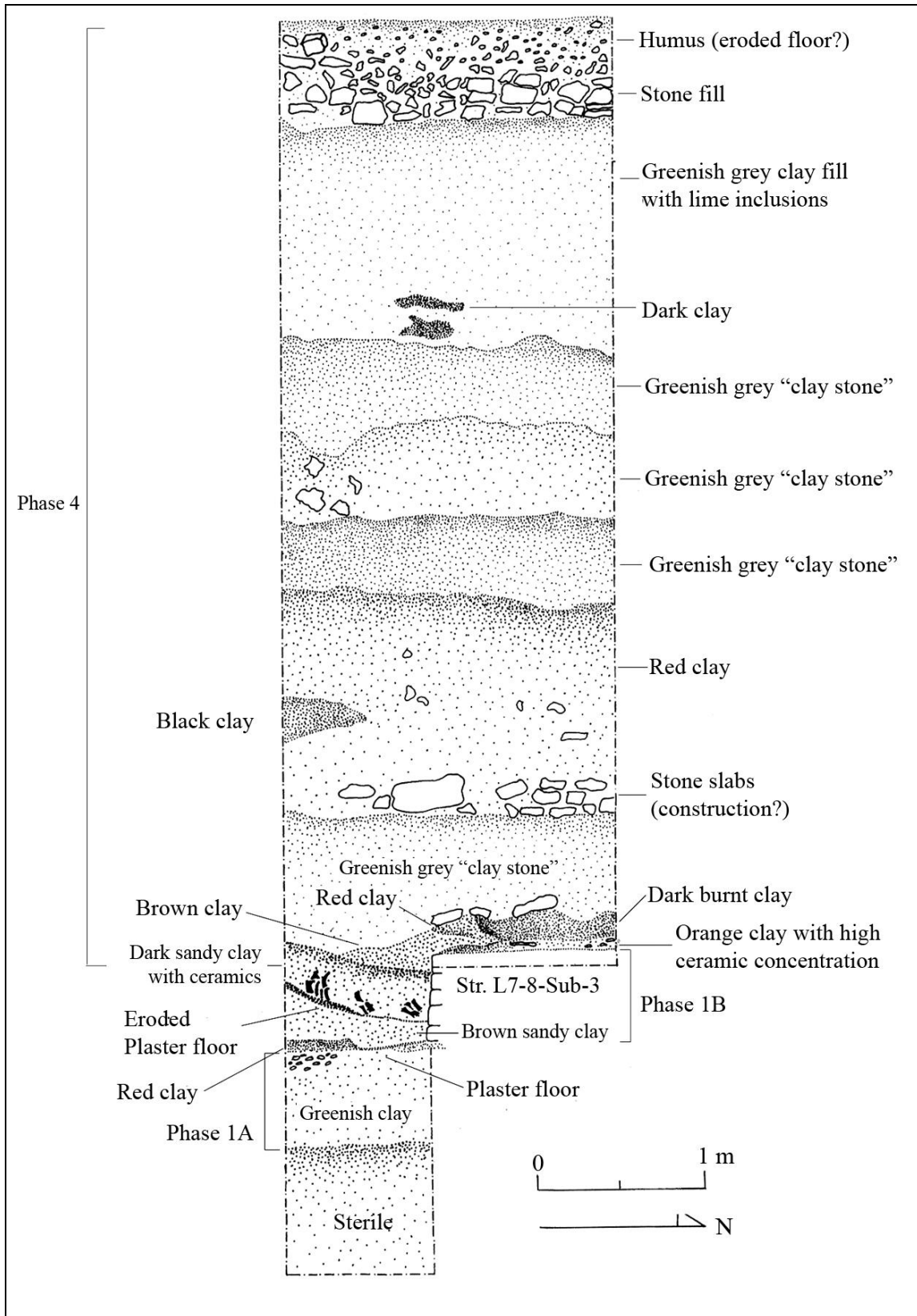


Figure 9.67 West Profile of unit CAN 27-19 (Drawing by M. Callaghan, L. Luin and T. Barrientos, VCAP)

This sub-structure was identified by a 0.57 m tall plastered wall, which was built on top of a plaster floor of 2 to 4 cm thick. The wall had five stone rows and it showed evidence that it was built in two episodes, given the presence of a vertical union in the wall (Figures 9.68 and 9.69).

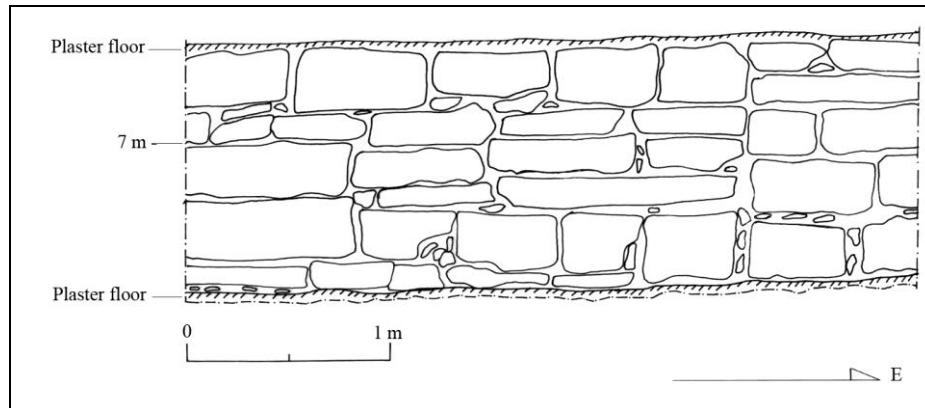


Figure 9.68 North Profile of Structure L7-8-Sub-3, unit CAN 27-19
(Drawing by M. Callaghan, L. Luin and T. Barrientos, VCAP)

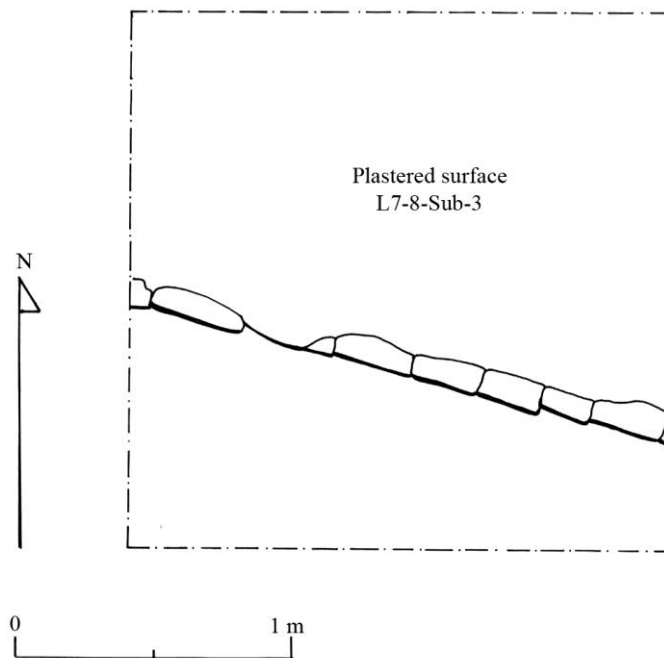


Figure 9.69 Plan view of Structure L7-8-Sub-3, unit CAN 27-19
Drawing by M. Callaghan, L. Luin and T. Barrientos, VCAP)

A circular dedicatory cache was located below the plaster floor, in front of the base of the structure wall. The cache contained a small spiked incense burner, with no signs of use. The censer seems to be of the Miseria Aplicado type, dated to the Tepeu 2 phase of the Maya Lowlands, and has a small lid with a handle (see full description under the ceramics section). Its main decoration consisted in four double rows of spikes applied to the sides of the vessel. Given that the cache did not present any sealing or lid, it is clear that it was located just before the substructure was cancelled and covered.

The following construction episode consisted in a massive fill that covered the early structure. This fill measured a total depth of 7 m, and created the base that supported the palace visible today, which seems to correspond to the *Taj Chan Ahk* reign. This fill was made with different types and colors of clay deposited sequentially. The first fill deposited consisted of hard greenish grey clay blocks. This soil is commonly found in the area, because it has been identified as sterile soil in many excavation units dug in Cancuen and its surrounding secondary sites. A curious find within the initial green fill consisted in large utilitarian ceramic sherds of the type La Isla Orange that seemed to be piled intentionally and glued with clay and mortar, and also covered with a thin plaster layer. Callaghan has suggested that these ceramic fragments could have been part of the early structure, which was dismantled or demolished when the fill covered the building (Callaghan and Bauer 2003:88)

After that initial grey fill, a reddish pink clay stratum was added, measuring a depth between 1 to 1.3 m. Within the red layer, and at 4.5 m below the surface, long and irregular stones (30 x 20 x 10 cm) were deposited in a leveled pattern, probably for stabilizing the fill or even as a temporary floor surface. On top of the stone level, a series

of green-gray clay fills were deposited, followed by an irregular level of mixed sandstones and clay blocks. This latter supported a more ordered fill of rocks and boulders that also could have supported the final floor of the Central Patio, though no evidence of it was found.

Most of the ceramics recovered in this pit corresponded to the deeper levels, suggesting the presence of a midden at 5 to 6 m below the surface of the patio. These materials consisted of La Isla and El Zapotal large utilitarian bowls, and two sherds of Campamento Fine Orange type were also present.

Structure L7-8

During the 2001 season, units CAN 27-1 to 27-3, CAN 27-8, and CAN 27-16 to 27-18 were located in the central axis of Structure L7-8, while units CAN 27-4 to 27-7, and CAN 27-12 to 27-13 were located on its northwestern section.

The excavations in the northwest part of the building covered an area of 24 m², and the first lot was very shallow, given that almost no humus layer was present. As a result, the collapsed northern wall of the structure was exposed quickly, showing that the wall of Structure L7-8 collapsed towards the south side. The masonry of this building consisted in small rectangular blocks made with the hard limestone that came from the river. Unit CAN 27-5 exposed the lower wall from its base, located at 1.5 below the top of the mound. The lower wall was still vertical in its first rows, and was located on top of a stone slab floor, which constituted the surface of the interior courtyard. As in other parts of the palace, numerous stucco sculpture fragments were recovered on top of the patio floor, probably part of Structure L7-7 original cornice decoration. The upper

portion of the wall was found in units CAN 27-6 and 27-7, completely collapsed towards the south side (Figure 9.70). Given that the wall fell in a very ordered and horizontal form, it was possible to identify the beginning of the vault. The next units, CAN 27-12 and 27-13, exposed the upper cornice made with soft and porous limestone blocks, probably to reduce the weight supported by the vault.

The units in the central axis of Structure L7-8 were part of the original exploratory trench. Unit CAN 27-1 removed the humus layer, and was followed by a level made with soft limestone debris. Beneath the latter one, the patio floor was discovered, made with flat stone slabs. Unit CAN 27-2 was open directly to the south, and its excavation uncovered the base of the two the door jambs of the northern entrance, located in the very east and west extremes of the unit, meaning that the entrance measured almost 2 m wide. However the fill between the two jambs was left *in situ*. Moving to the south, unit CAN 27-3 uncovered what seems to be the lintel of the entrance and the entire central corridor, made with thin stone slabs and small stones. The collapsed roof was sunken, leaving the slabs almost in vertical position. This pattern continued in unit CAN 27-8 to the south, where the southern entrance could have been located under the collapsed walls, given that the next unit (CAN 27-9) exposed the exterior floor of the platform and the beginning of the staircase. Three more units (CAN 27-15, 27-16 and 27-17) were open as 2 x 1 m extensions of the axial trench, uncovering the same sunken pattern that could represent the roof of the central corridor. In unit CAN 27-15 it was possible to assess the width of the northern wall of the structure, measuring approximately 1 m. The southern wall was found collapsed in unit CAN 27-17 (Figure 9.70).

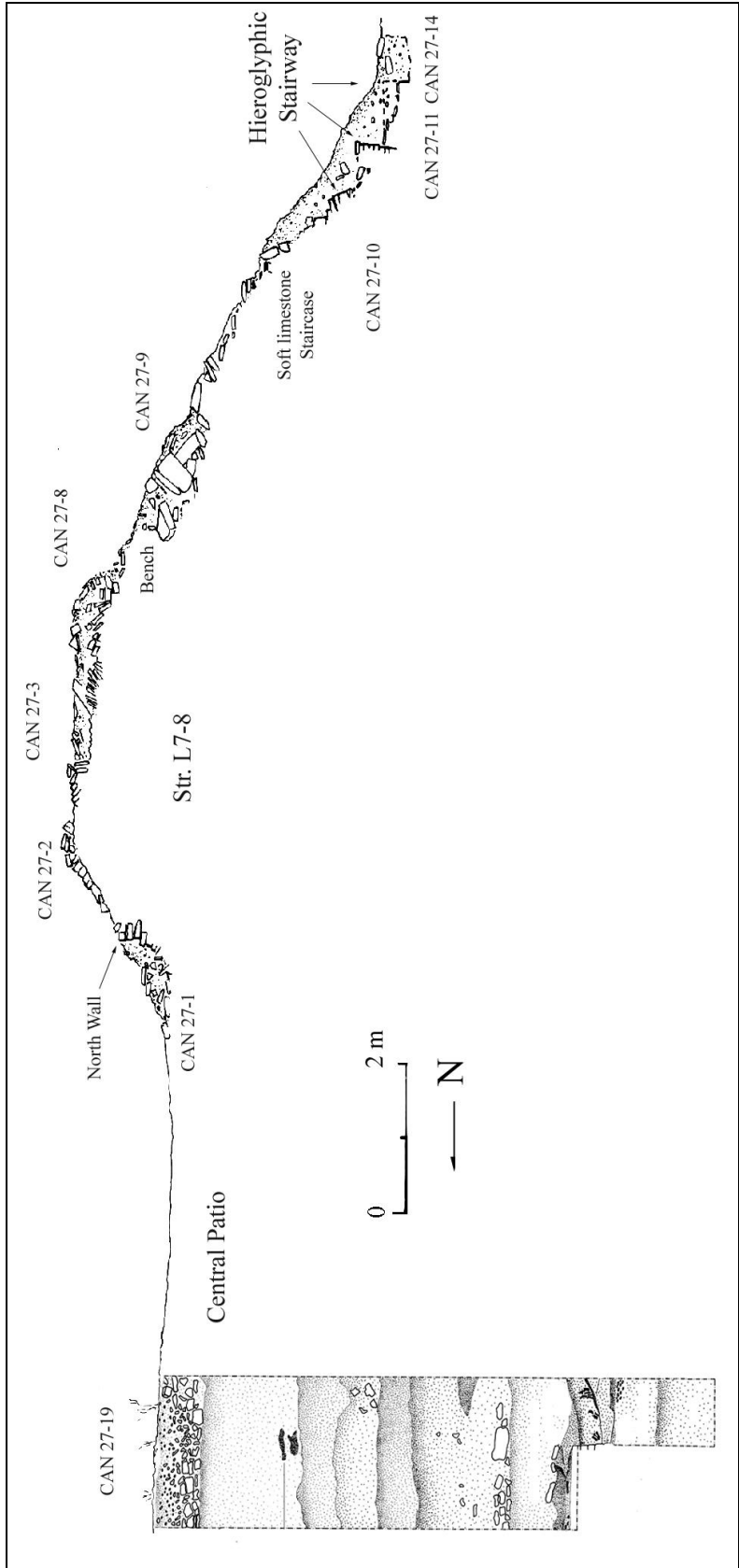


Figure 9.70 West profile of Central Patio and Structure L7-8, Test trench.
 (Drawing by L. Luin, R. Larios and T. Barrientos, VCAP)

Structure L7-8 was intensively excavated in 2007 (Romero *et al.* 2008), through 59 excavation units that included pits, trenches and a tunnel (units CAN 27-49 to CAN 27-108). These excavations revealed more portions of the basal platform of the superstructure, including the southwest and southeast corners. They also confirmed the existence of three terraces that flank the hieroglyphic staircase (Figures 9.71, 9.72).

The extensive excavations in the superstructure defined some features of the building, which were covered by the collapse of the northern wall. Units CAN 27-85 and CAN 27-80 defined the central entrance, which measures 1.90 m wide. Units CAN 27-88 and CAN 27-89 revealed an internal division between the west and east chambers, formed by a thin wall that was added to the original construction (Figure 9.73).

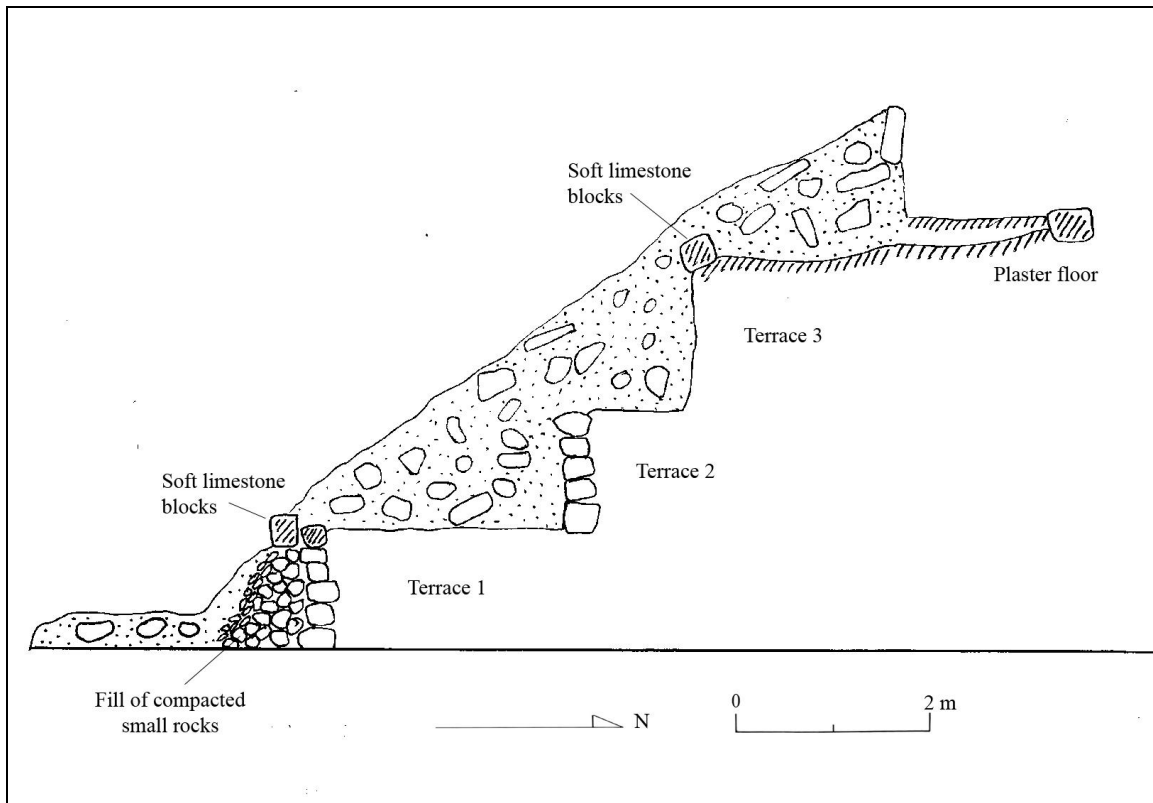


Figure 9.71 West profile of units CAN 27-107, 106, 105 and 103 (Drawing by L. Romero, VCAP)

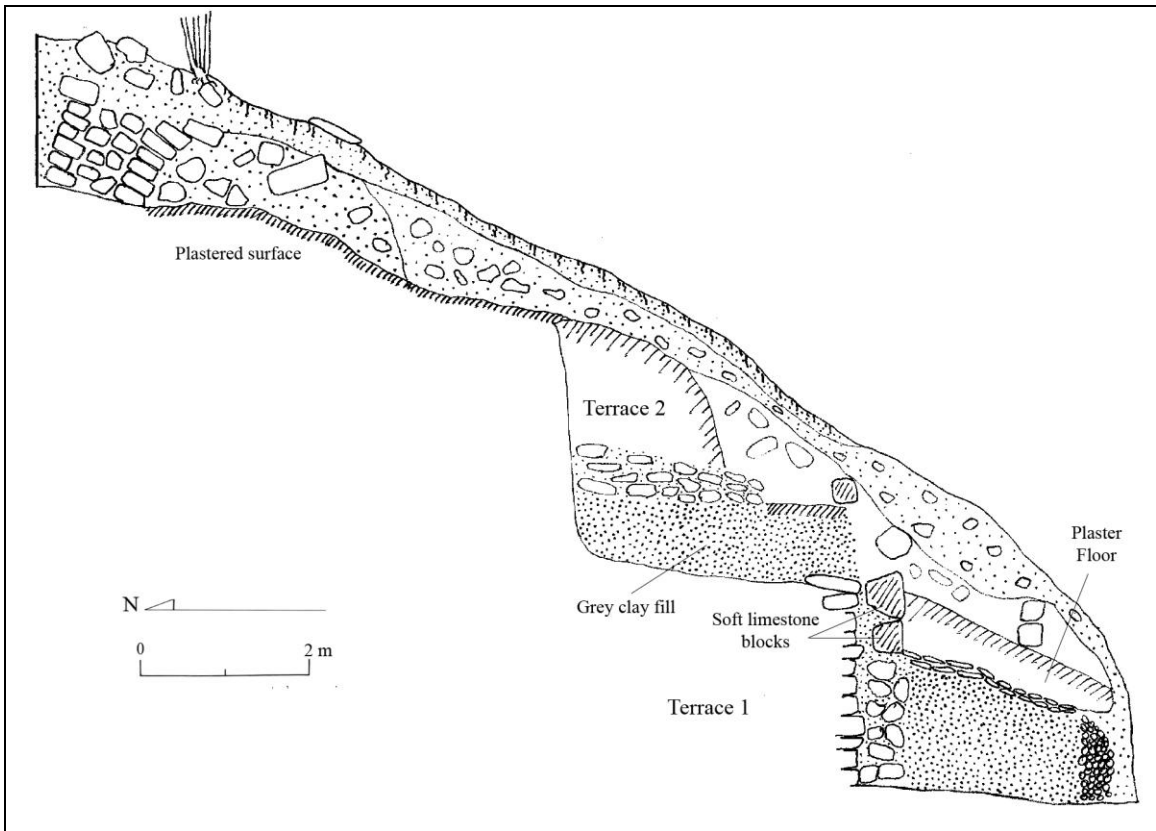


Figure 9.72 West profile of units CAN 27-71, 75, 81, 82 and 83 (Drawing by L. Romero, VCAP)

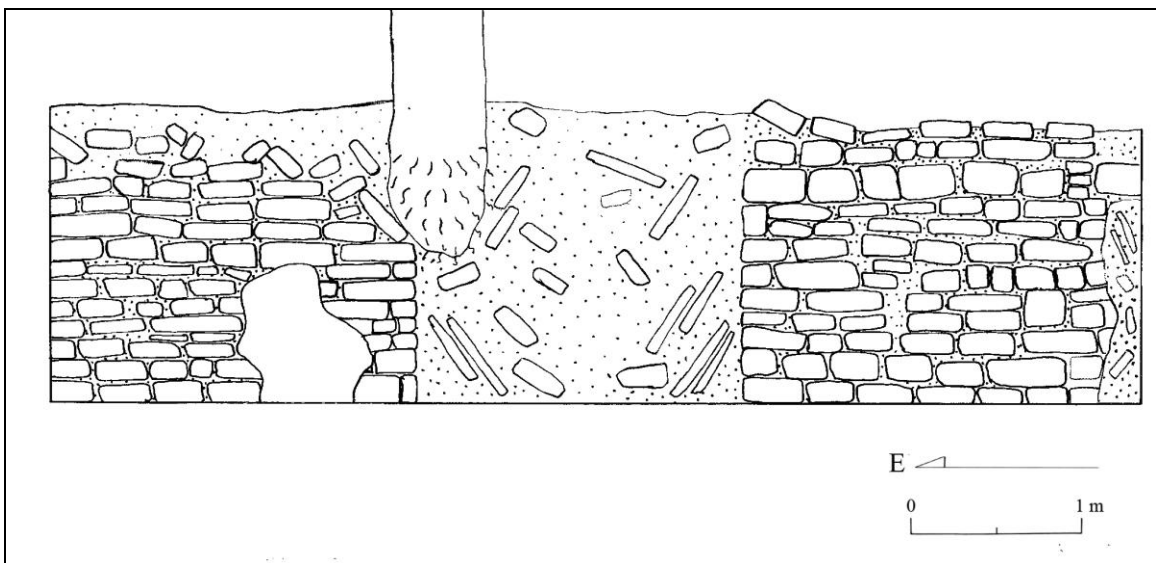


Figure 9.73. North profile of units CAN 27-80 and 27-83, showing central doorway of Structure L7-8 (Drawing by L. Romero, VCAP)

Units CAN 27-96 and CAN 27-103 also revealed the presence of a plastered bench in the eastern or central room, which measures 2 m wide and 0.5 m high (Figure 9.74). It is interesting that no staircase was found in the northern side of the central access, suggesting that the access to the central patio was located at the western and/or eastern sides of the northern façade.

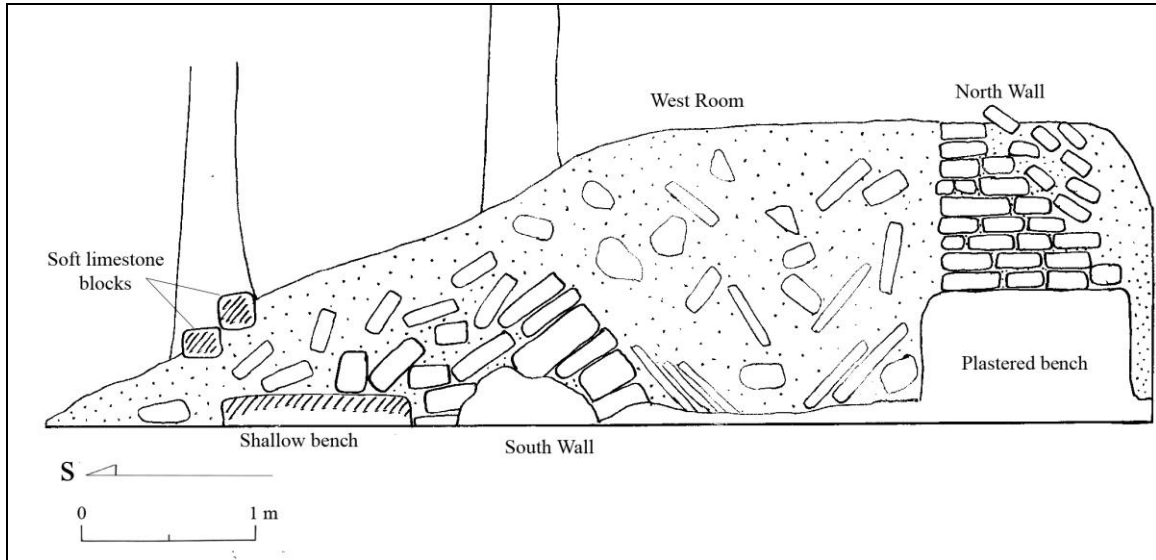


Figure 9.74 West profile of units CAN 27-96 and 27-100, showing West Room and plastered bench (Drawing by L. Romero, VCAP)

The eastern corner of the structure was revealed by a trench of units CAN 27-67 to 69, 27-73, 27-77 and 27-79 to 80. The western corner was also defined by the trench including units CAN 27-57 to 60, 27-71 to 72, 27-74, and 27-78. In addition, unit CAN 27-108 defined a shallow wall (two lines of blocks) that joined structures L7-8 and K7-36 (*Ibid.* 51-5). Directly below the superstructure, Burial 101 was found at 2.8 m below the surface; in unit CAN 27-76A (Figure 9.75). It included a semi complete vessel with black slip (*Ibid.* 46-7). The absence of significant funerary offerings points to its interpretation as a dedicatory burial.

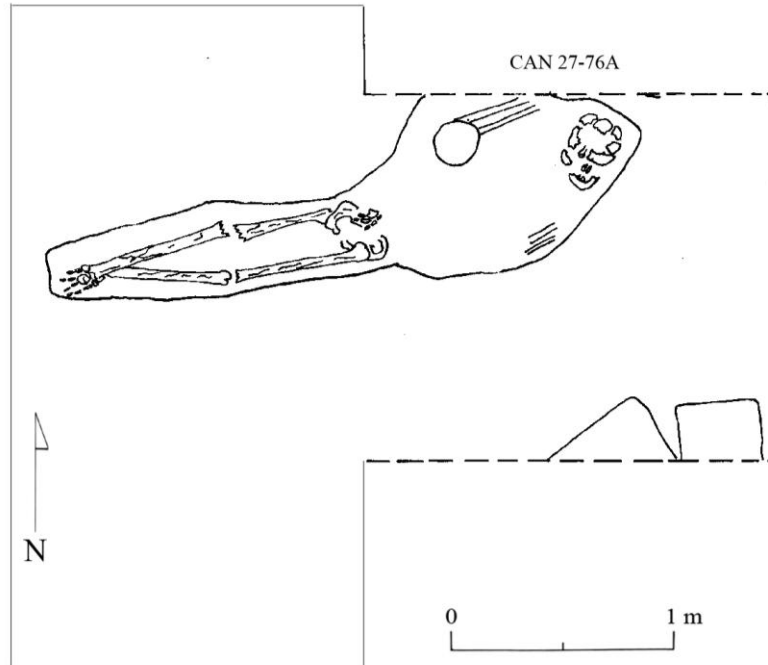


Figure 9.75 Plan view of Burial 101(Drawing by L. Romero, VCAP)

As a conclusion, the construction sequence of the Structure L7-8 platform consisted of four stages (*Ibid.* 56-7):

1. Platform made with red clay with a ramp in the southern side (L7-8-Sub-2)
2. Platform with two terraces built with masonry walls and gray clay fill (L7-8-Sub 1).
The first riser measures 2.30 m high and it is formed by four panels. A stairway was added using red clay fill and a possible floor of stone slabs. This staircase had secondary accesses on its sides.
3. The platform was enlarged, using a grey clay fill to support new terraces and the hieroglyphic staircase. A layer of flat stone slabs was also added, which was later covered by a thick plaster floor. A bench was added on superstructure L7-8.
4. Soft limestone blocks were added to the previous facades, which were later covered by plaster.

The superstructure revealed two construction stages (*Ibid.* 57)

1. The first version included a long room with corbelled vault and 4 doorways in the southern façade, also decorated with stucco sculpture. This building should correspond to phases 2 & 3 of the platform. No central northern staircase has been defined.
2. The central room was divided by a thin wall. The western room had only one access, while the eastern one had 3 doorways.

Hieroglyphic Stairway

This staircase represents the main access of Structure L7-8, coming from the South Patio. It will be treated as a separated feature given the many details of its construction, that were more directly associated with the South Patio than the Central Patio. The glyphic inscription was carved in large rectangular blocks, which were combined with plain blocks of the same size. Federico Fahsen has analyzed the text, which refers to the birth and accession of ruler *Taj Chan Ahk*, the visit of Dos Pilas Ruler 4, and other activities that cover a time period between the long count dates of 9.14.14.6.0 (742 C.E.) and 9.17.15.4.4 (786 C.E.) (See a more detailed description in Chapter 11) (Fahsen, *et al.*, 2003: 27-42)

Although the Harvard team found parts of the Hieroglyphic Stairway *in situ* in 1969, it was heavily looted during the eighties, and it was first recorded during the initial explorations of the project in 1999. The looters dismantled the entire staircase looking for carved blocks, and some were cut with chainsaw. The plain blocks and the remains of two caved ones were dispersed in front of the stairway, and were quickly observed during

the first visits to the South Patio. Given that there is no photograph or drawing of the stairway *in situ*, the only information comes from the brief description made by the Harvard team, which says that the glyphs were located in the step riser, and that the first (upper) step panels had two sets of glyphs, while the remainder only one set of glyphs (*Ibid.*, 27). However, it was hoped that test excavations would help to reconstruct the original layout of the staircase and to find previous versions of the main access to Structure L7-8.

The test excavations in 2001 were the first explorations of this staircase, being five 2 x 2 m units: CAN 27-9, 27-10, 27-11, 27-14 and 27-18 (Barrientos and Luin, 2002: 41, 64-65). These units were part of the north-south trench that followed the central axis of the palace, and were planned to expose only the last construction phase found (Figure 9.70). The northernmost unit (CAN 27-9) uncovered large amounts of wall fall, possibly from the top of Structure L7-8; however, in its southern extreme, the excavation exposed a small plastered step or bench with a small stone slab floor in front of it. This could have been the access to the central corridor of the building. Unit CAN 27-10 exposed the damaged remains of the staircase, made with porous and soft limestone blocks. To the south, unit CAN 27-11 followed the staircase, but it was very difficult to observe clear steps, maybe because these blocks represent a very late addition that covered the original staircase. Closer to the plaza floor, the features found in CAN 27-14 were in better shape, thus revealing the two initial steps. Furthermore, after removing the wall collapse in unit CAN 27-17, it was clear that the lower portion of the staircase presented three small terraces built with sandstone and limestone, which probably held the large plain and carved blocks that were dismantled by the looters. Through unit CAN 27-18, the second

terrace was cleaned, confirming the idea previously described. Regarding the upper portion of the stairway, the excavation could not confirm the existence of a stairway, but it seemed probable that the few blocks found could represent the very last version of it.

The excavations in the Hieroglyphic Stairway continued in 2003, as part of the intensive excavation program of the South Patio that mostly focused in Structure L7-9, located on the opposite side of the plaza. Following the same methodology used in L7-9, a grid of 2 x 2 m units was laid out covering the entire staircase. During the 2003, 36 units were excavated: CAN 27-9 to 27-48. Also, all carved and plain blocks were numbered, codified and measured, in order to have a good registry of their current location in the site and in other places, such as the storage room of the National Museum of Archaeology and the storage room of the Tikal National Park.

The excavation and registry of blocks was divided into two sections: east and west. The western side of the stairway was excavated through units CAN 27-15 and CAN 27-19 to 27-33. The westernmost units (CAN 27-28 to 27-31) exposed the South Patio floor made with river pebbles, after removing all rubble fell from Structure L7-8, mainly soft limestone blocks from its cornice. The southwest corner of the staircase was exposed by units CAN 27-20 and 27-25, showing clearly that the first three steps, where the carved inscriptions were located, were the result of a late addition to the original staircase. The excavations also showed that the lower steps had a construction fill made with small sandstone blocks, and the exterior details were made with small hard limestone blocks. In some parts, the plaza floor in front of the stairway was made with flat slabs of limestone.

The three terraces that supported the Hieroglyphic Stairway were exposed by units CAN 27-21 to 27-24, CAN 27-32 and CAN 27-33, though they were best preserved in units CAN 27-15 and CAN 27-35. The terraces covered the original soft limestone steps, and a base of flat sandstone blocks served as support to the large and heavy rectangular plain and carved limestone blocks. The excavations also showed that the first step is larger than the other two ones.

Nevertheless, the most important discovery was the location of two plain blocks still *in situ*, which were part of the first step. They were codified steps O-14 and O-15, and were resting over a limestone alignment that delimits the area of the staircase. Of the two blocks, O-15 was in its original position (the riser on front), while the other one had fallen forward. These two blocks provided more information related to the entire staircase, because it was clear that a shallow molding was carved in every block upper surface, possibly to canalize water to the sides and not to the front, preventing erosion of the inscriptions. Also, the presence of two plain blocks together suggested that for every carved block, two plain ones were located on their sides. Other blocks that were near their original location were O-16, which could have been part of the second step, and O-17, related to a third step (Figures 9.76 and 9.77) . The eastern section of the stairway was not as well preserved as the western half. However, the excavation units found the eastern limit of the staircase, thus defining a total width of 17 m for the stairway. Units CAN 27-34 to 27-44 uncovered the three terraces and the southeast corner of the staircase, as well as four stone lines that were part of the basal platform of Structure L7-8.

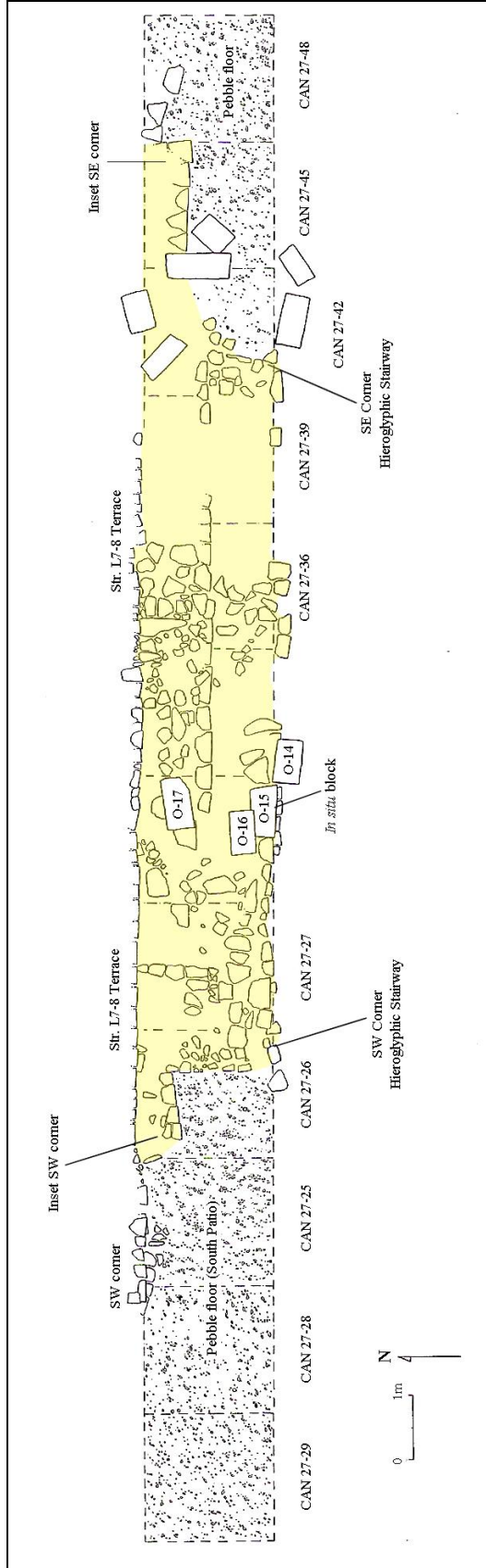


Figure 9.76 Plan view of excavations in the Hieroglyphic Staircase in 2003
 (Drawing by L. Luin and T. Barrientos, VCAP)



Figure 9.77 Blocks O-14 to O-16 found in situ, Hieroglyphic Stairway (Photo by T. Barrientos, VCAP)

In total, 52 blocks were recorded; 41 plain ones and 11 carved ones that had been registered in different parts of the country, including one vertical panel that could have been located at the upper center of the stairway (Table 9.1).

The 2007 excavations revealed more chronological information about the hieroglyphic stairway. A 16.8 m tunnel and other related excavation units defined at least four walls that were part of previous versions of the central staircase of Structure L7-8. These included walls and steps made with hard limestone masonry blocks and different types of clay and sandstone fills, as well as some architectural features made with red clay. These defined three construction stages for the staircase: the first one was made completely with red clay; the second one had a grey clay fill that supported masonry blocks; and the third one is directly related with the three terraces and the carved blocks (Romero *et al.* 2008).

Table 9.1 Dimensions of plain blocks, Hieroglyphic Staircase

Code	Width	Height	Length
E1	79	40	29
E2	59	34	22
E3	60	39	31
E4	78	48	19
E5	73	39	23
E6	60	38	31
E7	64	35	20
E8	50	46	25
E9	69	34	15
E10	80	41	26
E11	89	34	29
E12	78	51	18
E13	71	37	17
E14	79	40	30
E15			
E16			
E17			
O2	35	21	25
O3	58	35	29
O4	71	42	29
O5	106	36	24
O6	96	36	30
O7	73	32	21
O8	38	28	22
O9	66	35	23
O10	62	47	28
O11	63	45	24
O12	103	37	30
O13	114	35	33
O14	69	36	27
O15	81	42	30
O16	76	39	27
O17	83	43	21
O18	62	35	24
O19	56	33	28
O20	62	41	30
O21	52	41	22
O22	63	35	26
O23	65	36	28
O24	71	30	23

With all these data, the Hieroglyphic Stairway was finally restored in 2007 by Luis Fernando Luin (2008, 2009). The restoration process allowed recording more detailed measurements of the hieroglyphic staircase: 13.1 m in length, 3.3 m in width, and 1.26 m in height. This restoration included 9 replicas of the carved blocks located in Guatemala and Tikal (one new carved block was identified during the restoration work, which was originally classified as plain), leaving empty spaces for those blocks that are still missing. The return of the plain blocks to their original location fitted exactly the pattern suggested in 2003, thus confirming the existence of three steps with a small and shallow drain canal in their upper surface (Figure 9.78).

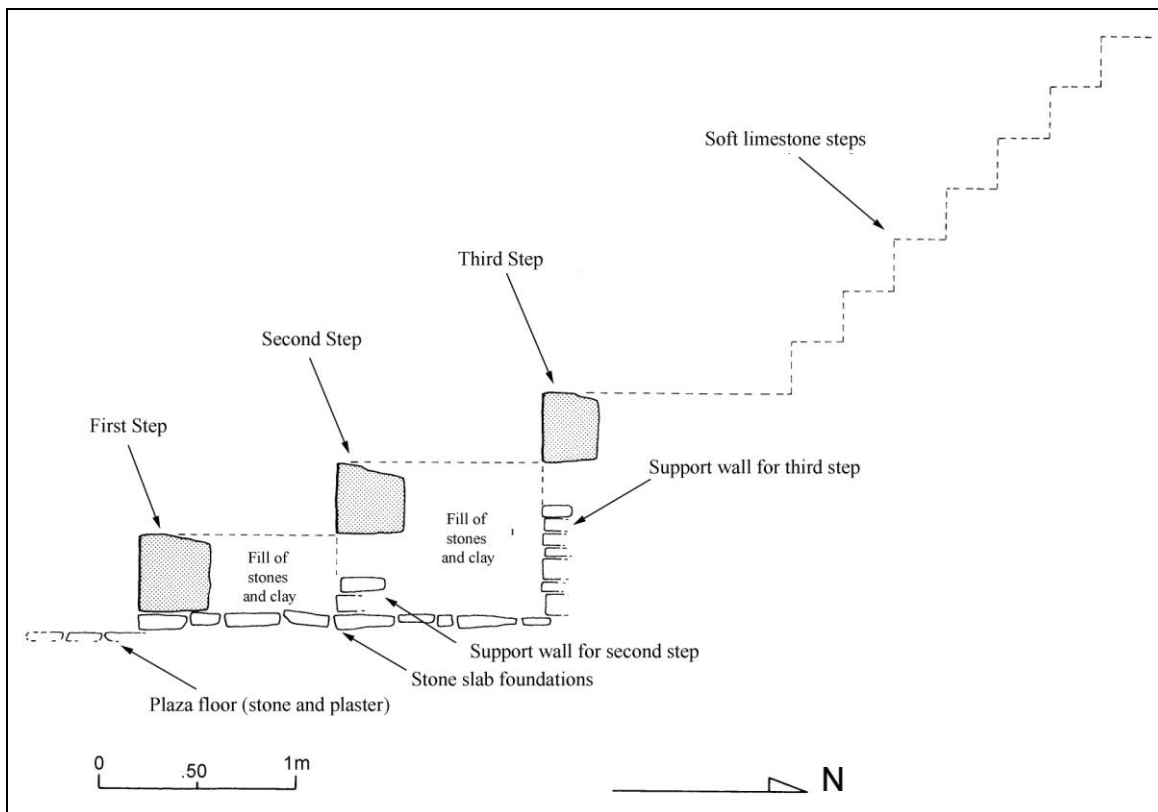


Figure 9.78 Schematic drawing of the Hieroglyphic Stairway constructive system (Drawing by L. Luin, VCAP)



Figure 9.79 Restored Hieroglyphic Staircase (Photo by Jorge Pontaza)

Conclusions

The excavation of Structure L7-8 and its Hieroglyphic Stairway present interesting parallels with Structure L7-9, especially some details related with their chronology. First, the stairways made with hard limestone blocks represent the last additions in both Structure L7-9 and Structure L7-8 main accesses. Also, both patios have a river pebble fill and areas with flat stone slab floors. Nevertheless, other details such as the type of masonry differ between the two buildings, but in any case, it seems that both areas were built more or less at the same time, during the reign of *Taj Chan Ahk*.

9.2.3. *The North Patio:*

The North Patio constitutes the highest point in the entire Cancuen site, because it is located 14 m above the South Plaza. Its high location reflects the importance of this small closed compound which seems to represent the maximum level of authority reached by ruler *Taj Chan Ahk*. Its closeness and restricted access clearly reflect the privileges managed by the royalty and high nobility of the site, which was only shared with other nobles of the same or higher rank that visited Cancuen from other contemporaneous cities of the Maya lowlands and highlands. The courtyard measures 8 x 8 m (64 m²), and was surrounded by Structures L7-1 to the north and L7-5 in the south, east and west sides. The latter is a “U-shaped” building that was originally defined as four separated structures: L7-2 to the west, L7-3 to the east, and L7-4/ L7-5 to the south (Figure 9.80). The excavations carried out in 2004 revealed that the court was enclosed by a platform approximately 0.5 m high that supported the main buildings. The map produced by the Harvard team indicates that all buildings that surround this patio had a double row of rooms (Tourtellot III *et al* 1978: 201, 225). The first excavations in this courtyard were defined as Operation CAN 26, being part of the test trenches excavated in 2001. Both the east-west and the north-south trenches originated from the center of this patio. Later on, a deep stratigraphic pit was dug in 2002, defining the earliest construction period of the palace and the entire site. In 2003 intensive excavations were carried out in Structure L7-1 (Figure 9.81), defining the northern entrance and its internal layout. The excavations in 2004 discovered a royal cache under the floor of Structure L7-1 and an earlier version located 10 m below its final version. The excavations continued in 2005, resulting in the discovery of another platform that was part of the first acropolis.

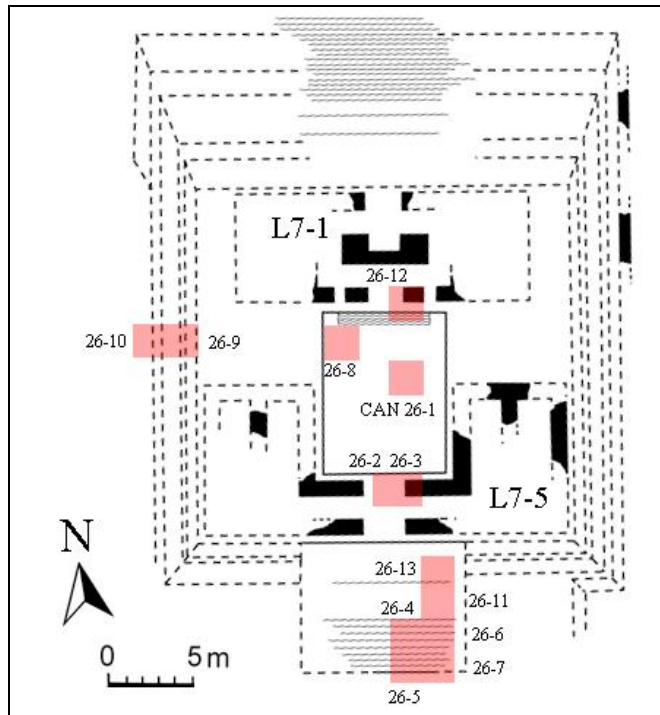


Figure 9.80 Map of the North Patio and excavations carried out in 2001 (Map by T. Barrientos, VCAP)

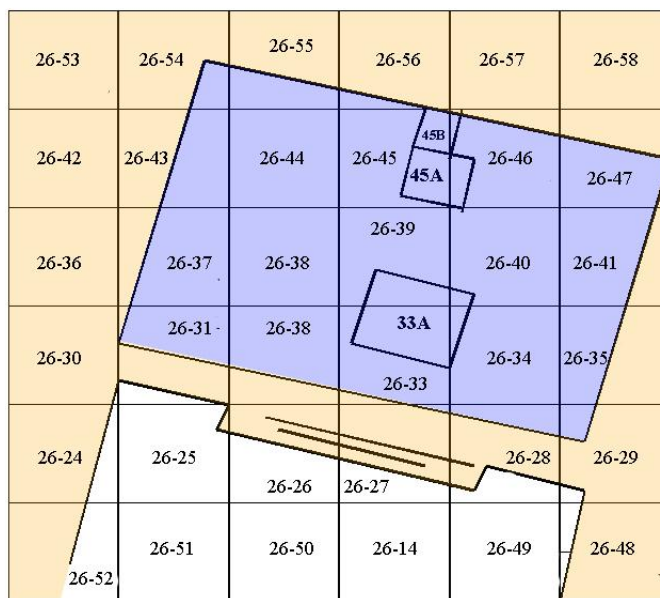


Figure 9.81 Grid of excavation units in Structure L7-1 carried out in 2004 (Drawing by M. Callaghan and T. Barrientos, VCAP)

The results of all these excavations will be presented according to the different areas investigated in these five field seasons:

Patio Floor and Substructures

The excavation of this patio was initiated with a 2 x 2 m unit that was the initial point of the north-south trench laid out in the central axis of the palace. Unit CAN 26-1 exposed the stucco floor of the patio, at 30 cm below the actual surface. The floor was found below the humus and a dense layer of soft limestone blocks that represent the collapsed cornice of Structure L7-3. Within this rubble, a limestone mortar was found, suggesting that it was used for preparing some type of plaster or mortar. The unit was left at this level, given that the objective of these trenches was to analyze the amount of debris in the different courtyards and structures, and also to only expose evidence for the last construction episode of the palace.

Only half meter to the northwest, the 2 x 2 m unit CAN 26-8 was defined as the starting point of the east-west trench that explored the other main axis of the palace. This pit exposed the same pattern found in unit CAN 26-1, but probably with the collapsed cornice of Structure L7-2. However, the pattern of the soft limestone blocks suggested that they could have been part of a staircase (Figure 9.82).

The stratigraphic excavations carried out by Michael Callaghan in 2002 included a new 2 x 2 m test pit in the small patio area. Unit CAN 26-14 was thus located in front of the staircase that leads to the basal platform of Structure L7-1. The test pit reached a final depth of 6.5 m, which is related to the deepest level of unit CAN 27-19 of the Central Patio. Also, like the latter one, this test pit revealed two main construction episodes.

The early episode was evidenced by four plastered steps found at the bottom end of the unit (Figure 9.82).

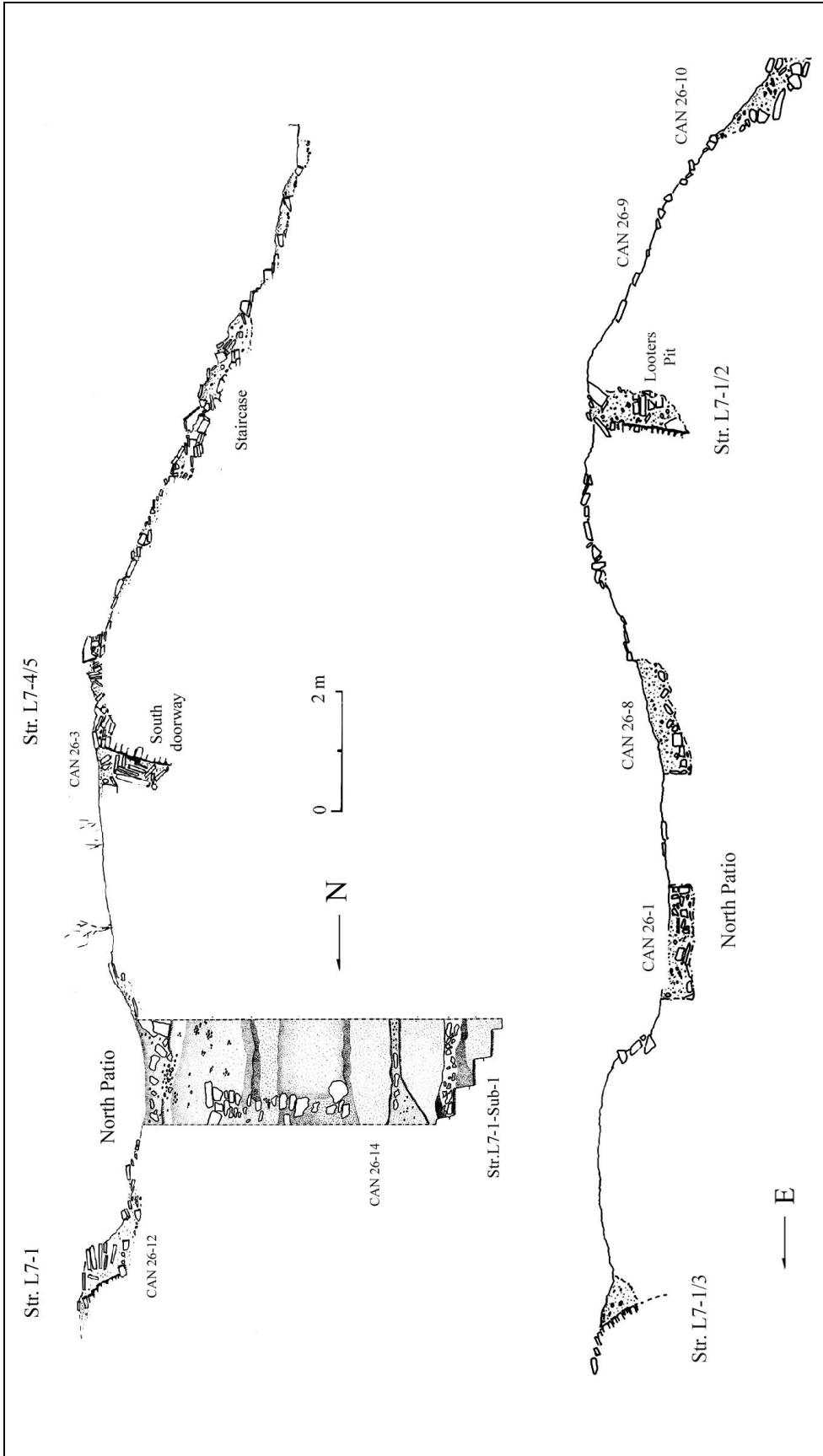


Figure 9.82 Above: East profile, Structures L7-1 and L7-5 (North-South Test trench)
 Bottom: South profile, Structures L7-1/2 and L7-1/3 (East-West Test trench)
 (Drawing by L. Luin, R. Larios and T. Barrientos. VCAP)



Figure 9.83 Excavation of unit CAN 26-14 (Photo by A. Demarest, VCAP)



Figure 9.84 Plastered steps found in bottom of unit CAN 26-14 (Photo by M. Callaghan, VCAP)

These steps were part of the platform named as L7-1-Sub-1 (“Coche”), whose dimensions were unknown at this moment. Also, the plaza floor was not found in the unit, making it difficult to calculate the height of the platform and its relation to the floor found under the Central Patio. Nevertheless, it seemed highly probable that these two features were part of an earlier version of the acropolis. The steps were found very well preserved and were made from soft limestone masonry; each one measuring from 26 to 41 cm in height and covered by a plaster layer 4 to 5 cm thick (Figure 9.86)

This early platform was buried under a series of clay layers that created a massive construction fill. Most of the fill was made with hard clay blocks and sandstone, which abound in the surroundings of the site. However, unlike the fill found in unit CAN 27-19, the stratigraphy of this unit showed evidence of different filling episodes, separated by fine layers of sandy clay and dark brown soil, suggesting the existence of short periods where the clay fills were exposed for short periods of time.

The stratigraphy also revealed the presence of a retention wall that grew as three different clay layers were placed one after another. The wall was formed by stones of different types, sizes and shapes that created a construction cell. After the third clay layer of the construction cell, a leveling fill made with brown clay and rounded river pebbles covered the entire area of the unit for 1 to 1.5 m of depth and served to support a plaster floor of 30 to 35 cm of thickness. This plaster floor corresponds to the surface of the North Patio. It is important to note that the construction fill beneath the patio floor is very similar to the ones found in other units like CAN 28-14 and the Southeastern Patio (Figure 9.85).

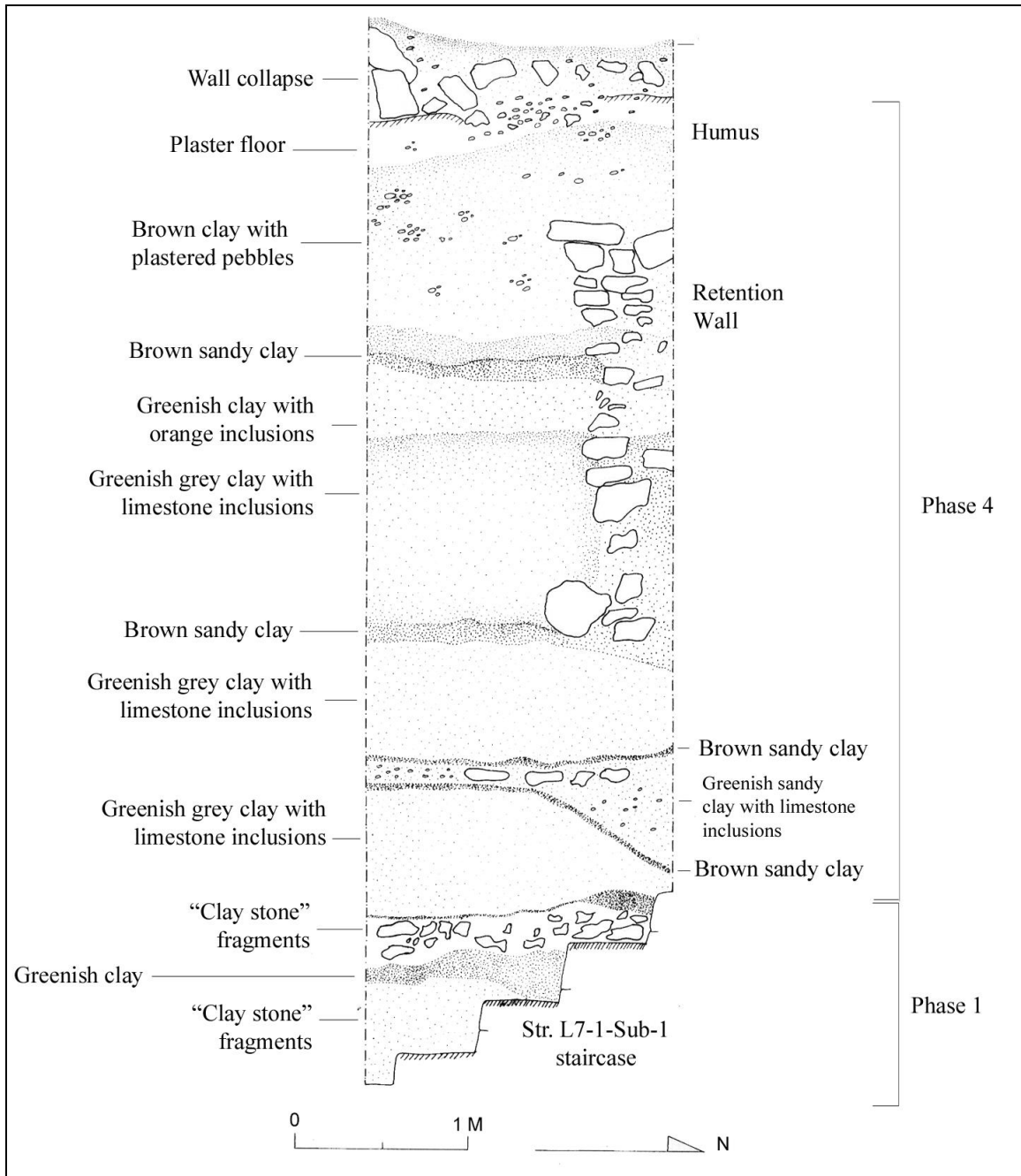


Figure 9.85 East profile of unit CAN 26-14

The ceramics recovered in this unit came mostly from the river pebble fill, and included sherds of the type Zapote Impressed and Chaquiste Impressed, dating it to the late Tepeu 2 phase, which corresponds to the reign of *Taj Chan Ahk*.

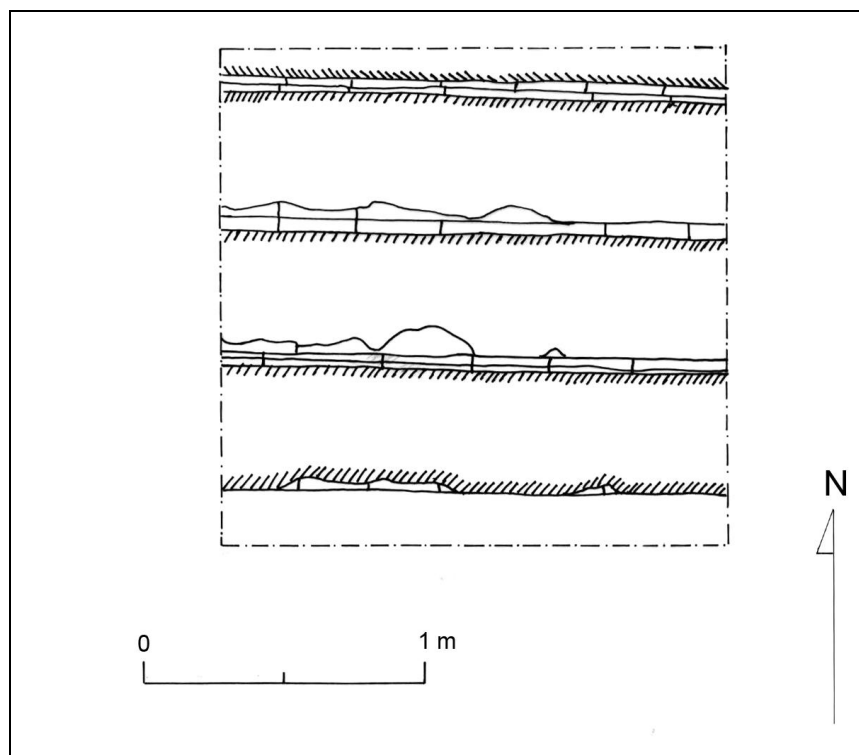


Figure 9.86 Plan view of plastered steps found in bottom of unit CAN 26-14

Structures L7-2, L7-3, L7-4 and L7-5 (U Shaped Structure):

The trench excavated in 2001 crossed the south side of the building, originally defined as structures L7-4 and L7-5. Before the excavation, it was noted that part of a wall was visible on the mound surface. Then, unit CAN 26-3 was laid out in the trench axis; while unit CAN 26-3 was defined as an extension to the west. In a first lot of 0.5 m, unit 26-3 exposed the corner of the western jamb of the northern entrance, and unit 26-2 uncovered the opposite door jamb. The door opening measured 1.6 m wide and was filled with soft limestone blocks, with flat stones beneath them, indicating that those were the remains of the collapsed door lintel and the upper cornice of the northern façade.

When a second lot was excavated, it became clear that these two walls formed the entrance of a single structure, and not the opposite corners of two separate buildings. No

ceramics were found in these units, but in lot CAN 26-2-2, several pieces of stucco sculpture were found throughout the unit, including a scroll-shaped tridimensional element that measured 10 x 13 cm. The patio floor and the base of both walls were found at 1.3 m below the surface.

Units CAN 26-9 and 26-10 crossed Structure L7-2 (west side of the U shaped structure), as part of the explorations that tried to relate the north and west patios. The first lot found a large deposit of architectural rubble, probably fallen from the western façade of the structure. However, the lot contained a large amount of stucco sculpture fragments, including a small human face, a foot with an ankle decoration, an arm, a stone torso, and other human parts. For that reason, the excavation was suspended until the project hired a conservator that could manage properly these fragile artifacts. Near this unit, a small looters excavation in the mound had exposed an internal division wall of the building (Figure 9.82).

Units CAN 26-4 to 26-7, 26-11 and 26-13 explored the stairway that came from the Central Patio to the southern entrance of structures L7-4 and L7-5. Originally, units CAN 26-4 and 26-5 were excavated to uncover the staircase, but the presence of a tree disturbed the entire context, making necessary to open other two adjacent units to the east: CAN 26-6 and 26-7. The excavation revealed the remains of various steps made with soft limestone blocks, in a very similar way than the other staircases previously mentioned. Unit CAN 26-5 exposed three steps, while other four were revealed in CAN 26-6 and 26-7, making a total of 7 steps for the staircase. Units CAN 26-11 and 26-13 were located to the north, in order to expose the end of the staircase and the floor of the basal platform of structures L7-5 and L7-4. Nevertheless, the amount of rubble and

stucco sculpture complicated the excavation, making it necessary to project such level based on the data recovered in unit CAN 26-3.

Structure L7-1

This structure was initially explored in 2001 by unit CAN 26-12; located 2 m north of unit CAN 26-1. This excavation exposed an access staircase and central doorway of the building, under a stratum of rubble that fell from the upper portion of the structure. The staircase consisted in three steps that initiated at the level of the North Patio floor and ended at the level of a platform that supported Structure L7-1 and the U-Shaped Structure L7-5. The staircase was completely exposed during the excavations of the 2004 season, measuring 3.75 m wide (Figure 9.87).

The doorway of Structure L7-1 was initially found in unit CAN 26-12, evidenced by its eastern jamb, which measured 1 m high. Within the debris found directly on top of the staircase, more sculpture fragments were recovered, consisting in moldings and scrolls that measured from 15 to 20 cm. Also, a large fragment that resembles a bird beak was recovered in the eastern side of the pit. Other decorative sculpture had a cruciform shape, similar to the upper portion shape present in some stelae at Cancuen. The latter one showed traces of a glyphic cartouche element, and it is possible that functioned as one of a series of “*almenas*” or crenels located on the upper part of the cornice.

The excavations in this structure continued in 2003 as Suboperation CAN 26A, under the direction of Michael Callaghan, in the form of a central axis trench that extended the 2001 test trench to the north (Callaghan 2004a: 97-135). The excavation showed that the interior rooms were divided by a wide wall, and the floor level was

different in the two halves, being the northern half lower than the southern one. The latter consisted of a narrow long room and three entrances facing the North Patio, while the north/lower half has a wide room and only one central doorway that faces the Lower North Patio, the North Ball court and the North Plaza. The internal layout of the building included a narrow south room and a northern room, all of them communicated through narrow passages in its east and west sides (Figure 9.87).

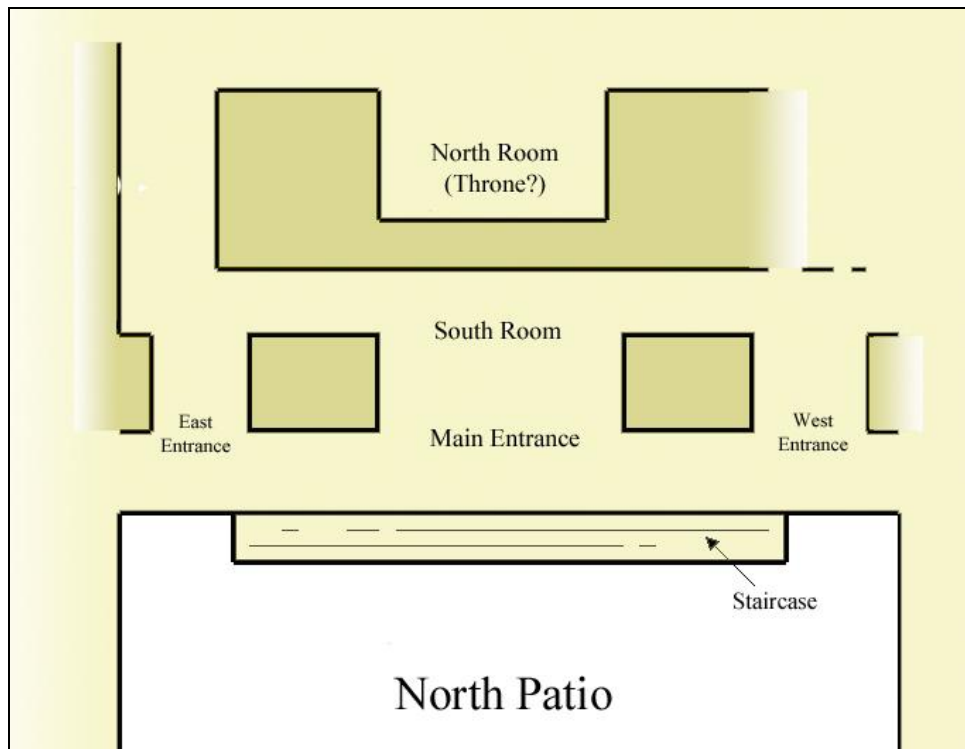


Figure 9.87 Internal layout of Structure L7-1 (Drawing by M. Callaghan and T. Barrientos, VCAP)

The south/superior part of Structure L7-1 was excavated in 2003 by units CAN 26A-9 and 26A-10, as part of the axial exploratory trench. Unit CAN 26A-9 exposed the interior of the narrow room that faces the North Patio. The room was a little more than 1 m wide, and presented three doorways that communicated with the closed courtyard (Figure 9.88).



Figure 9.88 Excavations in the southern façade of Structure L7-1 (Photo by M. Callaghan, VCAP)

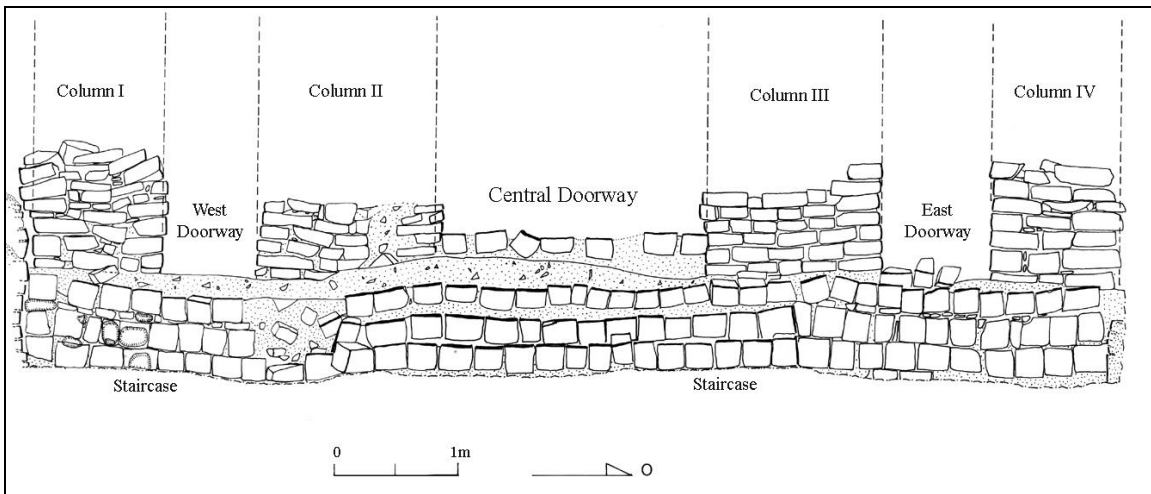


Figure 9.89 South elevation, Structure L7-1 (Drawing by L. Luin, VCAP)

The central entrance was wider than the east and west ones. No bench was found, suggesting that it could have functioned more as an antechamber than a throne room. The interior floor was found at 1.10 m below the mound surface, under a layer of rubble consisting of large cut stones that weighted more than 50 pounds. Unit CAN 26A-10 excavated the south exterior wall, which was found sloping to the north. The excavations continued in 2004, defining a narrow corridor in the west side of the building, which communicated the south with the north rooms.

The north/inferior section of Structure L7-1 was excavated in 2003 by units CAN 26A-6 to 26A-8, revealing the presence of a north doorway that communicated with the Lower North Patio through a series of long steps and a stairway (Figure 9.90).

Unit CAN 26A-6 removed the interior fill of the northern room, which consisted of large flat limestone stones and loose brown soil, with some fragments of stucco sculpture. Before the project excavations, this area had been looted by an excavation that reached a depth of 0.5 m below the surface. Within this unit, the wall that divides the interior of the structure was revealed, showing a marked inclination towards the north side. This wall measured 1 m in width at its center, and was made with fine cut stone masonry, with blocks larger than the rest of the building architecture (Figure 9.91).

The base of the north exterior wall was found in the third lot of this unit, at 1.80 m below the surface and showed remains of plaster painted in red. After cleaning this wall, it became evident that an opening in the east side communicated the two rooms of the structure. To further investigate this feature, unit CAN 26A-7 was opened to the south, excavating within the fill until reaching the interior red painted floor at 2.4 m below the surface.

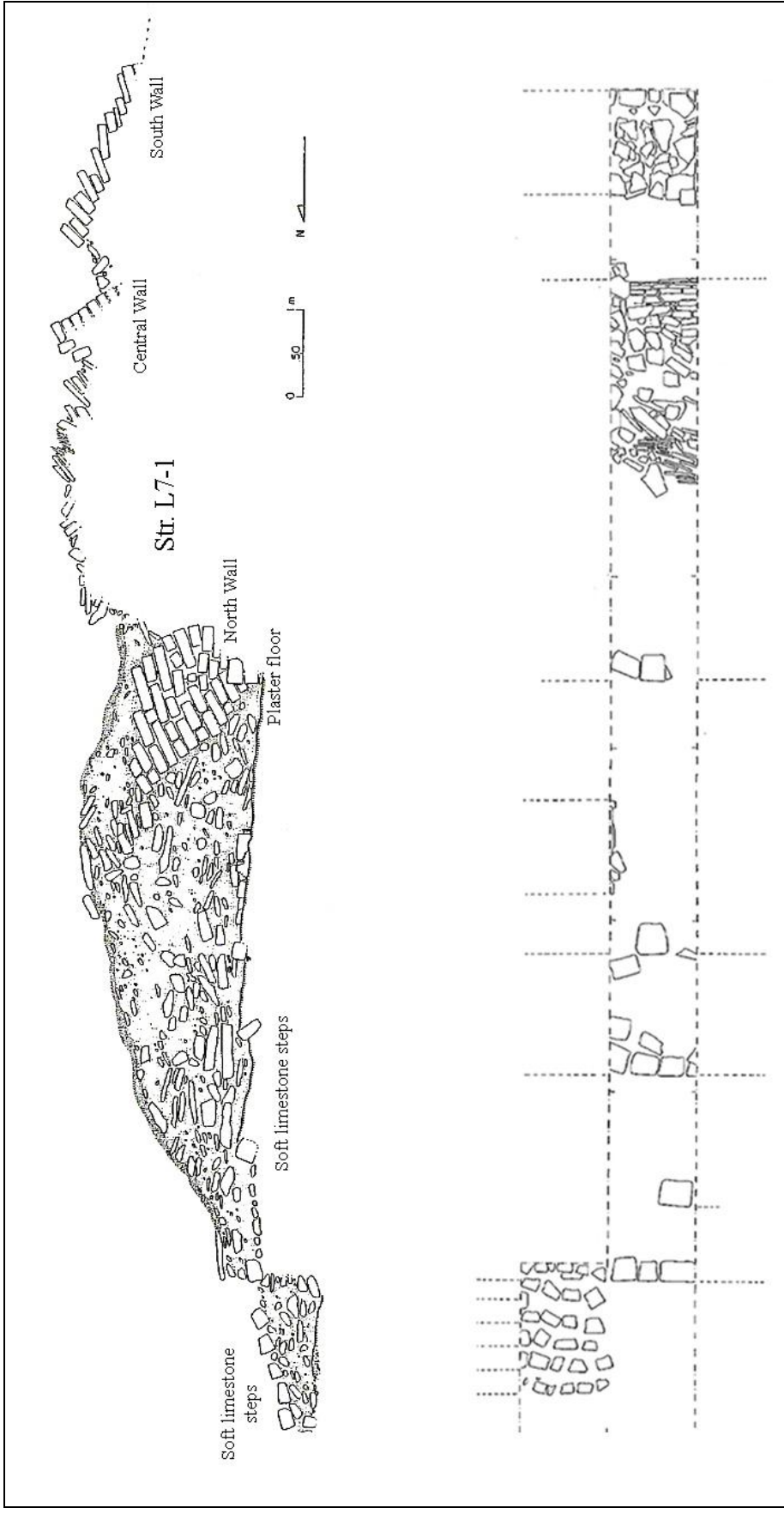


Figure 9.90 West profile (above) and plan view (below) of excavation trench, Structure L7-1 northern access
 (Drawing by M. Callaghan and L. Luin, VCAP)

This unit also revealed the base of the division wall, located at the edge of a step that came down from the floor of the south/superior room. This step was formed by two rows of soft limestone blocks, and some of them were pulverized by the weight of the heavy flat stones that fell from the roof. This produced a fine lime layer found in lots 3 and 4 of the unit, on top of the interior floor. Unit CAN 26A-8 was laid out between units 26A-7 and 26A-9, but was not excavated due to the probable presence of a throne and because it was necessary to stabilize the visible walls before proceeding to clean the rest of the architecture.

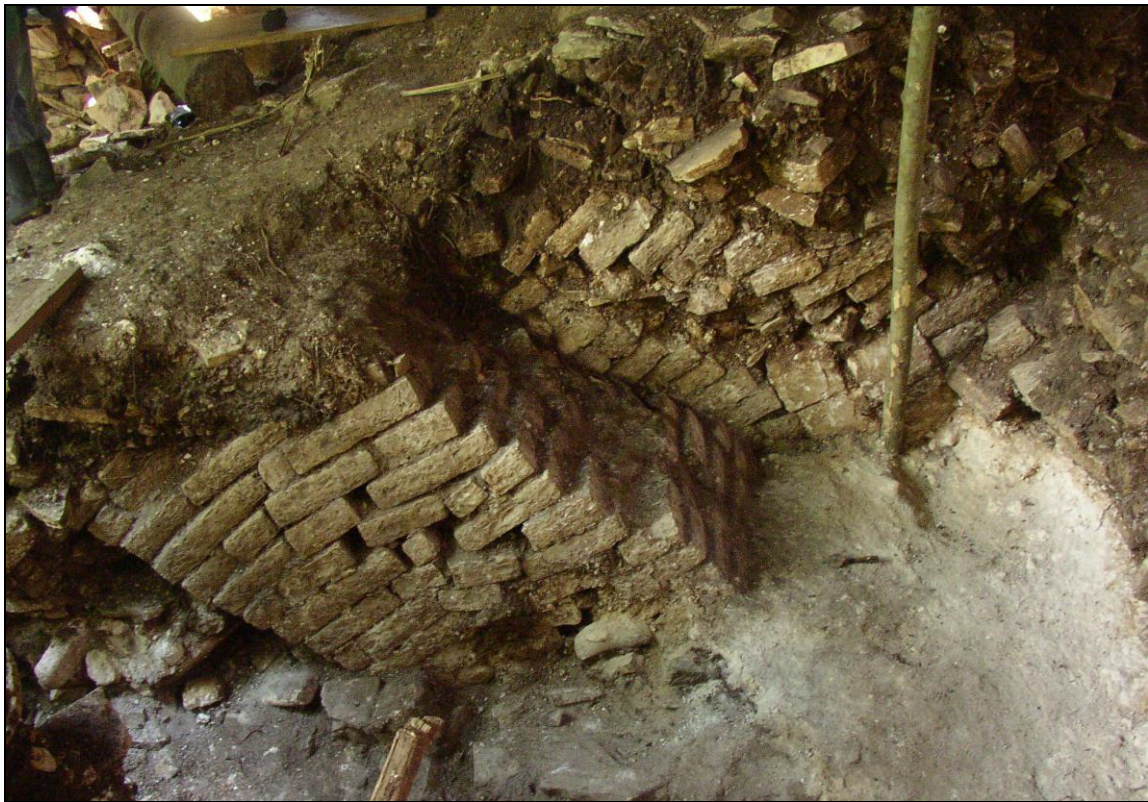


Figure 9.91 South exterior wall of Structure L7-1 (CAN 26A-10) (Photo by M. Callaghan, VCAP)

The interior of the structure was excavated in 2004 through a test pit in the north room, CAN 26A-45A. This unit revealed the floor of the room, but also descended until reaching another plastered floor which seems to correspond to an earlier version of Structure L7-1, where the levels of the floor were deeper. The pit was ended until the floor of L7-1-Sub-1 was found at approximately 2.5 m below the surface (Figure 9.92).

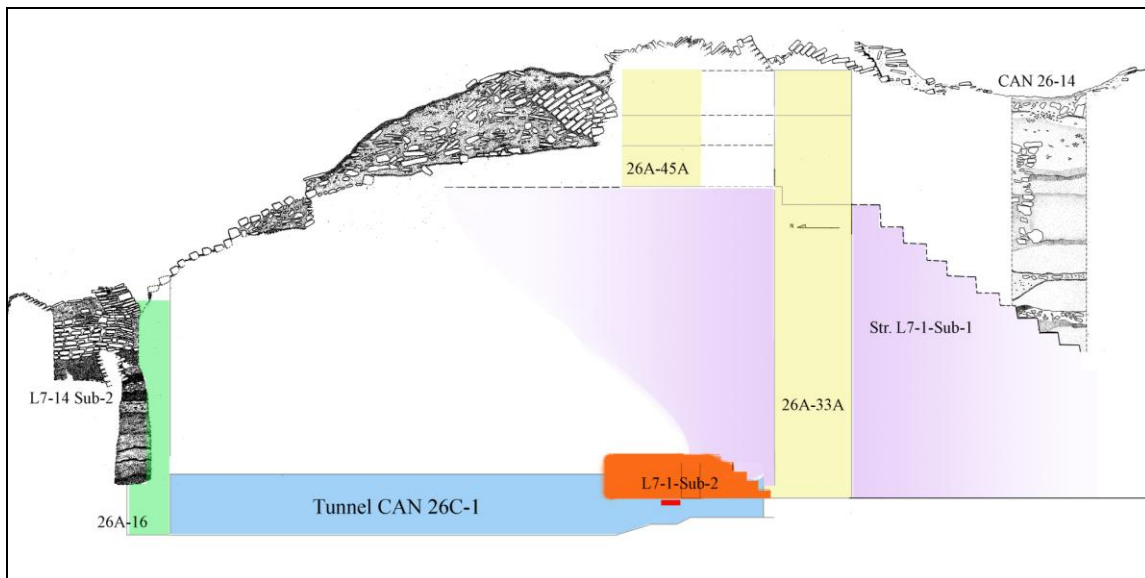


Figure 9.92 Location of stratigraphic excavations and substructures in the North Patio area
(Drawing by T. Barrientos and L. Luin, VCAP)

The test pit in the south room was unit CAN 26A-33A (Figure 9.93). Its excavation discovered a cache located under the interior floor of the room, consisting of a small box made with thin blocks of polished limestone that was covered with a lid of unworked limestone (Figure 9.94). After removing the lid, a large greenstone boulder was found (Figure 9.95). The greenstone had a small section finely cut in one of its edges.



Figure 9.93 Location of excavation unit CAN 26A-33 inside the southern room of Structure L7-1
(Photo by M. Callaghan, VCAP)



Figure 9.94 Excavation of unit CAN 26A-33 and location of royal cache (Photos by M. Callaghan, VCAP)



Figure 9.95 Unworked greenstone boulder found inside royal cache (Photos by M. Callaghan, VCAP)

Once the greenstone was removed, several artifacts were found lying on the bottom of the box (Figure 9.96). These included two *Spondylus* shells of a strong dark red color, and one of them contained a necklace made with beads of orange *Spondylus*. The offering also contained two large jade beads, a small anthropomorphic jade pendant (approximately 1 x 1 x 1 cm) and a royal *huunal* diadem made in light greenstone. It is possible that this *huunal* effigy was made from the piece cut from the greenstone boulder found in top of the cache, meaning that this rock was so sacred that it was used only to elaborate the royal jewel, and was buried after it. The cache also contained a small unused obsidian prismatic blade that could have been used for a bloodletting ritual relating to the cache dedication. Once the stone box was empty, it was noted that its east and west sides presented a thin layer of debitage that was the product of polishing the limestone blocks.



Figure 9.96 Location of jade, shell and obsidian artifacts inside royal cache
(Photo by M. Callaghan, VCAP)

The excavation of CAN 26A-33A proceeded in front of the cache, finding the floor of Structure L7-1-Sub-1 (“Coche”) at approximately 2.5 m below the surface, and two steps in the northern profile of the unit, in lot CAN 26A-33A-17 (Figures 9.97, 9.98).



Figure 9.97 Plastered step and floor of Structure L7-1-Sub-1 (CAN 26A-33)
(Photo by M. Callaghan, VCAP)

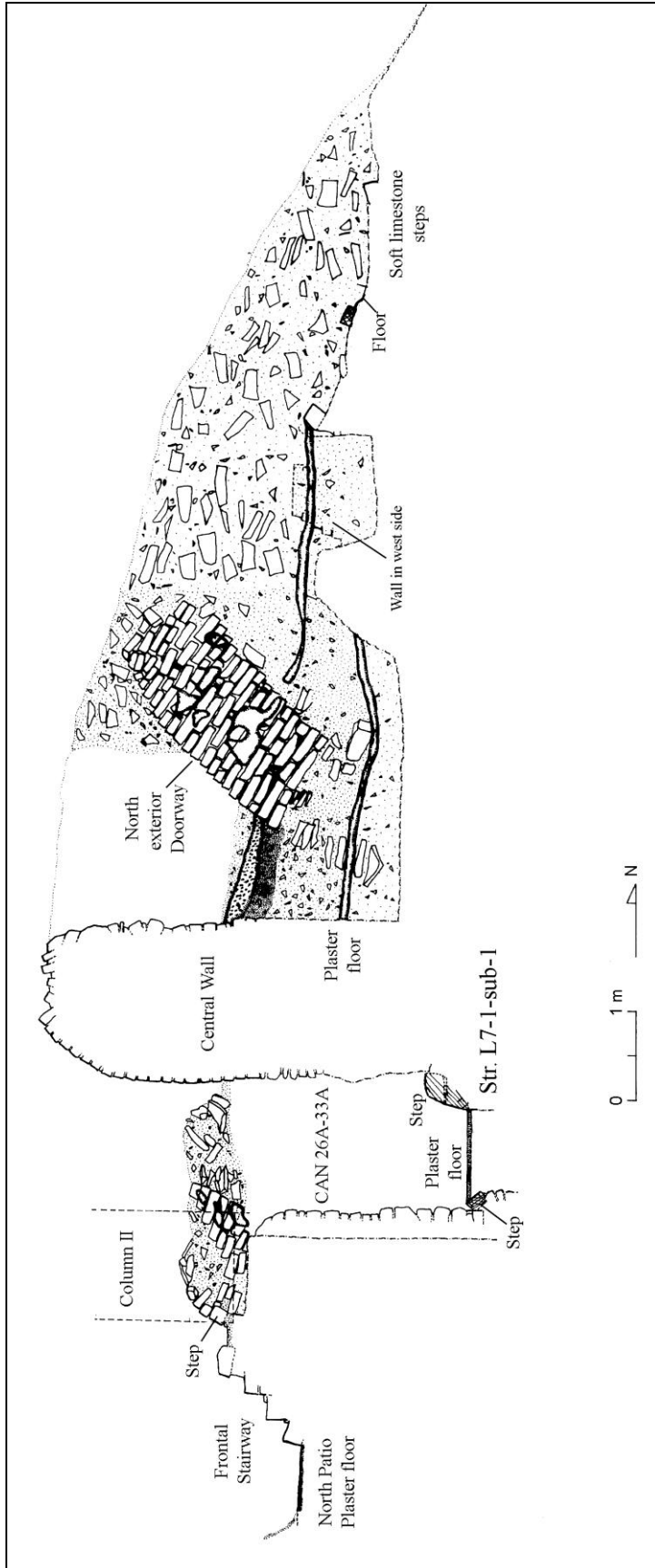


Figure 9.98 West profile of excavation trench, Structure L7-1 northern access
 (Drawing by M. Callaghan and L. Luin, VCAP)

This indicated that Structure L7-1-Sub-1 was a larger building than thought, with a staircase that corresponds to the one found in unit CAN 26A-14. Before reaching that floor, a formal retention wall was found in the south profile of the unit. This wall was built directly on top of the L7-1-Sub-1 level and was found exactly below the south exterior wall of Structure L7-1. The excavation continued below the L7-1-Sub-1 floor (lot CAN 26A-33A-19) in a fill of red and gray clay with pebbles and large boulders, but few artifacts. The excavation reached the stairs of L7-1-Sub-2 (lot CAN 26A-33A-27) at the level of tunnel CAN 26C-1, 10.6 m below the surface.

Structure L7-1-Sub-2

During the 2004 and 2005 seasons, a tunnel was excavated at the deepest cultural levels found in the central section of the palace (Figure 9.92). Previous test pits such as CAN 27-19 and CAN 26A-14 had already identified the remains of early plastered low platforms resting on top of the sterile soil level, thus providing enough data to plan the excavation of the tunnel, under Operation CAN 26C. The tunnel, named unit CAN 26C-1, measured 1 m wide and 2 m tall, and was located at 10.6 m below the level of the North Patio. It started at the bottom of unit CAN 26A-16, continuing 14 m to the south (unit CAN 26C-1A), until it reached the south façade of Structure L7-1-Sub 2. From here, it turned 5.5 m to the west in order to follow the main stairway of the building (unit CAN 26C-1B), and another 4.5 m to the south, where the northern wall of Structure L7-1-Sub 3 was found. From here, the tunnel was again extended 2 m to the west and 3 m to the east (unit CAN 26C-1C), in order to follow the wall (Figure 9.99).

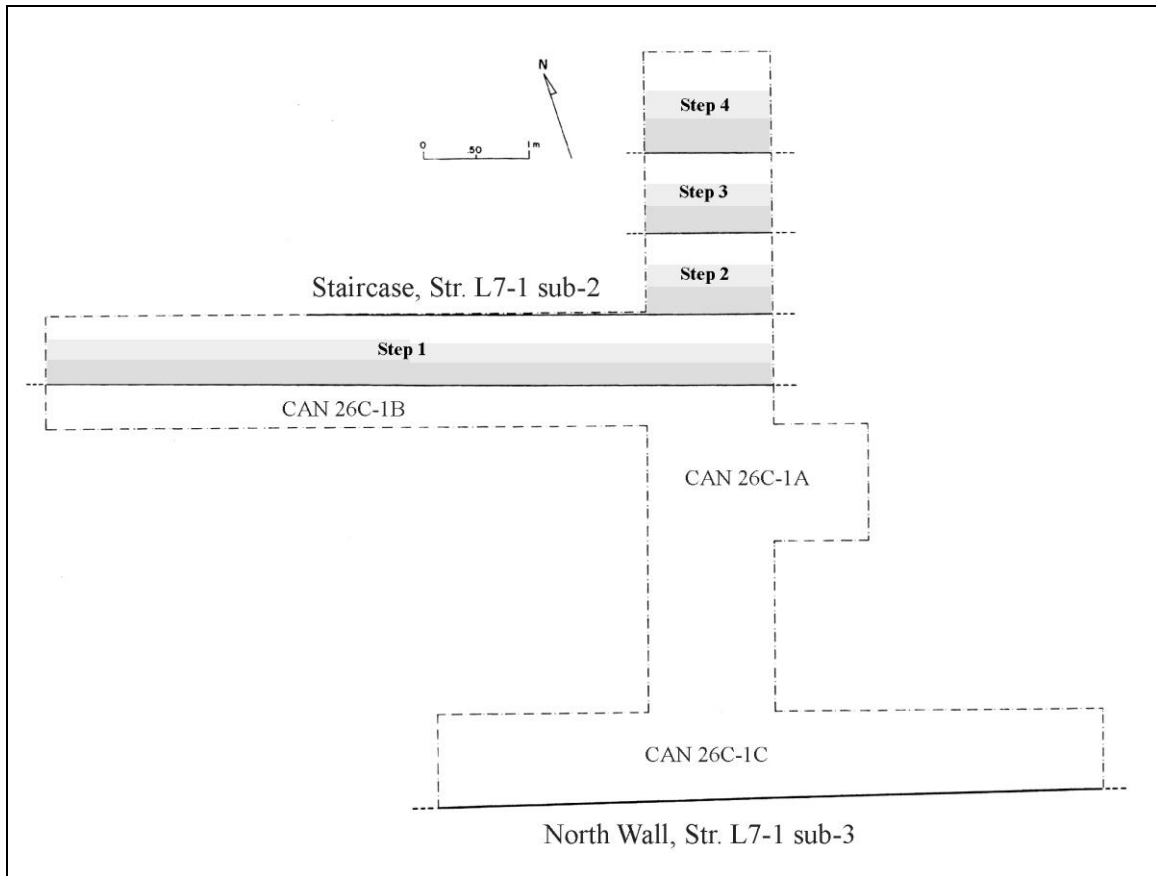


Figure 9.99 Location of tunnels, Structure L7-1-Sub-2 and Structure L7-1-Sub-3

Tunnel CAN 26C-1A was excavated through two main strata: a 1 m high grey clay fill and a thin level (20 cm) of dark brown clay containing carbon, shell, chert, bones and abundant ceramics. This latter was probably a midden located directly on top of sterile soil; it was found in almost the entire tunnel, stopping at 10 m from the north, where a small masonry wall was found. The grey clay fill also stopped at this point, and it is not clear if the wall could have functioned as an interior retention wall that supported the front staircase of L7-1-Sub-2 or if it constituted the southern façade of the building (Figure 9.101).

Given that this tunnel started from the south profile of unit CAN 26A-16, it was possible to follow one masonry wall found in the west profile (Structure L7-14-Sub-3). This wall kept going for another 4 m inside the tunnel, until reaching the gray clay fill and a plastered floor, suggesting that Structure L7-14-Sub-3 was added later, probably during the construction of L7-1-Sub-1. The excavation continued and revealed a retention wall (Figure 9.100) and a floor made with flat stones. The sterile layers under the floor revealed that this location was not leveled; instead, it showed a slight natural elevation that reaches its high point where Structure L7-1-Sub-2 was built.



Figure 9.100 Plaster floor and retention wall found in tunnel CAN 26C-1 (Photos by M. Callaghan, VCAP)

Chablekal Fine Gray sherds were recovered between 1.55 to 3 m from the north end of the tunnel (lot CAN 26C-1-13), in the clay fill associated with the wall of L7-14-Sub-3 (Callaghan 2004b: 74, 88). This feature dates the fill of L7-14-Sub-3 after 760 C.E., but it is not clear how this event relates to the construction of Structure L7-1-Sub-1.

Just outside the south wall of L7-1-Sub-2 (10 m from the north end of the tunnel), a burial was discovered beneath a floor of flat stones. The body rested directly on top of

the sterile level, and was named Burial 83 (Figures 9.101, 9.102). It corresponded to an adult male individual, laid in flexed position with the head oriented to the south. Its only funerary offering was a polychrome vase of the Maticulebra type located near the feet, and some quartz fragments next to the west side of the head. The vessel dates the burial and the construction of the early platform with the stone floor to the Late Tepeu 1 or Early Tepeu 2 phase of the Maya Lowlands (AD 650-700) (See full description in the ceramics section). However, it is possible that L7-1-Sub-2 could have been built later, given the location of the burial outside its south wall.

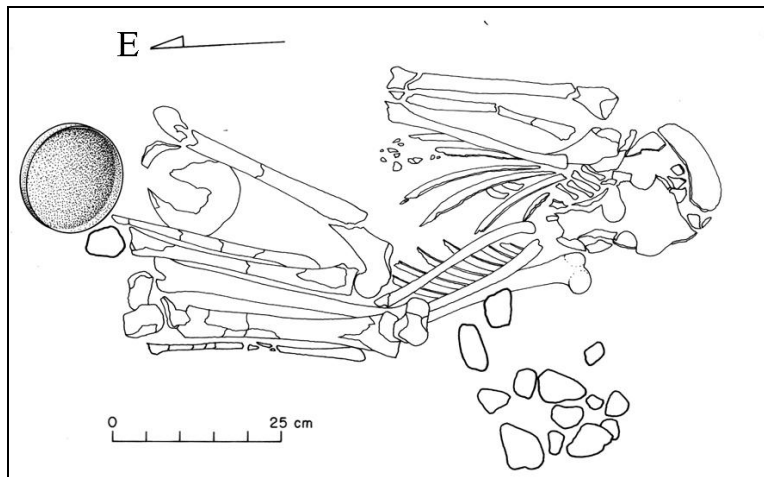


Figure 9.101 Drawing of Burial 83 (Drawing by L. Luin, VCAP)



Figure 9.102 Photo of Burial 83 (Photo by M. Callaghan, VCAP)

Without knowing it, the tunnel penetrated the early platform L7-1-Sub-2 from its back side, meaning that the clay layers constituted the interior fill of the building. The identification of Structure L7-1-Sub-2 happened when the tunnel reached 14 m in length, where the excavation revealed four plastered steps in the profile (Figure 9.103).



Figure 9.103 Plastered steps of Structure L7-1-Sub-2 (Photo by T. Barrientos, VCAP)

The structure measured 1 m high, oriented in a north to south axis; and was entirely made with a mix of brown and grey clay over a floor of small rocks and flat stones. It was also visible in the profile that the steps were made with dark brown rectangular adobes (Figure 9.104). The platform and staircase surface was covered with a hard white plaster layer. In order to find an approximation of the platform dimensions, an extension tunnel named CAN 26C-1B was excavated in the 2005 season. The tunnel followed the steps in a west to east orientation. After exposing 7 m of the first step (Figure 9.105), none of the two corners were found, thus indicating that it was at least 10 m wide, which is relatively large for the early structures known in Cancuen.



Figure 9.104 Gray clay adobe and plaster layer forming step of Structure L7-1-Sub-2 (left)
(Photo by T. Barrientos, VCAP)



Figure 9.105 Excavation of first step of Structure L7-1-Sub-2 in tunnel extension CAN 26C-1B (right)
(Photo by T. Barrientos, VCAP)

The excavations during the 2005 season included an extension of the main tunnel to the south. After 4.5 m, the tunnel hit a stone masonry wall of 1.5 m high, which was

part of another platform named L7-1-Sub-3 (Figures 9.106, 9.107). The structure was built with a clay fill surrounded by retention walls made of irregular sandstone blocks. The tunnel was able to expose 6.5 m of the wall, revealing an upper molding, but no corners were found. However, the upper surface started to descend towards the west side, suggesting the presence of a ramp that could have been part of the platform front façade.



Figure 9.106 North wall of Structure L7-1-Sub-3 in tunnel extension CAN 26C-1C (Photos by T. Barrientos, VCAP)

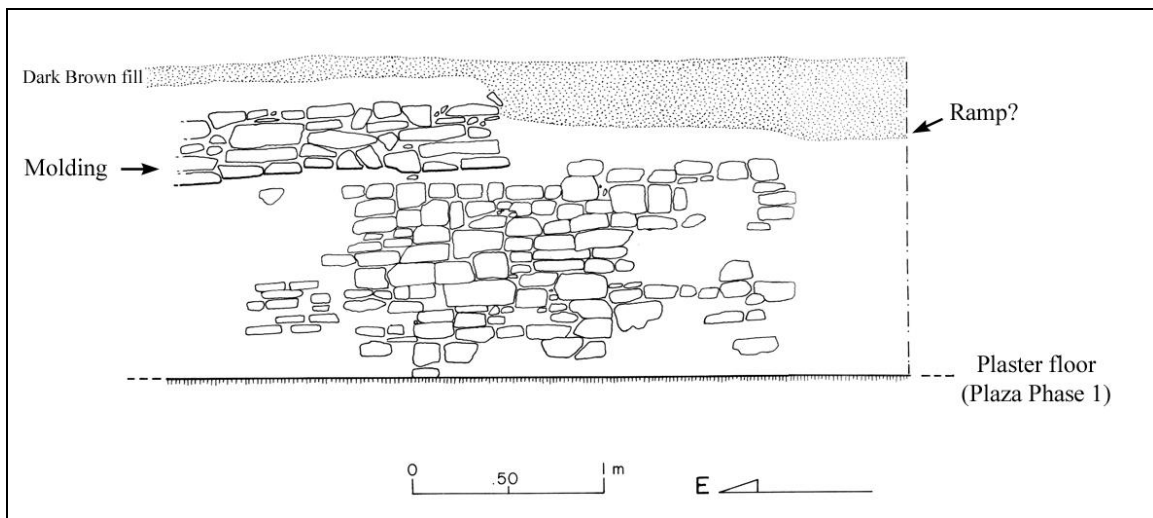


Figure 9.107 Profile of North wall, Structure L7-1-Sub-3 (Drawing by L. Luin, VCAP)

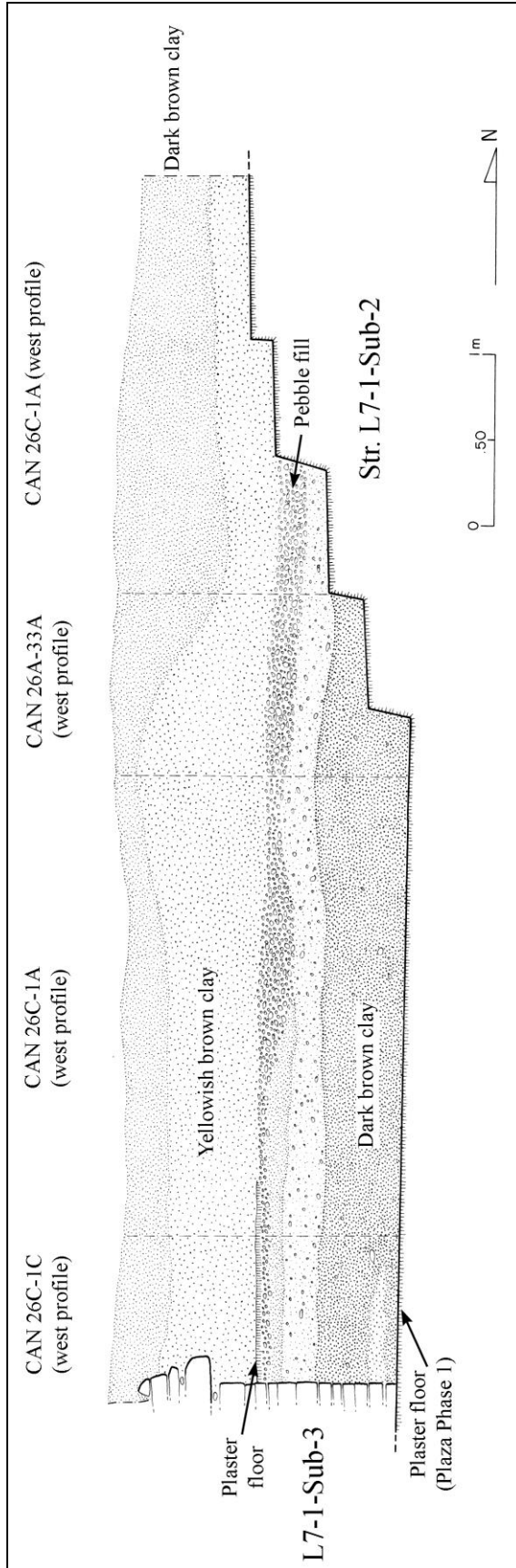


Figure 9.108 West profile of structures L7-1-Sub-2 and L7-1-Sub-3
 (Drawing by L. Luin, VCAP)

9.2.4. *The Lower North Patio:*

The Lower North Patio was defined in 2003 as the flat surface that measures 600 m², located directly north and below the North Patio. The floor of this patio was made on top of the roof surface of Structure L7-14, a vaulted building whose rooms were filled in the late phases of the palace history (Figure 9.109). The excavation of this area had the primary objective of descending to the level of the earlier platforms in order to dig tunnels that would reveal the dimensions and other architectural features of these substructures. During this excavation, many data concerning the history of Structure L7-14 were revealed, including the presence of five previous constructions and modifications, as well as the existence of a northern staircase that descended from Structure L7-1 to the North Plaza of the site (Callaghan 2004a).

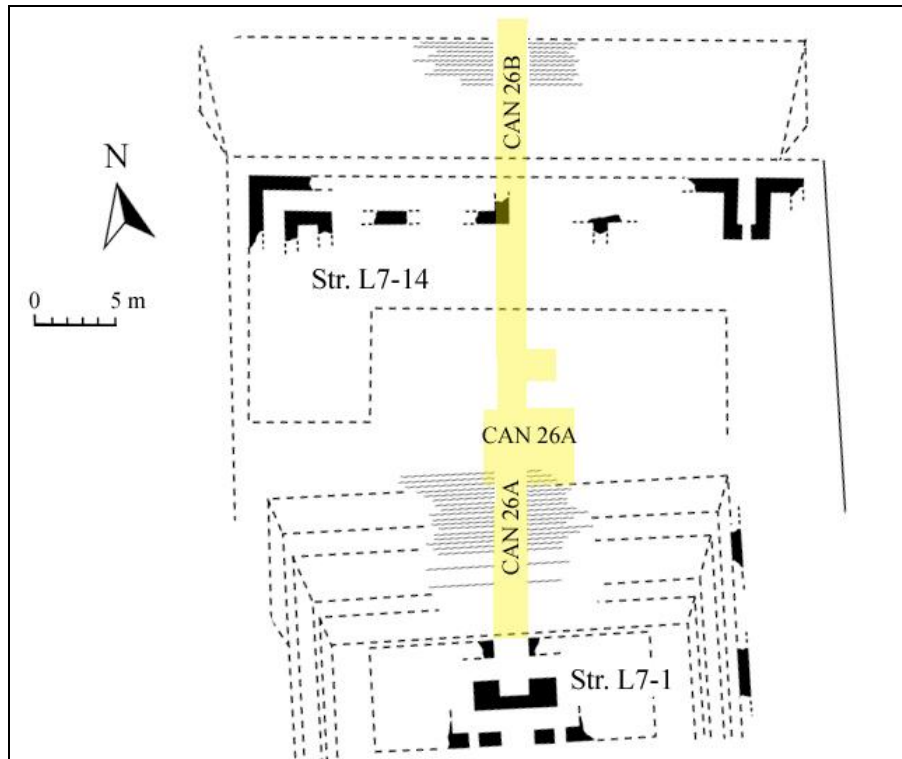


Figure 9.109 Location of Lower North Patio and excavations in 2003 and 2004
(Map by T. Barrientos, VCAP)

The investigation of Structure L7-14 in 2003 was defined as part of Suboperation CAN 26A, including units CAN 26A-1, CAN 26A-12 to 26A-15, and CAN 26A-17 to 26A-22. The earliest construction evidence was found in unit CAN 26A-13, in the form of a platform (L7-14-Sub-2) made with a retention wall and a fill of different clay levels that were visible on the east and north profiles, at 2 m below the surface (Figure 9.110). The wall was found in an east-west direction, measuring 0.8 m in height, and was formed by large hard limestone blocks. The platform façade was identified on the wall north side, and a thin plaster floor that covered its upper surface was slightly visible on the unit south profile (Figure 9.111). Structure L7-14 was added to the north, which had a double row of vaulted rooms and an interior patio that could have measured 200 m². A wall found in the northeast corner of unit CAN 26A-20 (level 5) could have been the back retention wall of Structure L7-14.

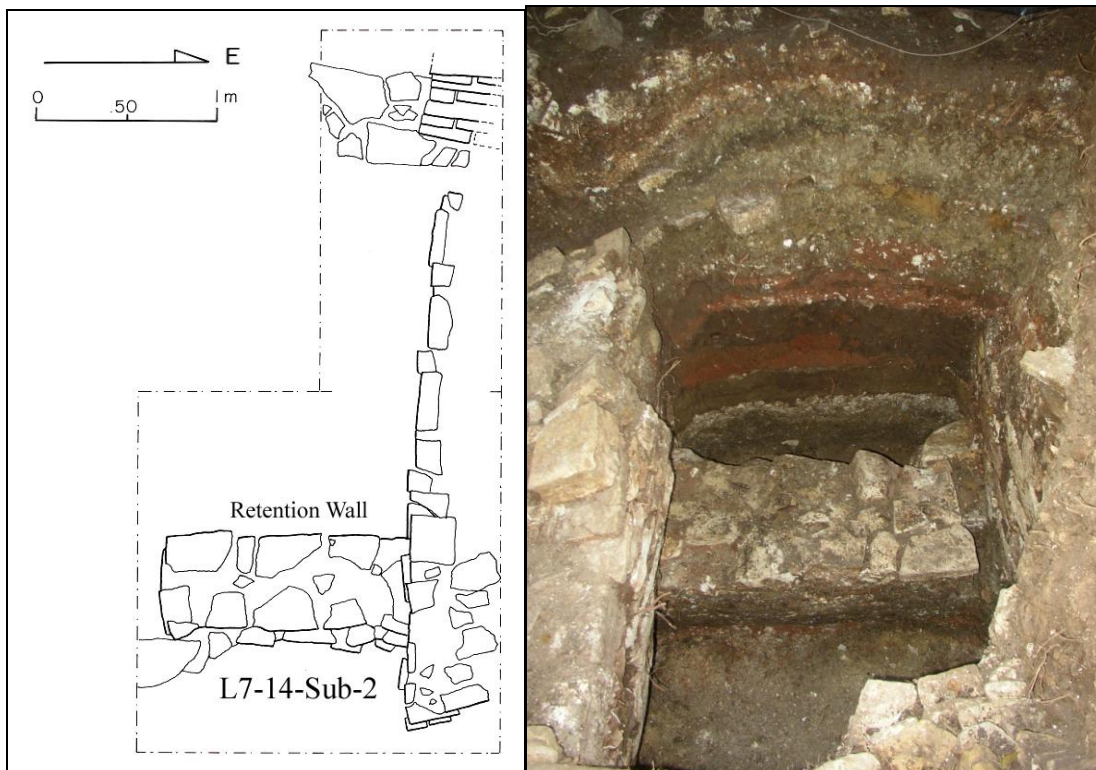


Figure 9.110 Retention wall of Structure L7-14-Sub-2 and clay fills

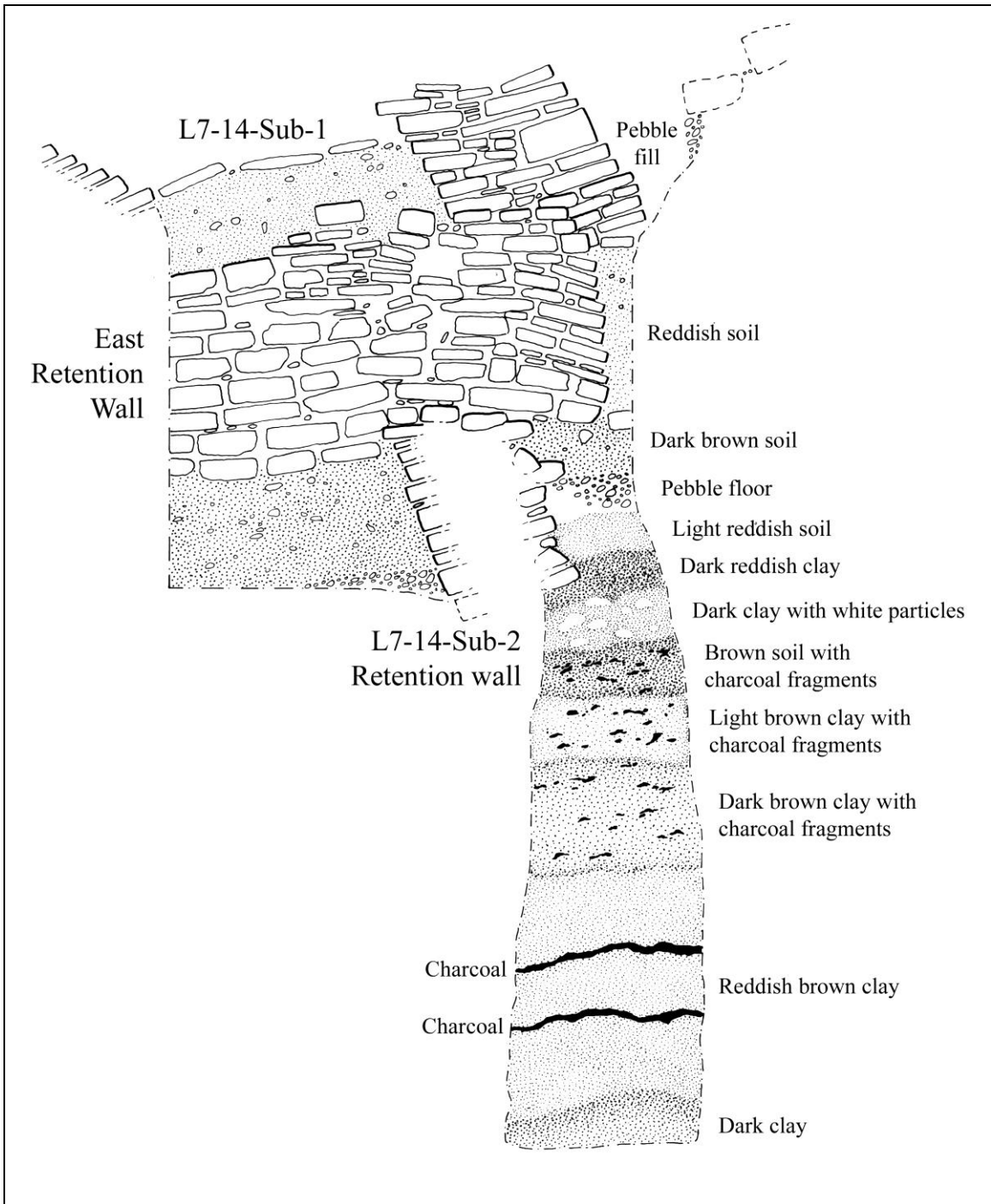


Figure 9.111 West profile of unit CAN 26A-13 (Drawing by M. Callaghan and L. Luin, VCAP)

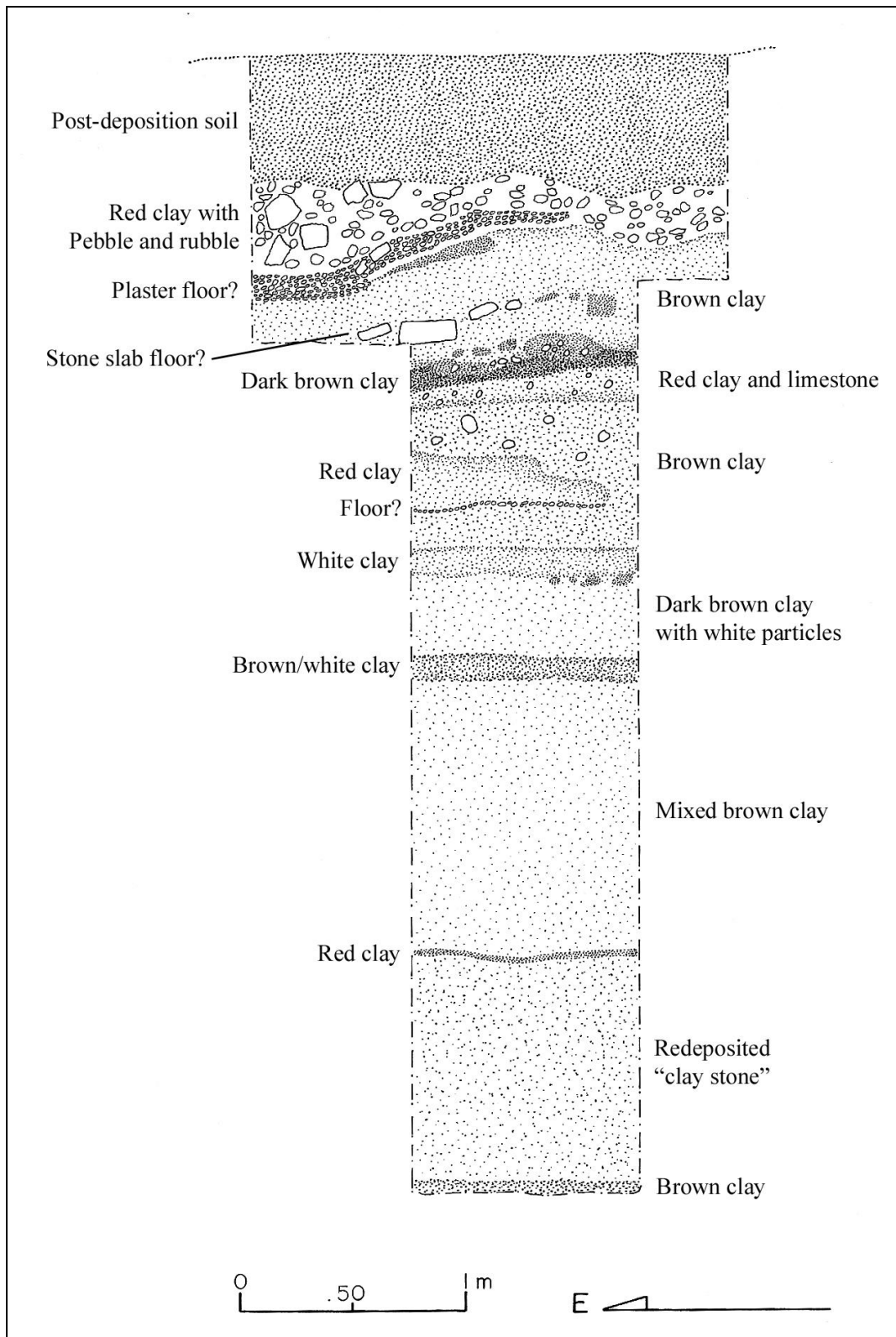


Figure 9.112 North profile of unit CAN 26A-13 (Drawing by M. Callaghan and L. Luin, VCAP)

After this early construction, the Lower North Patio was built as a higher platform that covered the previous one that supported Structure L7-14-Sub-1, whose interior floor was made with flat stones (Figure 9.113). Excavations uncovered remains of wall foundations that supported perishable walls and roof and a small rectangular interior bench (Figures 9.114, 9.115). The northernmost wall found in units CAN 26A-20 and 26A-21 could have been an exterior bench or the doorjamb of its main entrance (Figure 9.116)

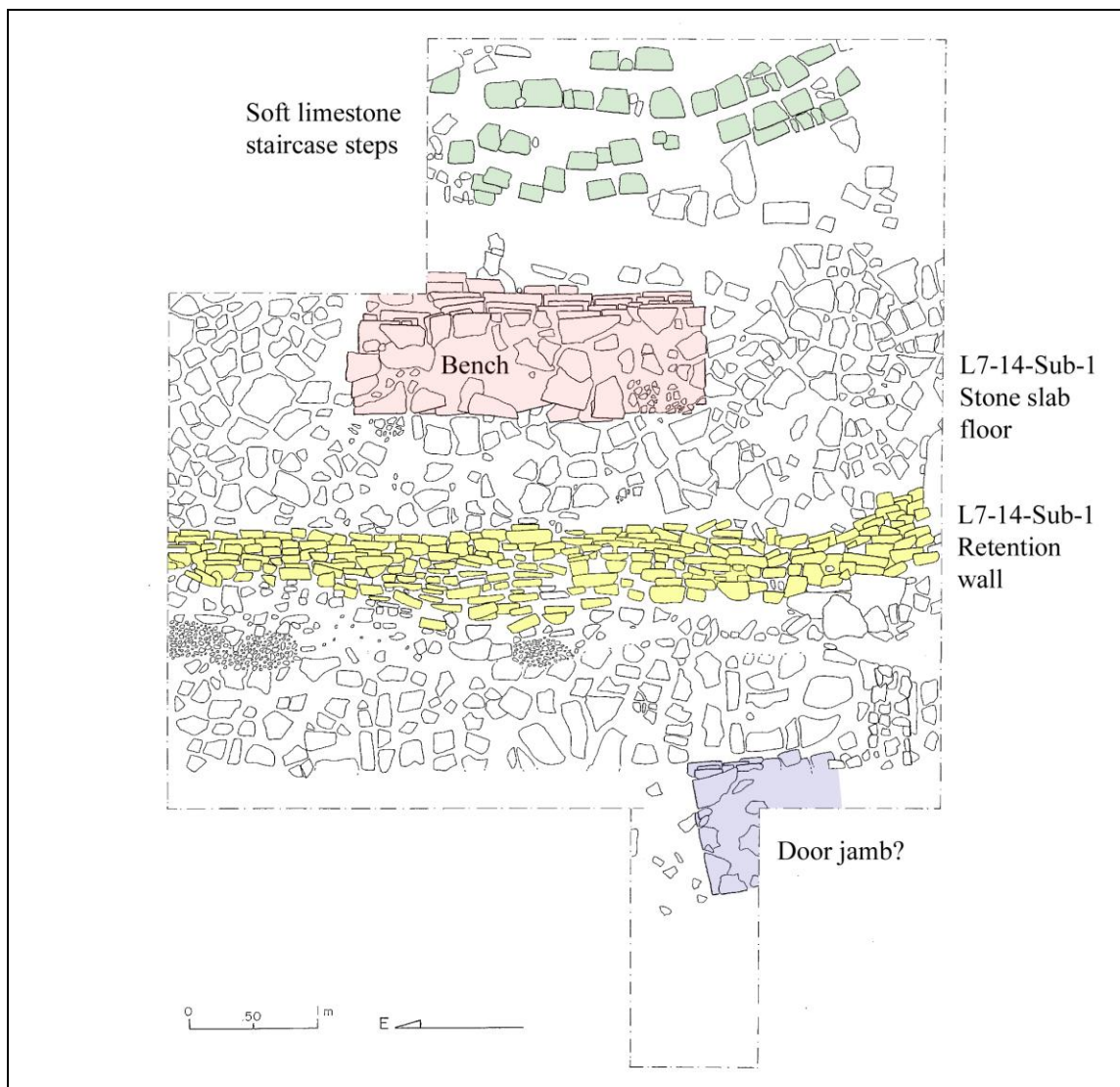


Figure 9.113 Plan view of excavations in Structure L7-14-Sub-1
(Drawing by M. Callaghan and L. Luin, VCAP)

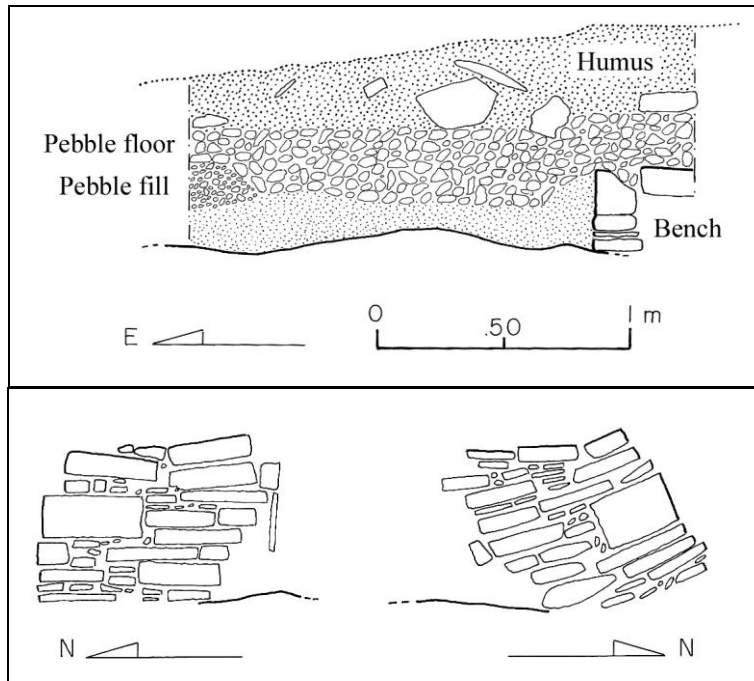


Figure 9.114 South (above), west (left) and east (right) profiles of small bench in Structure L7-14-Sub-1. Units CAN 26A-15 and 26A-13 (Drawings by L. Luin, VCAP)

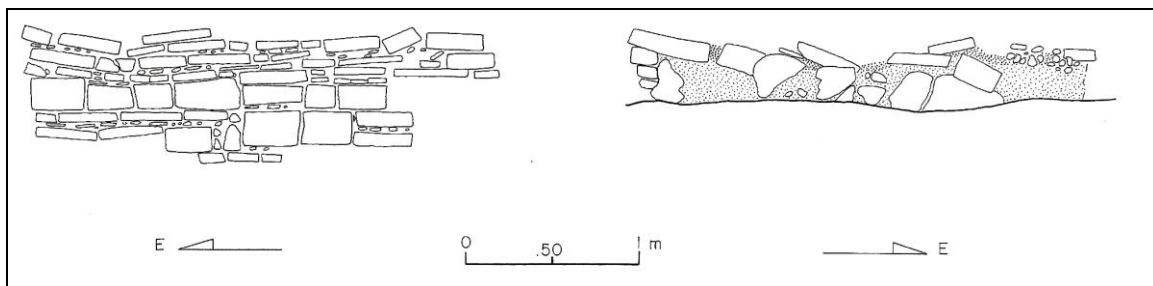


Figure 9.115 South (above) and North (below) elevations of possible bench in Structure L7-14-Sub-1 Unit CAN 26A-1 (Drawings by L. Luin, VCAP)

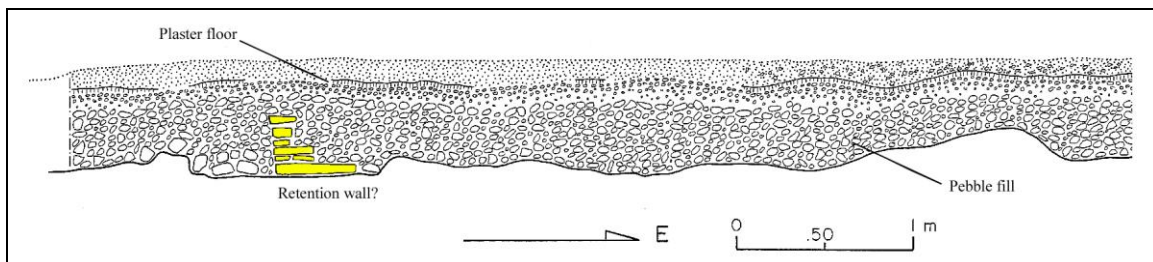


Figure 9.116 North Profile of Lower North Patio, showing profile of possible southern exterior bench or retention wall in Structure L7-14-Sub-1 (Drawing by L. Luin, VCAP)

The development of these constructions in the northern extreme of the palace could have been related to the construction of the Main Ballcourt, meaning that this area was becoming the scenario of public rituals and ceremonies, probably presided over by the king himself.

The next remodeling episode covered L7-14-Sub-1 with a fill consisting of red clay mixed with a dense layer of river pebbles that covered the room. Some sherds of Chablekal Fine Gray date this fill to the reign of *Taj Chan Ahk*. At this level, a low retention wall was built in an east to west orientation, made with 9 rows of small flat stones within a matrix of red clay (Figures 9.117, 9.118).

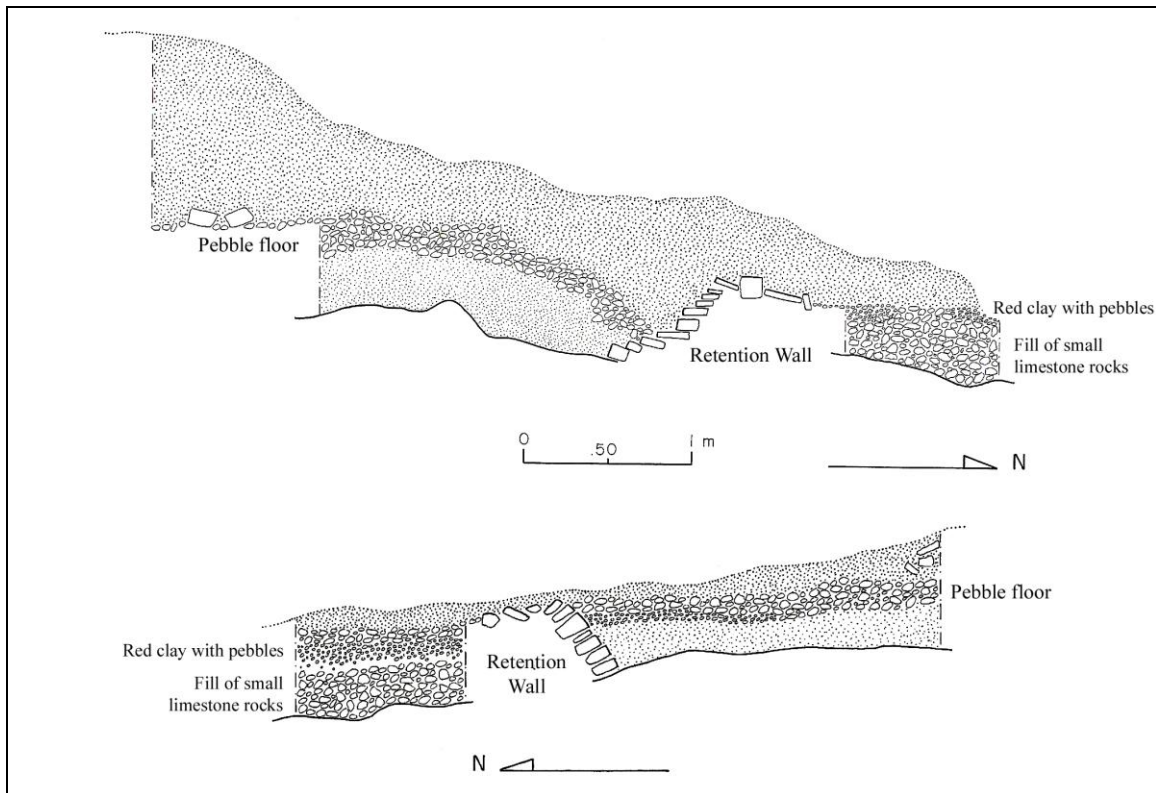


Figure 9.117 East (above), and West (below) profiles of Lower North Patio pebble floor and retention wall. Units CAN 26A-19, 26A-18 and 26A-15 (Drawings by M. Callaghan and L. Luin, VCAP)

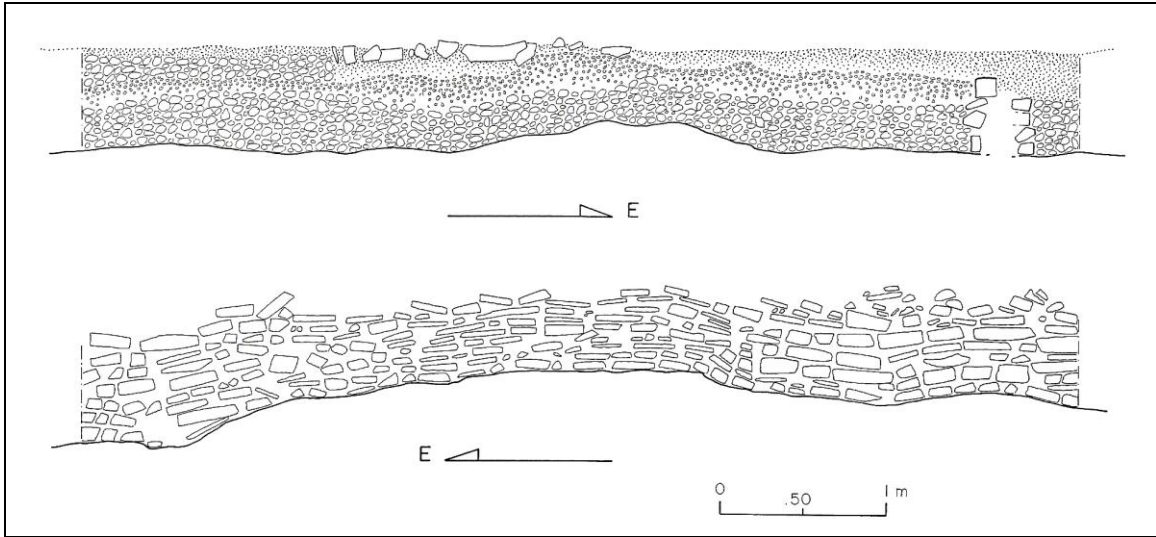


Figure 9.118 South (above) and North (below) elevations of southern retention wall
 (Drawings by M. Callaghan and L. Luin, VCAP)

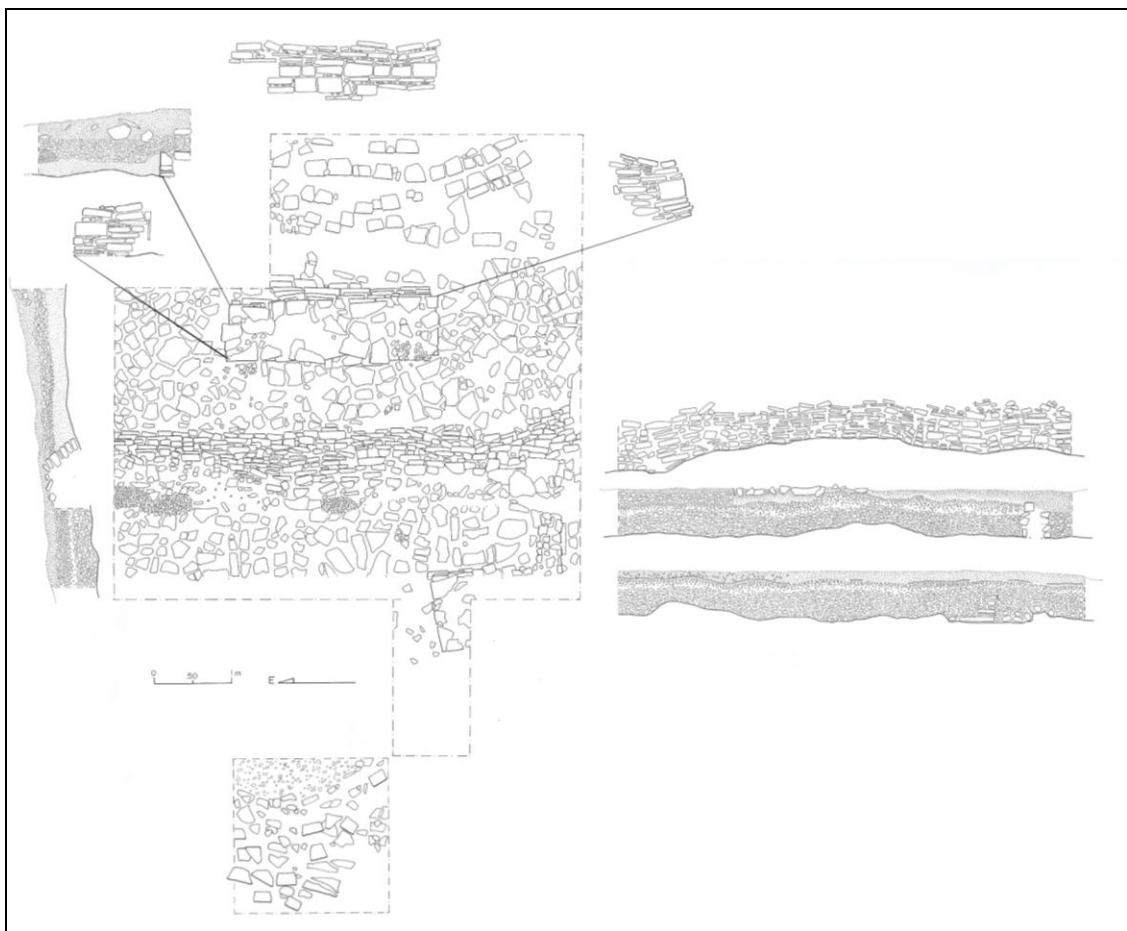


Figure 9.119 Location of different profiles and elevations of Structure L7-14-Sub-1 architectural details
 (Drawing by T. Barrientos and L. Luin, VCAP)

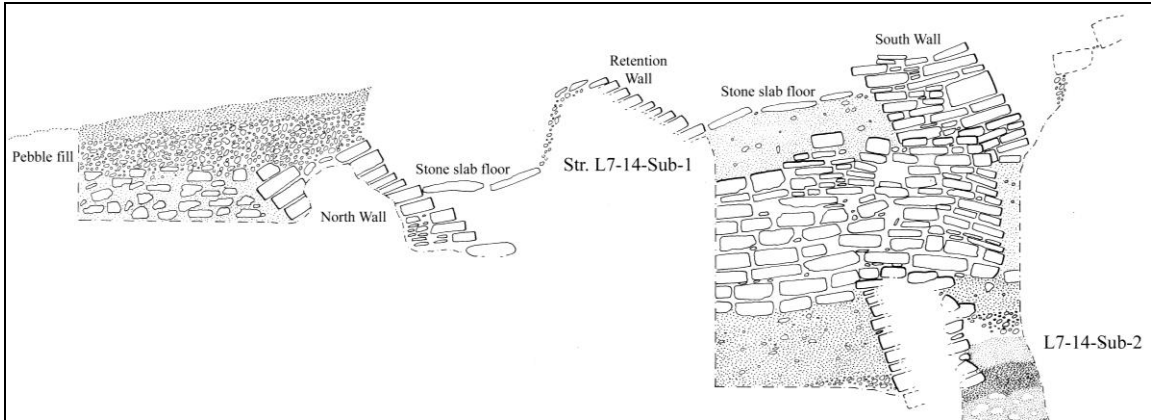


Figure 9.120 West profile of Suboperation CAN 26A, showing Structure L7-14-Sub-2, Structure L7-14-Sub-1 and latest additions in the Lower North Patio (Drawing by L. Luin, VCAP)

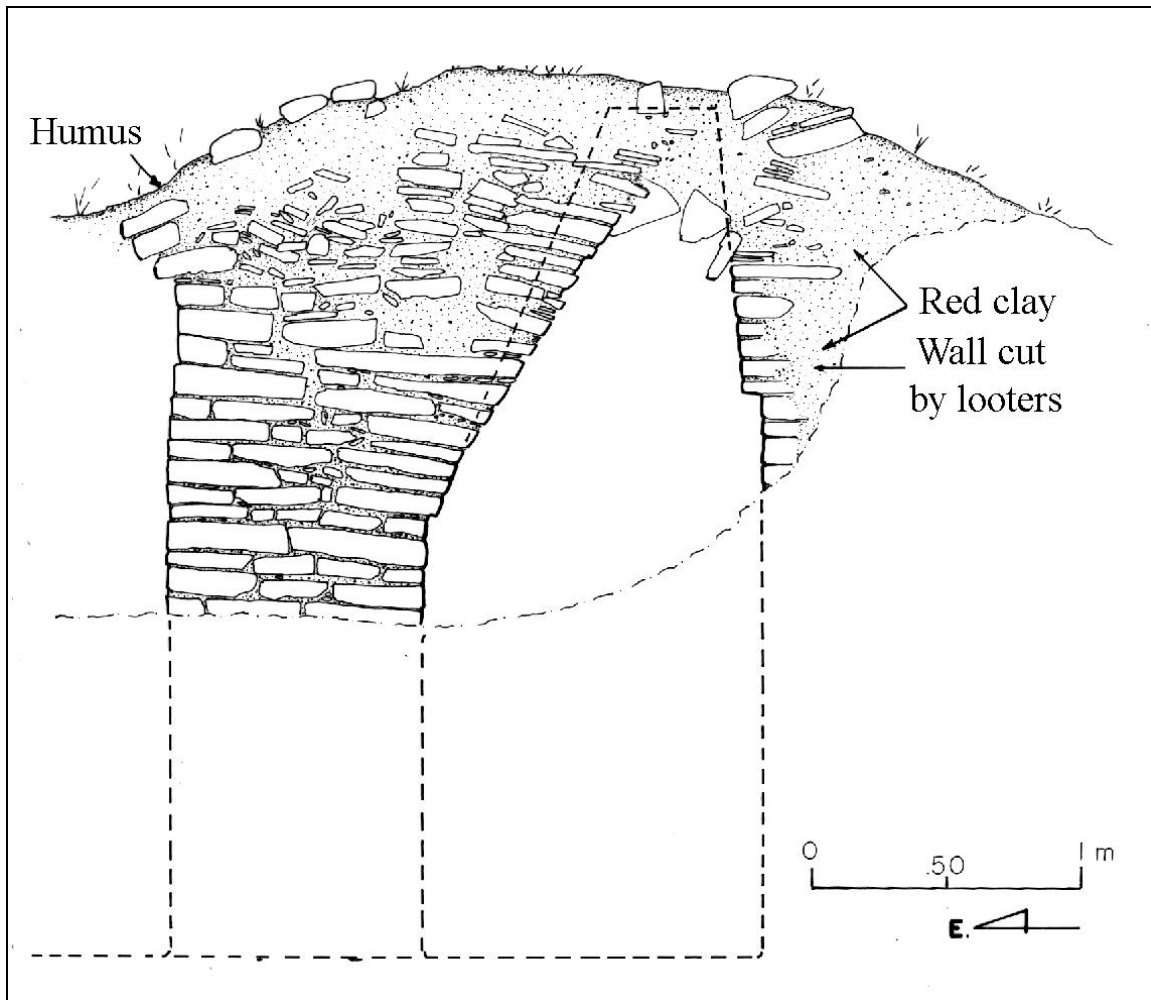


Figure 9.121 South profile of westernmost room of Structure L7-14 (Drawing by R. Larios, VCAP)

The last constructive phase in the Lower North Patio is related with the second phase of Structure L7-1 and its northern staircase, which cancelled all the architectural features of Structure L7-14-Sub-1. The staircase passed through Structure L7-14, connecting the northern entrance of L7-1 directly with the North Plaza (Figure 9.122). In order to build such a monumental stairway, all rooms of L7-14 were filled, creating a basal platform that supported the staircase. This means that the empty room located in the northeastern corner of L7-14 was a product of looting, which removed the entire fill made with stones and clay. Remains of some of the soft limestone steps were found in unit CAN 26A-22, just above the northern façade of Structure L7-14.

The northern stairway of Structure L7-1 was investigated with a new trench that extended the original north-south trench excavated in 2001. The upper part of the trench exposed the architecture of Structure L7-1 (described above), and its northern portion, consisting in units CAN 26A-2 to 26A-5, CAN 26A-11, CAN 26A-16 and CAN 26A-23, exposed the remains of 18 steps made with soft limestone blocks, as well as three plastered terraces on their sides. Many stucco sculpture fragments with geometric designs were recovered on top of the stairway, probably fallen from the northern façade of Structure L7-1.

Unit CAN 26A-5 was the southernmost of the trench units, located directly north of unit CAN 26A-6. Its excavation exposed the platform floor in front of the Structure L7-1 northern entrance, which showed remains of red paint. To reach the floor level, debris from wall fall, including stucco sculpture fragments had to be removed. After removing 2.02 m of rubble, the first two steps of the staircase were found, as well as two small terraces. The next unit to the north, CAN 26A-4, was excavated 1.5 m into the

rubble, exposing another step and the floor of a third terrace. The excavation continued in unit CAN 26A-3, but the state of preservation of the staircase was very poor, making it difficult to distinguish more steps. This made it necessary to excavate deeper, resulting in the discovery of a previous version of the staircase, which was built on top of a sandy yellowish brown clay fill. Under the staircase fill, a plastered floor was found at 1.45 m below the surface of the unit, which could be related to the architectural features that were built before the stairway. In order to keep defining the last stairway, unit CAN 26A-23 was opened to the east of CAN 26A-3, revealing five steps made with soft limestone blocks. Going down to the north, five more steps were exposed in unit CAN 26A-2 and other five steps in unit CAN 26A-11. The latter ones ended at the base of the stairway, located on top of a thick layer of river pebbles and red clay.

Unit CAN 26A-16 was originally placed at the base of the staircase, south of CAN 26A-13 and west of CAN 26A-11. Its excavation exposed the pebble layer, followed by the flat stone floor. In lot CAN 26A-16-8 (2.5 m from the surface), a thin white plaster floor was found at the same depth as the wall of Structure L7-14-Sub-2 found in CAN 26A-13. After several layers of clay fill, the top of a masonry wall was found at 4 m of depth (CAN 26A-16-13), defined as part of Structure L7-14-Sub-3. The next excavation lots revealed that the wall was lying on top of a floor and a dark brown clay midden, at 6.75 m from the surface. It is important to note that 2 sherds of Chablekal Fine Gray were found at this level (CAN 26A-16-21) (Callaghan 2004b: 49), indicating that L7-14-Sub-3 was buried after 760 C.E. The end of this unit in sterile soil set the starting point of tunnel CAN 26C-1, which followed the clay fills found on top of sterile soil.

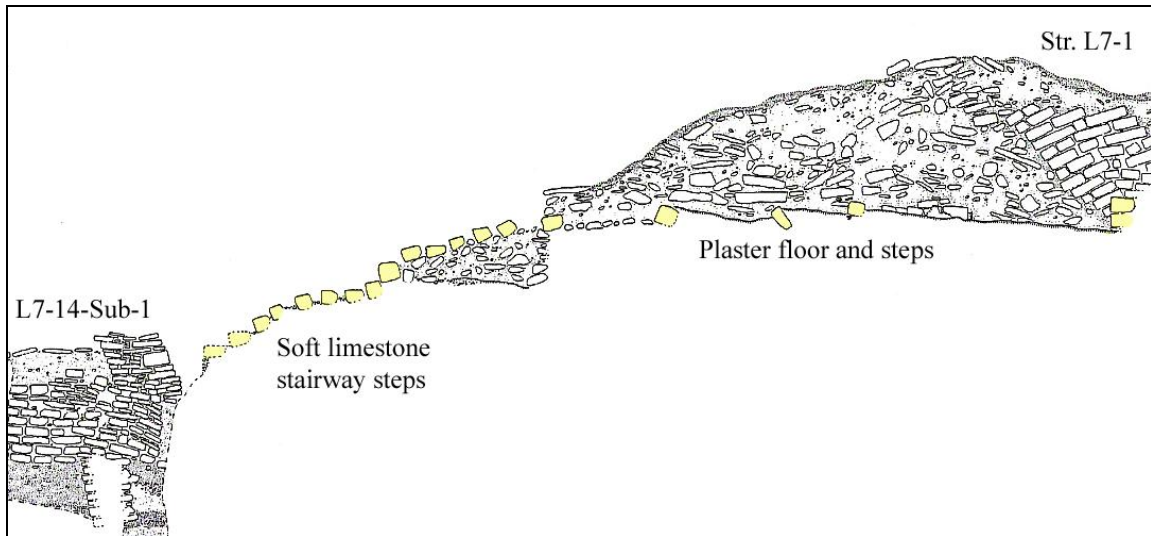


Figure 9.122 West profile of Suboperation CAN 26A, that exposed the northern staircase of Structure L7-1
(Drawing by L. Luin, VCAP)



Figure 9.123 Excavation of unit CAN 26A-16 (Photo by M. Callaghan, VCAP)

The excavation in Structure L7-14 continued in 2004 under Operation CAN 26B, which extended the axial trench to the north, until it reached the base of the palace basal platform and the floor of the North Plaza. The 11 units that were excavated in this trench revealed the remains of a staircase that descends from the Lower North Patio platform to a small lower terrace made with flat stones (CAN 26B-2) and then to the North Plaza floor (Figure 9.124).

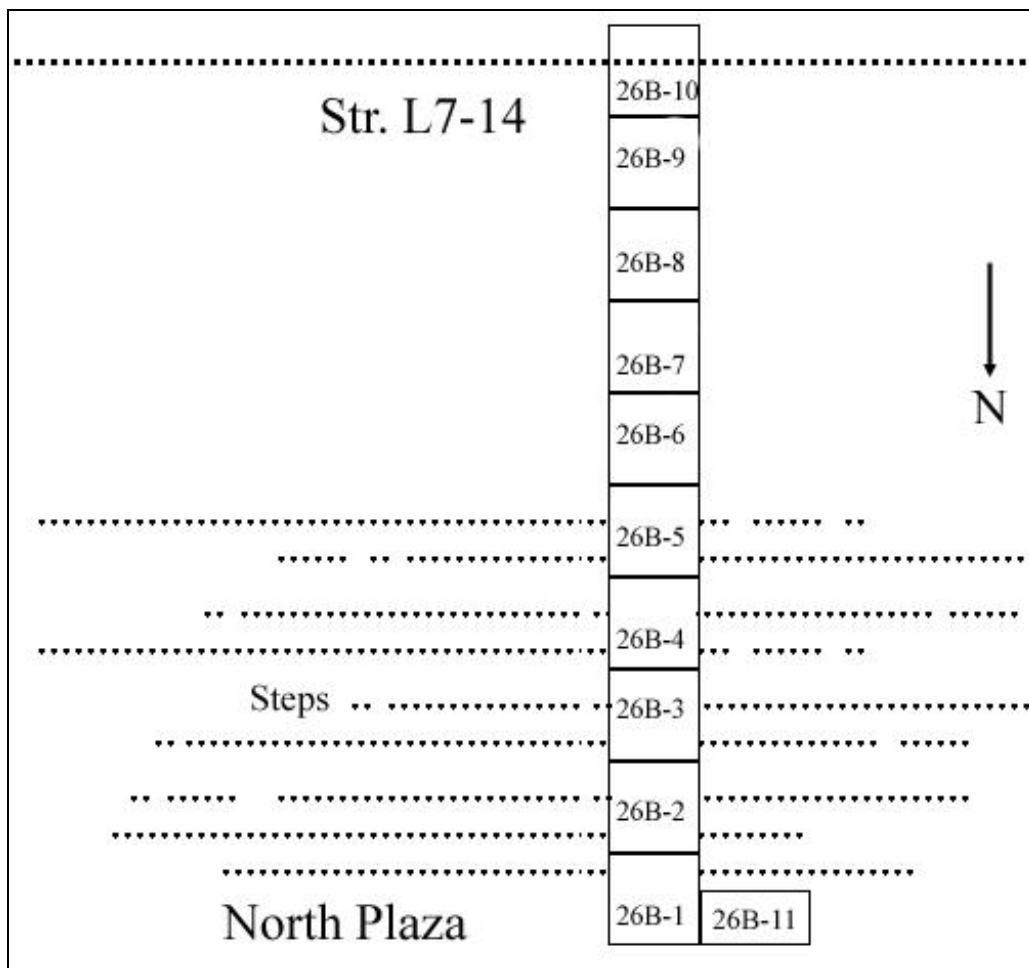


Figure 9.124 Layout of excavations in Suboperation CAN 26B showing location of stairs
(Drawing by M. Callaghan, VCAP)

Units CAN 26B-1 and 26B-11, located in the plaza, uncovered the remains of an eroded pebble floor, which was supported by a layer of greenish brown clay. Within this level, a burial was deposited 1 m beneath the plaza surface. Burial 75 consisted in a male individual placed on top of the sterile soil, in an extended position and oriented with an east-west axis, with the head to the east. Its funerary offering consisted in a small incised red/orange bowl (Puerto Inciso type), located north of the head (Figure 9.125). The vessel provided a date of Tepeu 2b phase for the burial, which could have been placed there as a dedicatory offering related to one of the remodeling episodes during the reign of *Taj Chan Ahk*.



Figure 9.125 Burial 75 (Photo by M. Callaghan, VCAP)

The staircase was revealed by units CAN 26B-3 through CAN 26B-6, consisting in 5 hard limestone blocks at the base and 5 soft limestone blocks in the upper part, showing a similar pattern found in the southern staircase of Structure L7-9. The excavations in suboperation CAN 26B penetrated the staircase fill made with red clay, revealing a previous version, with five well preserved plastered steps (Figure 9.126).



Figure 9.126 Plastered steps of first version of Lower North Patio northern staircase
(Photo by M. Callaghan, VCAP)

These two versions led from the plaza floor to the platform that supported Structure L7-14. The architecture found in units CAN 26B-6 to 26B-9 revealed two small collapsed stone masonry walls, which were part of a low terrace. Another larger wall was found, probably another terrace, given that a well preserved plastered floor was found

south, near the upper part of the wall. This was probably the level where the Structure L7-14 rooms are located. However, it is also possible that this wall corresponds to one of the filled rooms of L7-14, and the floor corresponds to the later platform of the Lower North Patio. A narrow register was excavated south of the wall, revealing a very different fill, consisting of grey clay with chunks of white mortar, very similar to the one found in the Lower North Patio (Callaghan 2004b).



Figure 9.127 Plastered steps and platform floor where Structure L7-14 is located
(Photo by M. Callaghan, VCAP)

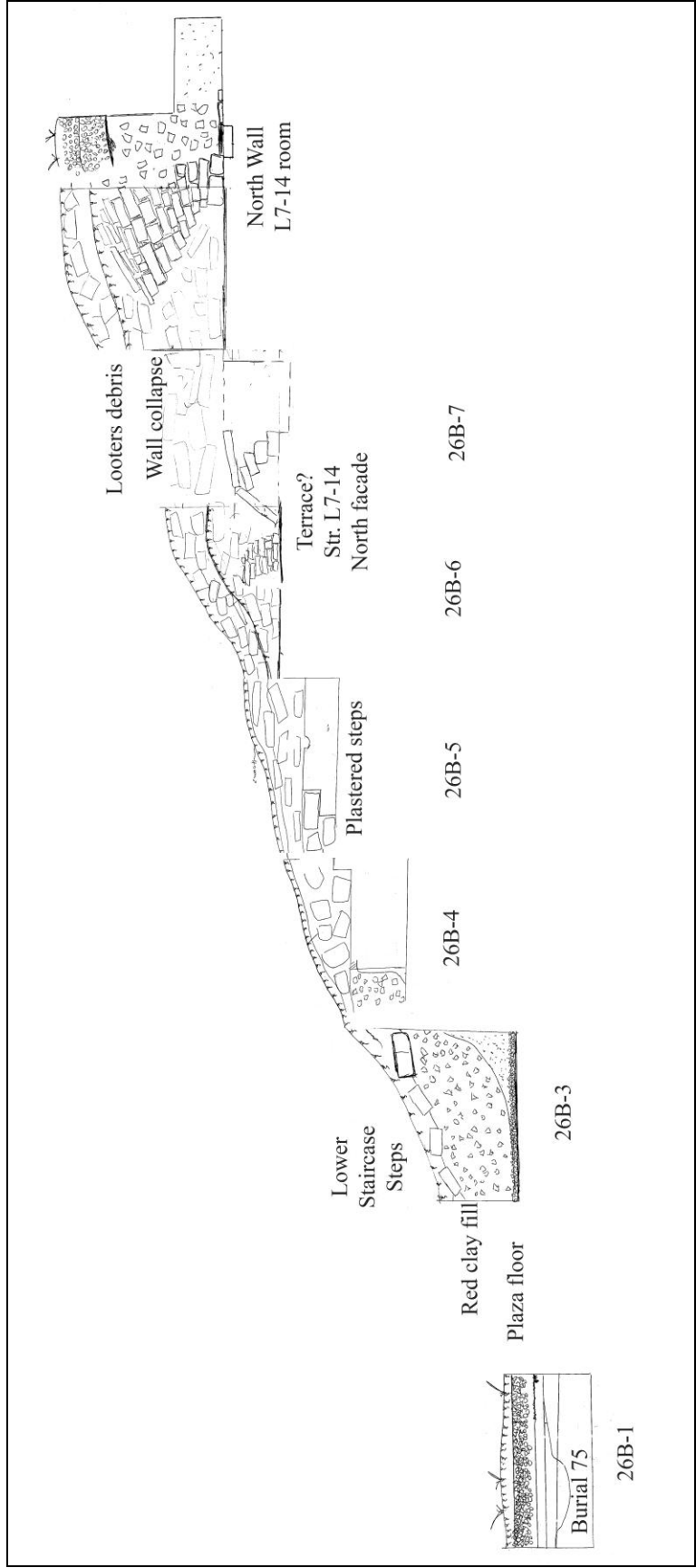


Figure 9.128 East profile of excavation trench, peration CAN 26B, Structure L7-14 and northern access of the royal palace
 (Drawing by M. Callaghan and L. Luin, VCAP)



Figure 9.129 Excavation of Suboperation CAN 26B trench (Photo by M. Callaghan, VCAP)

9.3 Main Plaza

The final layout of the royal palace includes a large enclosed courtyard in its eastern side, which was originally named “Main Plaza” because it was thought that it was a plaza separated from the palace. After the detailed clearing and mapping of this area, it became clear that this plaza was part of the palace complex, at least in its final phase. It covers an approximated area of 4,000 m², and includes three large structures, L7-27 to the east, L7-25 to the north, and L7-26 to the south (Cambranes and Quintanilla 2012: 53). The western side of the plaza is delimited by the main basal platform of the acropolis, which supports Structure L7-24. The orientation of the three large structures follows an exact north-south and east-west axis, which is different from the rest of the palace, thus suggesting that its construction corresponds to a late addition to the original acropolis or that it was more related to the East Plaza than the palace. As it will be discussed below, it is also probable that this version of the plaza covered earlier structures that could have arranged a more open compound directly related to the East Plaza, where the East Ball court and other important buildings are located (Figure 9.130).

The excavations carried out in the Main Plaza only included Structure L7-27, L7-24 and the courtyard itself, and recently Structure L7-26 (*Ibid.*). Our knowledge of Structure L7-26 was initially superficial; cleaning vegetation allowed the identification of a massive basal platform built with large fine carved hard limestone blocks, which included a monumental staircase. On the top of the mound, the superficial debris suggested the presence of a vaulted superstructure, at least on its west half. Regarding Structure L7-25, it measures approximately 16 x 53 m and its low height suggests that it constitutes a basal platform that supported a perishable building.

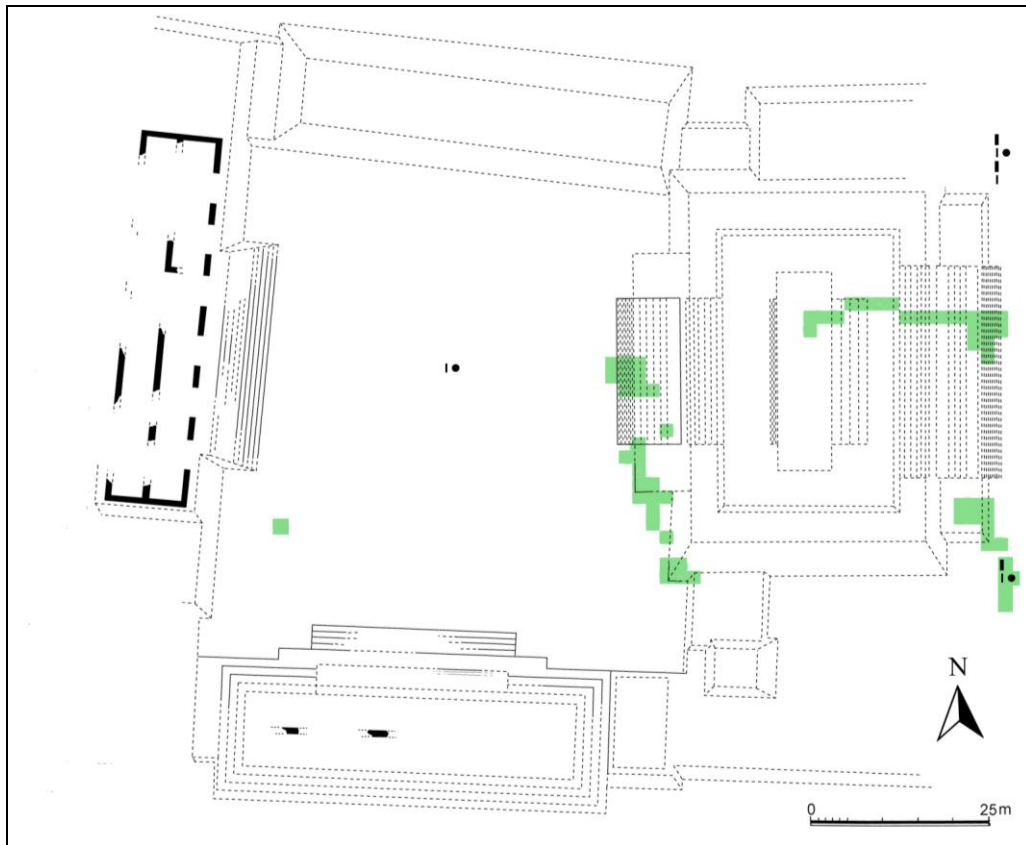


Figure 9.130 Plan of Main Plaza and initial excavations (Drawing by T. Barrientos and L. Luin, VCAP)

Excavations in the Main Plaza started in 1999 with a test pit in the courtyard area (Kovacevich 1999), and were continued in 2000 with the exploration of the plain stelae located in the eastern façade of L7-27 (Barrientos, *et al.* 2001). The western end of the plaza was investigated in 2001 as part of the exploratory east-west trench, which only covered the eastern staircase of Structure L7-24, and its central corridor (Barrientos and Luin 2002). However, the intensive excavations in the Main Plaza were carried out until 2004 and 2005, revealing interesting architectural and chronological features, including the discovery of two monuments and burials 77 and 96, which corresponds to ruler *Kan Ma'ax* tomb and an important individual, possibly his consort (Barrientos *et al.* 2006).

9.3.1 The Main Plaza courtyard

The courtyard area measures approximately 67 m from east to west and 75 m from south to north, which constitutes the largest open area within the palace (5,000 m²). Test excavations in 1999 included two test pits in this area under Operation CAN 2.

The first unit, CAN 2-1, was located in front of the southeast corner of Structure L7-24. Below the layer of humus and a light brown fill mixed with plaster, a stone floor was found, made with flat limestone and sandstone blocks (Figure 9.131).

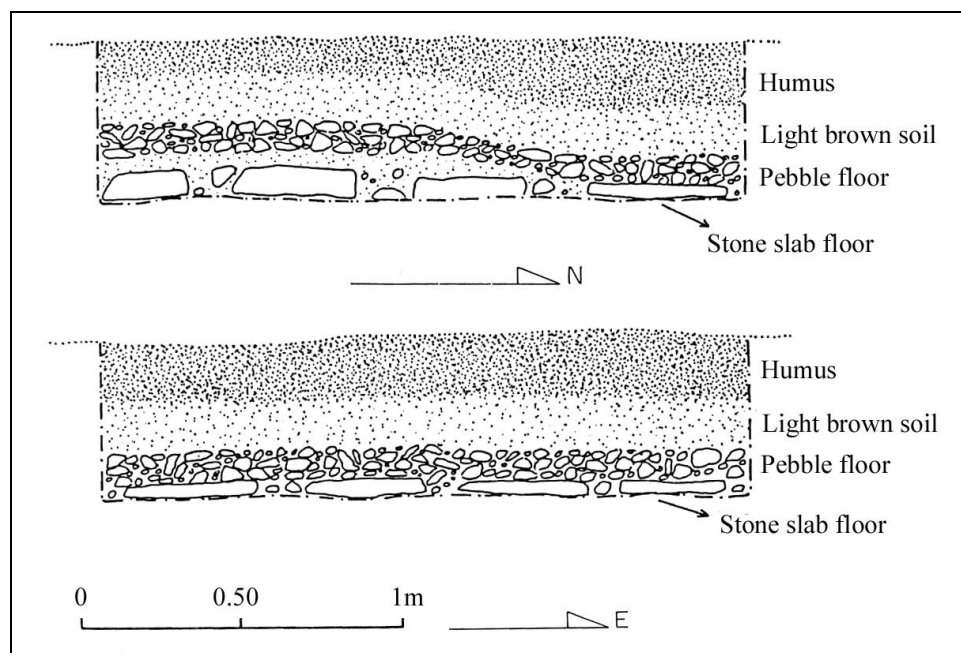


Figure 9.131 East (above) and north (below) profiles of unit CAN 2-1
(Drawings by B. Kovacevich and L. Luin, VCAP)

A second unit, CAN 2-2, was excavated in front of the southeast corner of Structure L7-27. Unlike the previous one, this unit revealed from the first level a layer of limestone blocks mixed with a brown soil fill, which corresponds to debris that fell either from Structure L7-27 or Structure L7-38, located in the opposite corner. The second level presented a light brown soil with plaster fragments, and directly below, a well preserved

plaster floor that covered the entire unit (Lot 3). The floor had a thickness of 5 cm, and the level beneath it exposed another floor made with flat limestone slabs. This second floor was associated with a high number of ceramic sherds, present on top of it and also below it (Lot 4). The excavation continued until reaching the sterile clay level (Lot 6), at 100 cm from the surface, and the unit was finished at 120 cm (Figure 9.132).

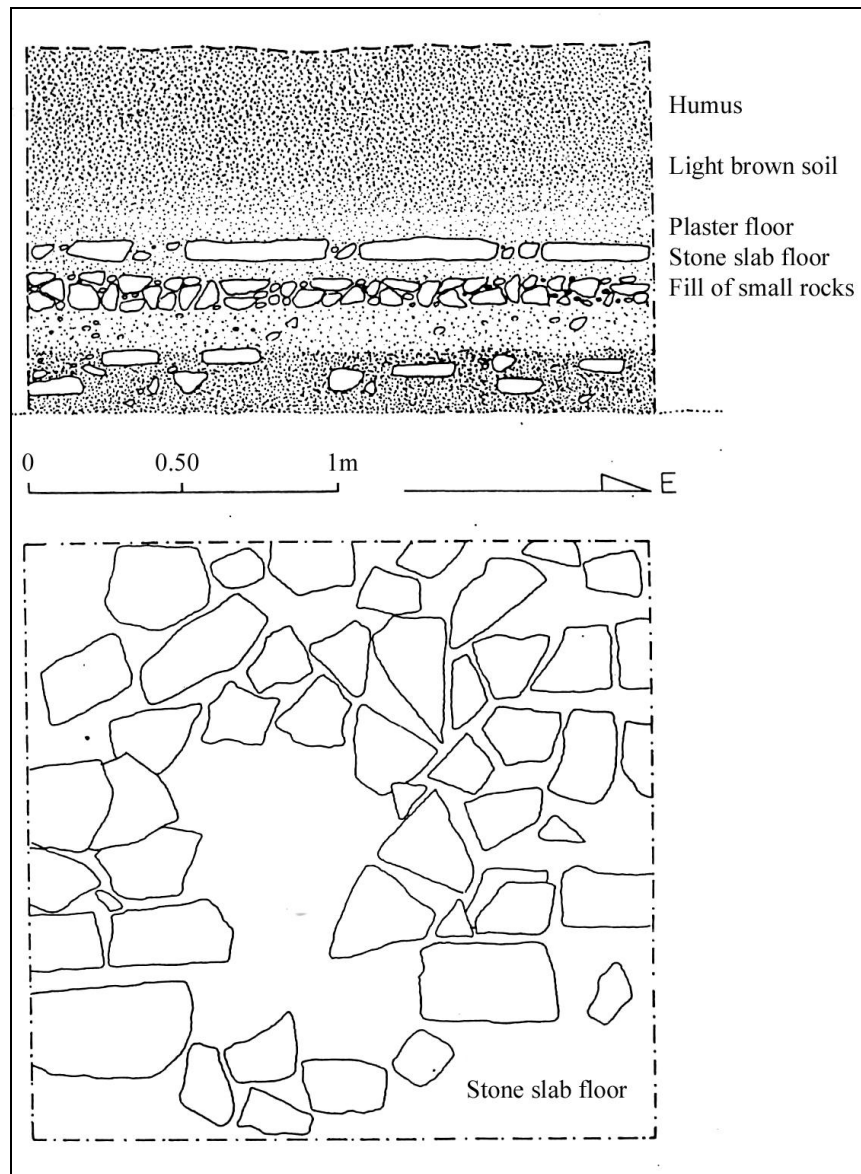


Figure 9.132 North profile and plan view of unit CAN 2-2
(Drawings by B. Kovacevich and L. Luin, VCAP)

9.3.2 *Monuments associated with the Main Plaza: Structure L7-27 Eastern Façade*

The initial map made by the Harvard Seibal Project team included four plain stelae (9, 10, 11 and 12) located on a small platform (named B-8) at the northeastern corner of Structure L7-27. These were located, cleaned, measured and registered in 2000, as part of the palace mapping activities.

During the 1999 and 2000 field seasons, numerous surveys were carried out in the palace in order to understand its complex layout and to open clear paths to facilitate the movement of people between its different courtyards and structures. The survey around Structure L7-27 cleaned not only the area around the four plain stelae, but also cleaned the base and corners of the building. During the last days of the 1999 season, the corner of a large limestone block was observed emerging from the surface near the path to the Main Plaza (Barrientos 1999), but it was not possible to investigate it until the 2000 season. A quick surface excavation revealed that the stone was a large stela (13), thus making it necessary to open an excavation unit in that spot.

Unit CAN 5-2 was a 4 x 6 m pit that was excavated in order to uncover the entire monument located between the southeast corner of Structure L7-27 and the northwest corner of Structure L7-38. The presence of four monuments in the opposite corner of Structure L7-27 suggested that this corner could have more than just one stela, following the symmetric pattern of Structure M7-1 in the opposite side of the East Plaza, which has two plain stelae and altars on each side of its central staircase. The excavation of unit CAN 5-2 started with a leveling of 1.6 m, due to the slope of the surface, which resulted in the discovery of another plain stela (16) and a truncated conic plain altar (j).



Figure 9.133 Excavation of Stela 13, Altar J and Stela 16 (Photo by T. Barrientos, VCAP)

The presence of two large tree roots prevented the definition of any clear cultural stratigraphy, although it was possible to define an upper level of architectural debris within a strata of brown soil. A layer of chert nodules was exposed near Altar j, which could have been part of its basal fill or an offering.

The clearing of Stela 13 defined its large size, measuring 4.05 m in length, 1.25 wide and 0.37 in thickness, making it the largest stela found at the site (Figure 9.134). The base of the monument was on its east side, and the top on the west side. The top of the stela presented a stepped shape similar to other monuments of the site, but instead of having a vertical top; it was of an inverted trapezoidal shape, resembling the “year sign” motif. The smaller Stela 16 measured 2.35 m in length, 0.7 m wide and a thickness of 0.25 m. Altar j measured a diameter of 1.05 m and a height over 0.25 m.



Figure 9.134 Stela 13 after being cleared (Photo by T. Barrientos, VCAP)

In order to understand the stratigraphic context of Altar j, a 1 x 1 m unit, CAN 5-3, was open directly east of Altar j. The first three arbitrary levels exposed the level with rubble from Structure L7-38, until reaching the plaza floor at 0.75 m below the surface (Lot 4). The next level (Lot 5) presented abundant ceramics and reached the base of the altar. This last level was made with yellowish clay with small limestone rocks that surrounded the altar. Unit CAN 5-4 was opened to find any other monuments associated with Stela 13. It consisted in a 4 x 1 trench aligned north of the monument, but the presence of a large fallen tree prevented the excavation at the exact base of both stelae.

The first arbitrary level exposed the humus and the architectural debris layers, and the second level revealed an irregular plaza floor located at the same level as the floor found in lot CAN 5-3-4. Beneath the floor the third excavation level revealed a fill consisting in a medium sized limestone rocks with a considerable amount of ceramics, including some polychromes, figurines, and a “donut” stone. Level 4 (80-100 cm) presented less cultural material and a fill of gray clay that continued until 1.30 m, when it became sterile at Level 6. A 2 x 1 m register was excavated for other 30 cm, exposing a series of grey clay and hard limestone thin layers, which make the sterile levels in most of the site. These particular strata seem to evidence episodes of flooding previous to the human settlement in the area. In any case, this trench proved that no other monuments were placed in this area, though the presence of two plain stelae and an altar shows a pattern of erecting monuments in both eastern corners of Structure L7-27 (Figure 9.135).

9.3.3 Monuments associated in the Main Plaza: Stela 19 and Altar 6

The 2004 field season included intensive excavations in Structure L7-27, but even with the presence of many students and excavators in the Main Plaza area, no one noticed the presence of a small altar at the center of the courtyard. It was one of the park guards, Gregorio Santa Maria, who informed the directors later that year, about the existence of the monument, which was named Altar 6. For that reason, the area was explored in 2005, initiating with clearing the vegetation around the altar and excavating a test pit next to it.

Once the vegetation was cleared around the altar, it was measured, indicating 0.6 m of diameter. It was also noticed that its surface was originally carved, but it had been broken and defaced.

The excavation unit measured 4 x 4 m and was located immediately south of the altar, in order to find more fragments. The results were highly satisfactory, because five fragments of the original carved surface were recovered, and another monument was discovered, which constituted a small plain stela located directly to the south (Figures 9.138, 9.137). The reconstructed carving of the lower part of Altar 6 shows a text of six glyphs, partially legible, bearing the name of *Taj Chan Ahk* and the silhouette of a central human figure seated on a throne (see Chapter 11 for a full description).

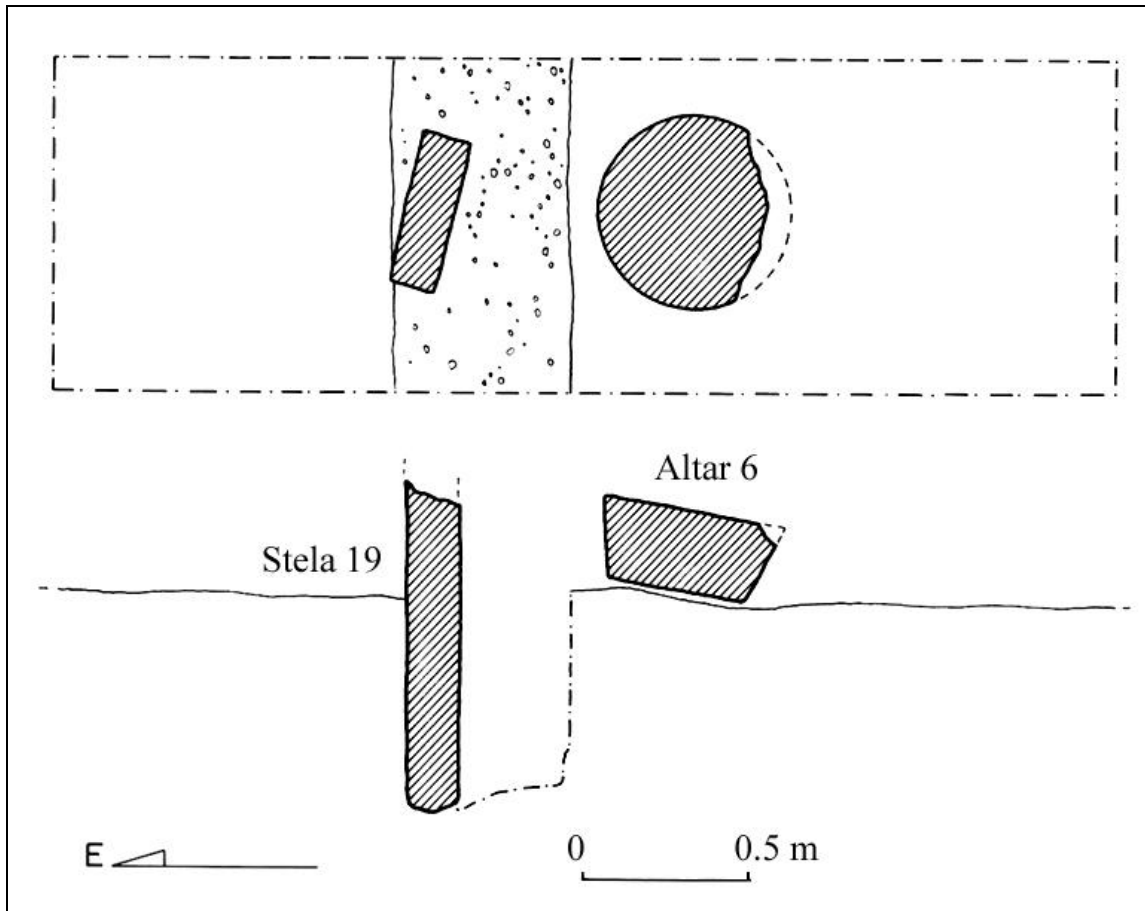


Figure 9.136 Excavation of Altar 6 and Stela 19 (Drawings by L. Luin, VCAP)



Figure 9.137 Altar 6 and Stela 19 (Photo by T. Barrientos, VCAP)

The small stela, named Stela 19, was found broken, measuring only 1.64 m in height, 1.25 m wide and 0.19 m in width. The visible part of the stela was only 0.4 m above the ground. The most notable feature of the stelae is the presence of a hole in its middle, exactly where it was broken. A detailed analysis of the hole noticed that it had a conical shape on both sides, indicating that it was not a natural hole caused by water, as it had been observed in other plain limestone stelae and altars of the site. If the hole was intentionally drilled, it could have an astronomical use, given that the monument was oriented with the hole facing the east-west axis, maybe to mark the sun ray during a specific date. It was even more interesting that near the stela, a small conical object made of limestone was found, which matched the hole diameter, thus indicating that it was used as a cap. Unfortunately, the scene and inscription of Altar 6 was not complete; however, the glyphs were legible enough to identify the individual portrayed as *Tajal Chan Ahk* or an important ally during his reign.

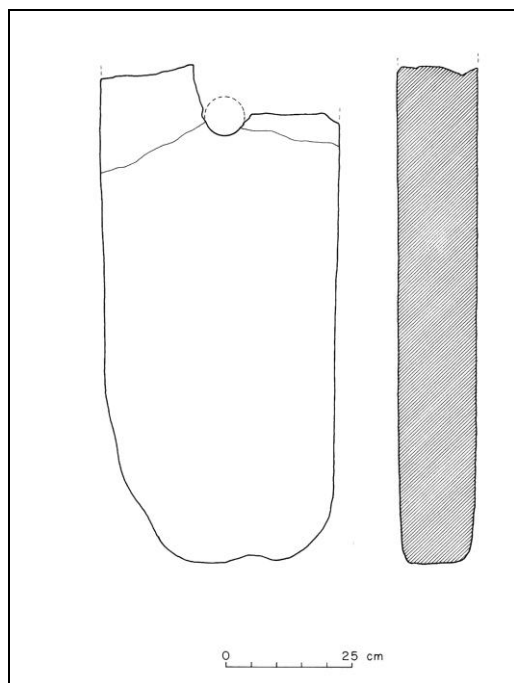


Figure 9.138 Drawing of Stela 19 (Drawing by L. Luin, VCAP)

9.3.4 Structure L7-24

The initial explorations in this structure were carried out in 2001, as part of the east-west exploratory trench, and Operation CAN 23, defined for the Northeast Patio. The architecture was visible with only the removal of vegetation, and no deep excavation was necessary to define the main features of the building and its associated staircase. Units CAN 23-2 and CAN 23-3 were two initial 2 x 2 m pits that cleaned the staircase in the eastern façade of Structure L7-24. In order to follow the steps, two more units were laid out to the south, CAN 23-4 and CAN 23-5, which exposed five steps made with large hard limestone blocks that ascend from the plaza floor to the basal platform of Structure L7-24. Other five steps, of minor dimensions, ascend from the platform to L7-24 entrance. During the cleaning of the staircase, a glyph made with stucco was discovered, indicating that the façade was decorated with this kind of sculpture.

9.3.5 *Structure L7-27*

This building is the largest single structure of the site, consisting of a three terraced platform with two staircases, measuring an area of 70 x 40 m and rising around 8 m above the East Plaza. It is located on the eastern limit of the palace complex and faces directly to Structure M7-1 of the East Plaza, which is part of the East Ball court. Together with the south stairway of Structure L7-9, Structure L7-27 was one of the two main entrances to the palace complex, and probably the one with more public nature, given the presence of six plain stelae, including the largest of the site (Stela 13).

Since the first explorations of the site, this building stood out because of its size and monuments, but it was also interesting that no remains of masonry debris were visible on the surface. For that reason, it was suspected that the building had a considerable amount of clay architecture, given that other structures of the palace showed evidence of stone masonry architecture being buried to construct larger platforms made with clay fills.

The excavation of Structure L7-27 started in 2004 using the same methodology applied to other parts of the palace, with the participation of various students directed by Tomas Barrientos. The initial excavation included a trench located in the central axis of the structure, and more extensive excavations were located at the base and both staircases (Figures 9.139, 140). The excavations of the 2005 season were continued in order to reveal the chronology of the building through deep stratigraphic pits.

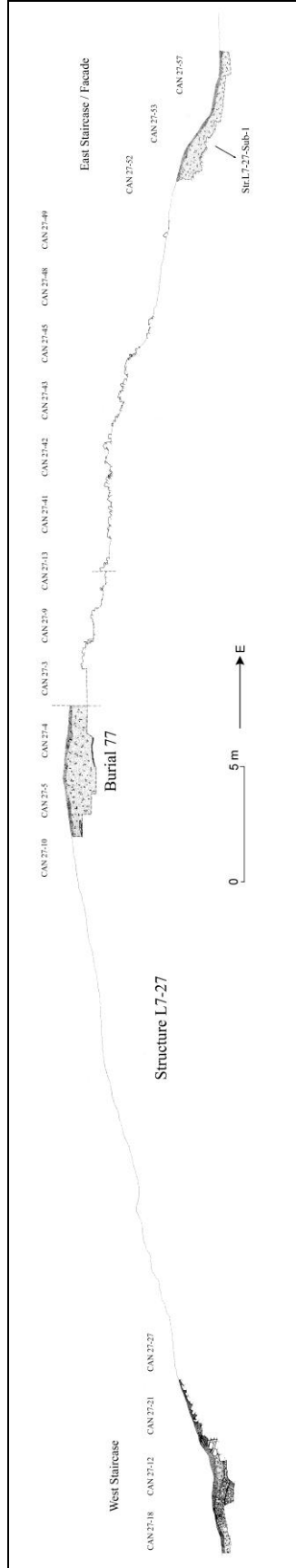


Figure 9.139 South profile of excavations carried out in 2004 in Structure L7-27 (Drawing by L. Luin, VCAP)

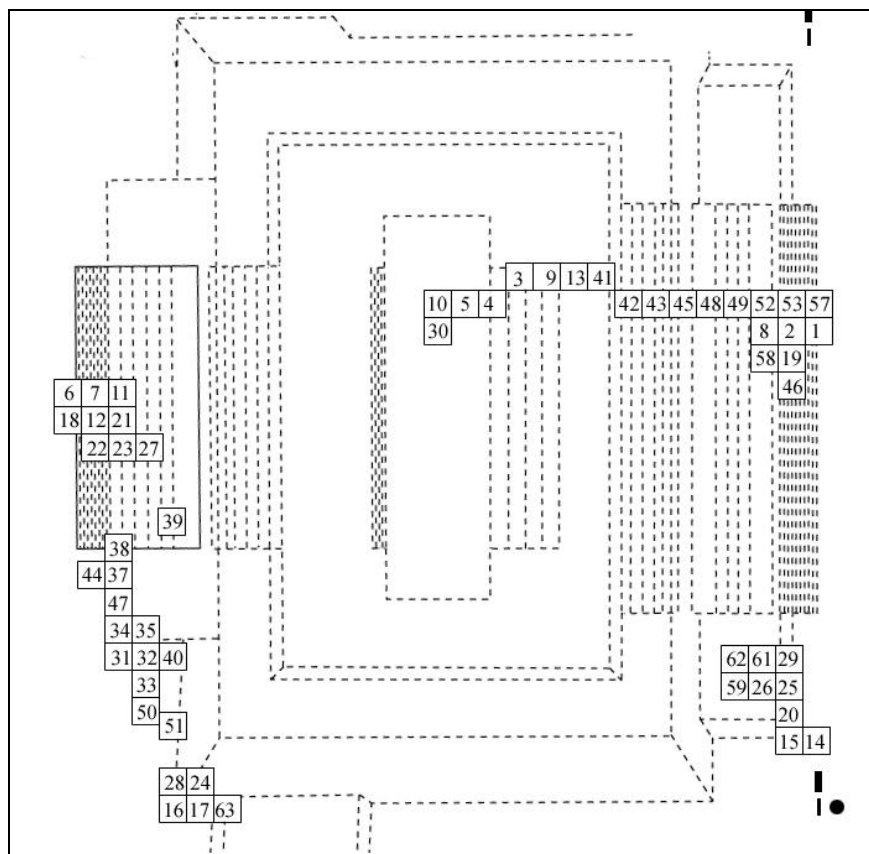


Figure 9.140 Plan view of excavations carried out in 2004 in Operation CAN 43 (Sketch by T. Barrientos)

Eastern Stairway

The excavations in the eastern stairway of Structure L7-27 were carried out under Operation CAN 43, which included 19 units of 2 x 2 m that were directed initially by Blanca Mijangos and were continued by Claudia Quintanilla (Barrientos *et al.* 2006: 259-63). Unit CAN 43-1 was located at the base of the stairway, in the center of the mound. After removing the humus and a layer of medium sized sandstone blocks, the plaza floor was found at 0.45 m below the surface. Some red painted ceramics were recovered, together with few obsidian fragments. Unit CAN 43-2 was located directly west of the previous one, looking for the initial step of the staircase, which was found at 0.73 m below the surface, after removing three levels of medium sized blocks, probably part of a

collapsed wall. The excavation continued with unit CAN 43-19, located south of CAN 43-2, revealing the continuation of the step at 0.59 m below the mound surface. Farther south, the staircase was exposed in unit CAN 43-46, at a depth of 0.28 m. However, the stairway did not appear in other units, like CAN 43-55 to the east and CAN 43-56 to the north, although only 0.15 m of sandstone rubble was removed in both. The same happened in unit CAN 43-58 to the west, where only medium size sandstone blocks were found at 0.12 m. Given that the southern limit of the staircase was visible as an outset corner at the base of the mound, unit CAN 43-14 was located in that spot. However, the corner was not found and a flat stone plaza floor appeared at 0.14 m below the surface. Hence, unit CAN 43-15 was excavated directly to the west, removing a layer of architectural debris until revealing the southeastern corner of the staircase, at 0.22 m below the surface. The first step was made with white limestone blocks measuring between 24 x 34 cm and 43 x 29 cm each. Unit CAN 43-20 was open to the north, revealing the same step but more deteriorated, at 0.35 m below the surface and under the rubble layer of medium sized blocks. Further north, unit CAN 43-25 also exposed the first step at 0.22 m of depth, but its stone alignment was poorly preserved. More units were open in order to find another step of the staircase, like unit CAN 43-26 to the east, which exposed a fill of small stones at 0.28 m below the surface, but no evidence of steps. Unit CAN 43-29 revealed the step at 0.31 m of depth, and unit CAN 43-54 was another extension to the north, where a corner stone was exposed at only 0.08 m below the surface. The excavation of this area was extended with units CAN 43-59 to 43-61, located to the west of the previous ones, which revealed that the rubble and corner found were part of a collapsed fine stone masonry wall of a substructure (L7-27-Sub 1).

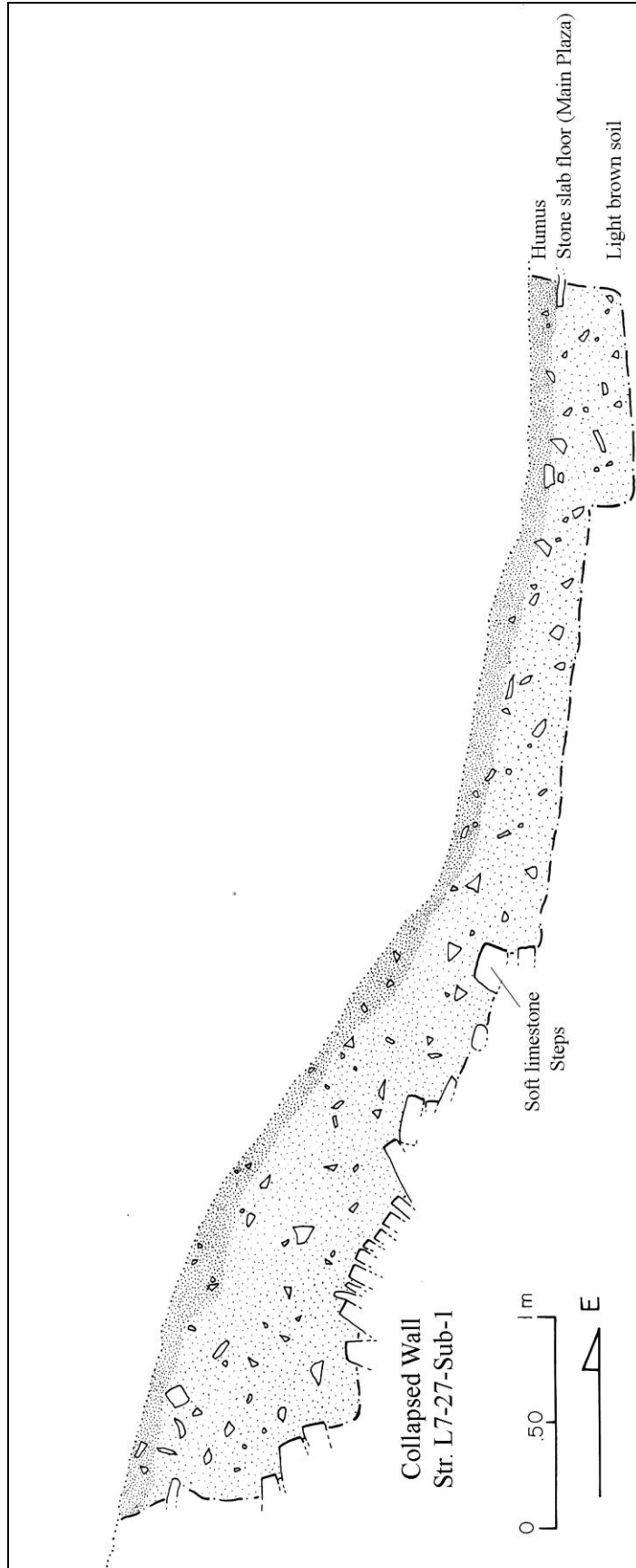


Figure 9.141 South profile of excavation units CAN 43-59, 60 and 61 (Drawing by C. Quintanilla and L. Luin, VCAP)

Unit CAN 43-59 exposed the wall that reached 1.8 m below the surface, and it was clear that it was a door jamb of a room entrance (Figure 9.141). The other units exposed the wall, although it was difficult due to the presence of a *corozo* palm tree. The last unit excavated was CAN 43-62, which did not find the wall. Instead, the flat stone floor was exposed at 0.23 m, and an earlier plaster floor was found at 2.2 m below the surface. All the previous architectural features indicate that fill made with medium sized yellow sandstone rocks was used to cover a previous building (L7-27-Sub 1) made with fine hard limestone masonry, very similar to the one used in buildings like L7-9, L7-1 and the East Ball court, which have been correlated with *Taj Chan Ahk's* reign. The step found in several units seems to correspond to a single low step or bench in front of this early building, which was also associated with an early plaster floor. The masonry wall that was excavated was part of a doorway that measured almost 2 m high, but it was found collapsed, leaning to the west, indicating that it was intentionally dismantled in order to build the massive platform visible today, probably by *Taj Chan Ahk's* son and heir, *Kan Ma'ax*. The central staircase of the eastern façade of the platform did not appear as a clear feature, suggesting that it could have not been finished.

Western Stairway and Façade

After excavating 26 units, the western stairway of Structure L7-27 appeared more clearly than its eastern counterpart, and the walls of the first terrace showed some interesting features. The area was initially excavated by Adriana Linares, and continued by Claudia Quintanilla, under the supervision of Tomás Barrientos (Barrientos *et al.* 2006: 263-71).

The central section of the staircase was first excavated as part of the axial trench that crossed the structure from east to west. The westernmost unit, CAN 43-6, removed the humus layer and a light brown fill, revealing a plaster floor sloping down to the northwest, at 25 cm below the datum. The floor could have been part of the staircase drainage, and was followed to the east in unit CAN 43-7, where some collapsed blocks of the stairway were found under the humus and light brown soil. In this unit, the plastered floor was found sloping down to the west, reaching a depth of 0.75 m, where it was delimited by an irregular alignment of stones. The floor was followed to the south in units CAN 43-12 and CAN 43-18. In the latter, the floor measured 33 cm deep in the northeastern part of the pit, and 55 cm deep in the southeastern corner. Unit CAN 43-22 was opened directly to the south, revealing the same floor at the same depth than its adjacent units.

The actual staircase was first found in unit CAN 43-11, located east of CAN 43-7. In this unit, only the humus was removed, reaching a depth of 22 cm, and revealing the first and second steps of the staircase (Figure 9.142). Within this excavation, the amount of ceramics recovered was relatively high. The excavation extended to the south with CAN 43-21, cleaning the humus and rubble, and finding the first two steps of the staircase and the plaza floor at 60 cm below the surface. Units CAN 43-23 and CAN 43-27 exposed at least one more step of the staircase at only 29 cm below the surface, but the amount of rubble did not allow a clear identification of other steps. Unit CAN 43-27 did reveal the upper steps (Figure 9.143), and 4 m to the south, unit CAN 43-39 exposed six smaller steps at 25 cm below the surface, although their alignment was not straight and some blocks fell forward (Figure 9.144)

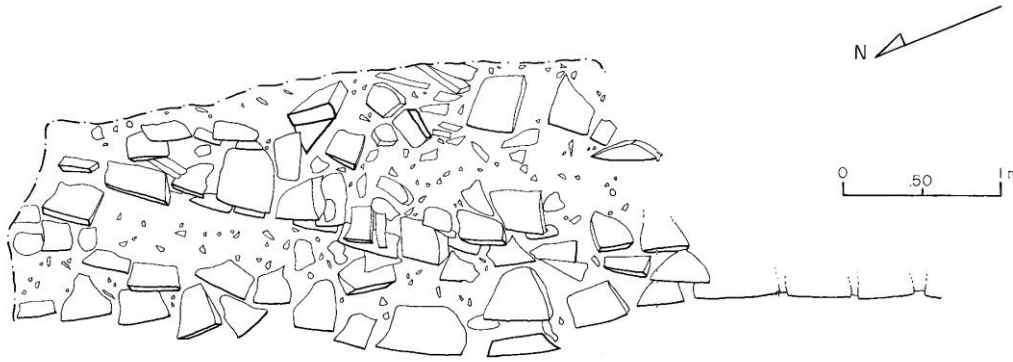


Figure 9.142 Plan view of first two steps of western staircase, Structure L7-27 (Units CAN 43-7, 11, 21 & 23) (Drawing by A. Linares and L. Luin, VCAP)

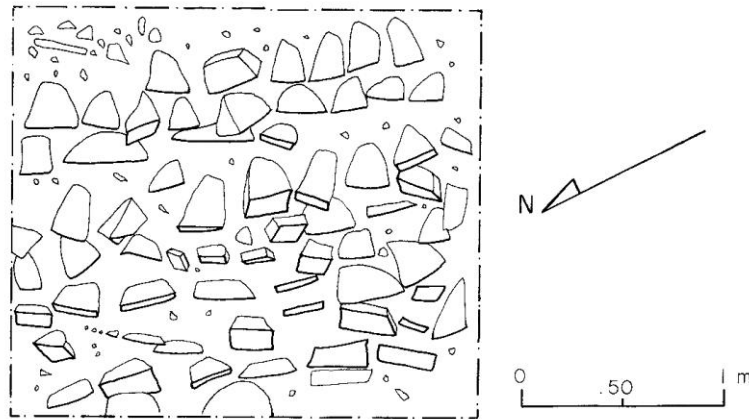


Figure 9.143 Plan view of upper steps of western staircase, Structure L7-27 (unit CAN 43-27) (Drawing by L. Luin, VCAP)

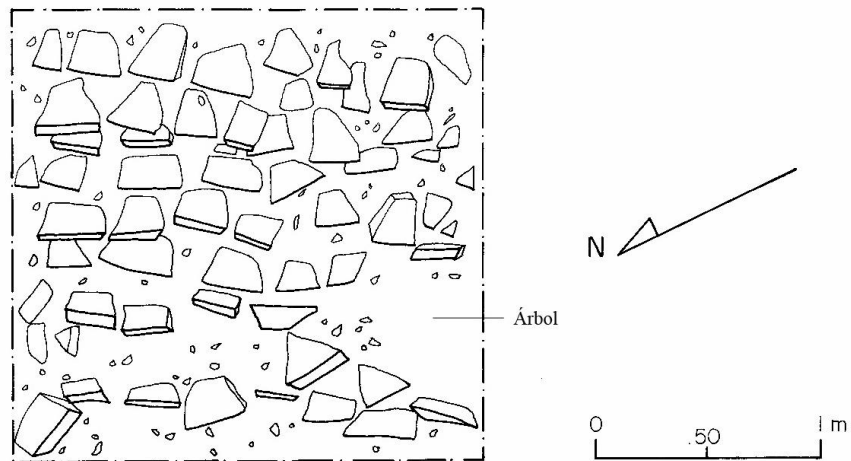


Figure 9.144 Plan view of upper steps of western staircase, Structure L7-27 (unit CAN 43-39) (Drawing by L. Luin, VCAP)

The floor in front of the staircase was exposed 6 m the south of the previous ones (CAN 43-23 and CAN 43-27), in unit CAN 43-38, where it also showed the slope similar to units CAN 43-6 and CAN 43-7. Units CAN 43-37 and CAN 43-44 were opened south of the previous one, confirming that the plastered floor slopes to the east. The plaster floor was removed, exposing a second floor made with flat stones at 0.75 m of depth.

Unit CAN 43-34 was opened 3 m south of CAN 43-37, showing a thin humus level and 24 cm of light brown fill. After that, a sandy soil was removed on top of a thin plaster floor, which was removed in order to expose the flat stone floor at 80 cm below the surface. A careful examination of the unit profile revealed that the base of the staircase is located at the level of the plaster floor (Figure 9.145). The portion of the staircase was made with four triangular shaped limestone blocks measuring 26 x 25 x 26 cm, and a square stone of the same dimensions in the northern limit of the unit. The square stone was interpreted as a possible corner stone, making it necessary to open a 2 x 1 m extension to the north, named CAN 43-47. This pit revealed an inset corner of the stairway and five more blocks of the first step, associated with large quantities of ceramics and some grinding stone fragments. Meanwhile, the excavation of unit CAN 43-44 was followed to the east, revealing two more steps and the wall of the basal platform, consisting of three stone lines reaching 0.82 m of height from the plaster floor. Unit CAN 43-35 was opened to the east, but only uncovered rubble at 24 cm below the surface

The previous architectural features were followed to the south in units CAN 43-31, 43-32 and 43-40. Unit CAN 43-31 revealed more of the inset corner that joins the wall with the staircase, at 54 cm below the surface (Figure 9.146).

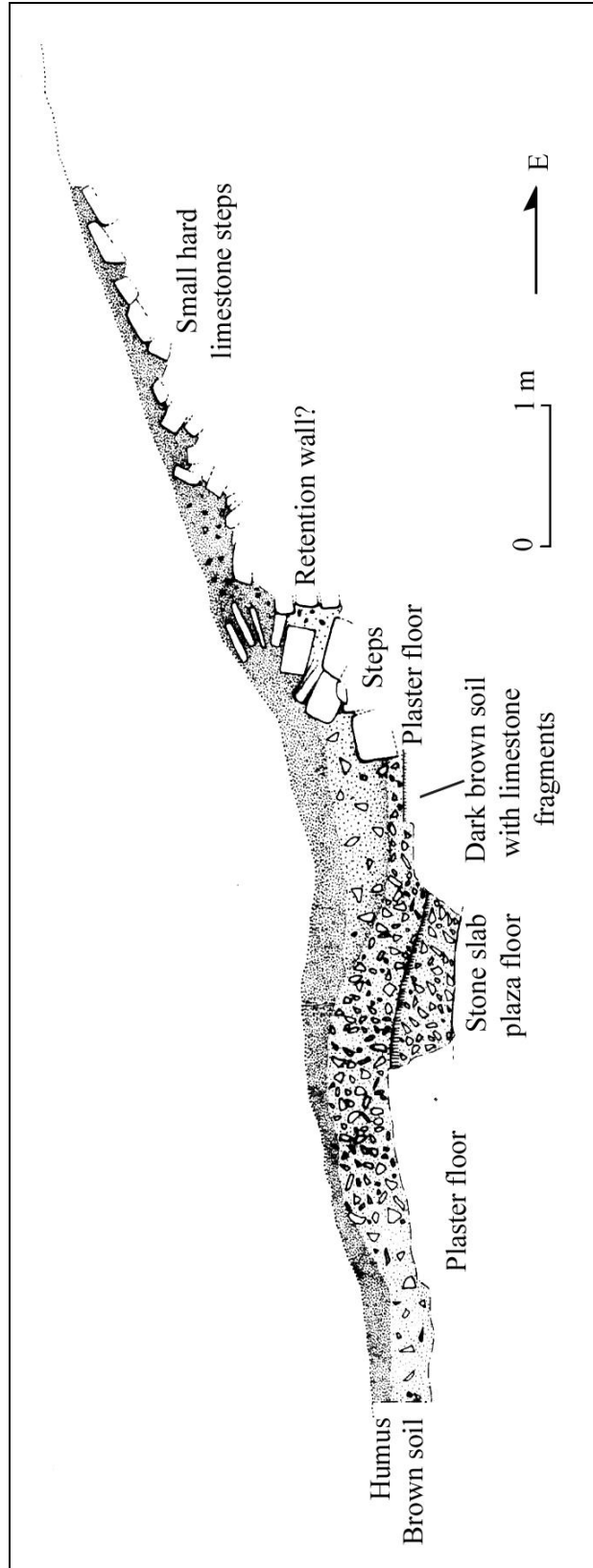


Figure 9.145 South profile of Structure L7-27 west staircase (units CAN 43-12, 18 & 21)
 (Drawing by L. Luin. VCAP)

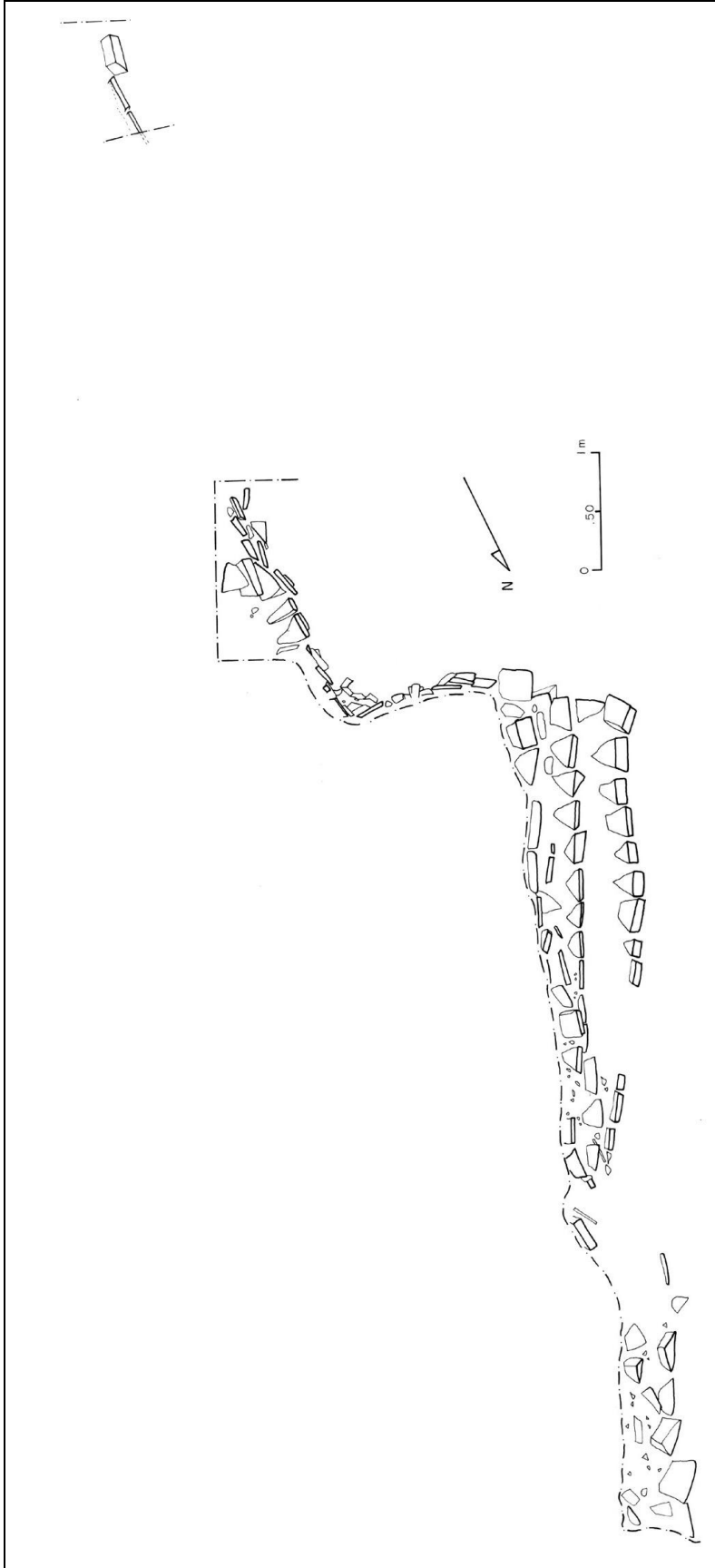


Figure 9.146 Plan view of Structure L7-27 west staircase (units CAN 43-7,11,21 & 23)
(Drawing by A. Linares and L. Luin, VCAP)

Here, the plaster floor had a thickness of 12 cm and the floor made with flat stones was found at a depth of 0.73 m, below a fill of light grey sandy soil. To the east, unit CAN 43-32 only found architectural debris at 15 cm below the surface, but unit CAN 43-40, located directly to the east, revealed four upper steps aligned with the ones found in CAN 43-39. The same steps were also exposed to the south, in unit CAN 43-51. In these units, several fragments of grinding stones were recovered with some ceramics, probably as part of termination offerings or remains of a post-abandonment occupation. Unit CAN 43-33 was opened to the south of CAN 43-32, revealing the flat stone floor at 59 cm of depth, below a fill of light brown soil. This floor was also exposed at the same depth in unit CAN 43-50, located south of the previous one. In addition, the wall of the basal platform was exposed, measuring 0.64 m of height.

The southern portion of the basal platform base continued to be explored with unit CAN 43-16, initially laid out at 28 m south of unit CAN 43-12. The excavation of this unit exposed the plaster floor of the plaza at 38 cm from the surface, below the humus level and rubble from the collapsed wall. The plaza floor presented a slope that descends to the west, just as did the floor exposed in front of the central staircase. Another plaster floor was found near the 40 cm of depth, and the third floor, made with flat stone slabs, was found at 73 cm below the surface. The southwestern corner of the staircase and the wall of the platform were finally exposed after removing the rubble found on top of the plaza floor, and was made by three alignments of finely cut limestone blocks. The excavation was extended to the east, with unit CAN 43-17, removing humus and rubble to expose the first plaster floor at 26 cm from the surface, and the second floor appeared

between 40 and 55 cm of depth. The excavation ended at this level, and the southern end of the staircase was exposed, showing a height of four blocks.

Unit CAN 43-24 was opened to the north of CAN 43-17, revealing only architectural debris without any order, possibly as part of the corner or a collapsed upper terrace. Directly to the west, unit CAN 43-28 only revealed the flat stone floor at 62 cm below the humus layer and rubble mixed with brown soil. In these two units, some ceramics were recovered, as well as some fragments of grinding stones.

The last unit excavated in this area was CAN 43-63, located directly to the east of CAN 43-17. The first level consisted of humus and rubble, exposing the first plaster floor. The excavation followed the floor to the east as a narrow trench, until finding the wall of the basal platform. However, the wall was found at 2.7 m to the east in relation to the wall found in units CAN 43-16 and 17, suggesting the presence of another inset corner

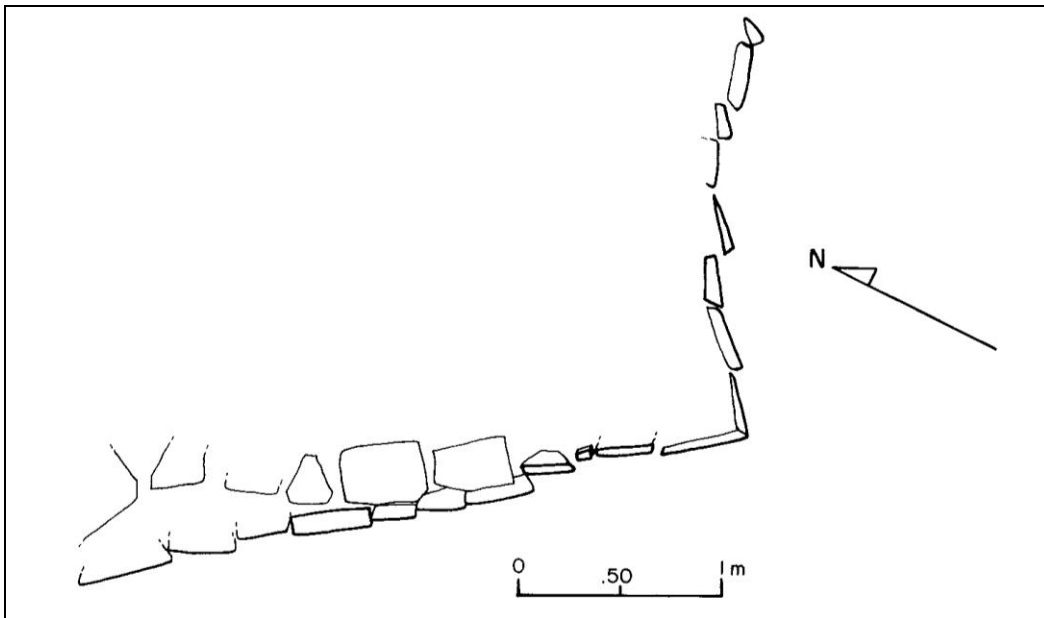


Figure 9.147 Plan view of southwestern corner of Structure L7-27 (units CAN 43-16, 17, 24 & 28)
(Drawing by A. Linares and L. Luin, VCAP)

The excavations in the western side of Structure L7-27 revealed a sequence of two main courtyard floors. The first one was found between 75 and 80 cm below the surface and was made with flat stone slabs, similar to other ones found in other parts of the palace and the epicenter (e.g. East Plaza, South Plaza). This floor was covered by a fill of approximately 45 cm that supported a plastered floor. A second plastered floor was found in some units and was directly associated with the first step of the central staircase. It showed a marked slope to the west, and a possible drainage located in front of the central staircase. Regarding the stairway, the areas exposed corresponded to the staircase of a first terrace, consisting of eight steps. The lower ones are slightly larger than the upper ones, only exposed partially. The basal platform was well preserved in its first three and four block lines, indicating the presence of at least two inset corners.

Central Trench

The trench located in the structure central axis was initially laid out in order to define the terraces of the basal platform and its central stairway. It consisted of several 2 x 2 m units aligned with the general orientation of the palace complex, 12 degrees northeast. Due to the presence of two large trees in the top of the mound, some units were located 2 m north of the original trench. Nevertheless, after tracing the units of the trench, it was clear that this structure did not follow the presumed orientation, as it had a north-south and east-west alignment. Despite this miscalculation, the excavations followed the original trench, given their exploratory nature. In addition, the western half was not excavated due to the discovery of an elaborated burial at the beginning of the 2004 field season.

The eastern side of the trench included 17 units, excavated by Moisés Arriaza, under the direction of Tomas Barrientos. In all units, the removal of the humus layer exposed an irregular fill of yellowish sandstone rocks mixed with brown clay, which has been found in other parts of the palace as part of the final construction phase. These shallow excavations showed the general profile of the building in its final form, consisting in three large terraces. However, the shape of the structure in its eastern side was not as well defined as the west side, suggesting that it could have been unfinished. This is based on the fact that the yellow sandstone fill was found covering previous buildings made with hard limestone masonry (associated with *Taj Chan Ahk's* reign) as part of the construction of massive platforms, best exemplified by Structure L7-27.

The first unit excavated was CAN 43-3, located on the top of the mound. It consisted of three levels; the first one of humus (0-10 cm); the second one of light brown clay (10-40 cm); and the third one was the fill of sandstone rocks, exposed at 40 cm below the surface. The density of rocks increased as the excavation went deeper; ending at 70 cm. Directly to the east, unit CAN 43-9 was open, presenting the same pattern: a first level of humus and light brown soil (0-30 cm), followed by fill of stones (30-50 cm) that was cleaned until reaching a depth of 70 cm, finding few sherds and lithics. The trench continued to the east with units CAN 43-13 and CAN 43-41, cleaning only the layer of humus that covered the fill of stones, oscillating from 10 to 20 cm of depth. Unit CAN 43-36 was located directly south of CAN 43-13, exposing the fill of stones at 40 cm below the surface.

The trench continued to the east of unit CAN 43-41, but had to be moved 2 m to the south due to the presence of a tree, consisting of units CAN 4-42, 4-43, 4-45, 4-48

and 4-49. In these 2 x 2 m pits, the humus was removed in order to expose the surface of the structure fill, consisting of irregular stones within a light brown soil. The layer of humus measured from 5 to 20 cm of depth. The absence of a formal floor or any other kind of surface indicated that this fill of stones was the only evidence that could be used to discern the profile of the structure, meaning that its construction was probably left incomplete.

The excavation of unit CAN 4-52 directly east of CAN 4-49 showed a different pattern, because the surface suddenly were found at 30 cm below the surface, indicating a possible collapsed terrace or the beginning of a staircase. The rubble continued to a depth of 92 cm, associated with a large amount of ceramic sherds and grinding stone fragments. This unit was extended to the east with units CAN 4-53 and CAN 4-57, reaching the base of the structure, directly north of units CAN 43-1 and CAN 43-2, previously described as part of the eastern façade excavations. Unit CAN 43-53 exposed several stone blocks made with soft limestone, which constituted remains of the collapsed platform wall. Unit CAN 43-57 revealed the flat stones floor of the East Plaza, also found in unit CAN 43-1.

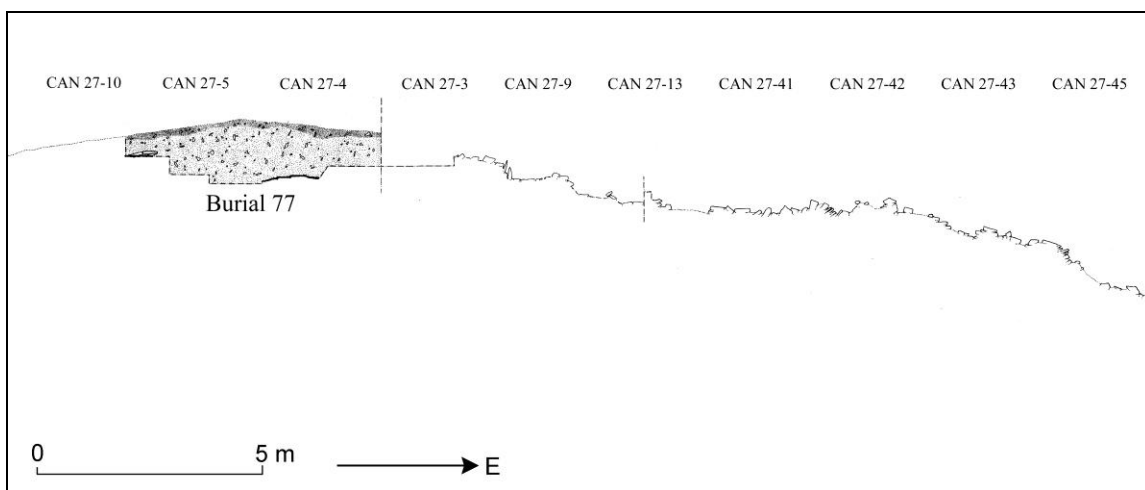


Figure 9.148 South profile of Structure L7-27 eastern half (Drawing by T. Barrientos and L Luin, VCAP)

Burial 77

Unit CAN 43-4 was located directly to the southwest of CAN 43-3, and initially, it followed the same pattern as the other units, presenting disperse stones in a light brown fill. However, at 40 cm of depth, the soil became thick brown clay with no stones, making it necessary to define a third level. In that moment, the absence of the stone fill was interpreted as a possible room or a platform, but this idea changed suddenly when hundreds of chert flakes appeared associated with fragments of carbon. A fourth lot was thus defined between 60 and 80 cm below the surface, where a large flat stone slab was exposed. Below it, a complete but fragmented black slipped vessel was discovered within more remains of charcoal, at 71 cm of depth. Moisés Arriaza, who was in charge of this excavation, noted that this context deserved special attention, consulting with the project directors about its possible interpretation. From this moment, Tomas Barrientos supervised the excavation, given that it was clear that it was part of an important burial.

Initial excavations of lot CAN 43-4-4 exposed a considerable amount of fine objects, quickly proving the hypothesis of the presence of an important individual buried in this location. The artifacts found in this lot were:

- a. A fragmented orange plate, 76 cm below the surface (CANV-108)
- b. A fragmented black vessel, 71 cm below the surface (Sendero Black)
- c. A tripod bowl with supports, 79 cm below the surface (CANV-102)
- d. Stone slab 1, 32 cm below the surface
- e. Stone slab 2, 57 cm below the surface
- f. Stone slab 3, 53 cm below the surface
- g. 12 fragments of *spondylus* shell mosaic
- h. 6 fragments of nacre mosaic

After reaching a depth of 80 cm, a fifth lot was defined, which corresponded to most of the burial offerings and bones (Figure 9.149). The soil changed from pure clay to a sandy brown fill. In the eastern part of the unit, a very large *spondylus* shell was found, which covered the cranium of the individual. With this evidence, it was also clear that the shell mosaic fragments were part of an elaborated headdress. The position of the head also confirmed the orientation of the body in an east-west axis.



Figure 9.149 Excavation of Burial 77 (Photo by A. Demarest, VCAP)

Given that the head of the individual was found in the northern portion of unit CAN 43-4, an extension was open to the west, named CAN 43-5, in order to expose the entire body. The first level of 20 cm exposed the superficial fill of stones, which were carefully cleaned to find any association with the burial, and some were left *in situ* on the

edges of the pit. The second level reached the brown clay fill, and the excavation continued to level three (40-60 cm), which corresponded to the layer of chert flakes. However, the southern portion of this layer included many obsidian prismatic blade exhausted cores, also associated with remains of charcoal throughout the unit (Figure 9.150). Below the chert/obsidian layer, and part of level 4, two more stone slabs were found at 62 cm below the surface. Two more vessels were found at the level of the burial (77 cm), which included another tripod plate.



Figure 9.150 Obsidian exhausted cores found in western half of Burial 77 (Photo by T. Barrientos, VCAP)

When the two units reached the fifth level (80 cm), the excavation of the burial artifacts included both units as a single lot. After a week of detailed excavation and registry, the total funerary offerings included 5 ceramic vessels (see a detailed description under the ceramics section, in Chapter 10):

- a. 1 black slipped vase (Sendero Negro type)
- b. 1 cream slipped vase (CANV-102, Raxruha Cream type)
- c. 3 orange tripod plates with cream slip and remains of polychrome paint (CANV-108, CANV-109, CANV-128, Saxche-Palmar type)

However, the main bulk of the burial artifacts consisted of hundreds of shell artifacts, classified in the following way:

- a. 1 large *spondylus* shell of 17 cm in diameter that covered the cranium and functioned as the headdress base. Its border presented continuous small perforations, probably to be attached with the rest of the headdress (Figure 9.151).



Figure 9.151 Large *spondylus* shell found beneath the head of the individual in Burial 77
(Photo by T. Barrientos, VCAP)

- b. A mosaic of orange *spondylus* fragments, mostly of narrow rectangular shape that originally covered the base of the headdress (Figure 9.152)



Figure 9.152 Remains of headdress made with spondylus shell mosaic (Photo by T. Barrientos, VCAP)

- c. Two small effigies of fish eating a water lily that were part of the headdress frontal portion. The fish was made with nacre and presented its fin shapes similar to the *mojarra* fish (*Cichlidae* sp.), common to the area. The water lily was made combining nacre (bulb) and orange *spondylus* (petals). (Figure 9.153)



Figure 9.153 *Spondylus* shell mosaic representing water lily and *mojarra* fish (Photos by T. Barrientos, VCAP)

- d. Fifteen glyphs incised in quadrangular cartouches made of nacre. These were found upside down and aligned in the northern edge of the burial, parallel to the thorax of the individual. It is not clear if these glyphs were part of a mosaic, necklace or any other ornament type, because they do not present any perforation. It is thus probable

that they were glued to a belt made from an organic material (leather?) that could be attached to the headdress or other part of the royal outfit. Some glyphs were crushed by the weight of the stone slabs, and the hard clay where the burial was located also erased some of the incised designs. As a result only 10 of the 15 glyphs are total or partially legible. Nevertheless, they provide the name of the buried individual, which corresponds to ruler *Kan Ma'ax* (see Chapter 11). (Figure 9.154)



Figure 9.154 Glyphs made with nacre shell. Above: Shells *in situ*. Bottom: Reconstructed text (Photos by T. Barrientos, VCAP)

Besides the 5 ceramic vessels and all these shell artifacts, Burial 77 also included other interesting objects:

- a. 1,044 chert flakes

- b. 697 obsidian flakes and 69 fragments of exhausted obsidian prismatic cores
- c. 1 jade earflare
- d. 1 mosaic of small and very thin (transparent) imperial jade plaques
- e. 1 large rectangular pectoral with horizontal incisions, made of bone (Figure 9.155)
- f. 1 bone mosaic representing the glyph of the *Cimi Tzolk'in* day and a number nine made with a bar and four dots (Figure 9.155).
- g. Approximately 30 circular and oval decorative objects made with bone and shell



Figure 9.155 Bone pectoral (left) and shell mosaic (right) part of Burial 77 funerary offerings
(Photos by T. Barrientos, VCAP)

The individual was placed in an extended and dorsal position, with an east to west orientation, with the head to the east side (Figure 9.156). The bone preservation was very poor, due to its shallow depth and the lack of any formal cist or cover. The soil associated with the burial consisted of dark brown clay on top of it, ranging from 26 to 70 cm of depth. The burial itself was surrounded by sandy light brown soil, found between 70 and 100 cm of depth. During the excavation of the burial level, it was also noted that the soil presented light blue and pinkish red stains (Figures 9.156 and 9.157). As the burial was totally exposed, these colors extended in a linear pattern on the edges of the burial, framing it in a rectangular shape. This has been interpreted as the remains of a cape or cloth where the body was placed.

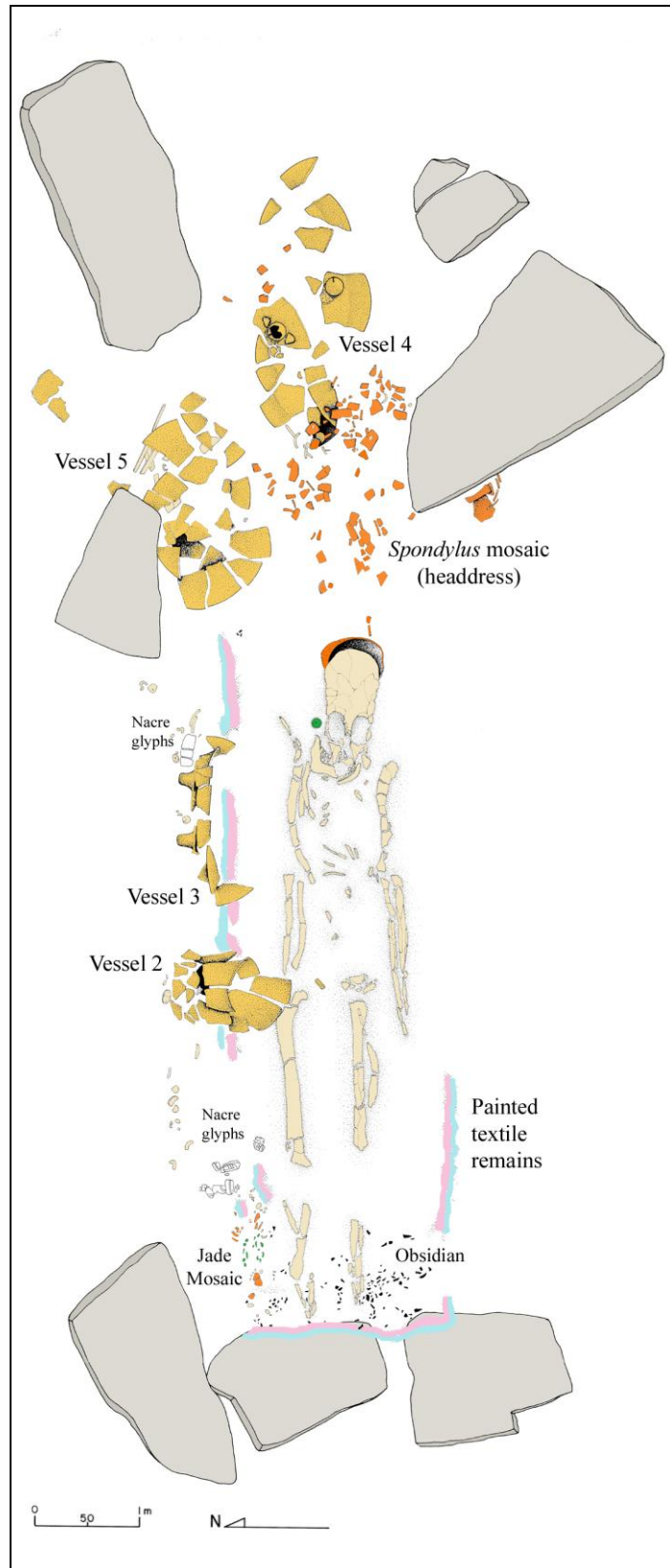


Figure 9.156 Drawing of Burial 77 (Drawing by L. Luin and T. Barrientos, VCAP)



Figure 9.157 Paint stains found throughout Burial 77, probably the remains of textiles
(Photo by T. Barrientos. VCAP)

The burial level (Lot 5) was excavated until reaching 1.3 m of depth, exposing a layer of charcoal mixed with burnt clay, located directly below the head of the individual. The excavations of the 2004 season ended at this point, and were continued the following year with the aid of Silvia Alvarado (Barrientos *et al.* 2006: 279-89).

As it was said before, the excavations in the central axis of Structure L7-27 were concentrated on its eastern side, and few units were opened in the west side, mostly due to the discovery of Burial 77. As a result, only two excavation units were opened, CAN 43-10 and 43-30. The first one was located directly to the west of CAN 43-5, exposing the brown clay fill at 40 cm below the surface. At 50 cm of depth, some remains of the obsidian flakes layer appeared, as well as a stone alignment that could have been part of a terrace wall or a cist part of Burial 77. South of CAN 43-10, unit CAN 43-30 was opened as an extension of 1.6 x 2 m, excavating only 20 cm below the surface, and no architectural features, ceramics or lithics were found.

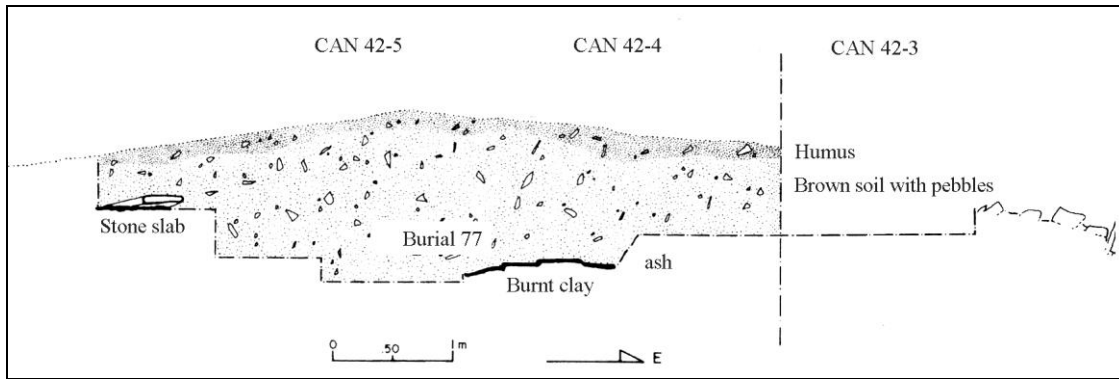


Figure 9.158 Stratigraphic location of Burial 77 (South profile) (Drawing by L. Luin, VCAP)

The excavations carried out in 2005 were intended to explore the stratigraphic history of Structure L7-27, because the units of the axial trench excavated in 2004 were very shallow and the excavation of Burial 77 was only 1.3 m deep. Therefore, the main objective was to continue the excavation of unit CAN 43-4 until reaching sterile soil, in order to define the context previous to the interment of *Kan Ma'ax* and the existence of any previous version of the building, taking into account the discovery of a collapsed masonry wall in the base of the eastern façade. Also, given that this unit (and the entire axial trench) was not located at the true center of the structure, a new unit was excavated at the top center of the mound following the east-west and north-south orientation of the last version of the building.

The 2005 excavations in unit CAN 43-4 initiated with Lot 6, defined between 1.22 and 1.30 m below the surface and directly under Burial 77. The soil was light brown compact clay in the western half of the unit, and burnt reddish clay mixed with charcoal in the rest of the pit. Lot 7 started at 1.30 m and consisted of a very plastic brown clay fill 10 cm thick that was followed by another layer of burnt clay measuring 5 cm of thickness (Lot 8). The next stratum (Lot 9) started at 1.61 m below the surface, consisting of loose

brown clay with small white limestone inclusions, some flat stones and carbon remains at 1.72 and 1.67 m. This first group of stones was removed, exposing an alignment of stones or low wall measuring two stone lines of height, with an east-west orientation (Figure 9.159). An irregular group of stones was also found in the northeast corner of the pit, and the amount of ceramics and lithics in these lots was very low.

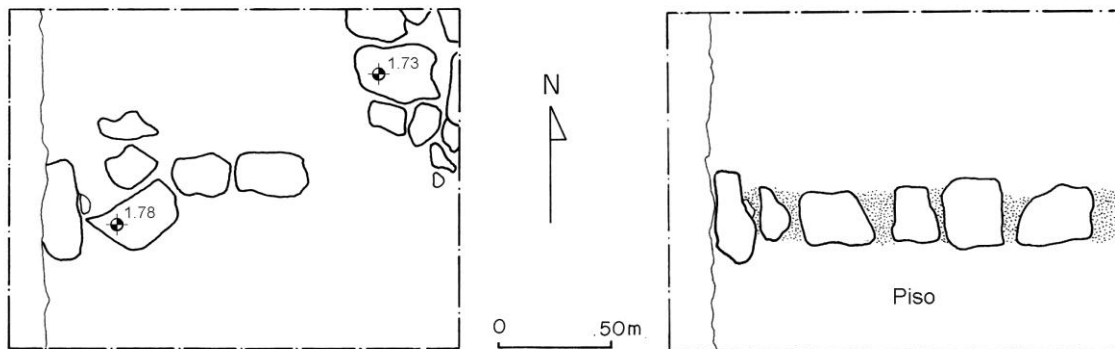


Figure 9.159 Stone alignments found in lots CAN 43-8 (left) and CAN 43-9 (right)
(Drawings by S. Alvarado and L. Luin, VCAP)

Due to the presence of the stone alignment, the unit was divided horizontally in two lots. Lot CAN 43-4-10 was defined measuring 57 cm from the stone alignment to the south profile, and had a depth between 1.84 and 1.96 m. Its west portion presented a high amount of charcoal directly related to the stone alignment. After removing the carbon layer, the excavation exposed a white floor made with sandstone and the alignment became a small wall of two stone lines of height. The sandstone floor was excavated as Lot 11, from 1.98 to 2.16 m below the surface, showing a shallow depression in the east and west extremes of the unit. Lot 12 was defined at the same depth but in the northern section of the unit, showing a loose brown fill with small white inclusions of limestone. A small register of the wall and floor (15 cm wide) was left in the west limit of the pit.

Lot 13 was excavated in the northern section, within the brown fill with white inclusions, reaching a depth of 2.4 m and recovering few ceramic sherds. It was clear then that the lower wall marked the limit of the sandstone floor. The same fill became more loose and soft in the next level (2.4 to 2.6 m), and the excavation exposed groups of stones in the northeast profile, indicating the presence of a retention wall. At this point, the sandstone floor and the low wall were removed as part of Lot 15, showing 5 cm of thickness. The fill underneath the floor was hard and compact dark brown clay.

The next level covered the entire unit, but the soil still presented the division of the previous two levels: brown with white inclusions in the northern half and dark brown clay in the southern part. However, as the excavation became deeper, the division disappeared, and the dark brown clay covered the entire unit. Some dispersed stones kept showing near the eastern profile. Lot 18, defined between 3 to 3.2 m below the surface, presented a change of soil, given that the brown clay was softer and was mixed with yellowish clay. Also, at this depth, no ceramics were recovered, though it was clear that the level was still part of the structure architectural fill. The next 60 cm (lots 19, 20, 21) showed more variation in the fill, indicating that it was intentionally mixed by the constructors. As a result, the brown fill became lighter in color and yellowish, though the eastern half of the unit showed a mix of brown and red clay. The texture of the fill was made with broken hard clay, indicating that it was the result of a “re-deposition” event. At 3.94 m below the surface, a circular group of stones appeared at the center of the unit, formed by a medium sized round stone surrounded by four small stones. Under the stones, a layer of burnt clay and carbon was defined (Lot 22), indicating a fire event. The bottom part of the stones also presented reddish areas as a result of the burning. Lot 23

was defined at 4 m of depth, and the circular burnt clay and carbon layer continued, and some ceramic sherds were recovered inside it. Just when the carbon layer ended, the construction fill changed again, now presenting an east-west division. The eastern half was soft and loose brown clay, and the western part was hard and burnt clay.

However, the construction fill became regular again in lots 24 and 25 (4.20-4.60 m), predominating a more beige tone of clay. The presence of ceramics or any other cultural material was almost absent; although another circular feature made with medium sized stones was found at 4.48 m. In the next lots the construction fill changed to a more dark brown color, with some reddish areas, and the texture became more hard and compact. The excavation continued within this fill until reaching a depth of 6.40 m (Lot 34), where it became a soft light brown clay with black and yellow inclusions. In the next three levels, the fill became damper and was predominantly yellowish with grey clay inclusions. When the unit was 7 m deep, the construction fill presented two shallow layers. The first one was hard and compact beige brown with red and yellow inclusions, followed by a layer of burnt beige reddish clay. Below these, a limestone floor was found, at 7.41 m below the surface of the mound, which seems to correspond to one of the East Plaza or Main Plaza floor levels. The floor was fragmented and did not cover all the pit area. Lot 40 was defined beneath the floor, exposing a layer of hard burnt yellowish beige clay, very similar to the one found on top of the floor. At 7.62 m of depth, the excavation exposed the white limestone bedrock, which was confirmed by a small 1 x 1 register that reached the final depth of 7.8 m. It is important to note that no ceramics were found after lot CAN 43-3-23, indicating that the deposition of almost 4 m of construction fill was very rapid.

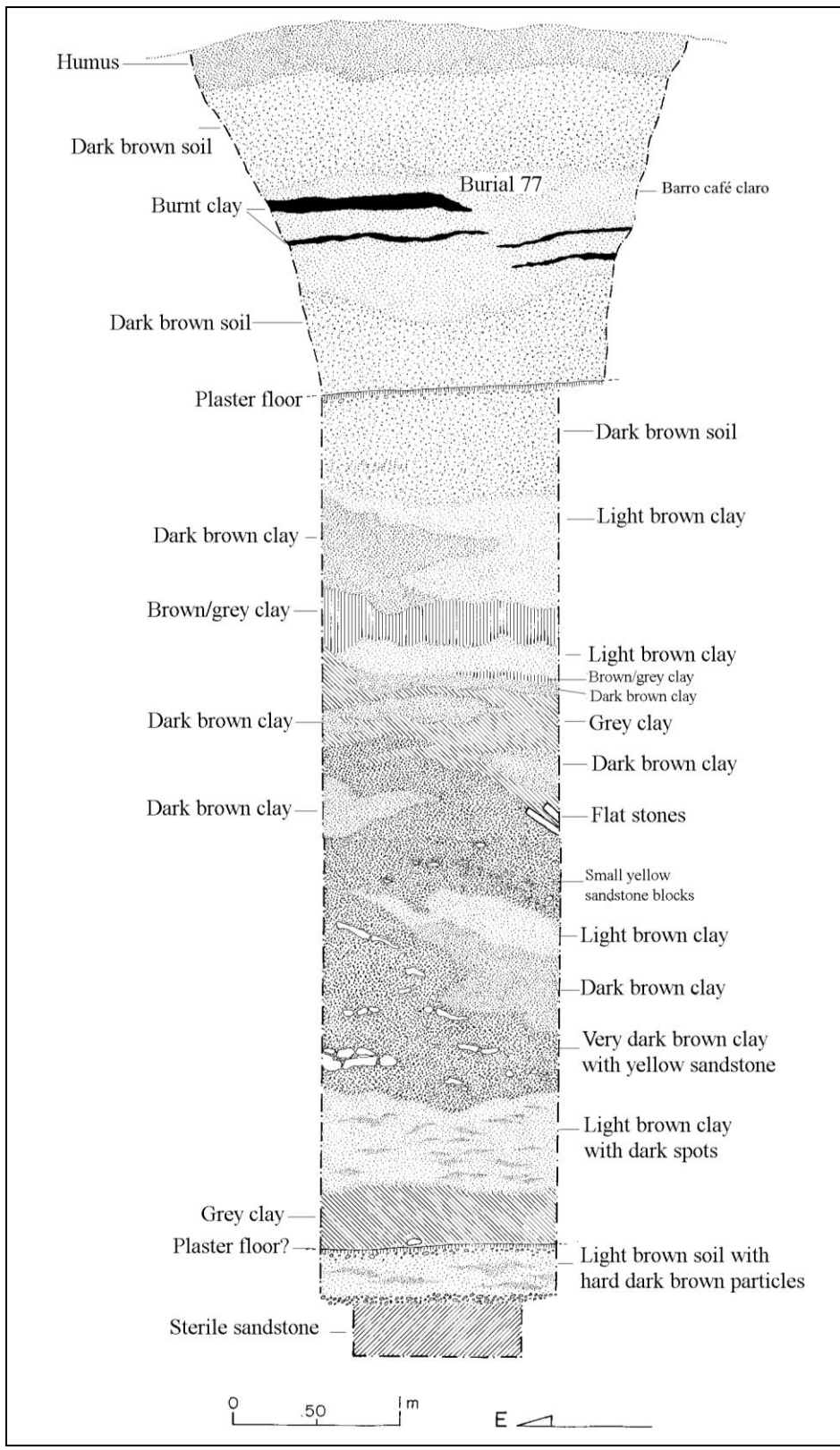


Figure 9.160 South profile of unit CAN 43, showing construction sequence of Structure L7-27 (Drawing by S. Alvarado and L. Luin, VCAP)

Unit CAN 43-64: Burial 96

As it was exposed before, one of the objectives of the 2005 excavations was to explore the true center of Structure L7-27. For that reason, unit CAN 43-64 was laid out according to the real orientation of the building, at 6.10 m south of CAN 43-4. Its excavation was directed by Silvia Alvarado and supervised by Tomás Barrientos (Barrientos *et al.* 2006: 286-9).

After removing the humus layer, the next four excavation levels exposed the brown clay fill with few dispersed stones and some ceramics. Between 0.6 and 1 m of depth, some large stones were uncovered, but they did not present any regular pattern. Some flat stones that measured from 50 to 60 cm long appeared in the west and north areas of the pit (Figure 9.161). In lot 7 (1.20-1.4 m) the soil changed to light grayish brown compact clay, and the northwestern portion of the unit showed an area of burnt clay and carbon. More stones were located in the north profile of the unit, and some fragments of deteriorated bone were found beneath one of these. Given that this was the same level as Burial 77, a 2 x 1 m extension was open to the north, denominated CAN 43-64A.

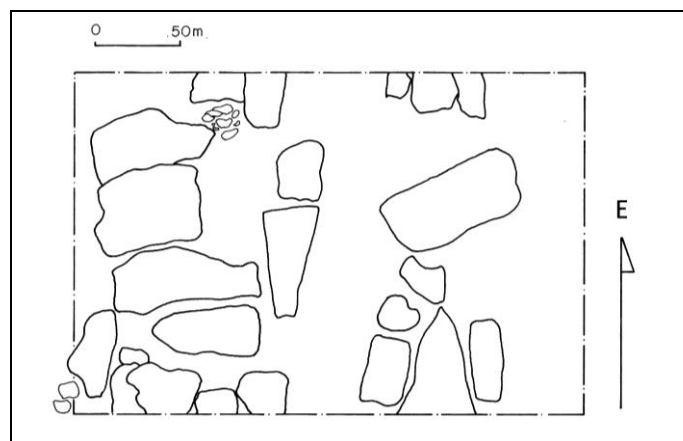


Figure 9.161 Plan view of flat stones found in lot CAN 43-64-5
(Drawing by S. Alvarado and L. Luin, VCAP)

In unit CAN 43-64A, the humus was removed and a single cultural lot was defined until reaching the level of flat stones, approximately between 0.6 and 1 m below the surface. The amount of flat stones found in this unit, and the ones located in the previous one, defined the presence of a burial with a similar pattern as Burial 77, where the body was placed inside a clay fill, and covered with irregular flat limestone slabs. In this unit, the burial was covered by hard yellowish brown clay and presented significant disturbing caused by tree roots. At the level of the burial, more carbon and burnt clay was found in the northern end of the unit. The area of flat stones was left temporarily unexcavated, and only its surrounding area was excavated until reaching a level of 1.2 m below the surface. However, it was necessary to open another extension west of the previous ones, given that more bones appeared in the west profile of this unit.

Unit CAN 43-64B was a 2 x 1 unit located west of units CAN 43-64 and 43-64A. The excavation of this unit did not present an initial humus layer, because the surface presented a hard brown soil with abundant roots. The second lot went through the dry brown clay fill, until reaching the level of limestone slabs, which were found only in the eastern half of the unit (Figure 9.162). After removing them, some bones were exposed within a more loose brown soil, and a fragmented vessel appeared in the northeastern corner of the unit.

Another 2 x 1 m extension was open to the west, named CAN 43-64C, showing the same stratigraphic pattern than CAN 43-64B. In the two first levels, some dispersed stones were found, and some ceramics were also recovered. At the level of the burial, a group of stones was discovered in the southwest corner of the unit, presenting a descending pattern. The excavation stopped when a level of carbon was found.

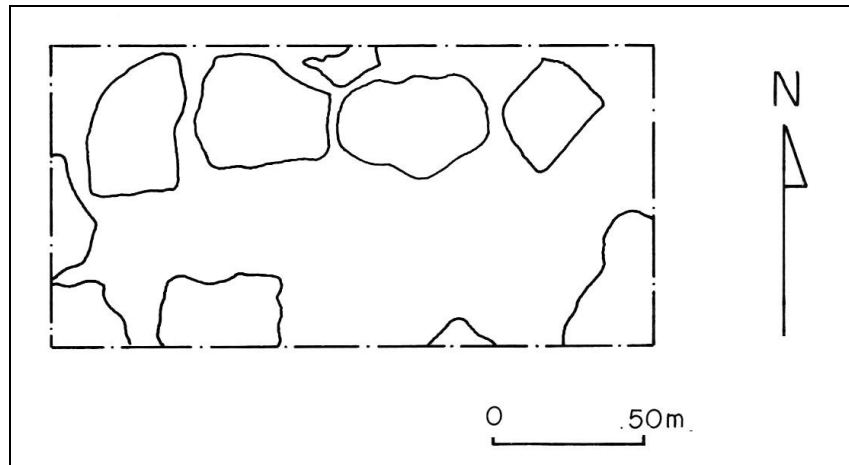


Figure 9.162 Plan view of flat stones found in lot CAN 43-64B-2

The excavation of Burial 96 started when the three extensions reached the level of 1.20 m below the surface, and all artifacts were registered as part of lot CAN 43-64-8. After removing all stone slabs, the skeleton was cleaned, although its preservation was very poor (Figure 9.163). Its orientation was east-west, with the head in the west side, and the cranium presented a slight inclination to its left side. The burial contained an offering of three ceramic vessels (see a detailed description of CANV-139 in the ceramics section, Chapter 10):

- a. Vessel 1: A black-brown slipped vase with incised motifs, probably imported from Alta Verapaz. It was located in the northern extreme of the burial.
- b. Vessel 2: A reddish brown vase with incised symbols and remains of blue and red plaster (CANV-139, Kanalcán Incised type). It was located southwest of the head.
- c. Vessel 3: Fragments of a polychrome plate, probably imported from the northern highlands. It was found in the southwestern portion of the burial, near a group of stones that could have been part of a collapsed wall.



Figure 9.163 Burial 96 (Photo by T. Barrientos, VCAP)

During the excavation of the burial, a small broken jade ear flare was found in the left side of the cranium, and the right ear flare was found under Vessel 2. Just next to the latter one, a small jade pendant was found, showing an effigy of a person carrying a headdress, chest pendant and necklace. In addition, two small jade beads were found near the hip (Figure 9.164). After removing the bones, it was clear that the body was placed on top of three large stone slabs and a layer of burnt clay and carbon that extended to the sides of the burial. The long bones were the only ones visible, given that the rest of the skeleton, including most of the teeth, appeared as stains in the soil (Figure 9.163).



Figure 9.164 Jade pendant and earflare found in Burial 96 (Photo by T. Barrientos, VCAP)

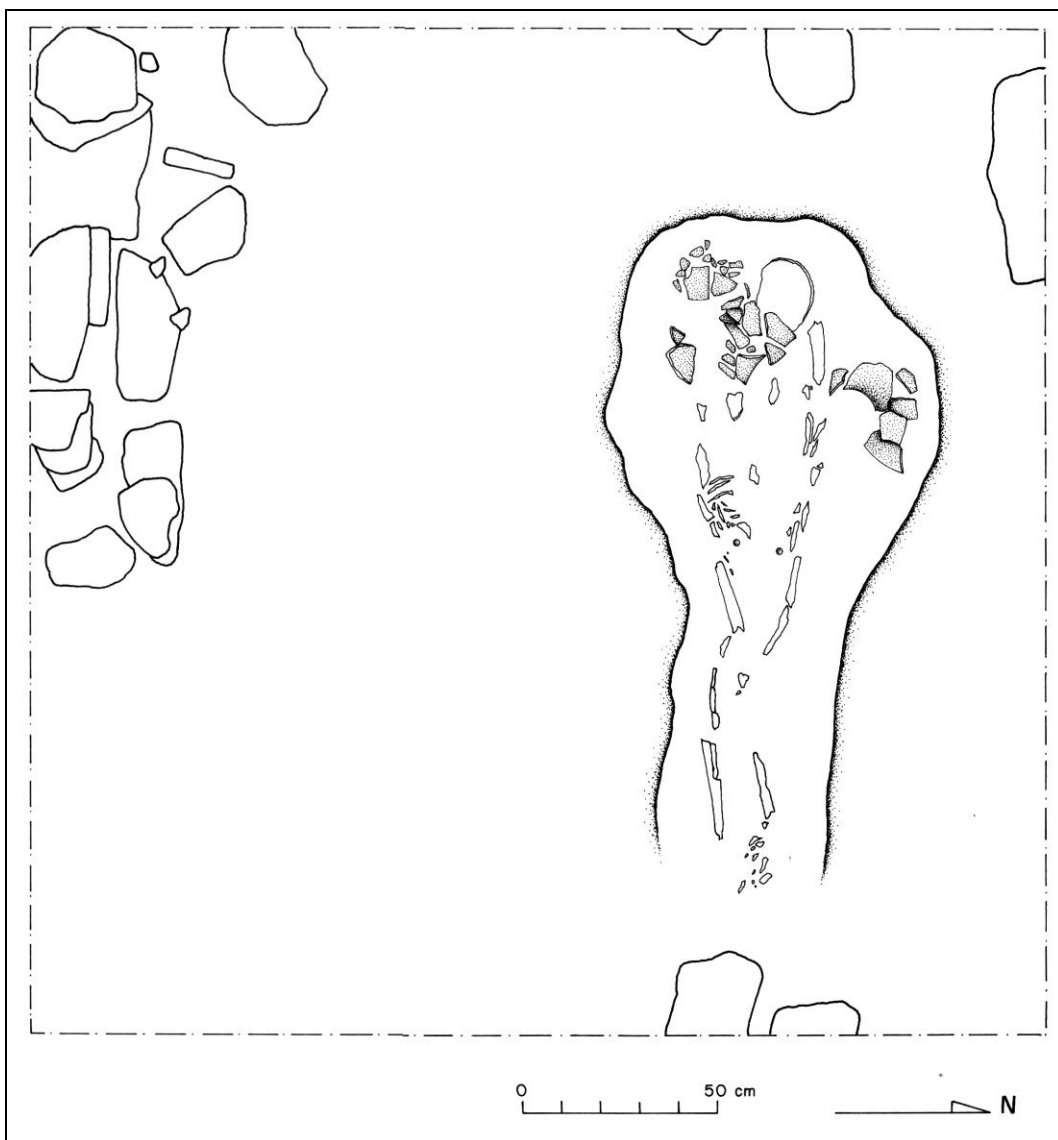


Figure 9.165 Plan view of Burial 96 (Drawing by L. Luin, VCAP)

The excavation continued below the burial level, as part of Lot 9, exposing three successive thin layers of burnt clay and carbon. At 1.6 m below the surface, the beige brown fill appeared under these layers, but no ceramics were recovered. In the next level, at 1.88 m of depth, the fill showed a change to light brown compact clay, with small white limestone inclusions. Near the 2 m, the excavation exposed the white sandstone floor previously found in lot CAN 43-4-10. Like in the previous unit, the floor was covered with two layers of carbon and burnt soil (Lot 13), and some chert and obsidian blades were also found on top of it. The floor presented a small step of 11 cm in the west portion of the unit, and a small post hole was found in the southwestern corner of the pit (Figure 9.166).

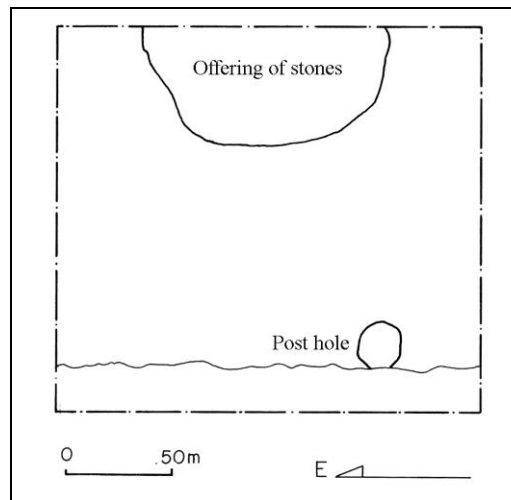


Figure 9.166 Plan view of lot CAN 43-64-13, showing possible post hole (Drawing by S. Alvarado, VCAP)

In the eastern half of the unit, the floor was broken in an area measuring 77 x 55 cm. The floor was removed (Lot 14), and some polychrome sherds were found. However, just under the post hole, a group of stones were found, in a semicircular pattern (Figure 9.168). Several chert layers and carbon were also found directly associated with this feature. The excavation of Lot 15 removed the circular feature, finding another group of

stones in the same pattern (Lot 16), also associated with chert flakes and within a mix of grey, red and beige soil. A third circle of stones was found in the next excavation level (Lot 17), which was followed by a fourth one (Lot 18), formed by fewer but larger stones. At this level, the excavation extended to the east, inside the profile, finding more chert flakes, a fragmented shell, and carbon. The circular feature continued in a similar form as a water well, and a new arbitrary level was defined in each stone line. As a result, three new arbitrary levels were defined (lots 19, 20, and 21), where the feature kept its circular pattern. However, the shape of the stones changed in the sixth level (Lot 20), where the circular shape was made with thin and finer blocks (Figure 9.167). The last level (Lot 21) consisted of a large triangular-shaped stone with rounded corners, which created the base of the feature.



Figure 9.167 Excavation of first (left) and last (right) layers of stone feature in unit CAN 43-64 (Photos by S. Alvarado, VCAP)

Below this stone, Lot 22 was excavated, reaching a final depth of 3.43 m (Figure 9.168) but did not find any cultural material or evidence that could help to define the function of the circular feature. Given its association with the post hole, this feature could have given strong support for a heavy post within the clay fill.

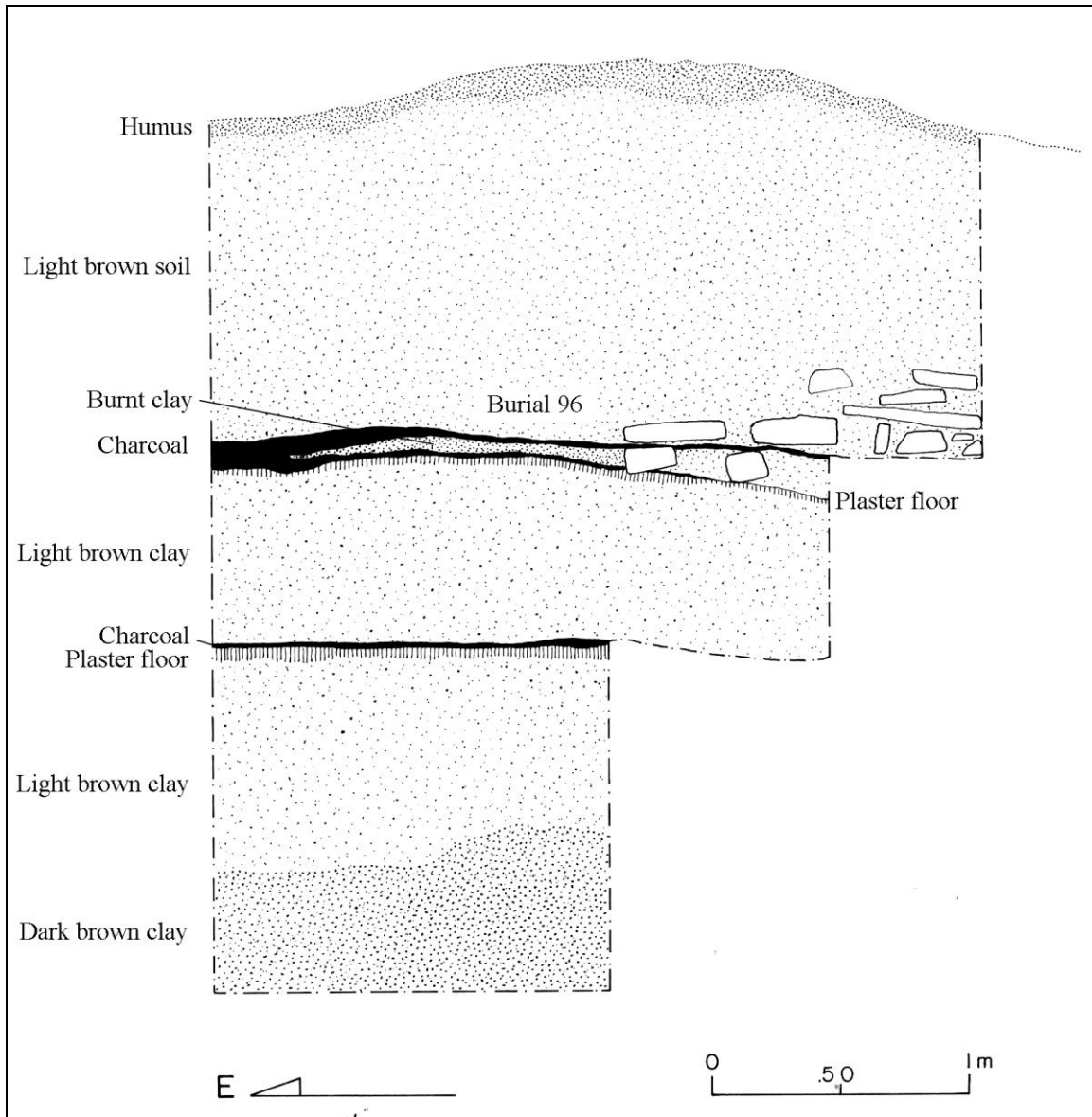


Figure 9.168 North profile of unit CAN 43-64, showing Burial 96 and two floors of Structure L7-27
 (Drawing by S. Alvarado and L. Luin, VCAP)

Interpretation of Structure L7-27 and Burials 77 and 96

The excavation of different areas of Structure L7-27 showed that its architecture was composed mostly of clay fills and almost no evidence of interior retention walls was found. The platform floor surfaces were made with stones and burnt clay; and masonry walls created the façade of the basal platform terraces, at least in its western side.

Three construction phases were identified: the first one corresponding to the stone masonry wall found collapsed at the base of the eastern façade, representing the door jamb of Structure L7-27-Sub-1. This substructure seems to be directly related to the stone slab floors found in the East Plaza and the interior court (Main Plaza); the plaster floor located at the deepest level of unit CAN 43-4 may have been its interior floor. It is also probable that the masonry walls of the basal platform in the western façade also correspond to this architectural stage, which is also related to the reign of *Taj Chan Ahk*.

A second phase seems to correspond to the white sandstone floor located at 2 m below the surface of the mound. At this moment, the platform of L7-27 measured approximately 5.5 m high, covering the previous stone masonry building. The fill of this massive construction included a circular feature made with stones, which probably functioned as the base of a long post or as a cache for perishable offerings. The lack of artifacts indicates that its construction was rapid, but due to the absence of diagnostic types, it is difficult to establish its chronological date. Nevertheless, it is possible to speculate that it could represent the end of *Taj Chan Ahk* reign or the beginning of *Kan Ma'ax* period, during the last years of the VIII century AD.

The third and last phase corresponds to the level where burials 77 and 96 were located. The excavations revealed the presence of a floor and a post hole, indicating the presence of a perishable superstructure. The platform in its final phase measured approximately 70 x 40 m, and was elevated 8 m above the floor of the East Plaza. The platform had three terraces, being the upper one very shallow compared to the other ones. A large staircase with inset corners ascended from the eastern side, but almost no evidence was found for the presence of a western stairway (Figure 9.169).

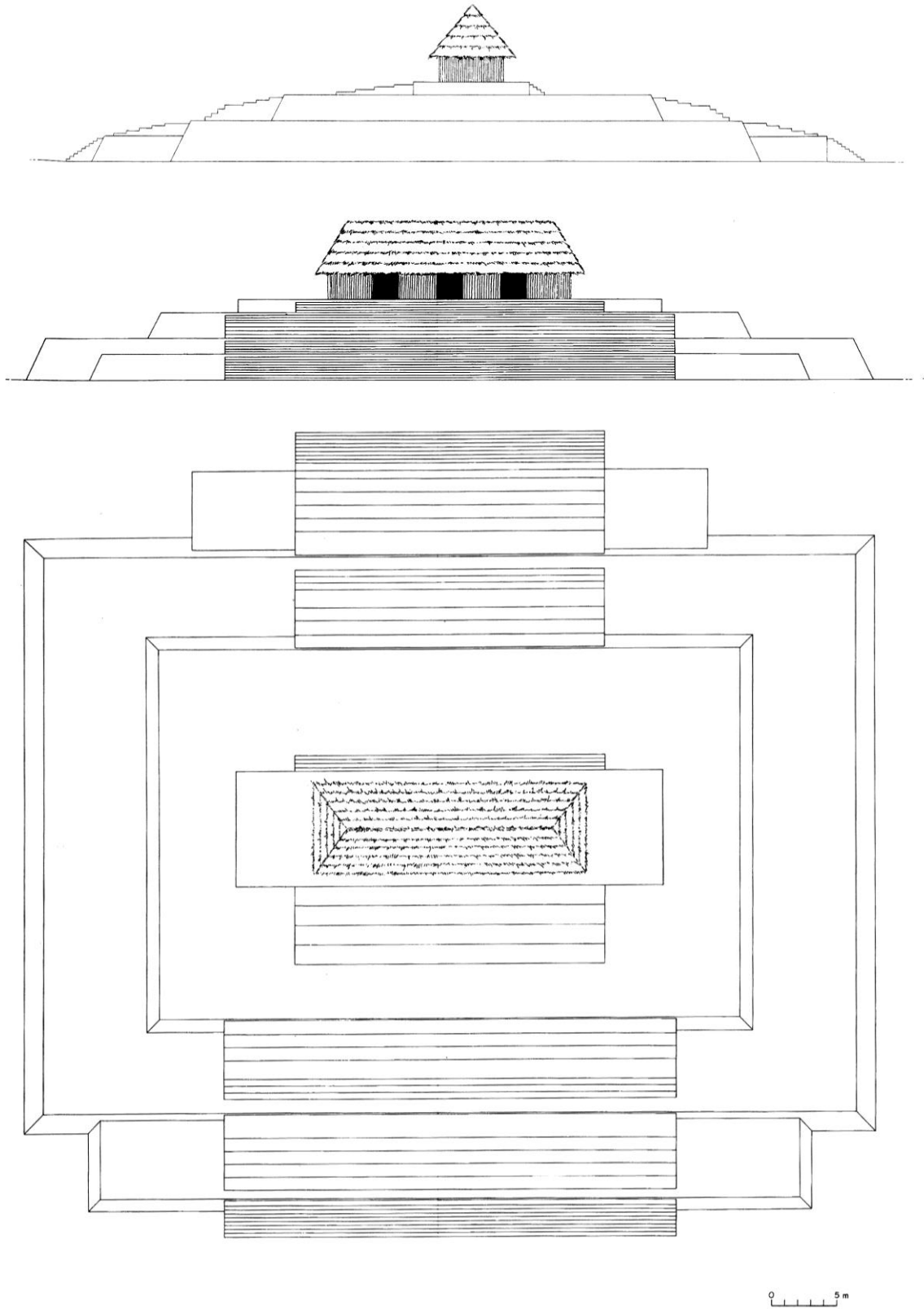


Figure 9.169 Reconstruction of north side (above), east façade (center) and plan view of Structure L7-27
(Drawing by T. Barrientos and L. Luin, VCAP)

Burial 77 is probably the most important found at Cancuén up to now. The presence of fifteen incised shell glyphs have allowed the identification of ruler *Kan Ma'ax* as the individual of Burial 77, and the discovery of an elaborate headdress made mostly with *spondylus* shell mosaics confirm its interpretation as a king. It is also relevant that the burial of the king was not placed in the central axis of the structure, but few meters to the north, probably to match the central axis of Structure M7-1, which is part of the East Ball Court. This ball court, located directly to the east, contains the three altars that were placed as alley markers. The Altar/Marker 1 portraits *Kan Ma'ax* playing ball with his father *Taj Chan Ahk*, probably celebrating his designation as heir to the throne of Cancuén. A recent analysis of the stucco sculpture that decorated the façade of Structure M7-1 suggests that its iconography and glyphic texts could have referred to *Kan Ma'ax* accession ceremony (Fernández 2010). Therefore, the orientation of Burial 77 to the central axis of Structure M7-1 seems to indicate his close relationship with his father, who died less than two years before him.

Burial 96 was placed in the central axis of Structure L7-27 and its archaeological context is almost identical to Burial 77. In addition, Burial 96 was found at the same level and with the same orientation of Burial 77, making it plausible that both individuals were buried at the same time, and it is also possible that they could have been related to each other, maybe as his wife or a close relative. In addition, it is important to note that both burials were located on top of a prepared surface, consisting of burnt clay. Although the king *Kan Ma'ax* was not buried inside a formal tomb or cist, there is enough evidence that indicates ceremonial activity for the event.

It is important to note the differences between the mortuary offerings of burials 77 and 96. First, it is intriguing that *Kan Ma'ax* did not wear an elaborate ornament made of jade, as most of his royal regalia were made with mosaics of *spondylus* and nacre shells. Even the individual of Burial 96 had an anthropomorphic jade pendant. In addition, it is notable that the two ceramic offerings of Burial 96 may correspond to types from the Northern Maya Highlands. This suggests that *Kan Ma'ax* established close relationships with the Verapaz region, either in the form of a trade alliance or as a marrying alliance. Within this scenario, the individual of Burial 96 could correspond to a woman from the highlands that married *Kan Ma'ax* or resided in Cancuen during its final days.

The archaeological evidence related to Structure L7-27 constitutes the best testimony of *Kan Ma'ax* ruling period, not only because it held its own physical remains, but it also represents the best example of the clay and sandstone architecture that covered the previous masonry structures built by his father *Taj Chan Ahk*. This seems to be the result of a rapid decline in the political and economic power of Cancuen, reflected in the unavailability to hire foreign artisans. Finally, the context of *Kan Ma'ax* interment also reflects the way in which his kingdom suddenly fell in hands of its enemies. The simple but honorary and ceremonial way in which he was buried could have been done by his loyal vassals or even by the conquering enemies that came from a former allied city in the Lowlands or Northern Highlands. In any case, these speculations can only be clarified by bone and ceramic analysis from burials 77 and 96.

9.3.6 Structure L7-26

Investigations conducted in 2012 by Rafael Cambranes and Claudia Quintanilla included 36 excavation units in its northeast, northwest and southwest areas of Structure L7-26 (Cambranes and Quintanilla 2013: 53) (Figure 9.170).

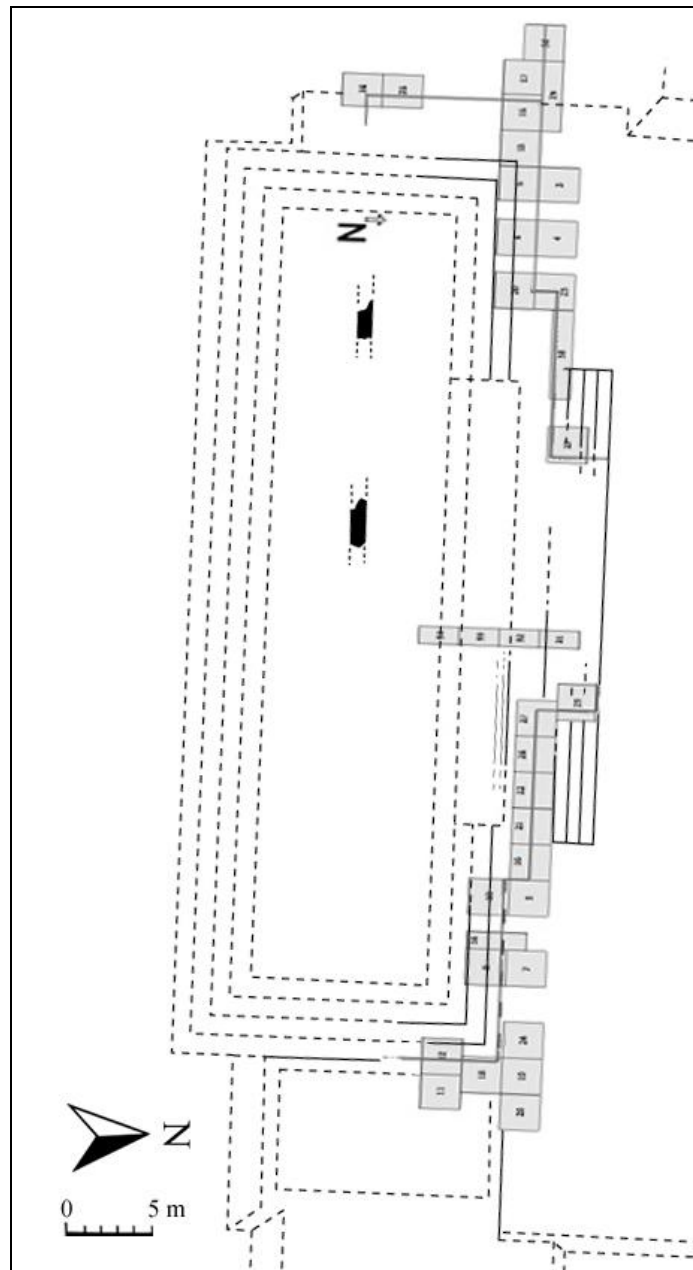


Figure 9.170 Sketch of excavation units in Structure L7-26
(Drawing by T. Barrientos, L. Luin, R. Cambranes, C. Quintanilla, VCAP)

The basal platform of the structure measured 52 x 18 m and could have three terraces. The lower one measured 1.50 in height, and the second one was found partially collapsed, with only three rows of stones *in situ*.

The chronological sequence associated with this building started with a compact clay floor, which was covered by a fill and plaster floor that elevated the plaza level for 0.78 m in front of the northern façade of Structure L7-26 (Figure 9.171, 9.172). This remodeling covered a basal molding that measured 0.38 m in height, and added an inset wall (4.4 x 1.4 m) on both sides of the central staircase (Figure 9.171). The stairway measured 35 m wide and was made with three initial steps of hard limestone, followed by smaller steps made with soft limestone blocks (Figure 9.174). Two more plaza floors were added, being the last one made with flat stones and located at 0.94 m above the first floor (*Ibid.* 68) (Figure 9.171).

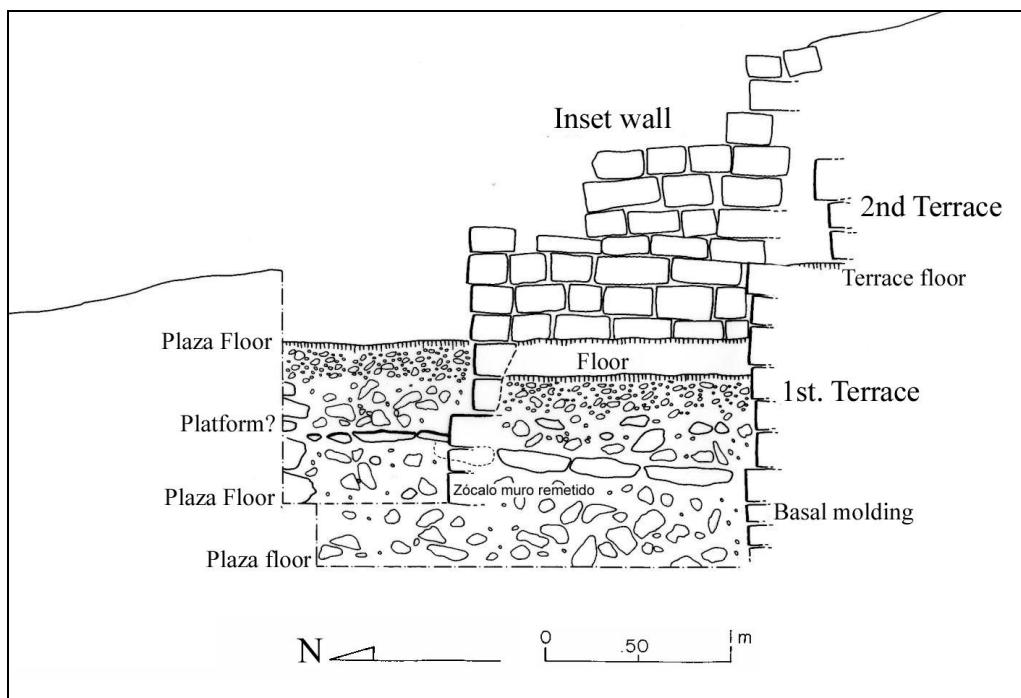


Figure 9.171 Construction sequences in west half of Structure L7-26 (units CAN 2-6, 20& 23)
(Drawing by R. Cambranes, VCAP)

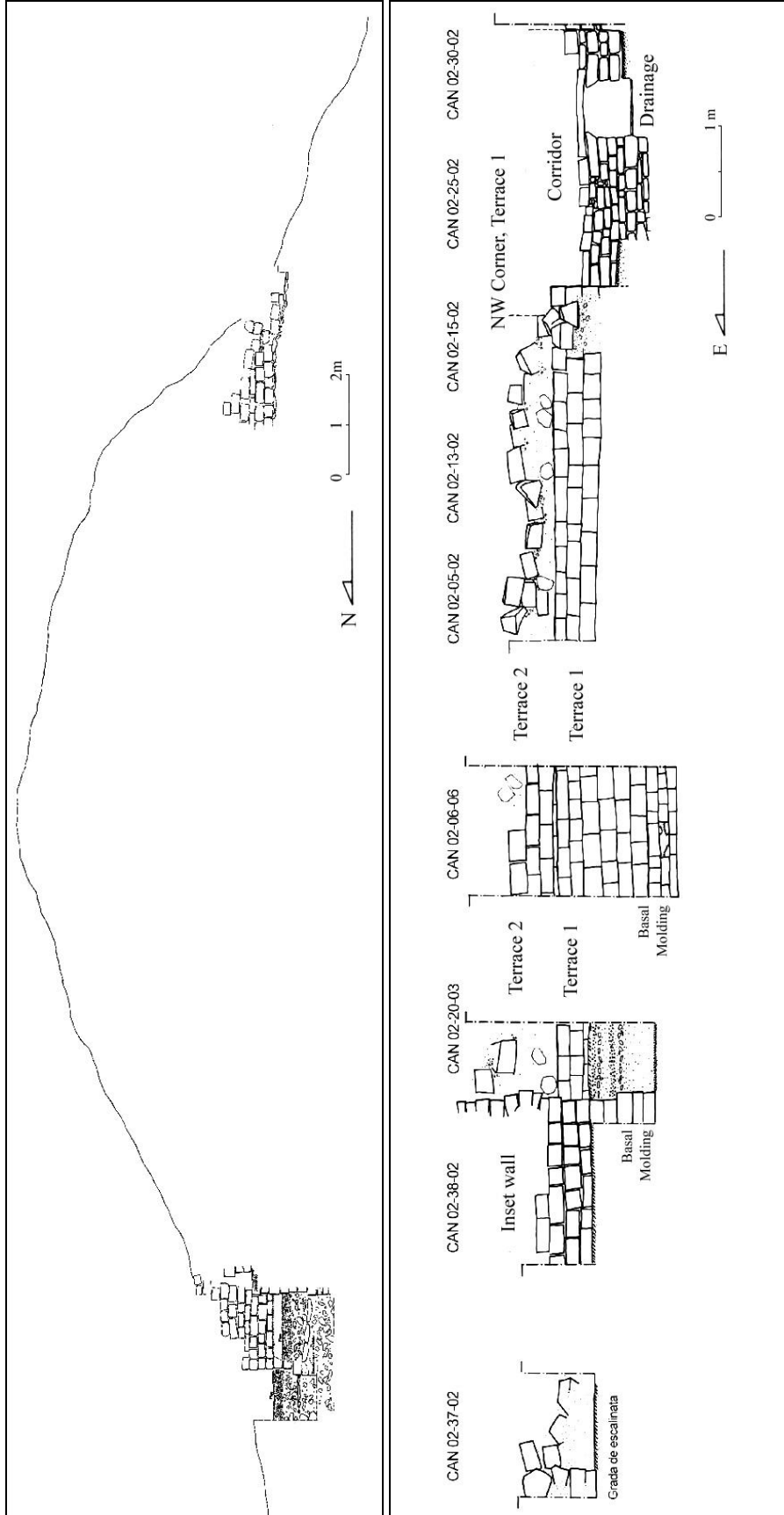


Figure 9.172 West (above) and north (below) profiles of excavations in Structure L7-26
(Drawings by R. Cambranes and L. Luin, VCAP)

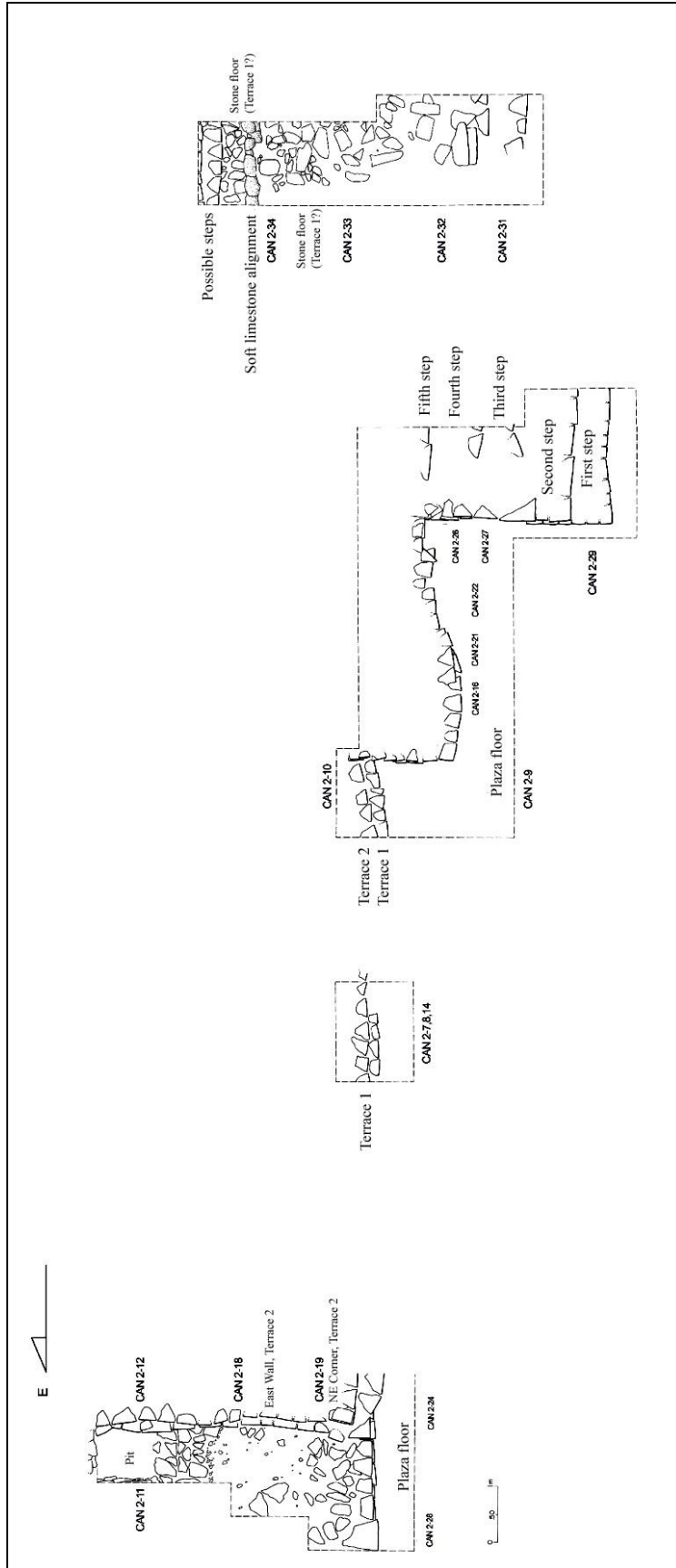


Figure 9.173 Plan view of Structure L7-26 excavations (Drawing by L. Luin, VCAP)

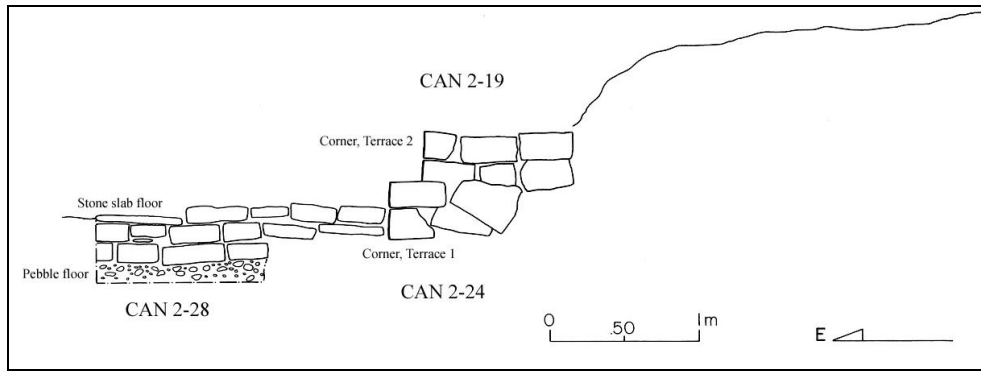


Figure 9.174 East (above) and north profile (below) of Northeast corner of Structure L7-26 (Drawing by L. Luin, VCAP)

Excavations in the western façade revealed a 3 m wide passage between this building and the basal platform of the Southeast patio. This area was paved with flat stones, probably as part of a basal step or bench that could have extended through the entire south façade of the building (Figure 9.175).

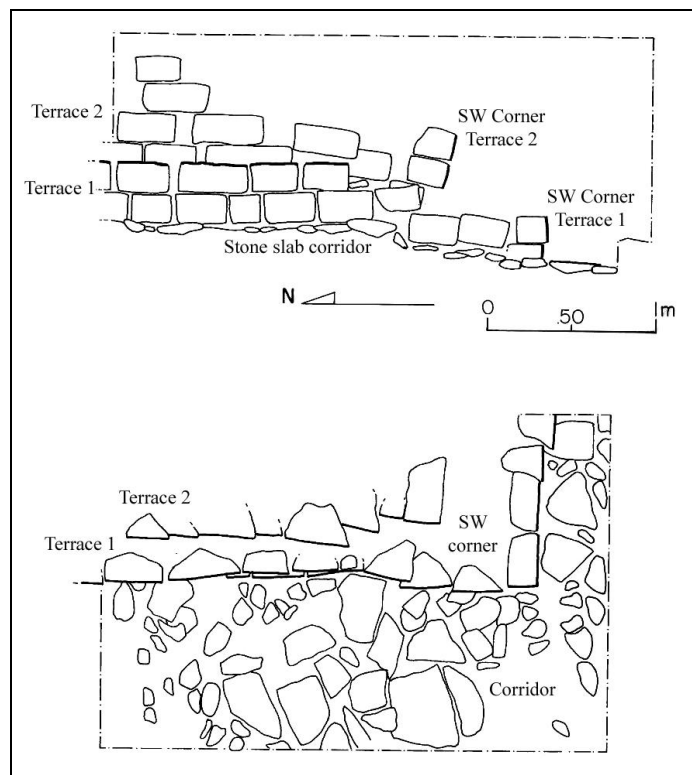


Figure 9.175 West profile (above) and plan view (below) of Southwest corner of Structure L7-26 (Drawings by L. Luin, VCAP)

A drainage canal was found beneath the stone floor of the corridor, measuring 0.56 x 0.6 m, and directed water to the southern drainage of the acropolis, which consisted in a slightly modified creek (see under section of hydraulic canals) (Figure 9.176). The eastern façade presented a rectangular platform attached, with remains of a possible termination ritual on top of a pebble floor (*Ibid.*67-8) (Figure 9.178).

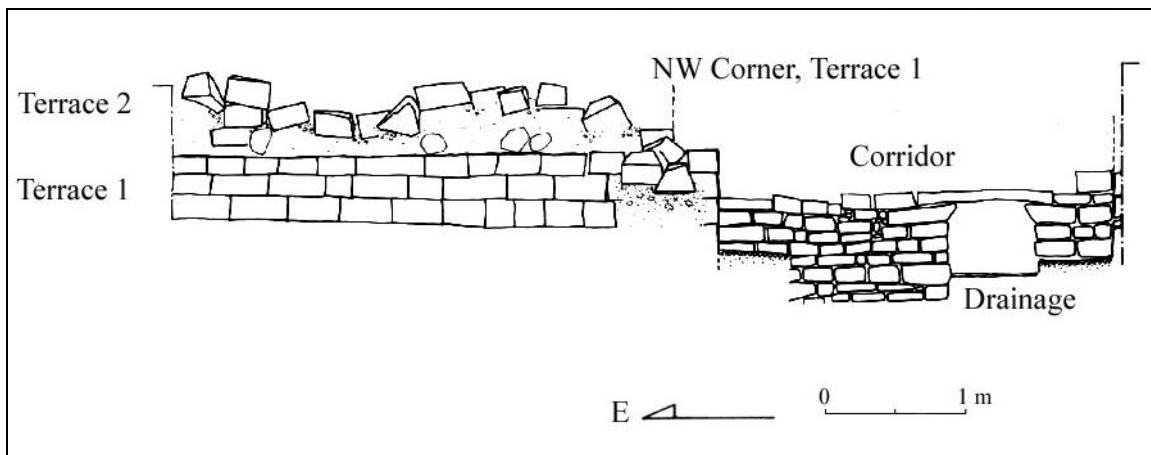


Figure 9.176 Detail of North profile, NW Corner of Structure L7-26 (Drawing by R. Cambranes, VCAP)

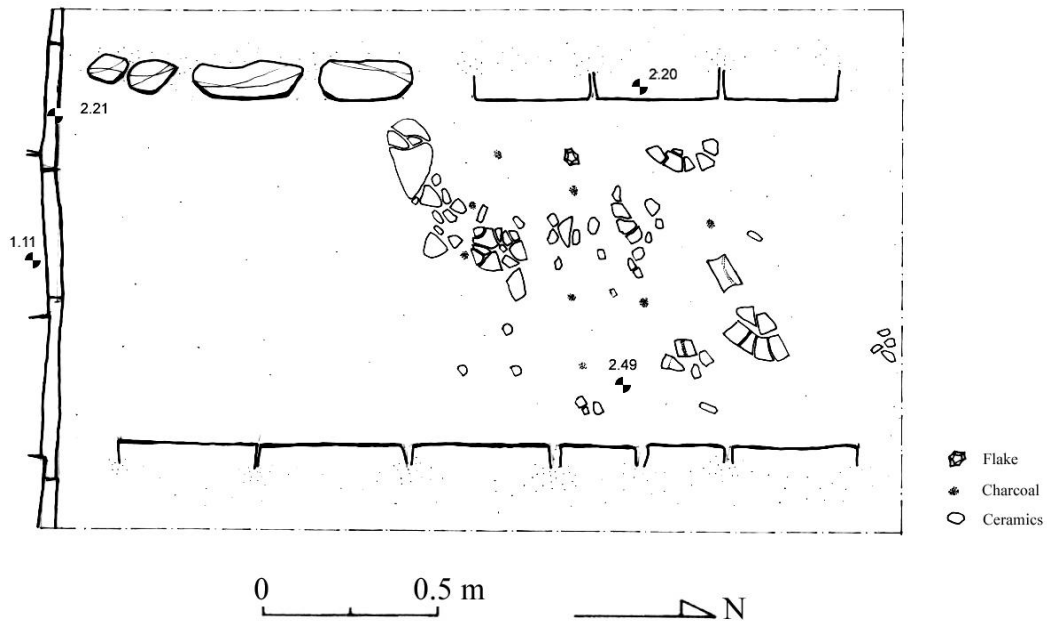


Figure 9.177 Drawing of ceramic deposit found in attached platform in east side of Structure L7-26 (Drawing by L. Luin, VCAP)

9.4 East section

The East Section of the royal palace of Cancuen is composed by one main courtyard in the north side (Northeast Patio); one small closed courtyard to the south (East Patio), very similar to the North Patio; and two small open areas in the west and south limits, named Southeast Corridor and Southeast Patio, respectively. To the east, Structure L7-24 communicates with the Main Plaza and Structure L7-27 (Figure 9.178). The definition of this eastern section as separated from the central one corresponds to a set of multifunctional spaces that are not yet fully understood. However, given that this section is not directly communicated with the three courtyards of the central section, it is clear that this area was not meant to be related with the activities that took part in the north, central and south patios of the palace. Therefore, it can be speculated that the east section had a less private character, though not public as the Main Plaza previously described. The four areas that constitute the East Section will be presented in a north to south order, supposing that the center of activities was the Northeast Patio.

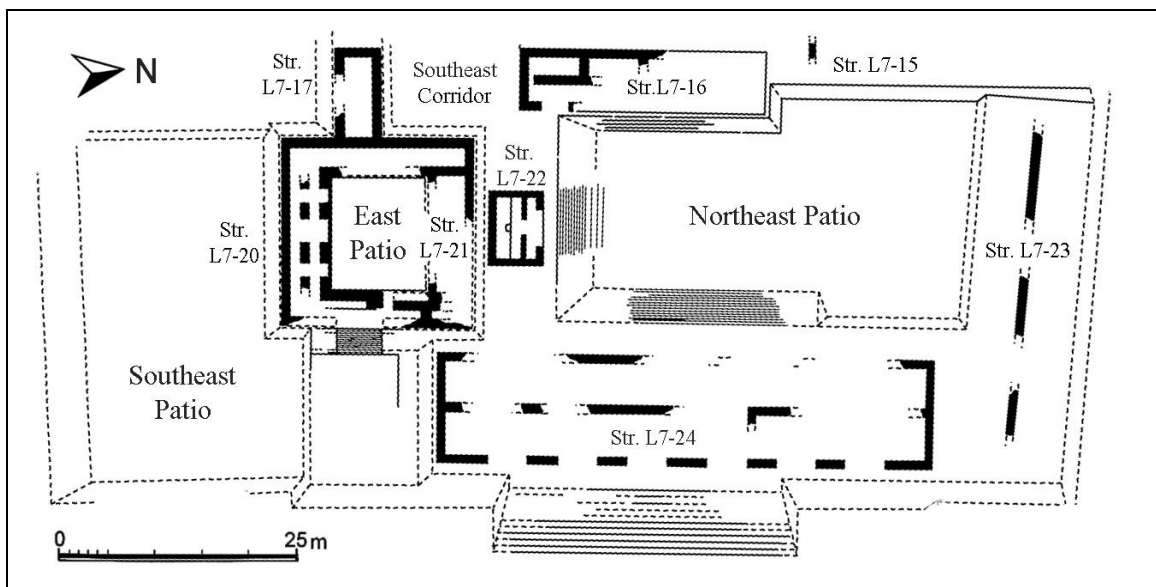


Figure 9.178 East Section of the royal palace (Map by T. Barrientos and L. Luin, VCAP)

9.4.1 Northeast Patio

This is one of the largest interior patios of the royal palace, measuring approximately 40 x 25 m, and it is surrounded by different types of buildings. To the west, structures L7-15 and L7-16 present multiple rooms, while L7-22 to the south only two chambers. Structure L7-24 is located in the east side and was a long structure with many doorways (Figure 9.179).

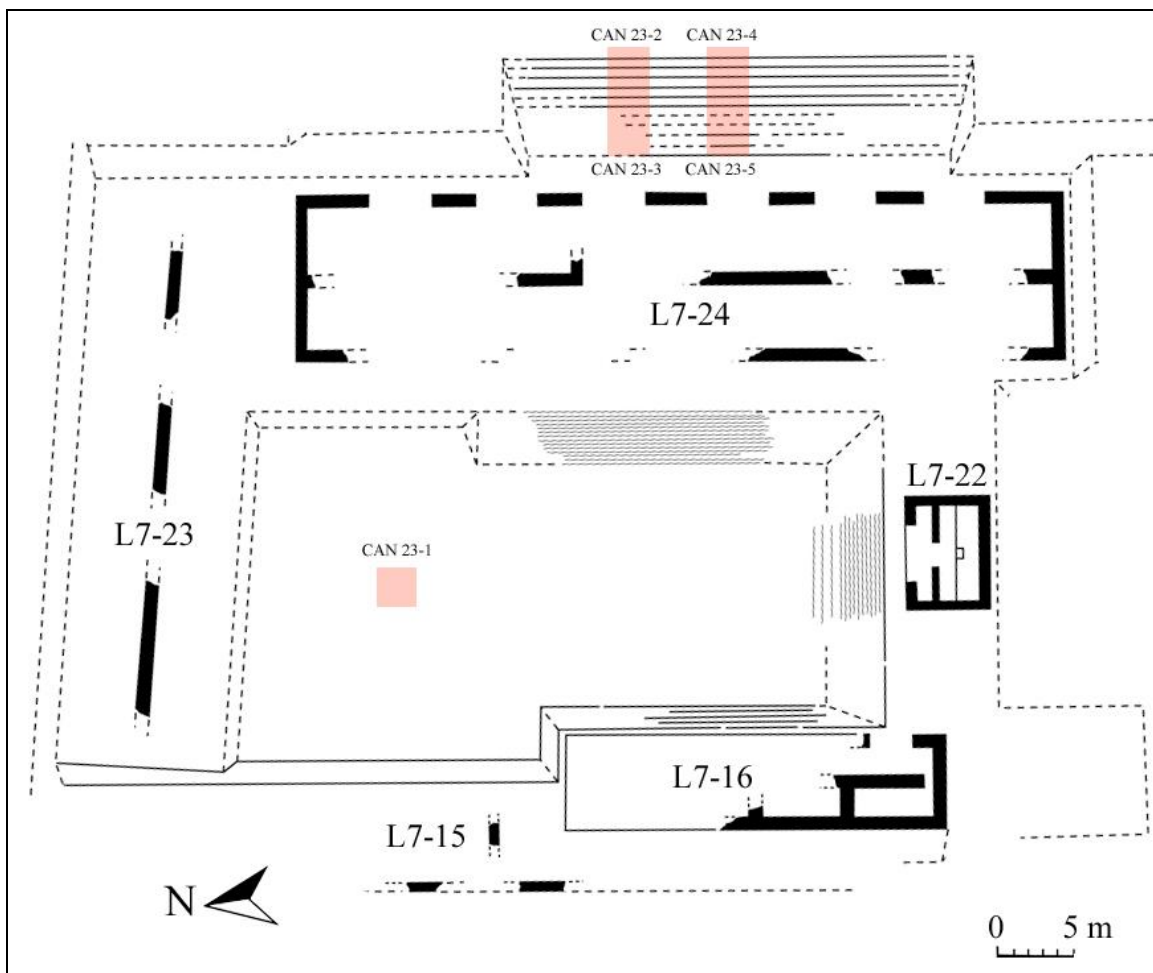


Figure 9.179 Northeast Patio of the royal palace and initial excavations
(Map by L. Luin and T. Barrientos, VCAP)

Explorations in this area started in the 2000 field season, as a test pit excavated under the direction of Brigitte Kovacevich (Barrientos *et al.* 2001). The operation designated was CAN 23. Unit CAN 23-1 was excavated through arbitrary levels of 20 cm, reaching a final depth of 2.8 m. The first level consisted in humus, followed by remains of a plaster floor that covered the last version of the courtyard. Level 2 was composed by light brown soil with some limestone inclusions, and the next one was formed by brown clay. Ceramic sherds were found increasing as the excavation went deeper. Level 5 (80 -100 cm) presented a change in soil, now becoming more reddish brown clay with pebbles and limestone fragments. Although no floor was detected, this change was notorious by the presence of small sized stones underneath the pebble layer, thus suggesting that it was part of a construction fill. In the sixth level (1-1.2 m), the amount of ceramics and lithics increased, suggesting the presence of a midden. The ceramic sherds included fine polychrome and incised vessel fragments. The next level, defined under the pebble and midden layer, presented some flat stones in the south side of the unit, though they were not part of a floor or wall. Level 8 (140-150 cm) consisted in grayish brown clay located under the flat stone feature, and was followed by a bright red sandstone fill. At 160 cm below the surface, a stratum of pinkish limestone was found, but no cultural remains were found after this point. The excavation continued until reaching a depth of 2.8 m, because the layers found were interpreted as natural levels of limestone and clay.

Structure L7-16

This structure has not been excavated yet, but most of its architecture is still visible. A brief inspection in 2001 determined that it consists of a masonry building attached to the east side of the Central Patio, containing a double row of 4 rooms, making a total of 8 chambers. Its construction consists of hard limestone masonry blocks, with thin blocks making the corbelled vaulted roofs, just as other palace structures that correspond to the reign of *Taj Chan Ahk*. Although no room was completely cleaned, it was possible to define the upper part of a very narrow door that communicates the two southern rooms. However, it is not clear if all the rooms were connected in this way. In the base of the corbelled vault in the middle wall, expert Rudy Larios identified a special type of counterweight stone. These blocks show a trapezoidal profile form with concave sides, which allow its attachment to the two vault bases.

The Harvard team registered some areas of this building, originally named C-5, drawing the plan view of the two southern rooms, including the narrow door (Tourtellot III, *et al.* 1978: 223-4). However, they did not uncover the rooms to the north. Their measurements for this building were 7.5 x 18 m; exterior wall thickness range from 1.25 to 1.5 m and the interior walls measure 0.65 in width. The rooms have an area of 1.85 x 3.8/3.95 m and the interior doorway is 0.60 m wide. The walls were 2.9 high until the vault spring.

Structure L7-22

This small building is located on the southern side of the northeast patio, and was initially identified as a possible throne room. Its visible architecture revealed the presence of a single masonry room which was accessed from the patio level through a possible

staircase. Recently, in the 2011 field season, this structure was excavated by Claudia Quintanilla and Judith Valle (2012) under Operation CAN 59, with a total of 19 units (9.180). These excavations revealed a 6 m (north-south) x 7 m (east-west) building with two rooms separated by an inner central wall and a small two step staircase (Figure 9.182). The remains of the superstructure included fine stone masonry walls of 4 to 7 stone lines of height, with some later additions of soft limestone blocks (Figure 9.182). The south room had a shallow bench of 0.78 m x 0.28 m that was modified with different features, including a small niche in the center, and a small sloping wall in the front (Figure 9.183).

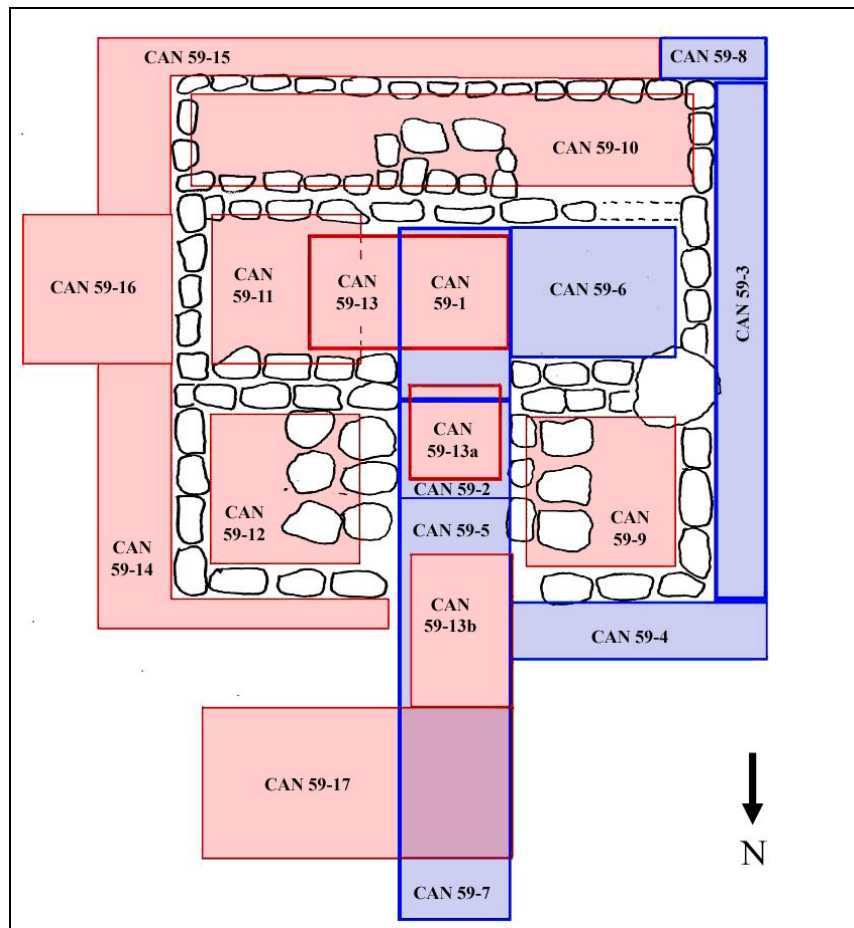


Figure 9.180 Sketch of excavations in Structure L7-22: Initial units in blue, later units in red (Drawing by T. Barrientos, after C. Quintanilla, VCAP)

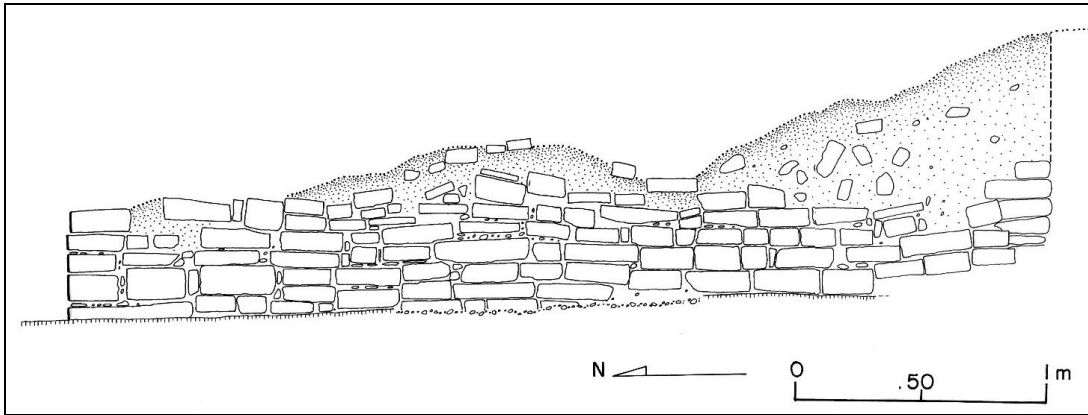


Figure 9.181 Drawing of West exterior wall of Structure L7-22 (Drawing by J. Valle and L. Luin, VCAP)



Figure 9.182 South bench and sloping wall, Structure L7-22 (Photos by C. Quintanilla, VCAP)

A small bench was added at the frontal doorway, part of the latest stage associated with the addition of two more rooms with perishable roofing. The access to the building was through a frontal staircase that measures 5 m from north to south and consists of 3 hard limestone steps and 7 soft limestone steps (Quintanilla and Valle 2012: 33-36) (Figure 9.183). The excavations in the interior rooms revealed a 10 cm thick layer of burnt clay and carbon, indicating an unusual floor surface or the remains of a perishable structure, which covered a floor made with stone slabs, similar to other ones found at the royal palace. An earlier plaster floor was found directly related with the wall foundations (first construction stage), at 0.63 m below the surface (*Ibid.* 26-32) (Figure 9.184).

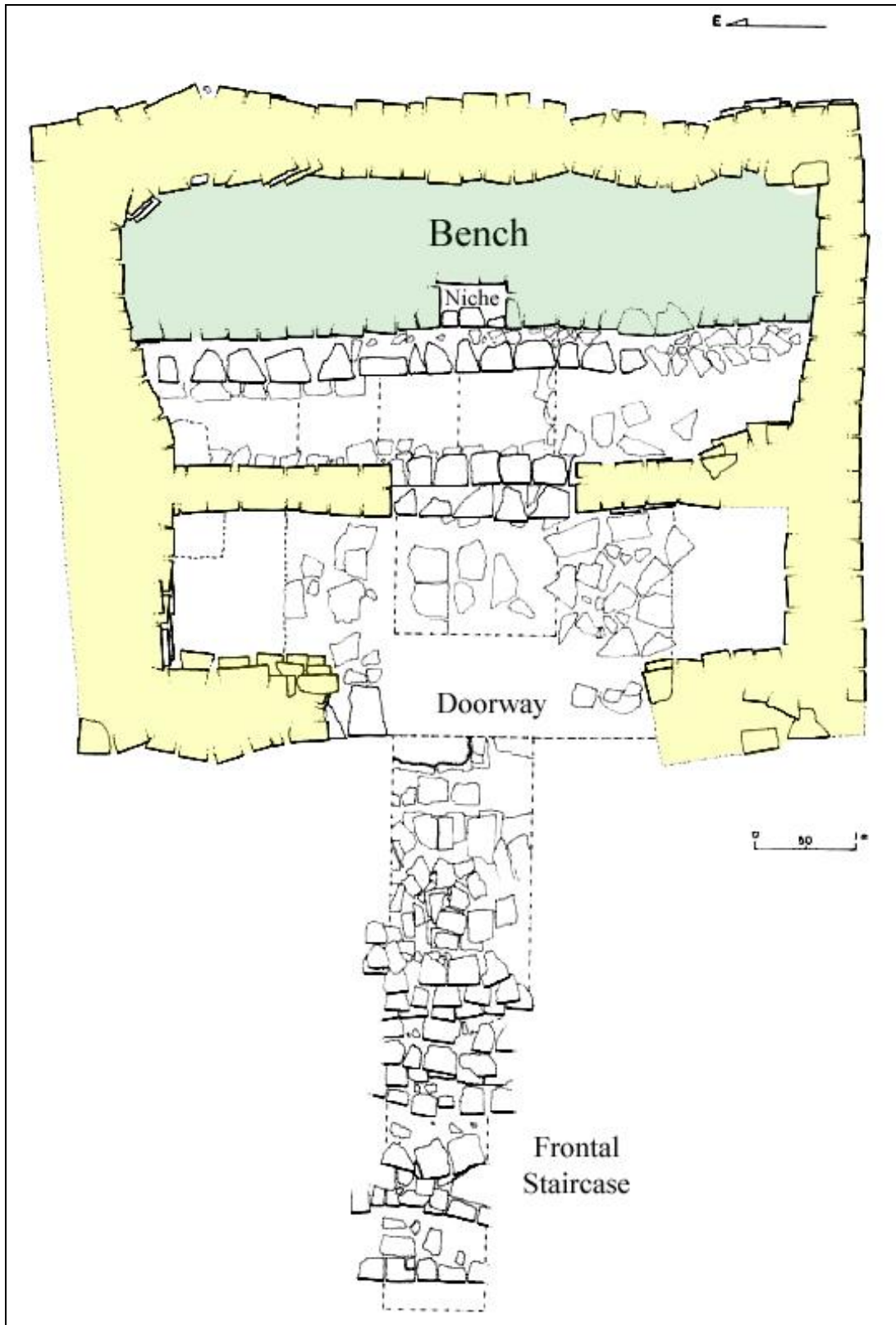


Figure 9.183 Plan view of excavations in Structure L7-22 (Drawing by L. Luin)

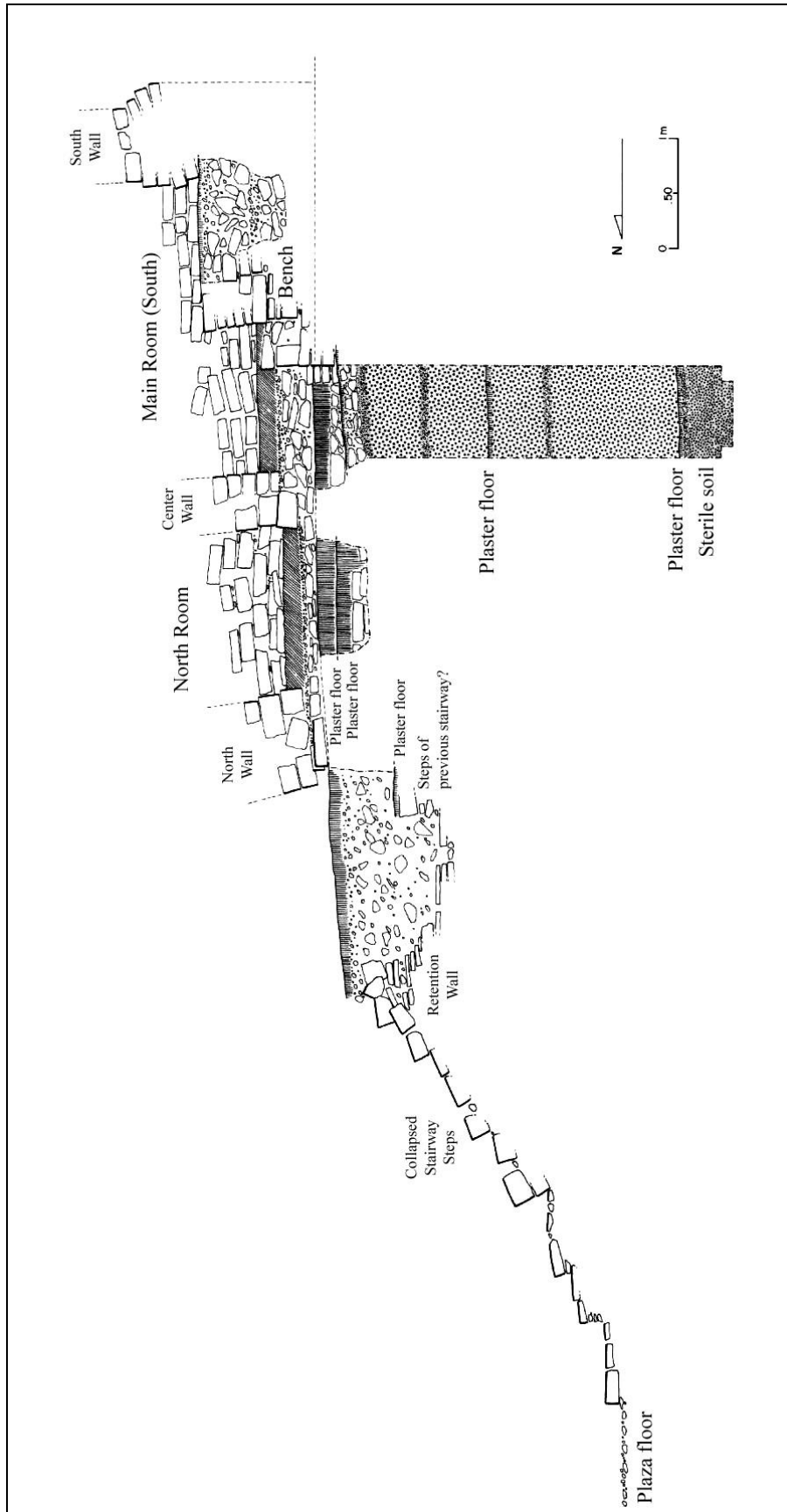


Figure 9.184 West profile of Structure L7-22 excavations (Drawing by L. Luin, VCAP)

Structure L7-24

As most buildings in this area of the palace, this structure has not been excavated. However, the 2001 test excavations defined its eastern staircase, consisting in five steps made with large hard limestone blocks and other smaller five steps made with soft limestone blocks. The structure itself showed some areas where its architecture was visible after clearing the vegetation. A central doorway was defined by the presence of small columns or door jambs in both the east and west sides, thus consisting in a central corridor similar to the one excavated in Structure L7-9. No other parts were cleaned, but it is estimated that this building had five doorways in each of its facades. The data gathered by the Harvard team indicates that this building had a single row of rooms, and their estimate of Structure L7-23 suggests that it had a double row of three or four rooms (Tourtellot III *et al* 1978: 201, 223).

9.4.2 *East Patio*

The East Patio of the royal palace consists of a small and enclosed patio very similar to the North Patio. The area of the courtyard measures 14.5 x 21.6 m (Urquizú and Torres 2103: 40), and it's surrounded by two "U-shaped" structures: L7-20 to the south and L7-21 to the north. Structure L7-17 is attached in its west side. During the 2000 field season, a brief inspection of a looters' pit in its eastern side defined the presence of a deep wall that could have been the door jamb of a doorway, suggesting that the entrance to the patio was from this side, probably from the Main Plaza. The map made by the Harvard team estimated a single row of rooms in the north and west sides of L7-21, and a double row of rooms in the east side (Tourtellot III *et al.* 1978: 201, 224).

The patio enclosure and its surrounding buildings were excavated in 2012 by Mónica Urquizú and Paola Torres (2013), with a total of 23 units under Operation CAN 31 (Figure 9.185).

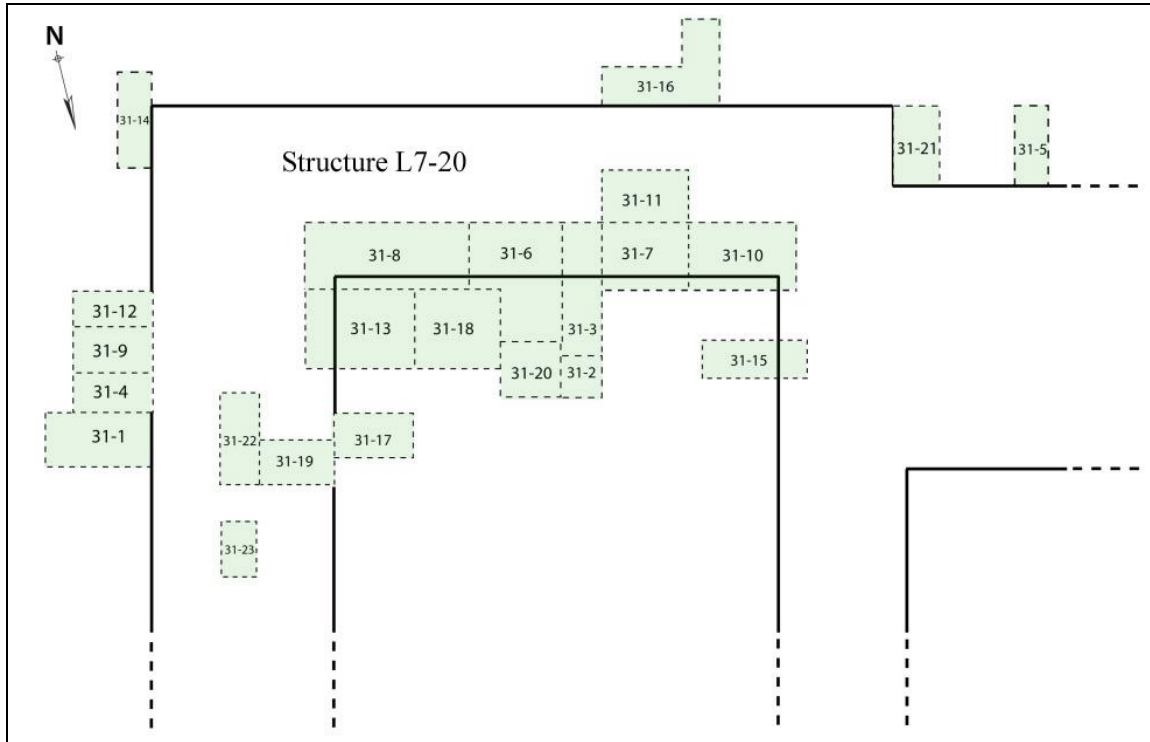


Figure 9.185 Sketch of excavations in Structure L7-20 (Drawing by P. Torres, VCAP)

Most excavations were focused in Structure L7-20, revealing its southwest and southeast corners, as well as the interior eastern and southern façades, the latter one with three doorways (accesses III, IV, and V, 1.5 m wide each). The interior layout of Structure L7-20 consists of a central passage and two lateral rooms with view to the patio. The hard limestone masonry walls were found well preserved, reaching up to 1.60 m in height, and it seems that they were decorated by a basal molding of 0.3 to 0.4 m high (*Ibid.*) (Figure 9.186)



Figure 9.186 Access to interior patio, Structure L7-20 (Photo by M. Urquizu, VCAP)

The collapsed debris suggests that the two structures had vaulted roofs, and were supported by a platform that elevates approximately 2.25 m from the plaza floor. The platform was built with brown clay and “clay rock” fills distributed in construction boxes, covered with hard limestone masonry blocks. Its main access was through an eastern staircase conformed by 9 steps, each one of 0.25 m high. At this entrance, a small bench measuring 0.5 m high was placed in the central axis (Figures 9.187, 9.188).

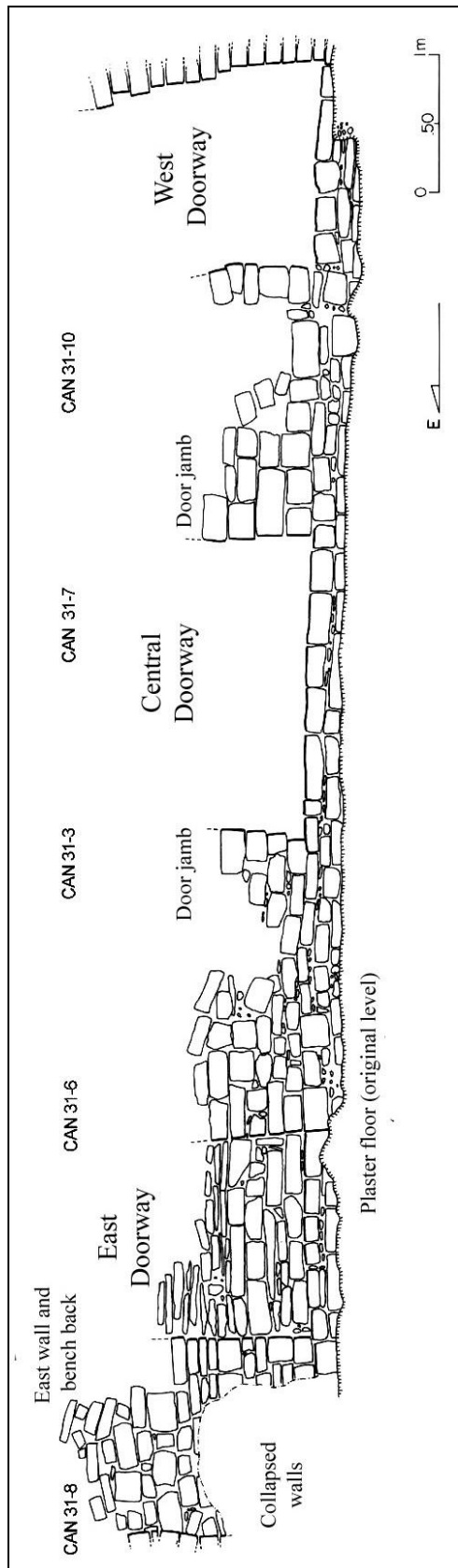


Figure 9.187 Interior South Façade of Structure L7-20 (Drawing by L. Luin, VCAP)

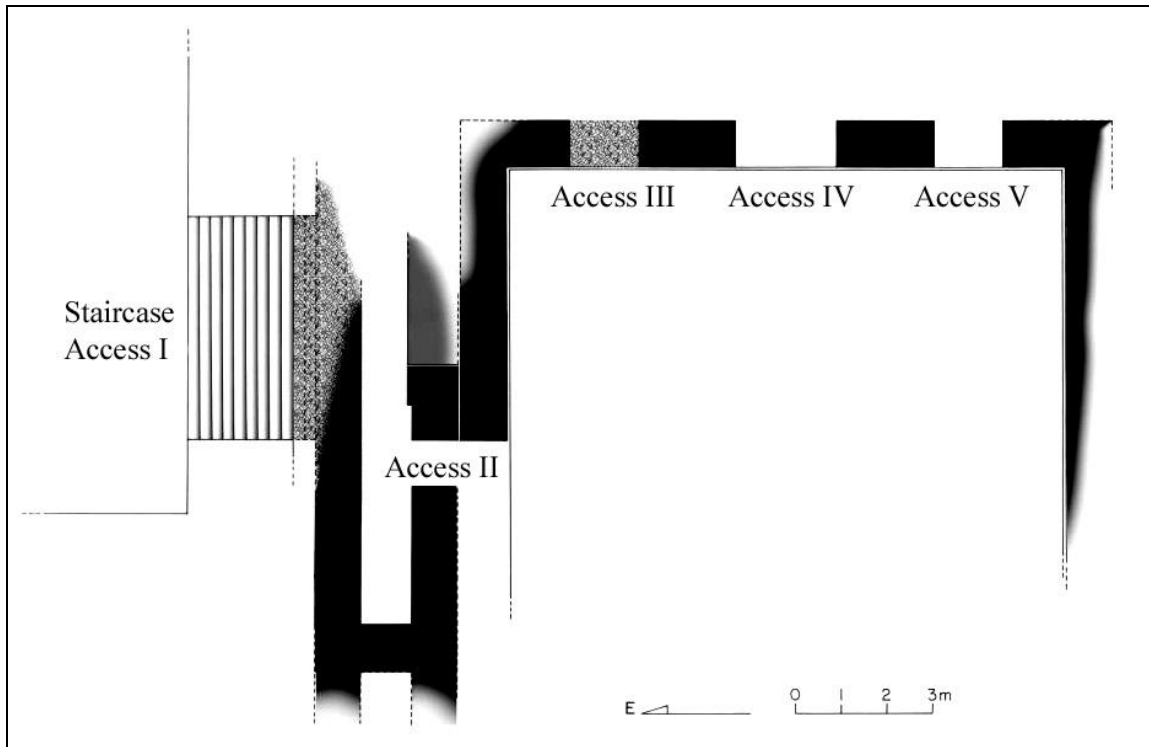


Figure 9.188 Reconstruction of internal layout, Structure L7-20 (Drawing by L. Luin, VCAP)

To the north, a passageway leads to the interior patio, and it is not clear if there was another access in the south side. This passage was more restricted by a later modification that also closed one of the southern doorways (Access III). The southern exterior façade of Structure L7-20 did not show evidence of staircases, thus suggesting that there was no access to the Southeast Patio. Later modifications added four new plaster floors that ultimately reached the basal platform level, covering it. At this moment, a new basal molding or bench was added to the entire wall, made with soft limestone blocks (*Ibid.* 37-40) (Figure 9.189).

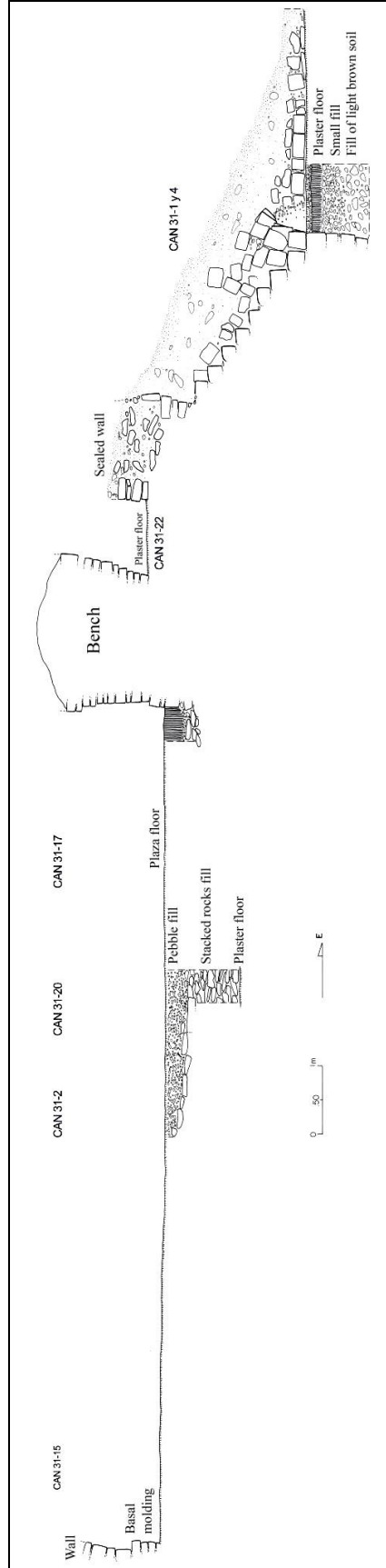


Figure 9.189 South profile of Structure L7-20 excavations (Drawing by L. Luin, VCAP)

9.4.3 Southeast Corridor

The Southeast Corridor is the name assigned to a small flat area located southwest of the Northeast Patio and directly south of Structure L7-16 and northwest of the East Patio. Today, this area communicates the South Patio with the Northeast Patio, though originally this access was probably blocked by Structure L7-17, which had one or two rooms, according to the Harvard team observations (Tourtellot III *et al.* 1978: 201, 224). The excavation of this area was directed by Michael Callaghan as part of the 2002 field season excavations (Callaghan and Bauer 2003), and were carried out as part of Operation 23A (Figure 9.190).

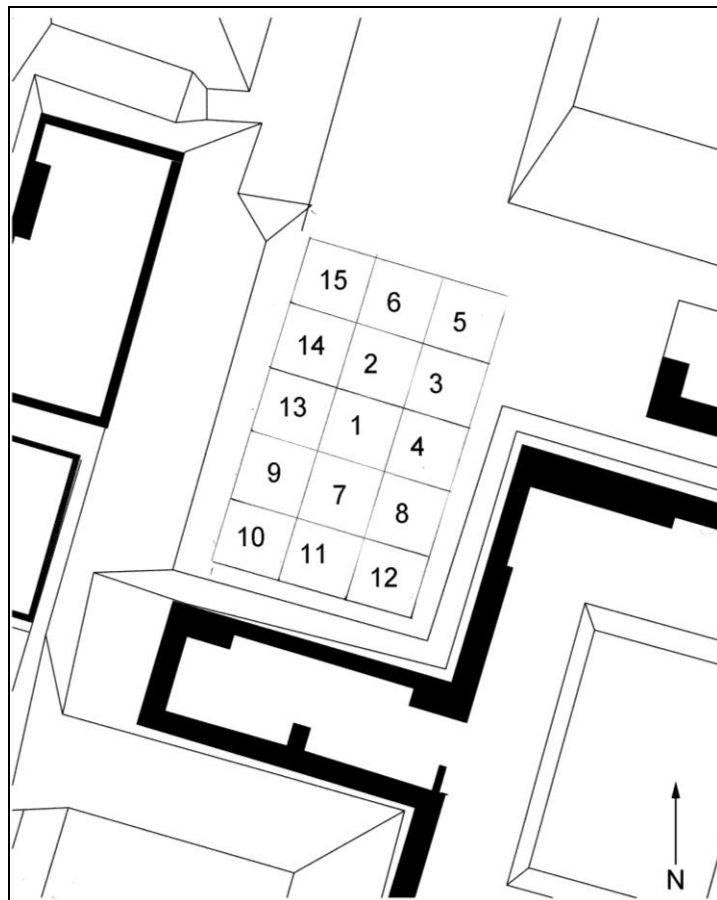


Figure 9.190 Map of the Southeast Corridor and excavation units of Suboperation CAN 23A
(Drawing by M. Callaghan, VCAP)

The first unit was designed CAN 23A-1, a 2 x 2m test pit located at the center of the corridor. At 1.5 m below the surface, three plastered steps were found in the north profile of the unit, ascending from west to east (Figure 9.191). The excavation was then expanded to the north, west and south sides, becoming a grid of fifteen 2 x 2 m units (CAN 23A-1 to 23A-15). The steps initially found were part of a buried substructure named L7-17-Sub-1. This building exhibited a different masonry style than the other structures located in this area of the palace. Instead of the hard limestone masonry, this platform was built with soft limestone blocks covered with plaster, resembling the construction technique found in Structure L7-1-Sub-1.

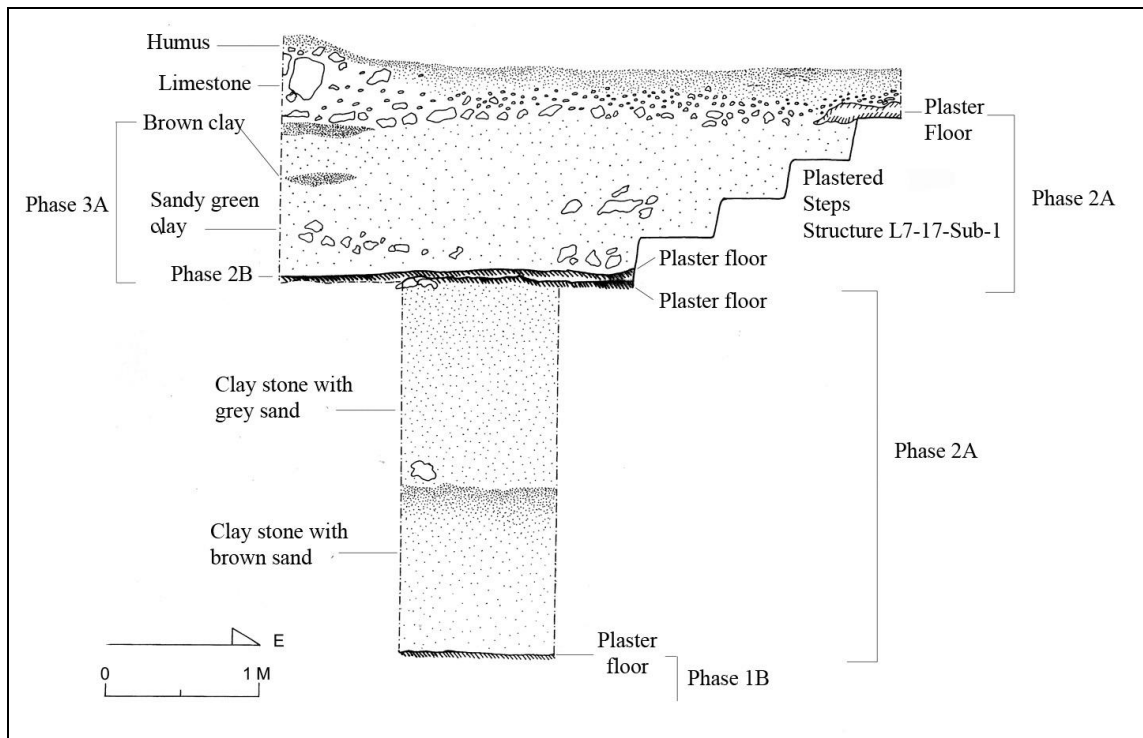


Figure 9.191 North profile of excavations in Suboperation CAN 23A
(Drawing by M. Callaghan and L. Luin, VCAP)

Some excavation units reached various levels beneath this structure, finding previous construction stages. Unit CAN 23A-7 was excavated up to sterile soil (Figure 9.192), while CAN 23A-6 to an early cultural level (Figure 9.191). All the other units only uncovered Structure L7-17-Sub-1 and did not destroy any part of the building.

Unit CAN 23A-7 found a pebble and plaster floor directly on top of sterile soil, at 4.5 m below the surface (Figure 9.193). This floor (Floor 10) covered Burial 53, which consisted of a female individual with no funerary offerings, though her teeth presented jade decorations of the type E1 and *Ik'* pattern in inferior arcade (Quintanilla 2013). Although the presence of jade inlays suggests that this woman had high status, the meaning of this burial is puzzling, because the presence of this type of teeth modification is not necessarily restricted for high elite burials in Cancuen (see a more detailed description in Chapter 10, under burials section).

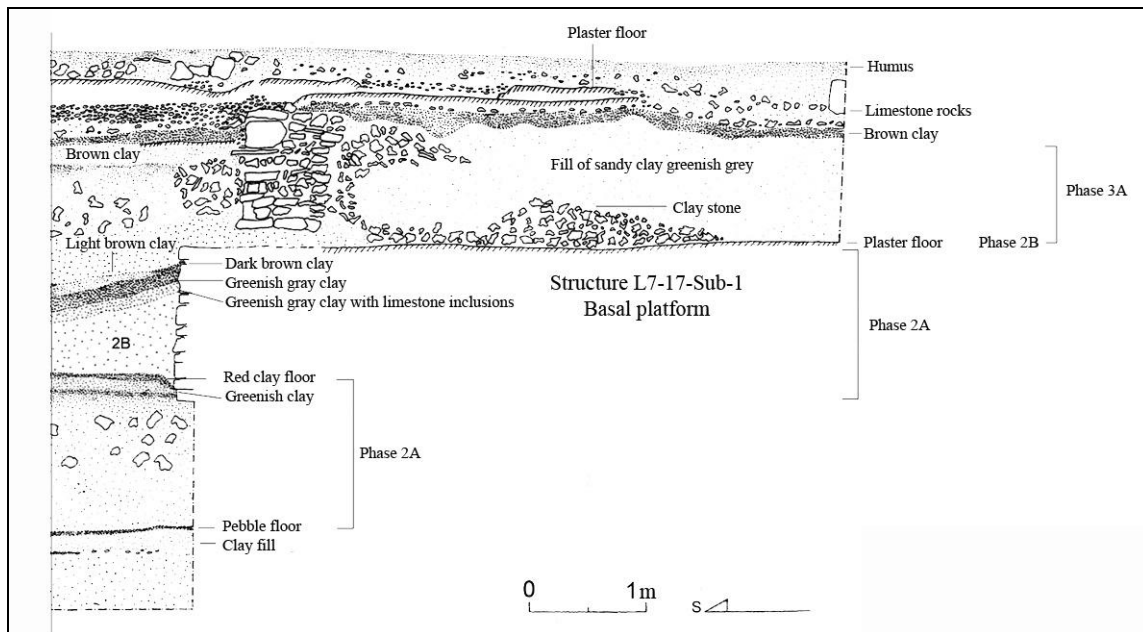


Figure 9.192 East profile of excavations in Suboperation CAN 23A (CAN 23A-7)
(Drawing by M. Callaghan and L. Luin, VCAP)

Floor 10 was covered with a thin red clay fill (4-7 cm) that sustained another floor similar to the previous one (Floor 9). Callaghan suggests that these two early floors (Phase 1A and 1B) may correspond to the same platform that sustained structures L7-1-Sub 2 and L7-1-Sub 3 and other buildings of the acropolis' first version (Callaghan and Bauer 2003: 75).

Unit CAN 23A-6 was located in the northern extreme of the unit grid. It reached a final depth of 3.6 m below the surface, finding another early floor (Floor 10) that also correlates with the two ones found in unit CAN 23A-7 (Figure 9.193).

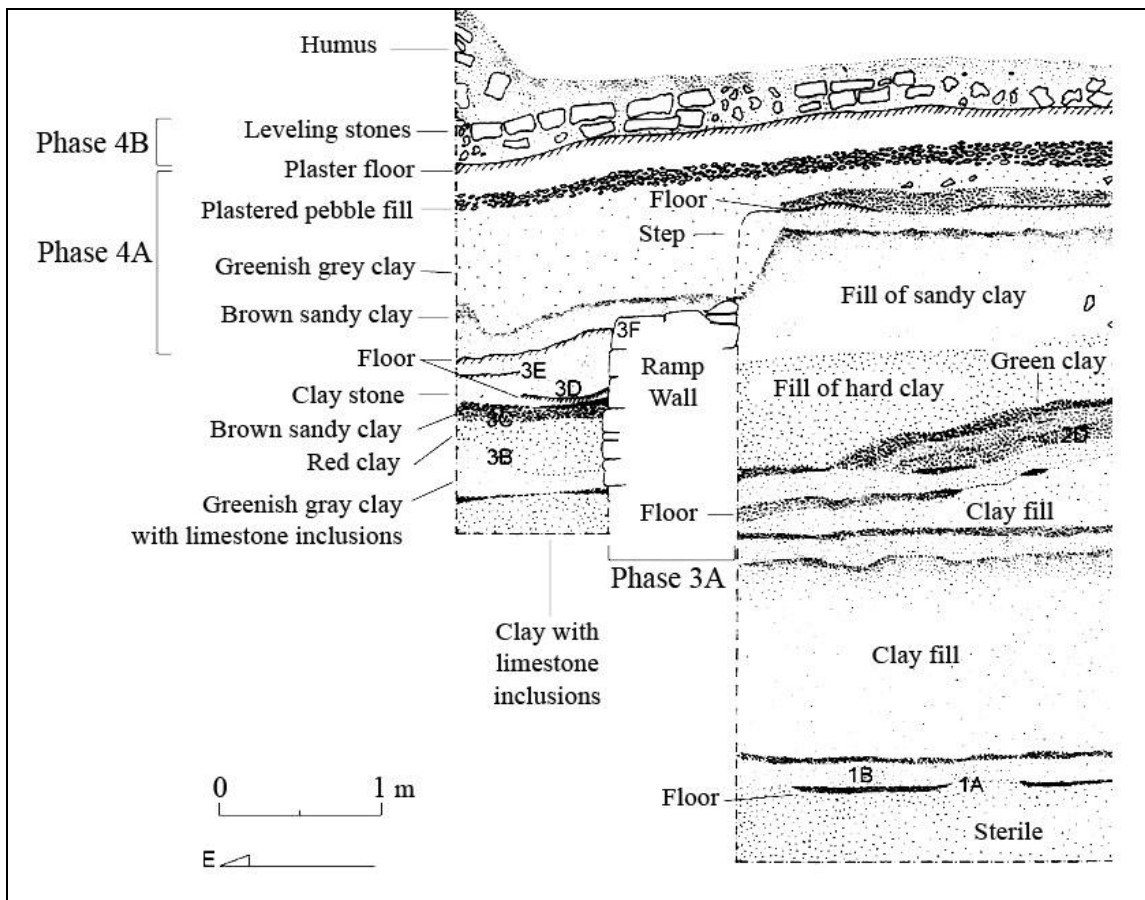


Figure 9.193 South profile of excavations in Suboperation CAN 23A (CAN 23A-6)
(Drawing by M. Callaghan and L. Luin, VCAP)

These early floors were covered by a thin red clay fill that was followed by a basal platform built on top of a construction fill made with clay and sandstone blocks (Phase 2A) (Figure 9.194). The southern limit of this basal platform was found in Operation 23A excavations, revealing a retention wall ranging from 1.2 to 1.4 m high. This wall was built with irregular limestone and sandstone blocks and no remains of plaster were found on its façade. It is possible that this platform had a western staircase that descended to the central axis of the acropolis. The basal platform sustained Structure L7-17-Sub 1 elevates 1.6 m from the platform floor and it was located at only 30 cm from the platform southern end. Its total area is unknown, but the exposed area measured 6.2 m in its north-south axis and 1.6 m in the east-west axis. This would suggest a length of at least 8 m, and an approximate area of 24 m² for the platform (Figure 9.194).

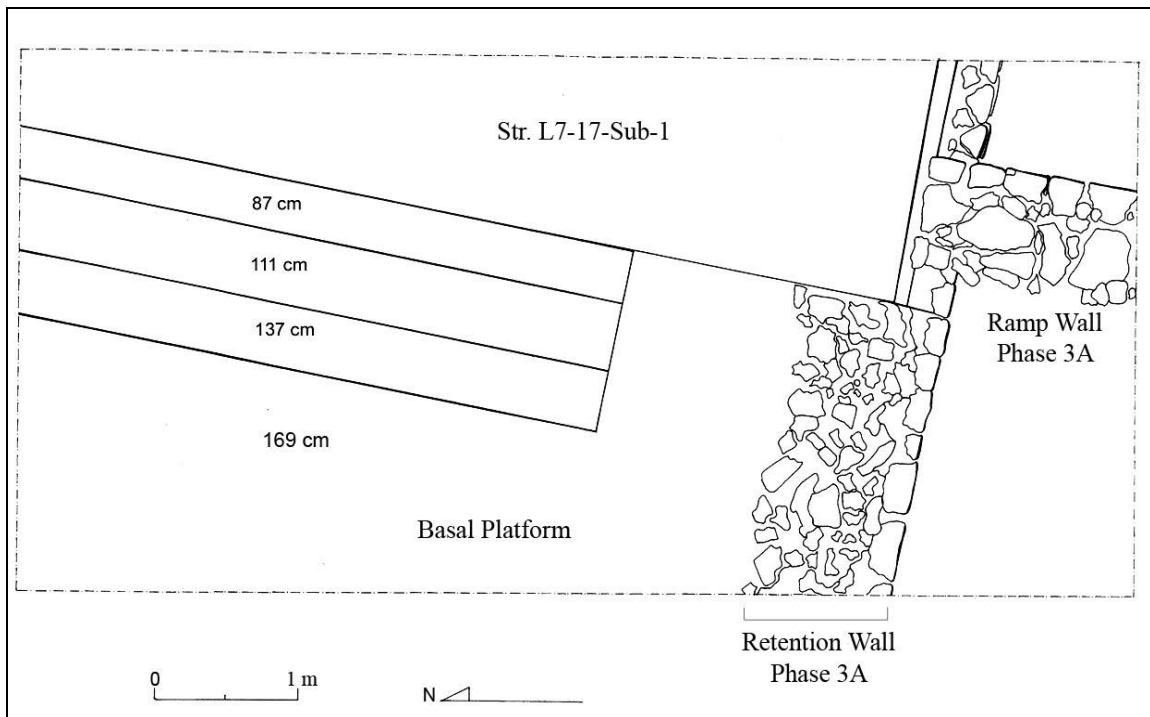


Figure 9.194 Plan view of Structure L7-17-Sub-1 and associated retention wall and ramp
(Drawing by M. Callaghan and L. Luin, VCAP)

Structure L7-17-Sub-1 was constructed with cubical blocks made with soft limestone and presented a staircase on its west side. The staircase contains three steps measuring between 35 to 45 cm wide and 25 to 30 cm high. The upper portion of the building walls included an outset molding that surrounds all sides. Its upper floor was also covered with a thick plaster layer, and no remains of a superstructure were identified (Figure 9.195).

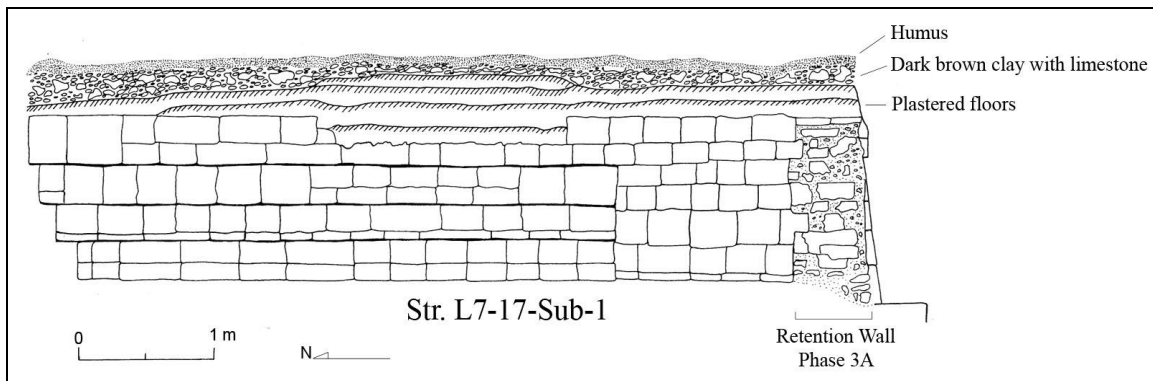


Figure 9.195 West façade (front) Structure L7-17-Sub-1 and associated retention wall (Drawing by M. Callaghan and L. Luin, VCAP)

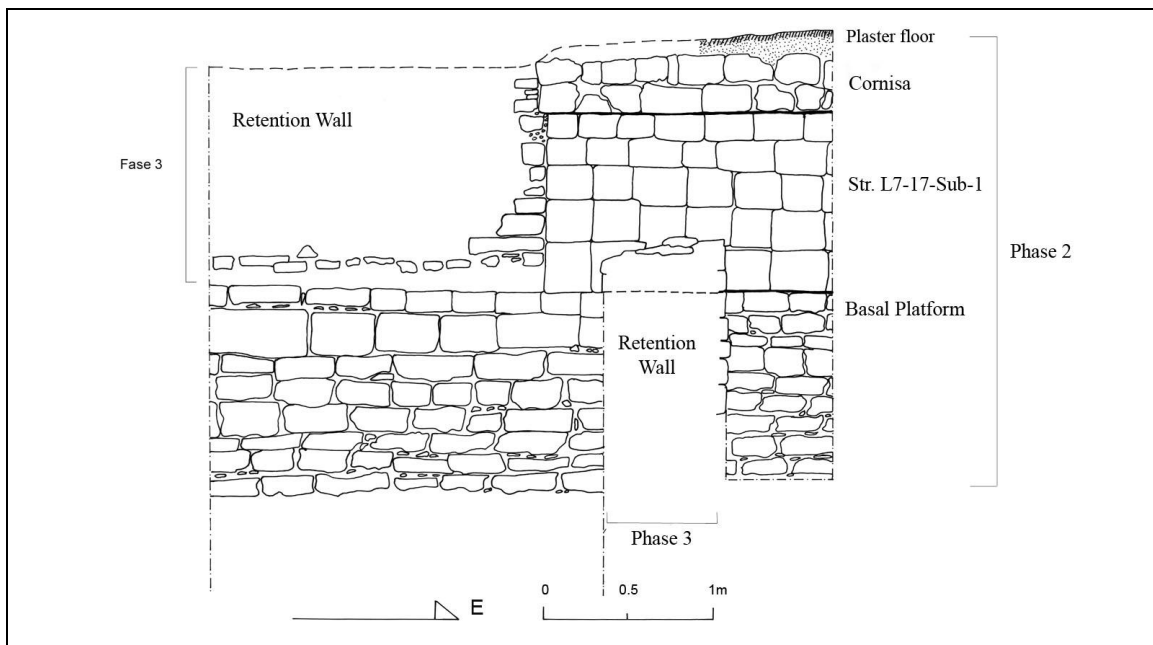


Figure 9.196 South profile of Structure L7-17-Sub-1, basal platform and associated retention wall (Drawing by M. Callaghan and L. Luin, VCAP)



Figure 9.197 Structure L7-17-Sub-1, basal platform and associated retention wall
(Photo by M. Callaghan, VCAP)

During the excavation, it was noted that at the base of the staircase, the floor was cut by the remains of a wall that ran parallel to the staircase base, which was removed at some point before the structure was covered. Structure L7-17-Sub 1 and its basal platform were modified with various additions: one of these was a ramp made with clay that leads to the southern façade of the basal platform. Although not a very common architectural feature, ramps have been found in other parts of Cancuen, such as Structure M7-9 (Saravia 2012). The ramp was visible on the west and south profiles of the excavation, extending 2 m to the south and descending only 50 cm (Figure 9.198). The ramp surface was leveled with different floors one on top of each other (Phases 2A to

2D); the first one elevated the ramp surface for 35 to 40 cm until reaching the highest stone alignment of the platform. A second layer extended the ramp to the west; and the other two layers, less clear in the excavation profiles, followed the same pattern (Figure 9.196).

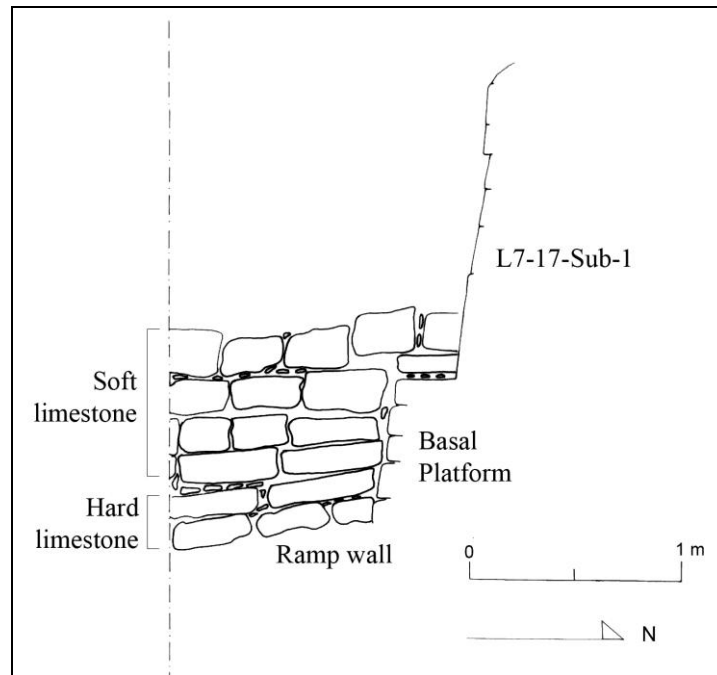


Figure 9.198 East profile of Structure L7-17-Sub-1 basal platform and ramp lateral wall (Drawing by M. Callaghan and L. Luin, VCAP)

The basal platform was later modified (Phase 3A) in its south and west sides, in order to create a larger platform associated with a stepped ramp. Its construction involved adding a retention wall in its southern side, made with irregular stones and dark brown clay mortar (Figure 9.195). The construction fill associated with this modification consisted of clay and irregular sandstone blocks, which completely covered the staircase associated with Phase 2. The upper part of this fill presented a layer of compact brown clay of 15 to 30 cm of thickness, covered by a plaster floor of 10 to 20 cm of thickness (Floor 8). The new ramp was built with clay and sandstone blocks, and included a

retention wall facing east, made with cut limestone blocks and small wedges to add stability. This wall was located on top of the floor of the ramp of Phase 2C. The wall was narrow at its base, presenting only one line of stones, and was wider in its upper portion (three stone lines), suggesting that it could be part of a step or a change in the construction fill. The new ramp completely covered the ramp of Phase 2, elevating 25 cm above the platform level, and was covered with a thin plaster layer (4 to 8 cm thick), though it was found poorly preserved. This plastered surface (Floor 7) was leveled at 30 cm above the retention wall, creating a small step in the southern limit of the platform.

The ramp was later modified in its east side, near the retention wall, adding five floors (Floor 6, 5, 4, 3, and 2) that constitute Phases 3B, 3C, 3D, 3E and 3F (Figure 9.195). Floor 6 measured 2 to 5 cm thick and was added after depositing 50 cm of construction fill of loose brown clay and compact red clay with limestone inclusions. The next one, Floor 5, also measured from 2 to 5 cm thick and was located on top of the previous one after a thin layer of fine brown sandy clay. The three next ones followed the same pattern and presented the same characteristics, though the last one was poorly preserved and consisted of a surface made with pebbles and plaster.

The last construction phase (Phase 4) in the Southeastern Corridor consisted in the final burial of the platform and associated ramp. This was carried out by covering these early buildings with different construction fills, starting with a deposit of brown and greenish clay of 20 to 70 cm thick that leveled the ramp. A layer of pebbles was located on top, which supported a plaster floor (Floor 1) that covered the entire platform (Phase 4A). A final minor modification was carried out in the southern side of the corridor

(Phase 4B), consisting of limestone blocks with limestone mortar, placed to level an eroded portion of the corridor surface (Figures 9.192 & 9.193).

The ceramic material recovered in the superficial levels consisted of large fragments of Late Classic utilitarian jars, suggesting a residential use. Nevertheless, the ceramics found in the lower construction phases were different, belonging to the early Tepeu 2 phase and including relative large quantities of polychrome sherds. Also notable was the recovery of some Chablekal Fine Gray sherds in lot CAN 27A-17-13 (on top of Floor 9), as well as a cache of a complete El Zapotal Impressed bowl on top of a Phase 2 floor located at 2.45 m below the surface (lot CAN 27A-7-8).

9.4.4 *Southeast Patio*

This patio consists in an open flat area that measures 35 x 20 m and it is located directly south of the East Patio and between the South Patio and Structure L7-26. This courtyard does not support any masonry structure and seems to have been associated as an open space that could have supported a perishable structure, or more probably, could have been used by the residents of the East Patio to perform activities related to the structures located to the north.

Excavations in this area were carried out by Brigitte Kovacevich in 1999 and 2000 in order to find chronological data to define the palace constructive history (Kovacevich 1999, Barrientos, *et al.* 2001). Operation CAN 3 was thus assigned to the Southeast Patio, beginning with unit CAN 3-1, which was a 2 x 2 m test pit in its center. This test pit revealed the presence of a well preserved plaster floor at 1 m below the surface (Floor 2), consisting of a thick stucco layer and a construction fill made with

large stones. At 1.4 m below the surface, another plaster floor was revealed (Floor 3). Between these two floors, a thick fill was revealed, made with river pebbles mixed with stucco, river shells and a large amount of ceramic sherds that included polychrome fragments as well as Chablekal Fine Gray and Campamento Orange pieces (Figures 9.199 & 9.200).



Figure 9.199 Excavation of unit CAN 3-1 (Photo by B. Kovacevich, VCAP)

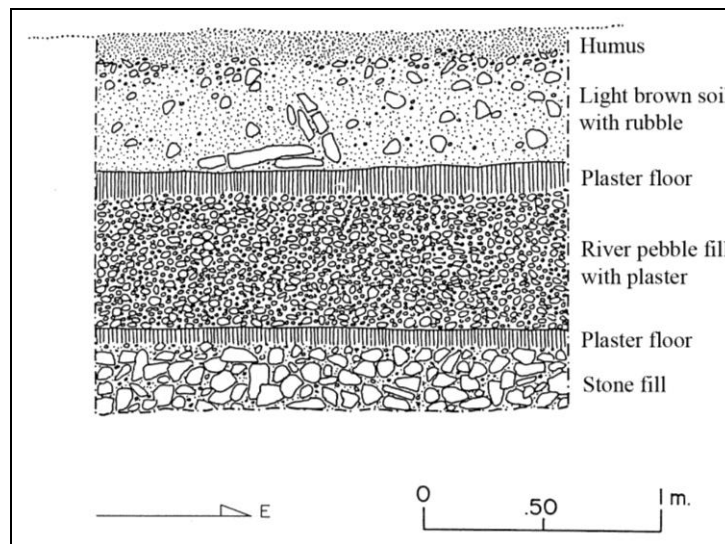


Figure 9.200 South profile of unit CAN 3-1 (Drawing by B. Kovacevich and L. Luin, VCAP)

During the 2000 field season, another 2 x 2 m unit was opened directly to the west of CAN 3-1, named CAN 3-2, in order to follow the stratigraphy already observed. The first levels consisted in humus and remains of a plaster floor (Floor 1) that deteriorated given its superficial condition. This floor was supported by a fill of small limestone rocks (10 x 10 cm), followed by a well preserved plaster floor (15 cm thick) located at 70 cm below the surface (Floor 2). Below this floor, the river pebble and shell fill was excavated until reaching the third floor (Floor 3) at 1.4 m below the surface. The amount of ceramics was very high, recovering a total of 20 bags of sherds covered with stucco. The construction fill under Floor 3 consisted of small red sandstone rocks with plaster mortar, which reached a depth of 1.8 m. The next cultural stratum (lot CAN 3-2-7) was made of compact grey clay with small limestone inclusions, ending with a thin plaster floor (Floor 4, 1 cm of thickness) located at 2.2 m below the surface. A fill of dense dark brown clay was excavated under Floor 4, presenting a very low presence of ceramics or any other cultural remains. Under this fill, a line of stones was found in the eastern side of the unit at 2.4 m of depth, and the excavation was followed only west of the stone alignment. In this new lot (CAN 3-2-9), which ended at 3.2 m of depth, the amount of artifacts increased dramatically, making a total of 11 bags of ceramics, chert, obsidian, animal bones and grinding stones, thus suggesting the presence of a midden. This deposit contained a large amount of polychrome and other fine decorated ceramic types characteristic of the early Tepeu 2 phase. The midden continued deeper, and it was excavated through arbitrary levels until reaching a change of soil at 3.5 m below the surface. Lot CAN 3-2-10 provided 6 bags of ceramics, while lot CAN 3-2-11 only 3 bags of artifacts. At this point, the soil changed from compact dark brown clay to sandy beige

soil. At 3.7 m of depth, sterile soil was reached, consisting of intercalated thin light brown sandy and white limestone sediments. Given that this was one of the first stratigraphic pits dug at Cancuen, the excavation continued until reaching a final depth of 4.5 m below the surface, in order to understand the nature of these natural sediments.

Units CAN 3-3, CAN 3-4 and CAN 3-5 were open to the east, north and northeast of CAN 3-2, respectively, creating a 4 x 4 excavation whose main purpose was to expose more of the stone alignment found at lot CAN 3-2-9. All these units were excavated following the cultural levels and showed the same stratigraphic pattern already described. However, when these units reached the 2.4 m depth, their contexts were different. Unit CAN 3-4, located north of CAN 3-2, exposed the continuation of the stone alignment and excavated the midden located west of it, until reaching a final depth of 3.4 m below the surface (Figure 9.201).



Figure 9.201 Excavation of units CAN 3-3, 3-4 & 3-5 (Photo by B. Kovacevich, VCAP)

Unit CAN 3-5, located east of CAN 3-2, reached a floor level (Floor 5) directly related to the stone alignment, proving that it was part of a buried platform. This floor was made with limestone blocks collocated on top of a red clay fill (Figure 9.202).

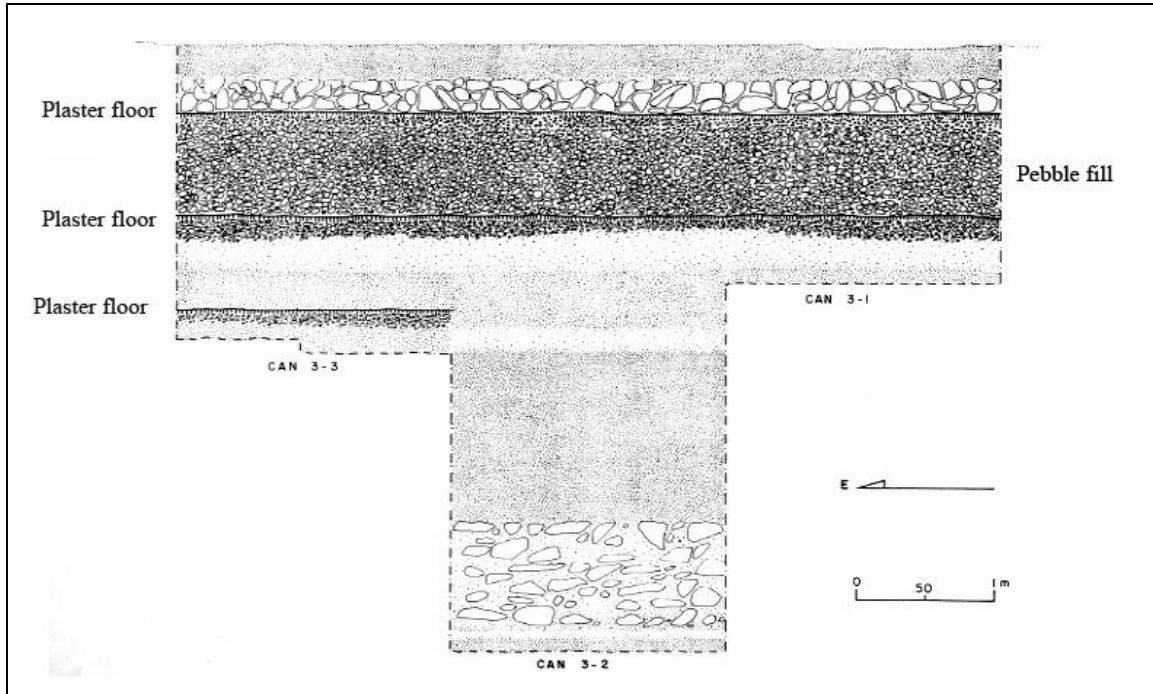


Figure 9.202 North profile of units CAN 3-3, 3-4 & 3-5 (Drawing by B. Kovacevich and L. Luin, VCAP)

9.5 West section

The West Section of the royal palace of Cancuen is the smallest of the four main sections of the acropolis complex being discussed here. Except for Structures K7-33, it is the least investigated part of the palace, and as a result, the one less understood until now. The section's main layout is centered in the West Patio, which is composed by an elevated platform of Structure L7-12 and Structure K7-33 to the west. To the north, the Northwest Patio is a small enclosed courtyard located lower than the rest of the center and west sections. To the south, the Southwest Patio constitutes a platform that sustains three small structures and seems to communicate with Structure K7-36 to the south. A

small staircase could have existed in the southwestern corner, descending to a lower enclosed courtyard formed by structures K7-1 and K7-3 (Figure 9.203).

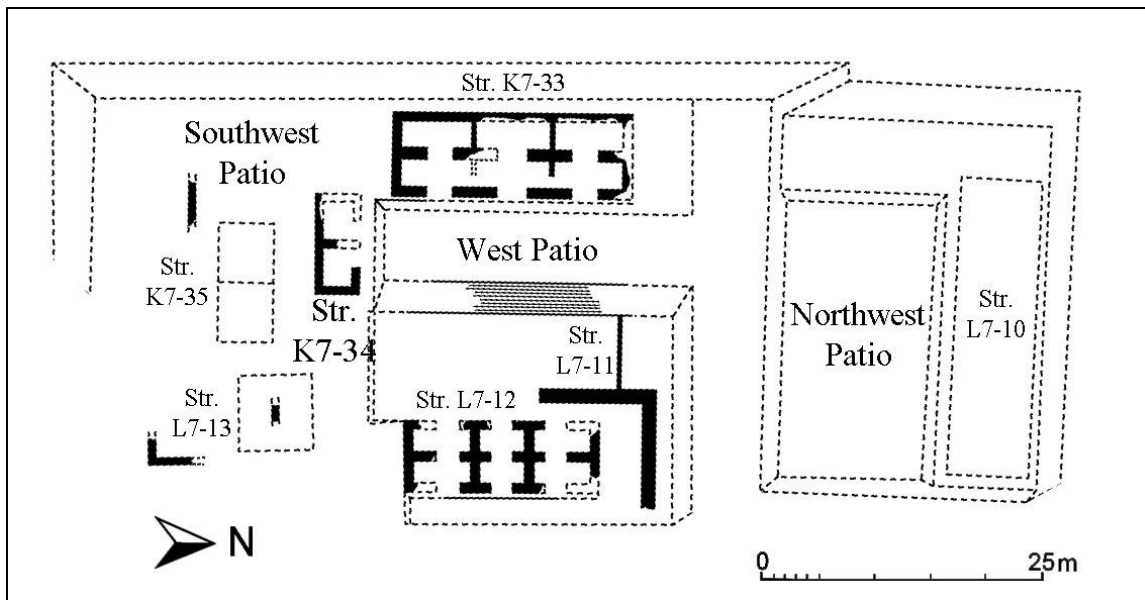


Figure 9.203 Plan view of western section of the royal palace (Map by T. Barrientos and L. Luin, VCAP)

The definition of this western section as separated from the central one corresponds to an area that clearly had activities different from those performed at the central and eastern portions of the palace. Initially, the presence of smaller patios and structures suggested a residential nature, something that has been proved by the most recent excavations. Between 2000 and 2004, all excavations carried out in this area were limited to test pits and exploratory trenches (Barrientos, *et al.* 2001, Barrientos and Luin 2002, Callaghan and Bauer 2003). However, extensive excavations in the West Patio started in 2010 with Structure K7-33 (Valle 2011) and continued in 2011 (Rodas *et al.* 2012).

The areas that constitute the West Section will be presented in a north to south order, giving more emphasis on the West Patio, which could have been the most important area of this section.

9.5.1 Northwest Patio

This closed patio is located on the northwest corner of the acropolis, covering an area of 23 x 7 m. It is surrounded by low platforms, sustaining Structure L7-10 on its northern side. It is also situated in a lower level than the adjacent west and lower north patios. The only excavation in this area was done by Lucia Moran in 2000, consisting of a 2 x 2 m test pit (unit CAN 21-1) and its extension (unit CAN 21-2).

Unit CAN 21-1 was excavated at the center of the patio, its first level exposed white pebbles that were the remains of a plaster floor (Floor 1) located very close to the humus and roots of the surface. At 10 cm, the excavation exposed large chunks of plaster and limestone blocks with marine fossils within a matrix of loose brown soil. The second lot continued with plaster and limestone blocks, as well as a small “donut” stone, three sherds and an obsidian blade fragment. The third lot, beginning at 40 cm deep, presented a hard and dry light brown clay level with no artifacts that continued to 80 cm below surface. In Lot 5, the clay fill changed to a reddish color, with some ceramics. Three figurine fragments were found in Lot 6, as well as fine ceramic fragments and a *mano* fragment. At this point, the fill was soft dark brown soil, possibly part of a midden, considering the higher number of ceramics and other artifacts. This deposit ended at 1.4 m from the surface, where more ceramics were recovered (three bags) and the soil became darker, almost black. The next lot (8) consisted of burned clay with river pebbles, followed by a greenish light brown clay fill, with a soft and plastic consistence. Within this fill, many large red slipped ceramics sherds were recovered, as well as two figurine fragments, chert and shell. In Lot 9 (1.7 m from surface), the ceramics diminished, and the soil became harder, wet, and more greenish. This fill continued in the southwest

corner of the pit, because some flat stones appeared covering most of the excavation area. The feature, identified as some sort of special deposit, continued in the next level (Lot 12), now surrounded by a dry and soft light brown soil matrix. After removing the stones, only five small sherds, an obsidian flake, a *mano* fragment, and a figurine fragment were found. These artifacts were located within a burnt clay area with charcoal fragments, which was also on top of a plaster floor (Floor 2) that covered the entire unit, at 2.25 m below the surface. In the northern side, three aligned stones were exposed, forming the top of a crypt. The capstones were left unexcavated, and another plaster floor (Floor 3) was exposed below it. Under this floor, a sterile level of light brown soil was found, mixed with hard thin grey strata, the product of natural sedimentation (Barrientos, *et al.* 2000).

Unit CAN 21-2 is a 2 x 2 m unit that was opened as a northern extension of CAN 21-1, in order to expose the stones that were supposedly covering a cist in lot CAN 21-1-12. The excavation followed the cultural levels defined in unit CAN 21-1. The first level was loose brown soil with roots (humus), ending with the remains of Floor 1 at 10 cm below the surface, consisting of large blocks of plaster that reached a depth of 20 cm. The second and third levels also presented remains of the plaster floor within a light brown soil. The fill changed to reddish brown clay at 90 cm below the surface, with some traces of a possible thin floor. Ceramic material also increased at this point, and the level changed at 1.15 m to a dark brown layer and areas with charcoal. This midden finished at 1.50 m, and the soil became darker at the bottom. Ceramics decreased at this point, where the fill became wet greenish clay (Lot CAN 21-2-7). Between 1.7 and 2 m below the surface, no cultural material was recovered within a dark brown fill. However, at 2 m,

another special deposit was found, consisting of a *mano* fragment, a small ceramic sherd and an irregular stone. All this was placed on top of a pebble floor (Floor 2) located at 2.1 m deep. Below the floor, the cist capstones appeared in a rectangular shape at 2.25 m below the surface. The soil outside the cist was sterile, and the soil inside it consisted of dry and soft dark brown soil (Figure 9.204).

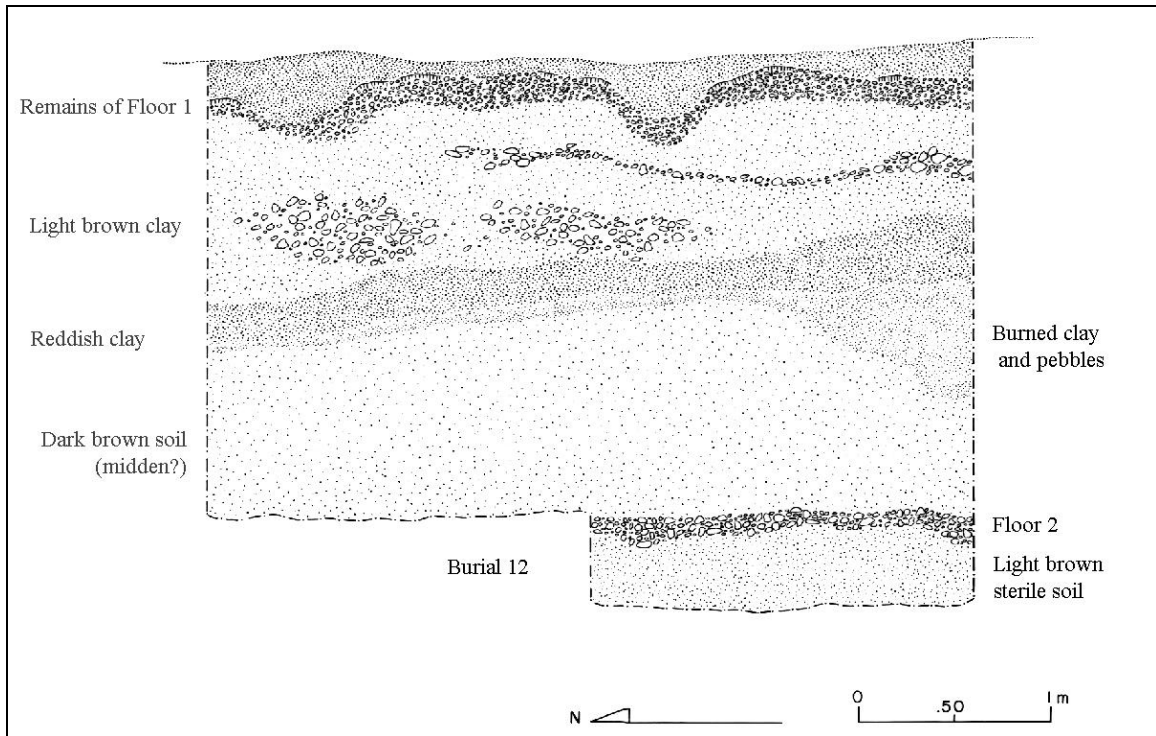


Figure 9.204 West profile of units CAN 21-1 and CAN 21-2 (Drawing by L. Morán and L. Luin, VCAP)

The cist, named Burial 12, measured 2.1 m long and 1 m wide, oriented north-south, with the head to the north. The bones were found in a regular state of preservation, with the mandible broken to the east, and molars on the side of the cranium. The offering consisted of two vessels located on the sides of the head (See a detailed description in Chapter 10, under the ceramics section). Vessel 1 (CANV-10) was the one west of the head, and Vessel 2 was the one to the east (CANV-13) (Figure 9.205). The burial was excavated to a final depth of 2.8 m (Barrientos *et al.*, 2001).

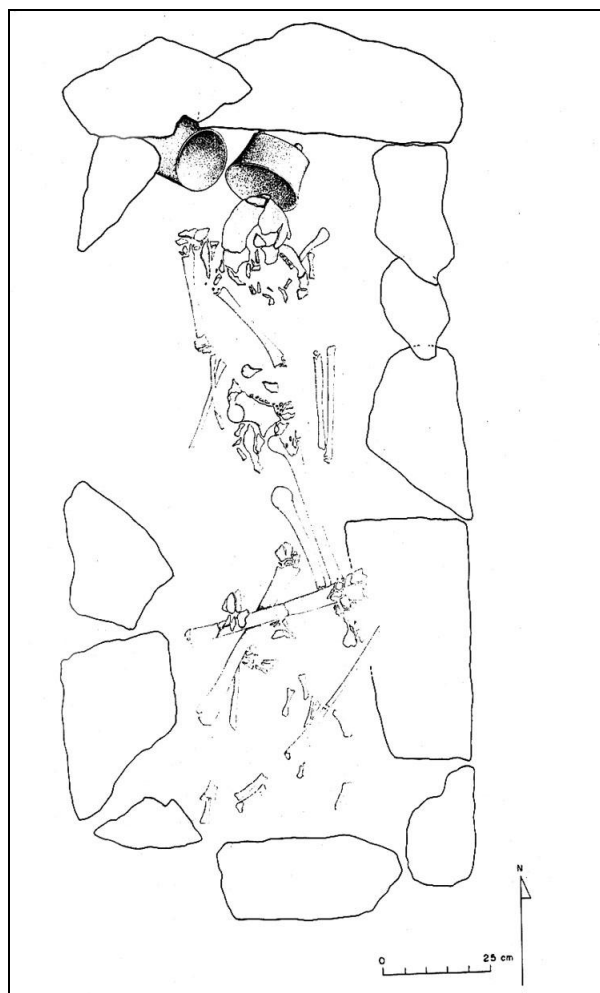


Figure 9.205 Drawing of Burial 12 (Drawing by L. Luin, VCAP)

9.5.2 *West Patio*

The West Patio is located directly west of the North Patio, in a lower level, but higher than the Northwest Patio. It consists mostly of a raised platform that measure 27 x 10 m that supports two structures: Structure L7-12 on the eastern side is the largest and dominant building of the court; and Structure L7-11 on the northern limit, which is a small platform that could have supported a perishable building. The platform descends to the west through a staircase, leading to Structure K7-33, which makes the western limit of the acropolis.

South of the West Patio, a large platform (Southwest Patio) contains various small structures distributed without any formal layout (Structures K7-34, K7-35 and L7-13). No excavations have been carried out in this area, and no data about their function is available yet. Given the small size of the structures, it is unlikely that they are of residential nature, meaning that they could had ceremonial purposes (Figure 9.206).

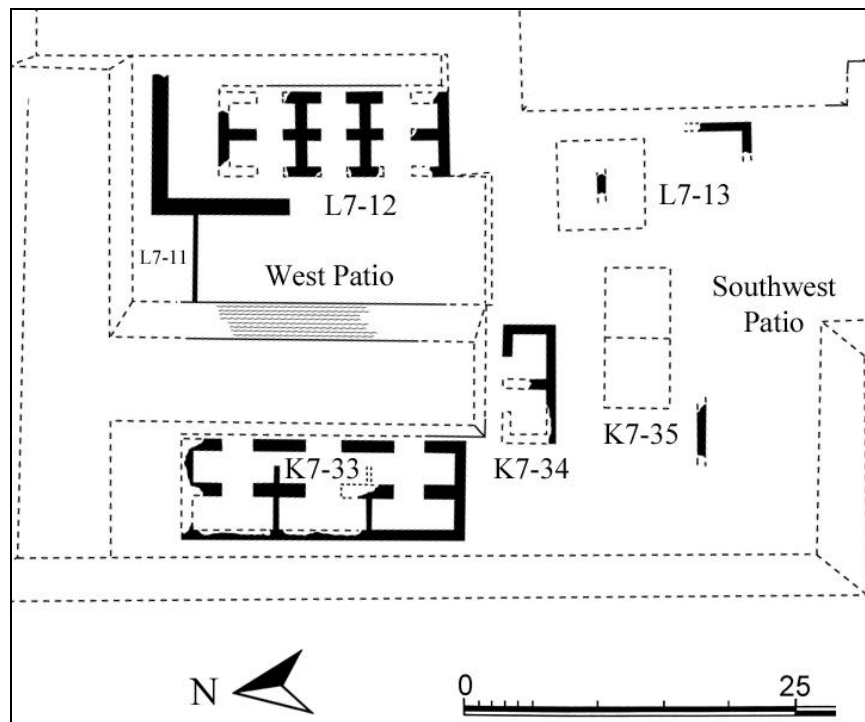


Figure 9.206 Map of West and Southwest patios of the Royal Palace
(Map by L. Luin and T. Barrientos, VCAP)

The first excavations in the West Patio were done in 2001 as part of the test trenches laid on the two main axis of the acropolis (Figure 9.207). A total of 19 excavation units were completed (Barrientos and Luin 2002). The east-west trench started in the west limit of the North Patio platform, near Structure L7-2, ending in Structure K7-33. Operation 26 was defined in Structure L7-12 and its surrounding patio, including six units in the eastern and western facades of Structure L7-12 (CAN 28-1 to 28-4, and CAN

28-11 to 28-12) and seven units on the western staircase (CAN 28-5 to 28-10, and CAN 28-13). Operation 29 was defined by six units inside Structure K7-33 (CAN 29-1 to 6).

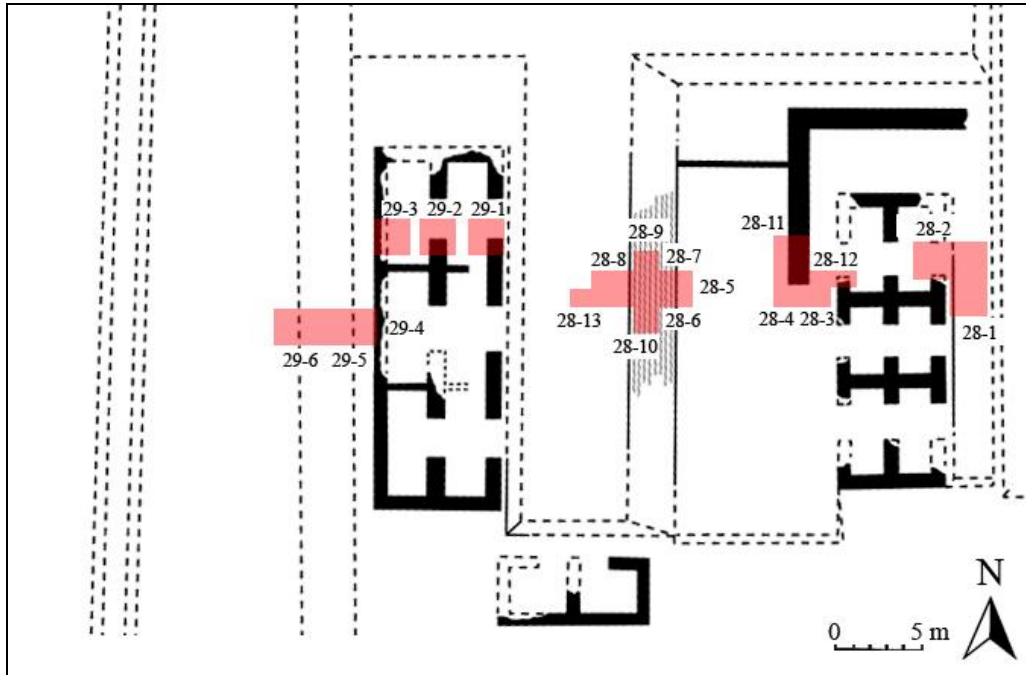


Figure 9.207 Test excavations carried out in 2001 (Map by T. Barrientos and L. Luin, VCAP)

Structure L7-12

The initial cleaning of looter excavations revealed that this structure was made with fine masonry blocks, containing six chambers that were probably roofed with a corbelled vault. The patio located on its western side makes the largest open area on this part of the acropolis, thus indicating that this building was of some importance.

Excavation units CAN 28-1 and CAN 28-2 exposed part of the well preserved exterior walls of the eastern façade. In unit CAN 28-2, the excavation removed one meter of rubble, reaching the base of a sealed doorway, and also uncovering a small plastered step that runs parallel to the base of the wall (*Ibid*) (Figure 9.208).

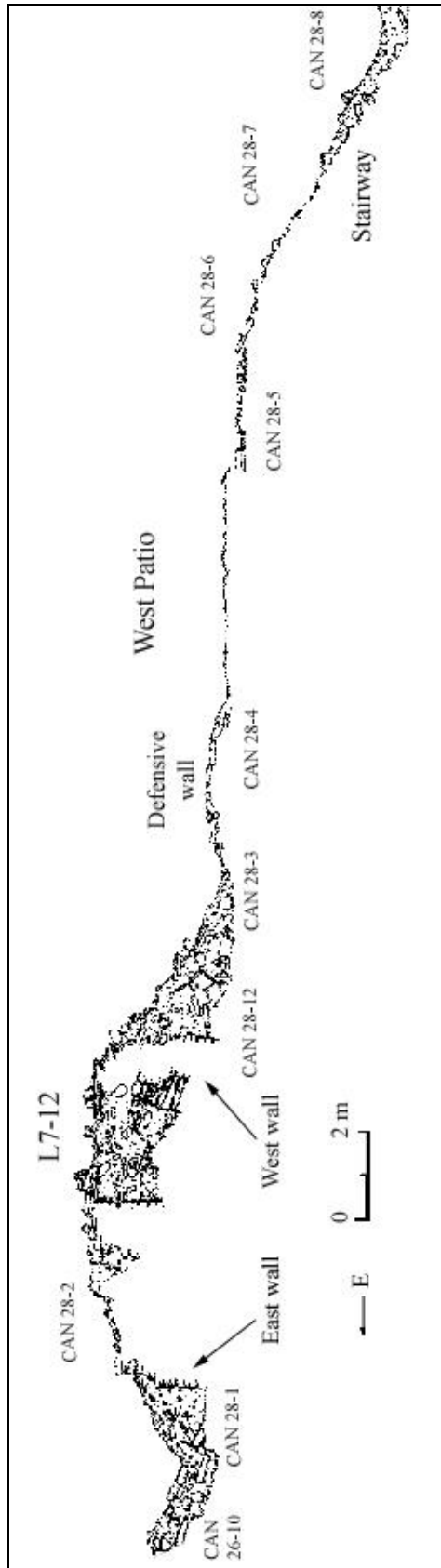


Figure 9.208 North profile of Structure L7-12 and West Patio excavations (Drawing by L. Luin, VCAP)

Unit CAN 28-12, of 2.5 x 1 m, uncovered the west façade wall after removing a large amount of debris. Given that the standing wall measured 0.75 m high, it was clear that this façade was less preserved than the eastern one. At the wall base, the excavation exposed the same plastered step found in the eastern façade (*Ibid*).

Units CAN 28-3 and CAN 28-4 exposed a low wall located 3 m from the west façade. This feature runs from the center of the building and crosses towards its northern side. Given its similarity with other lower walls found in the acropolis, it is likely that it corresponds to a defensive feature that was added as part of the final occupation phases, although it could also correspond to a late perishable addition to the structure. North of CAN 28-3, unit CAN 28-11 was located directly on the wall, exposing its width of 1 m and a height of 4 block lines, approximately 0.5 m (*Ibid*).

West Patio Platform and Staircase

The trench formed by excavation units CAN 28-5 to CAN 28-8 exposed the remains of the staircase that descends from the platform that sustains Structure L7-12 to Structure K7-33 eastern façade. In unit CAN 28-5, the humus was removed and the first step of the staircase appeared at the half of the 2 x 2 m unit. Immediately to the west, four more shallow steps made with soft limestone blocks were uncovered in unit CAN 28-6. The next unit of the trench, CAN 28-7, did not continue to expose the following steps, as they seemed to have been dismantled by erosion or other disturbing factors. However, one well preserved step was found at the western and deepest part of the pit. This step was followed by other four in unit CAN 28-8, though they were made with sandstone blocks. In order to clarify these features, two more units were placed on the north and

south sides of CAN 28-7 (units CAN 28-9 and CAN 28-10). To the north, unit CAN 28-9 exposed two steps, while CAN 28-10, to the south, uncovered one step deeper than the two other ones. In total, nine soft limestone steps made with blocks of cubical shape were defined in the upper level of the staircase, and the lower part presented blocks made with sandstone (*Ibid*). Given that the characteristics of the upper steps were similar to the ones excavated in Structure L7-8 southern façade, it is probable that the differences in materials and measurements of staircases reflect chronological stages in the acropolis history. Finally, unit CAN 28-13 was located directly west of CAN 28-8, at the bottom end of the staircase. At 20 cm below the surface, an eroded pebble floor was found (Floor 1), corresponding to the staircase base that led to Structure K7-33 eastern entrance (*Ibid*).

Two years later, Michael Callaghan excavated unit CAN 28-14, a 2 x 2 m test pit at the center of the West Patio, in order to explore its construction history, through the recovery of ceramics from sealed contexts, especially between plaster floors. In sum, this test pit reached a final depth of 8 m from the surface, defining two major construction episodes with different soil strata each one (Figure 9.209). The late phase consisted of a massive set of different construction fills placed on top of a floor located at 7.3 m below the surface (Callaghan and Bauer 2003).

The first phase consisted of an earthen floor, whose surface is related to the first version of the acropolis beneath Structure L7-1. Its construction fill consisted of a sequence of different clay levels that represent brief occupations, summarized in the following way (*Ibid*):

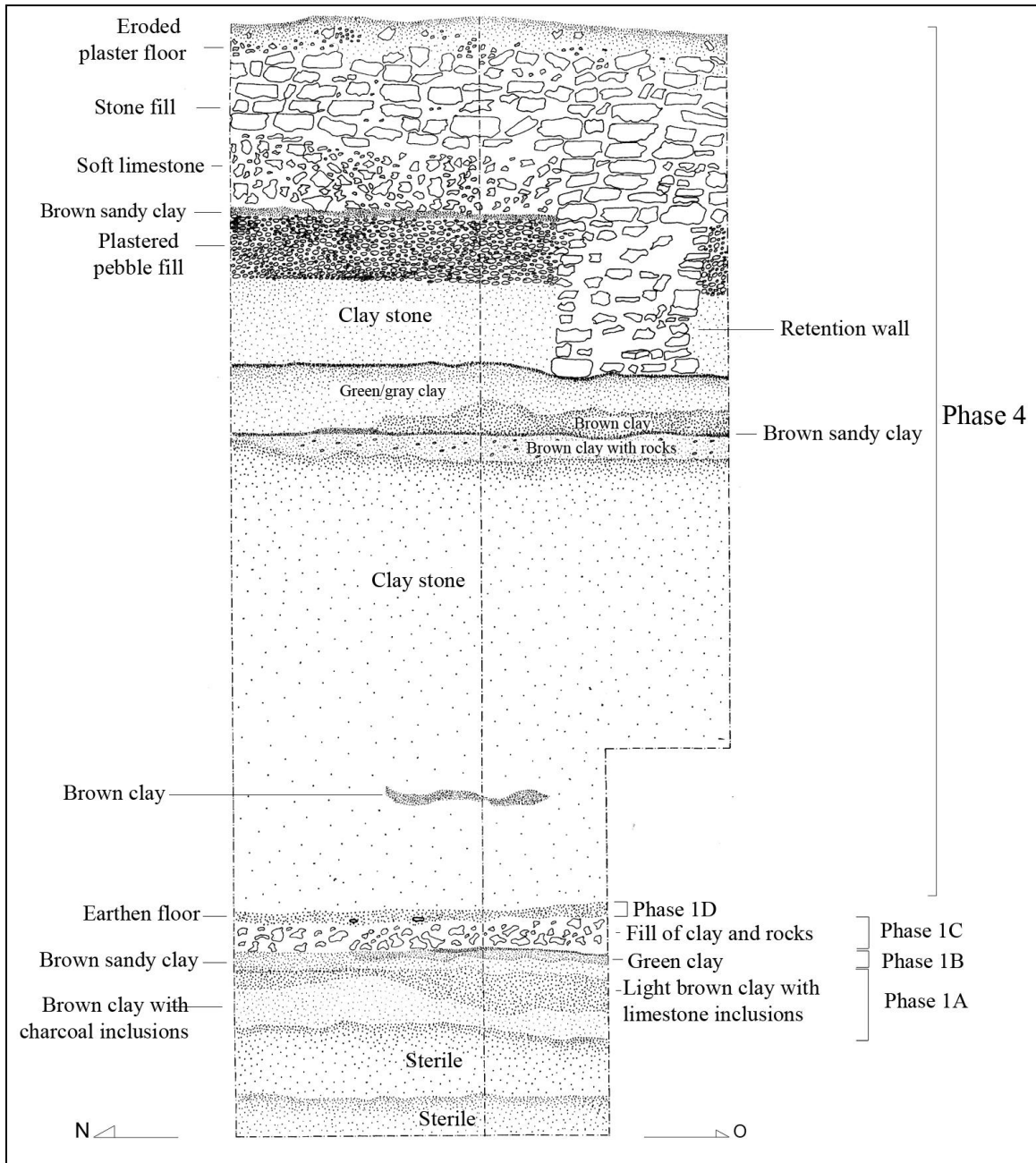


Figure 9.209 East and south profiles of unit CAN 28-14 (Drawing by M. Callaghan and L. Luin, VCAP)

Phase 1A: Found in the deepest level of the pit, it consisted of a light brown soil stratum ranging from 20 to 35 cm of thickness, placed on top of sterile strata. This first construction fill had a good amount of cultural material, including ceramics, figurines and carbon remains.

Phase 1B: The previous surface was leveled with a fill of light greenish brown clay whose thickness varied from 4 to 30 cm. A shallow midden of sandy dark brown clay was found on top of this fill, containing a large density of ceramics and carbon, very similar to the layer that divided this and the earlier phase.

Phase 1C: Consists of a thin greenish brown clay level (2 to 5 cm) followed by a red clay fill similar to those found in the North Patio (unit CAN 27-19) and Southeast Corridor (Operation 23A), which could have sustained a plaster floor, now disappeared.

Phase 1D: The last fill of the first phase consisted of a 20 to 30 cm stratum made of sandstone and clay blocks, covered with a brown clay layer of 5 to 10 cm. This last surface could have been originally plastered, given some scarce remains observed during the excavation.

The second construction phase seems to correlate with Phase 4 in Operation 23A (Southeast Corridor), and consists of a massive fill covering a total height of 6.5 m. The first 3.5 m of the fill was made with clay blocks, followed by a thin layer of sandy brown clay that looks like a floor. Nevertheless, the lack of substantial cultural remains associated with this layer suggests that it was a temporary surface created by a pause during the fill process. Another sequence of clay fills of approximately 1 m of height was placed on top of the thin layer, in order to sustain a retention wall made of crude medium sized limestone blocks. The retention wall measured almost 2 m in height, and was surrounded by a layer of plastered pebbles and ceramic sherds. At this point, a thin layer of sandy brown clay marked another pause in the fill process.

It also points to a change in the type and size of masonry blocks of the wall, which was elevated by another 0.5 m and surrounded by a fill of loose soft limestone

blocks. At the level where the wall ends, a fill of sandstone blocks covered the entire test pit for another 50 to 60 cm of height, making it the last fill of the platform. Although no remains of a plastered floor were found, it seems that the sandstone fill supported the floor of the West Patio platform.

Very few ceramic sherds were found inside the fills of the second phase. However, a small ceramic dedicatory offering was found resting on the floor of Phase 1D, below a small stone in the southwest corner of the test unit, at 6.6 m of depth. The offering consisted of two almost identical Chablekal Fine Gray vessels, placed lip to lip. This type, dated not before AD 760, gives an approximate date for the massive fill of the second phase. The ceramics found within the first phase fills include polychrome plates and other fine types corresponding to Tepeu 2 times.

Structure K7-33

This is the westernmost building of the acropolis. In 2001, as part of the east-west test trench, three excavation units were located in its interior (CAN 29-1 to CAN 29-3) and other three were placed on its western side (CAN 29-4 to CAN 29-6), in order to define the presence of a staircase that could lead to the plaza west of the main platform of the acropolis.

Units CAN 29-1 to CAN 29-3 were located in the central section of Structure K7-33. The excavation of the first 20 cm level quickly revealed the interior plaster floor, because recent looting activities had removed most of the debris, sometimes reaching below the floor level, as it was shown in the profiles. Unit CAN 29-1, located next to the interior face of the eastern exterior wall, exposed the plaster floor and part of the fill

below it. Unit CAN 29-2 was excavated inside the interior walls, at the center of the building. Finally, unit CAN 29-3 was placed outside the western façade, exposing an eroded pebble floor that could have been the exterior surface of the platform that sustained Structure K7-33 (Barrientos and Luin 2001) (Figure 9.210).

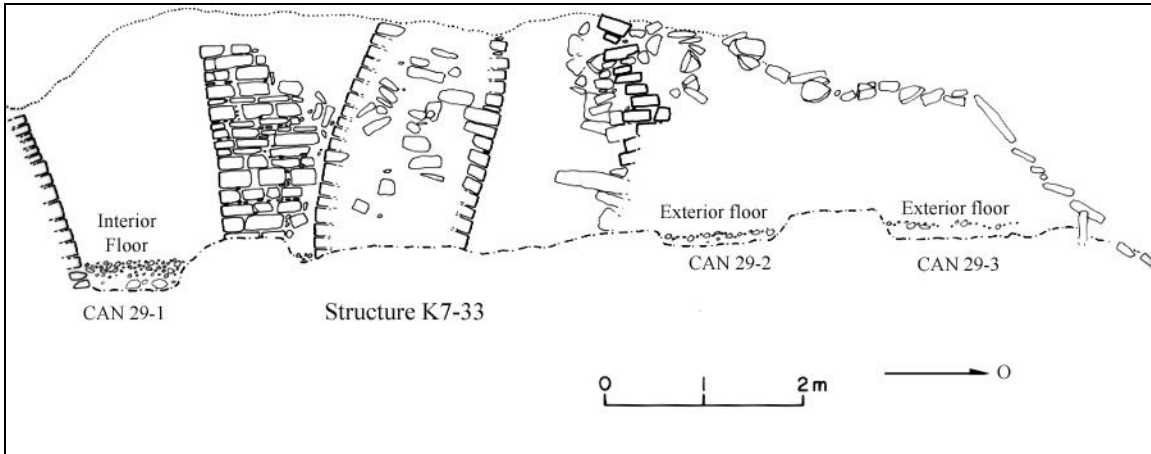


Figure 9.210 North profile of Structure K7-33 (Drawing by L. Luin, VCAP)

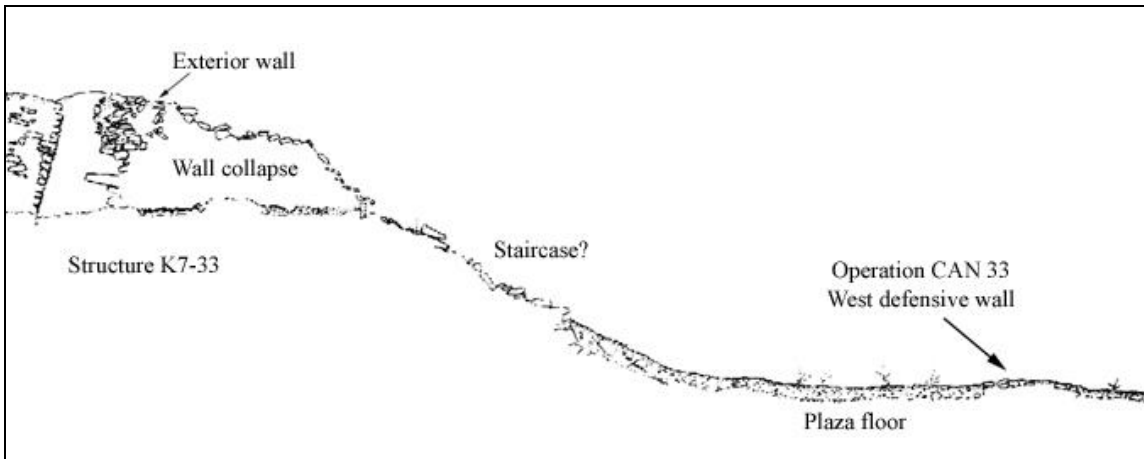


Figure 9.211 North profile of Structure K7-33 exterior floor and possible staircase (Drawing by L. Luin, VCAP)

A trench of 6 x 2 m descended west of unit CAN 29-3 to the exterior plaza floor, on the west limit of the acropolis platform (Figure 9.211). This trench was divided into units CAN 29-4, CAN 29-5 and CAN 29-6. Although time constraints limited the excavation, the debris removal did not expose any traces of a staircase in the upper part. Some stone alignment remains were defined in CAN 29-5 and CAN 29-6, but it was not clear if they were part of a staircase or terraces of the acropolis platform (*Ibid*).

The excavations in K7-33 were continued in 2010 by Judith Valle with four excavation units (CAN 29-7 to CAN 29-10), in order to define its interior rooms and doorway accesses. These excavations confirmed the presence of six rooms, whose access was only through three doorways in the eastern façade, since no western doorways were found. The walls of the structure were found in good state of preservation, reaching 1.90 m in height (Figure 9.212). Fragments of modeled stucco also indicated the presence of external decoration for this building (Valle 2011: 136). With the previous results, it seemed possible that K7-33 was a royal residence. For that reason, the excavations of K7-33 continued in 2011 by Edna Rodas, Molly Toth and Ryan Steeves, with a total of 15 units (CAN 29-8 to CAN 29-23) (Figure 9.213). These excavations defined the dimensions of the structure (22 x 10 m) and its walls (0.7 to 1.3 m wide x 3 to 4 m long), as well as remains of a vaulted roof and a staircase in its eastern access, composed by two or three steps. However, the fill found inside the rooms indicate that they were filled intentionally to create a high platform that communicate the West Patio with the area of structure K7-1 and K7-2; and crude staircase was also added in both the eastern and western sides (Figure 9.214). As it has been observed in other buildings of the palace, this second phase was not finished.

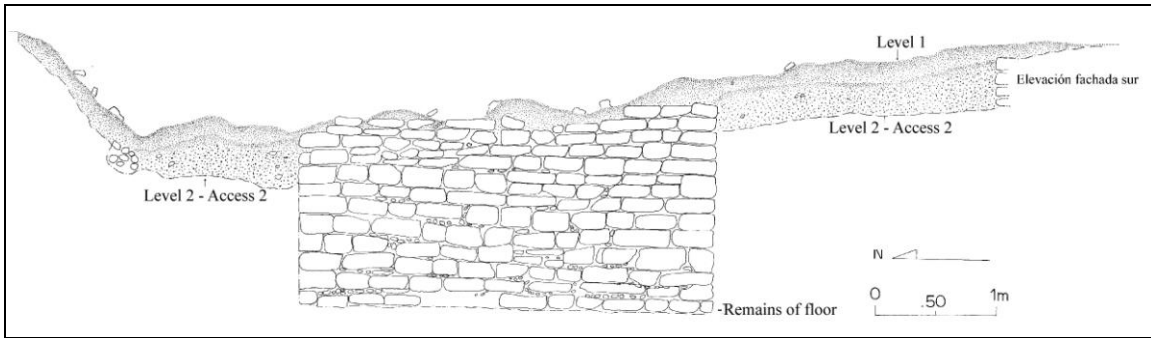


Figure 9.212 Profile of Eastern Façade, Structure K7-33 (Drawing by J. Valle and L. Luin, VCAP)

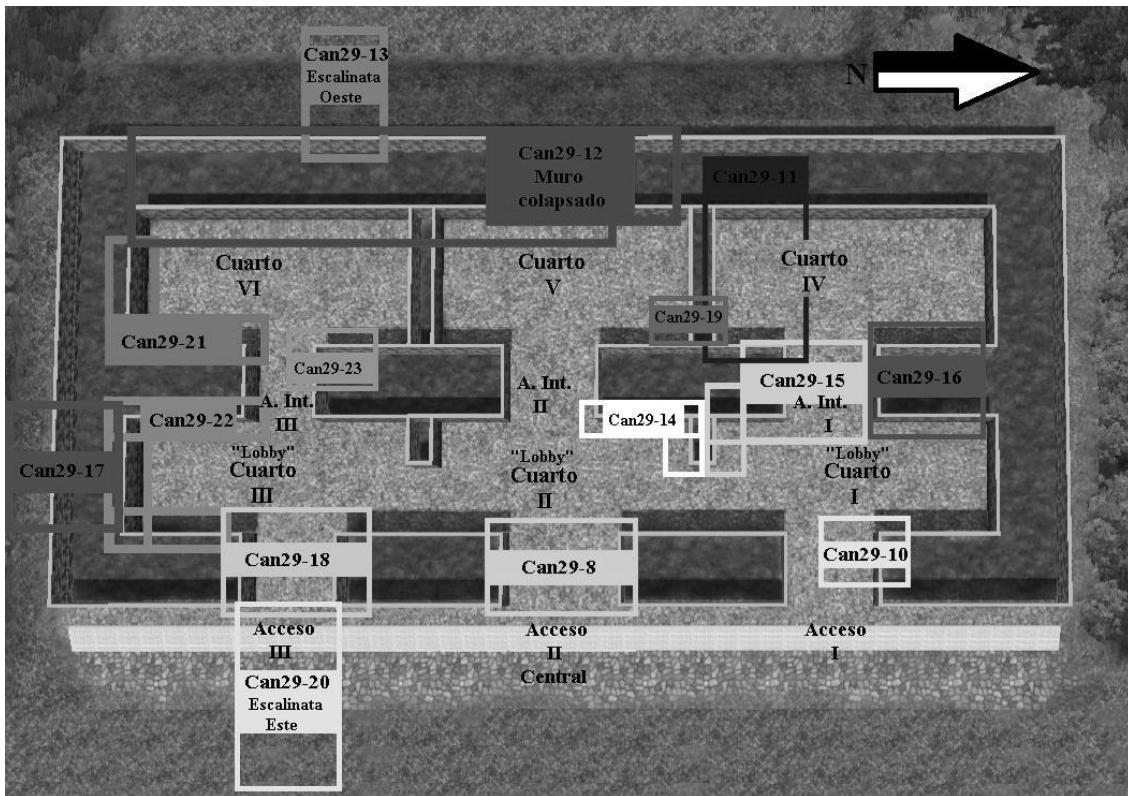


Figure 9.213 Reconstruction of Structure K7-33 and location of excavations in 2011 (Drawing by E. Rodas, VCAP)

The plan of this structure has been defined as similar to Structure E-32 of Machaquila, Structure M7-32 of Aguateca, Structure Sub II C-2 of Calakmul (Rodas *et al.* 2012: 60), and the Palace of Group III-B at Holmul (Valle 2011: 136), suggesting a residential function.

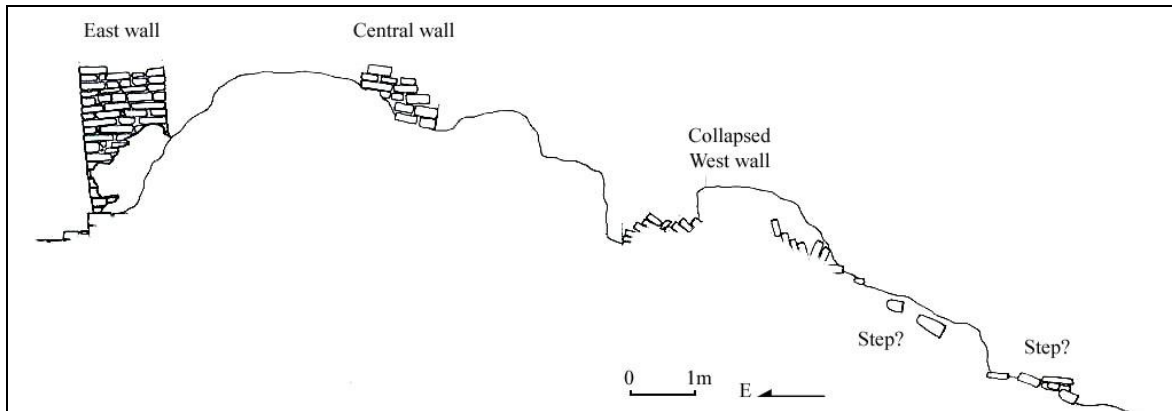


Figure 9.214 North profile of Structure K7-33 and possible west staircase (Drawing by L. Luin, VCAP)

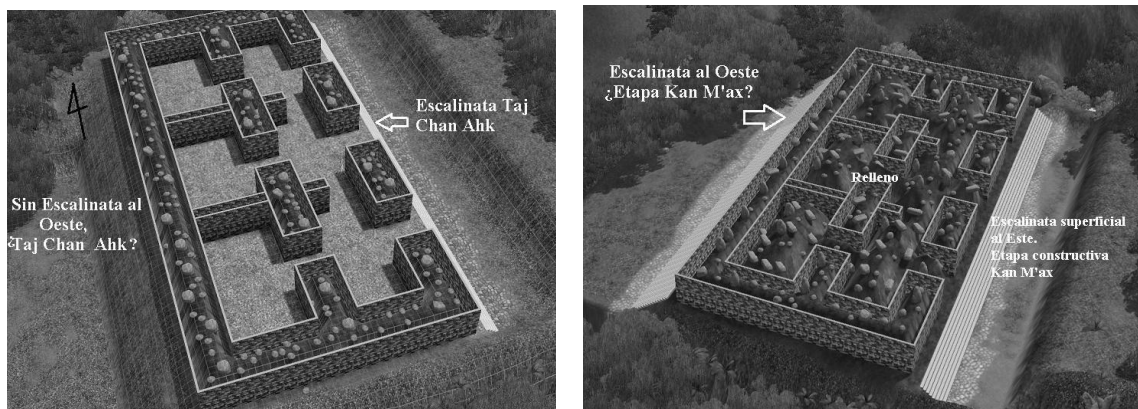


Figure 9.215 Reconstruction of original plan of Structure K7-33 and its later remodeling (Drawing by E. Rodas, VCAP)

9.6 Palace Periphery Structures

The area of the royal palace is not restricted to the acropolis itself, because some buildings located on its edges are aligned and spatially related with individual structures located on the exterior plaza floor. Of particular importance are three structures located on the western end of the acropolis: K7-1, K7-2 and K7-3 (Figure 9.216). These masonry buildings face east and their location suggests that they could have functioned as part of the same architectural complex. Parallel to the royal palace excavations, these three structures were also fully investigated by different archaeologists and students, providing important information that complements the data collected in the acropolis itself.



Figure 9.216 Plan of the royal palace of Cancuen and its surrounding areas and structures
(Map by T. Barrientos and L. Luin, VCAP)

9.6.1 Structure K7-1

This structure has a rectangular shape, measuring 26 x 13 m and oriented in a north-south axis. It is located directly in front of the Southwest Exterior Patio of the acropolis and was fully excavated by Erin Sears during the 2000 and 2001 field seasons (Sears, *et al.* 2001, Sears and Seijas 2002). During the first phase of excavations, Operation CAN 17 was created for this structure. The first step was a superficial cleaning of the humus layer, which allowed the definition of the base platform perimeter and its northwest and southeast corners. Five trenches were laid out in order to expose exterior and interior walls of the building, each one divided into 2 x 2 m units. These exploratory excavations revealed that the structure eastern façade had a low staircase facing the royal palace, with three steps. These units also revealed that the single and large interior

chamber had no divisions, but a long and wide bench divided the room in two halves (Sears, Morán y Seijas, 2001:73-98) (Figure 9.218). The 2001 excavations concentrated along the southern half of the structure, revealing the exterior floor of the structure platform, as well three successive construction phases (Sears and Seijas 2002: 103-9)

Excavation of Trench 1 consisted of 8 units (CAN 17-1 to 17-8) located on the southern wall of the building, and revealed the interior and exterior faces of the west and east walls, as well as the main staircase (Figure 9.217). In unit CAN 17-1, the debris of the back wall (west) was removed in order to find remains of a midden (*Ibid.*). The unit was continued in 2001, and all the collapsed wall debris reached a depth of 70 cm below the surface.

Close to the surface, the west limit of the structure platform was defined at the eastern limit of the unit, consisting of a line of 10 triangular shaped masonry blocks. Below that floor, different levels of clay were excavated until the unit was finished at 1.8 m. Unit CAN 17-2, located directly next to the previous one, revealed the exterior floor made of irregular stones, at 30 cm below the collapse rubble. The next unit, CAN 17-3, revealed the west wall of the building, consisting of 5 lines of masonry blocks.

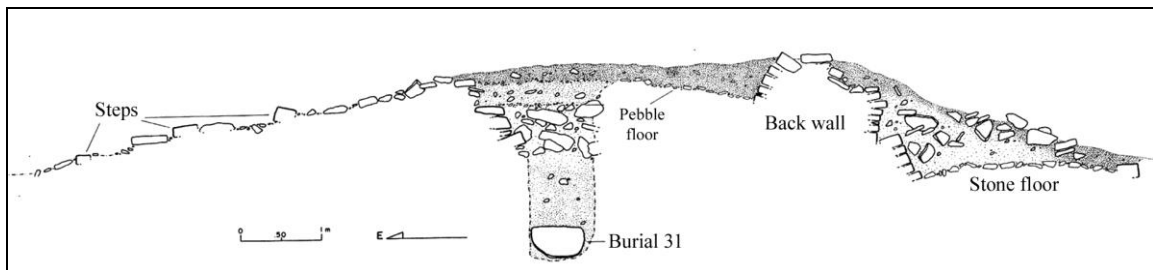


Figure 9.217 South profile of Structure K7-1 (Drawing by L. Luin, VCAP)

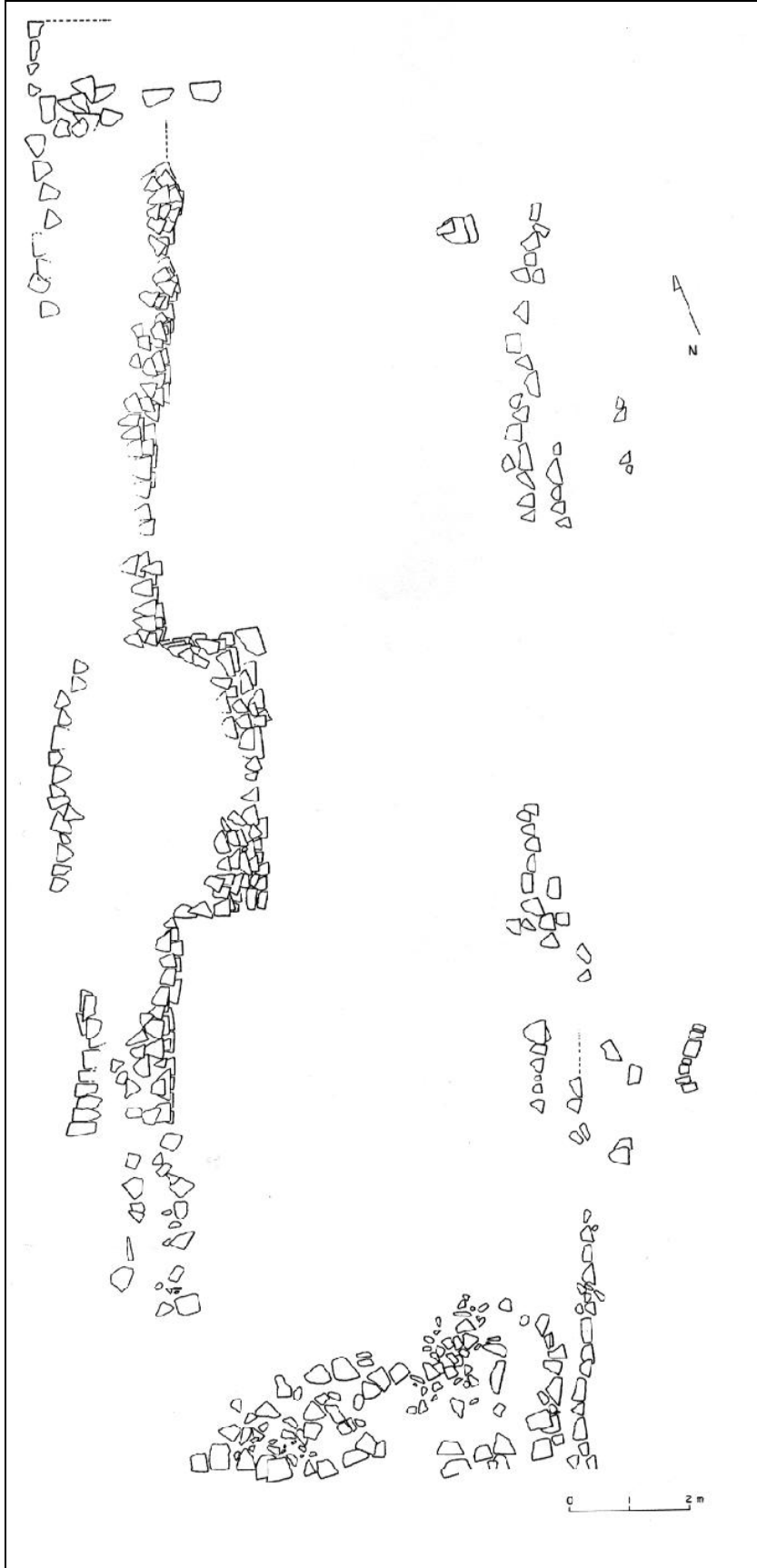


Figure 9.218 Plan view of Structure K7-1 (Drawing by L. Luin, VCAP)

Unit CAN 17-5 fell inside the structure, in the southern side of the interior bench. The first 20 cm level revealed a sequence of two pebble floors within a matrix of dark brown soil. Below them, a fill of red clay, medium sized stones and a retention wall was excavated, reaching 1 m deep. At this point, Burial 30 was found in the southwest corner of the unit. Given the presence of a large tree, only the inferior portion of one arm was exposed. The excavation continued in the western side of the unit, and Burial 31 was found at 2.3 m below the surface. This burial was located under a thin plaster floor located at 1.4 m, light brown clay fill (1.6 m), and another clay fill of grayish dark brown color. The burial was covered with two large flat stone slabs, and was oriented east-west, in extended position, measuring 1.63 x 0.3 m. An offering of three ceramic vessels were placed around the head (Figure 9.219).

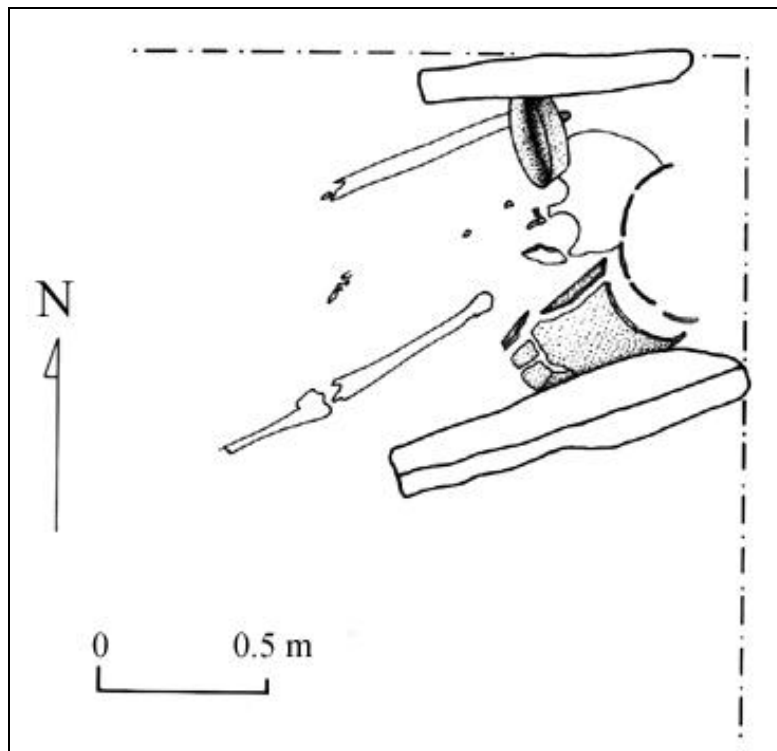


Figure 9.219 Burial 31, Structure K7-1 (Drawing by L. Luin, VCAP)

Vessel 1 (CANV-14) is a flat bottom bowl with negative paint, with squares framing “X” and diagonal dot motifs. Vessel 2 (CANV-2) is a small tripod bowl with a black line in the rim. Vessel 3 (CANV-29) consists of another vessel with negative paint decoration, its shape is cylindrical. INAA analysis of Vessel 1 proved that it was imported from Alta Verapaz, being stylistically and chemically identical to other examples from Chipoc (Sears and Seijas 2002: 106-9) (See full description in Chapter 10, under the ceramics section).

Unit CAN 17-4 was located west of CAN 17-5, and was fully excavated in 2002 (Sears 2003:177-118). The stratigraphy almost replicated what was found in CAN 17-5: two interior floors and a construction fill of square shaped stones, followed by another fill of irregular rocks in a red clay matrix. The remains of the west wall were exposed, consisting of six masonry stone lines, supported by other two rows of larger triangular shaped blocks.

Below these construction fills, a brown clay level appeared at the level where Burial 30 was found. A fragment of cranial bone, an ankle bone and remains of hand bones were recovered in a sparse pattern. However, a large amount of ceramics came from this level, suggesting that it could represent a midden. At 1.4 m deep, the greenish clay related to the plaster floor was found, containing more ceramics and a fill of river pebbles that could support the floor. At 1.6 m the amount of material diminished, as the soil became dark brown, but it changed again to greenish clay at 1.9 m, where Burial 31 was found. The excavation of the lower part of the skeleton revealed a thin layer of dark soil just beneath the bones, separating the body from the sterile soil where it rested. That

is for sure, the remains of an organic material where the body was placed. Other materials found are some quartz fragments near the head (Figure 9.219).

Trench 3 was located in the northern edge of unit CAN 17-4, towards the center of the structure. It included units CAN 17-9 to CAN 17-14 and CAN 17-22, which revealed the presence of a wide bench with different levels that divides the interior room in two halves (Sears, *et al.* 2001). Unit CAN 17-10 was excavated in 2002, just on top of the interior bench of the structure, near where three teeth were found in 2000. The objective of the unit was to find a cache or another type of dedicatory offering. The excavation exposed a sequence of construction fills similar to those recorded at CAN 17-4 and CAN 17-5, but no offering was found (Figure 9.220). However, a large amount of ceramics, and some obsidian and chert fragments were recovered in the first levels (Sears 2003: 118-9).

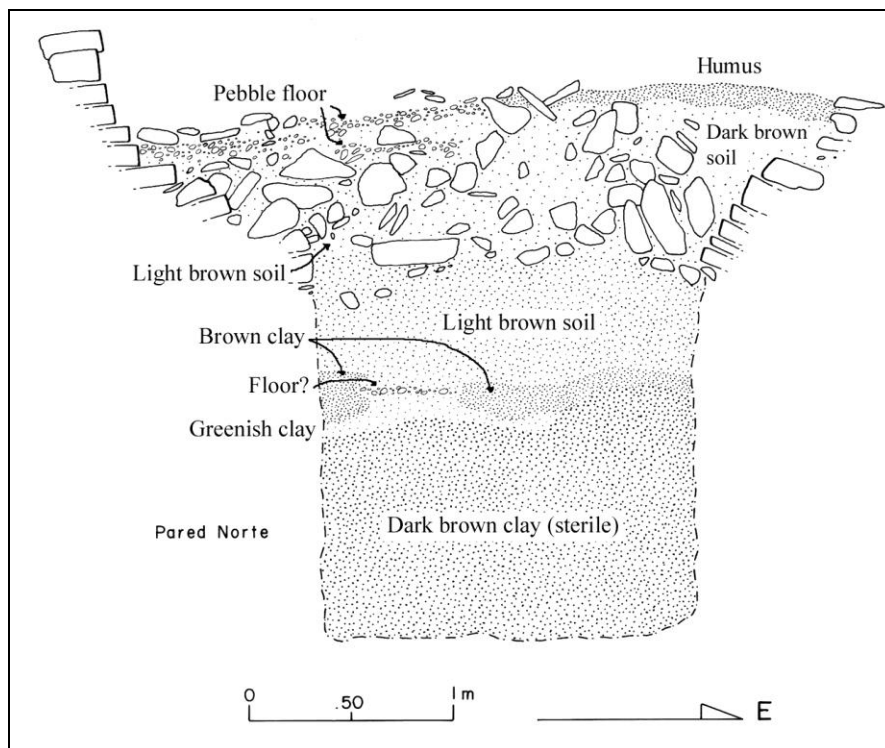


Figure 9.220 South profile of unit CAN 17-10, Structure K7-1 (Drawing by L. Luin, VCAP)

Trench 3 was defined by four units (CAN 17-15 to CAN 17-18) located on top of the collapsed west wall in the northern half of the structure. After removing the wall debris, the excavation exposed the interior northwest corner of the north room. Trench 4 consisted of 3 units, CAN 17-19 extending east from unit CAN 17-14 and units CAN 17-20 and CAN 17-21 extending west of unit CAN 17-16. Trench 5 included six units (CAN 17-23 to CAN 17-28) that exposed the western exterior wall. Some units removed the collapsed wall debris in order to find a midden.

In sum, the excavation of Structure K7-1 indicated the presence of two major construction episodes. The first one consisted of a clay platform that supported a perishable building, whose floor surface was found at 1.4 m below the surface and was defined by a series of clay fills, including a river pebble level. It covered Burial 31, probably dated to the Concordia ceramic phase. On top of this platform, a midden accumulated just before the next construction phase was located. The second episode consisted on a fill of irregular stones of approximately 1 m deep, including retention walls that supported the exterior walls of the second phase building (Sears 2003: 119). The architecture of the second episode recalls the architecture of Dos Pilas under the reign of Ruler 4 (Demarest, pers. com.), date between 740 and 760 C.E. Given its dimensions and layout, its function seems to have been residential.

9.6.2 *Structure K7-2*

This building is located north of K7-1, with similar dimensions and shape, oriented 20 degrees east of north. The initial excavations were initiated by Erin Sears and continued by Lucía Morán in 2000 as part of Operation 18 (Searset *al.* 2001). However,

most excavations were conducted by Jeanette Castellanos in 2002 (Castellanos 2003). Initial investigations included preliminary surface cleaning of stones from the collapsed structure roof. Unit CAN 18-1 consisted of a 1 x 2.5 m test pit placed where the bones were found, which exposed various teeth, a mandible, some ribs, a tibia and a fibula, all of them on top of large stone slabs. After removing more stones, a portion of an articulated leg with some foot bones were also found (Sears, *et al* 2001: 77-80).

Unit CAN 18-2 was a 7 x 1.50 m east-west oriented trench located in the eastern edge of the building, which faces the acropolis. At 30 cm below the surface, a white pebble floor was exposed, measuring 10 cm of thickness. The floor continues to the base of the structure exterior wall. In the western side of the structure, a 2 x 2 m unit was placed (CAN 18-3) in order to expose the width of the exterior wall and a midden behind it. However, after excavating 50 cm, only debris of the collapsed wall was found. For that reason, another 2 x 2 m unit (CAN 18-4) was placed directly north of the previous one. This second unit found exactly the same, blocks of the collapsed wall and was finished at 50 cm below the surface. Finally, 2 x 2 m unit CAN 18-5 was placed in front of the eastern edge of Structure K7-2, in order to follow the white pebble floor found in unit CAN 18-2. At 20 cm below the surface, the floor was found, but more eroded, continuing to the east, reaching the base of the western edge of the acropolis platform.

The 2002 excavations focused on the eastern façade (Figure 9.221). Most excavation units presented four levels: humus (0-0.30m); wall and roof collapse debris (0.30-1 m); plaster or stone surfaces (interior floor, exterior floor and central bench); and interior or exterior construction fills made with stones or clay, reaching a maximum depth of 2.30 m below the central interior bench (Castellanos 2003: 145-146).

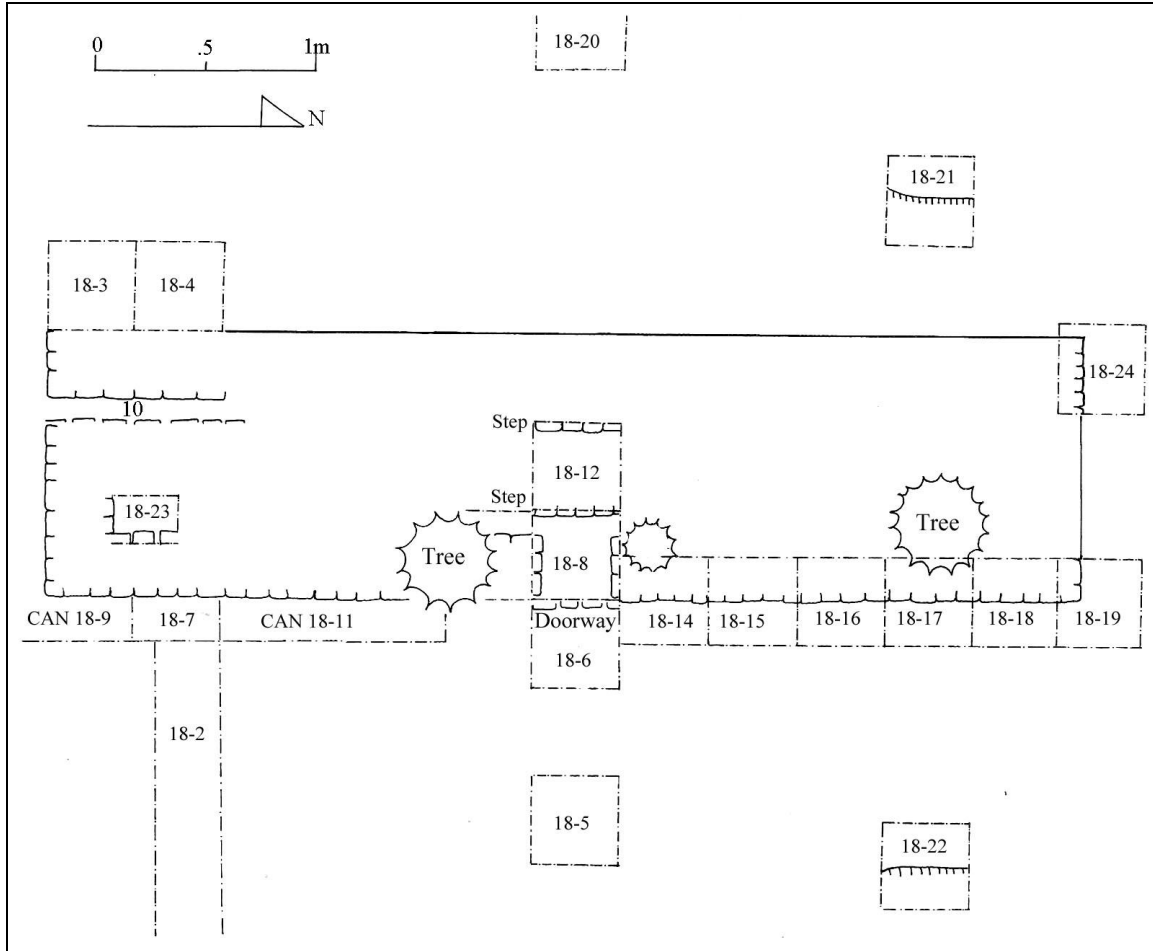


Figure 9.221 Sketch of excavations in Structure K7-2 (Drawing by J. Castellanos, VCAP)

In the east-west axis of the structure a trench of 4 units explored the central entrance and bench. Unit CAN 18-6 exposed a plastered stone floor leading to a staircase step. In the same unit, the east side of the central room north jamb was also exposed. Directly to the west, unit CAN 18-8 exposed the other side of the doorjamb, revealing that the façade wall measure 1.10 m wide. The west side of the unit revealed the bench façade at only 0.4 m from the room entrance, and measuring 0.6 m high. CAN 18-13 exposed part of the south doorjamb, estimating the width of the entrance to 1.60 m. Following the trench to the west, unit CAN 18-12 exposed the entire width of the bench,

measuring 2 m, whose surface was made with large stone slabs. Some remains of the back wall of the structure were identified directly west of the bench. The excavation penetrated the bench, exposing its construction fill, corresponding to medium sized limestone blocks mixed with red clay. Below that, another fill consisted of 0.5 m of reddish brown clay, followed by a third one made with river stone alignments. A final layer of compact yellowish brown clay was placed directly over the sterile level of yellowish clay (*Ibid*, 147-148).

Other five units were located in the southern edge of the structure. CAN 18-7 was a 2 x 1 m unit that exposed the eastern façade exterior wall, consisting of three rows of masonry blocks, as well as remains of plaster in the platform exterior floor, made with flat stone slabs. The wall was followed by unit CAN 18-11, a 5 x 1 m trench that exposed a series of squared features that seems to represent additional entrances measuring 1.5 m wide. Unit CAN 18-9 consisted of an “L” shaped trench of 3 x 7.5 m located south of the latter one, which exposed the southeastern corner of the building and its east-west width (6 m). The corner was excavated, exposing a well preserved wall reaching 1 m below the surface, made with 5 rows of masonry blocks and measuring 1.20 m wide. Unit CAN 18-10 was a 1 x 4 m trench located next to units CAN 18-4 and CAN 18-2, in order to find a possible southern access. However, it exposed the collapsed interior face of the back wall. Six rows of masonry blocks were identified, estimating a height of 1.5 m, though it could have been more, given that some rubble was removed in the 2000 season. Finally, unit CAN 18-23 was placed inside the southern half of the interior room in order to find another bench, but it only exposed the interior floor and the interior corner of the east and south walls (*Ibid*, 149-150).

A trench of six 2 x 2 units explored the northern half of the eastern façade (CAN 18-14 to CAN 18-19) starting from the northern doorjamb, previously exposed by units CAN 18-6 and CAN 18-8. The trench exposed the façade reaching the northeast corner of the structure, measuring a total length of 22 m from the southeast corner, exposed in CAN 18-9. Unit CAN 18-24 found the northwest corner, proving that the structure width is also 6 m in its northern end. The final assessment of the eastern façade remains consisted of a low wall made with four rows of masonry blocks, measuring 1 m high, and three possible entrances, all of them originally covered with plaster. All units were excavated below the floor, reaching 1.2 m of depth, exposing two columns or walls of 1 m wide, separated by a fill of brown clay. This seems to represent a previous construction stage, but its original shape was not clear, given that these deep walls do not appear in a symmetric pattern throughout the structure. In addition, unit CAN 18-22 exposed part of a perimeter wall that also goes 1.2 m below the floor, indicating the presence of the previous construction (*Ibid*, 151-2).

Three final units explored the area behind the back wall (west), in order to find a midden. Unit CAN 18-20 did not find any substantial amount of artifacts, given that the sterile yellowish clay was found at 1 m below the surface. The same happened with unit CAN 18-21, where the sterile soil appeared at 0.5 m from the surface. This means that this natural stratum goes deeper in east direction, or it was modified during the construction of Structure K7-2 (*Ibid*, 152).

As a result of the excavation of Structure K7-2, it is clear that it had two construction phases. The first one is poorly known, but it consists of a building with masonry walls that reach at least 1 m in height, covering the same area as the later phase.

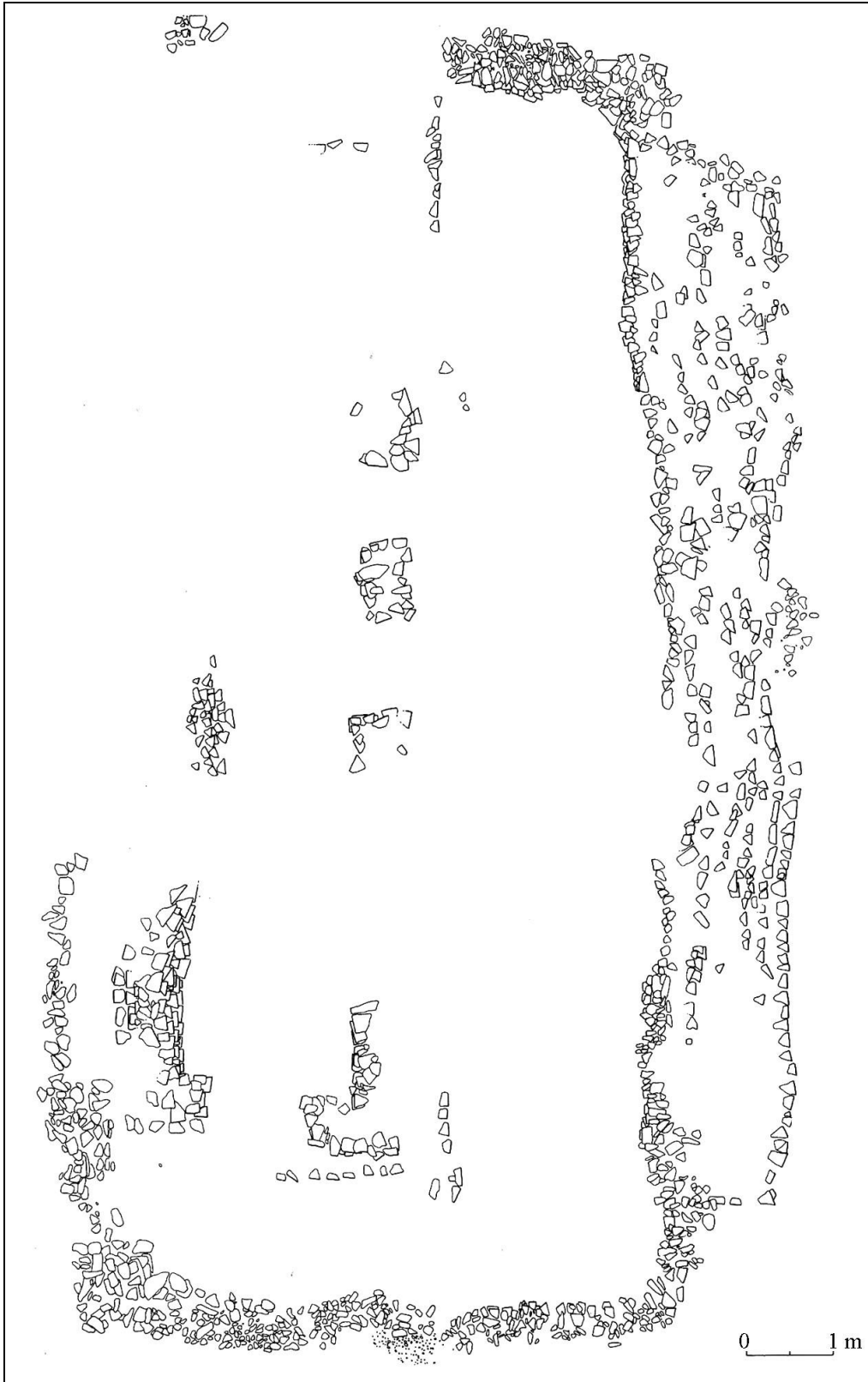


Figure 9.222 Plan view of Structure K7-2 (Drawing by L. Luin, VCAP)

This first building was completely filled with a brown clay fill, creating a basal platform that supported the second phase building. This latter consisted of a 22 x 6 m building with masonry walls measuring 1.2 m wide. The interior area could have had up to five rooms in a row, with a 2 m wide central bench and at least three 1.6 m wide entrances in the eastern facade. Even when the excavations exposed a large amount of flat stones, it seems that the roof was not vaulted; instead, wooden beams could have sustained them. Both the interior and exterior floors were made with flat stones, covered with plaster. The eastern façade had a shallow step that led directly to the west edge of the acropolis, communicating with the West Patio and later with Structure K7-33. Given its similarity with Structure K7-1, both phases of Structure K7-2 probably had residential function.

9.6.3 *Structure K7-3*

This building was first identified by Matt O'mansky in 2000, as it was not included in the original Harvard map. Erin Sears carried out some initial explorations that year, cleaning two looter trenches in its northern side, under Operation CAN 16. The first trench measured 5.5 x 1.6 m, and the other one 3 x 0.75 m. Their profiles were cleaned and drawn, showing a variety of fills of different colors, including dark brown, yellowish green and reddish clay. Some white lines suggested the presence of plaster floors (Sears, *et al.* 2001).

In the year 2001, the connection between this and Structure K7-1 was investigated by Erin Sears (Sears and Seijas 2002). The surface cleaning exposed a shallow platform with two steps to the west and a possible ramp to the east, oriented north-south and

extending 10 m between both buildings. Close to the surface, a complete Chablekal Fine Gray vessel was found at 9.3 m from the west edge of the platform (*Ibid*), indicating that was a late addition to both structures.

Excavations in the structure began in 2002, when it was divided by eight sections of 5 x 10 m. Each section was excavated only by removing the humus level, which varied between 5 and 20 cm. This exposed the northwest, northeast and southeast corners of the basal platform, the north and south walls of the platform, six steps in the eastern façade, and a single interior chamber with walls made with soft limestone blocks (Figure 9.225).

A trench of six 1 x 2 m excavation units was placed on top of the mound (western limit of Looters Trench 1) as well as other eleven 2 x 2 m units in the remainder part. These units, numbered CAN 16-1 to CAN 16-17, revealed the entire interior room of the C-shaped superstructure, with an eroded plaster floor and its open entrance facing east, directly towards the platform staircase (Figure 9.224). The room walls measured from three to four stone lines high (Sears 2003: 121-122). All the architectonic features suggest a close similarity with some buildings of Dos Pilas, especially the ones in the Murcielagos Group, dated to Ruler 4 reign (Demarest, pers. com.).

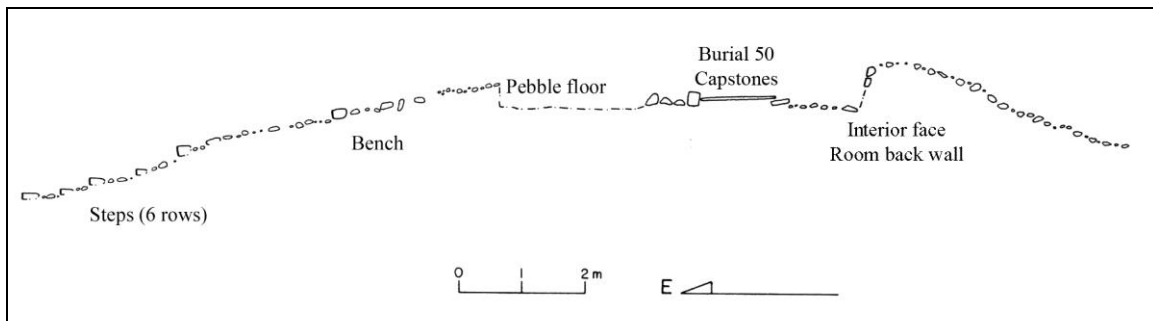


Figure 9.223 North profile of Structure K7-3 (Drawing by L. Luin, VCAP)

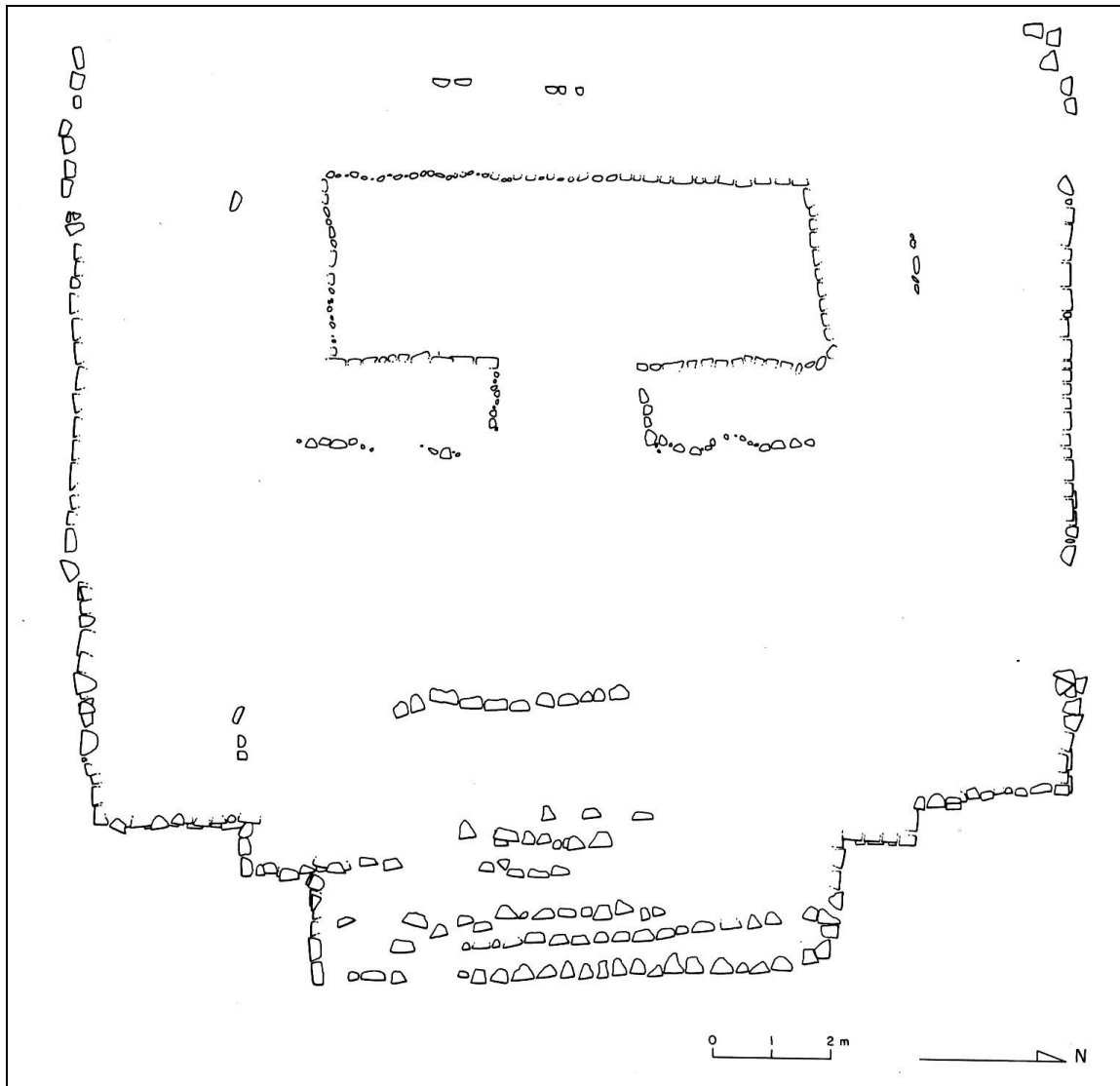


Figure 9.224 Plan view of excavations in Structure K7-3(Drawing by L. Luin, VCAP)

In unit CAN 16-9, located at the center-west section of the interior room, a carved stone panel broken in three pieces was found lying on top of the floor, directly in front of the eastern entrance and at 0.58 m from the back (west) wall (Figures 9.225). In the same spot, a spiked censer with handles was recovered, as well as a stingray spine near the room entrance (Sears 2003: 123).

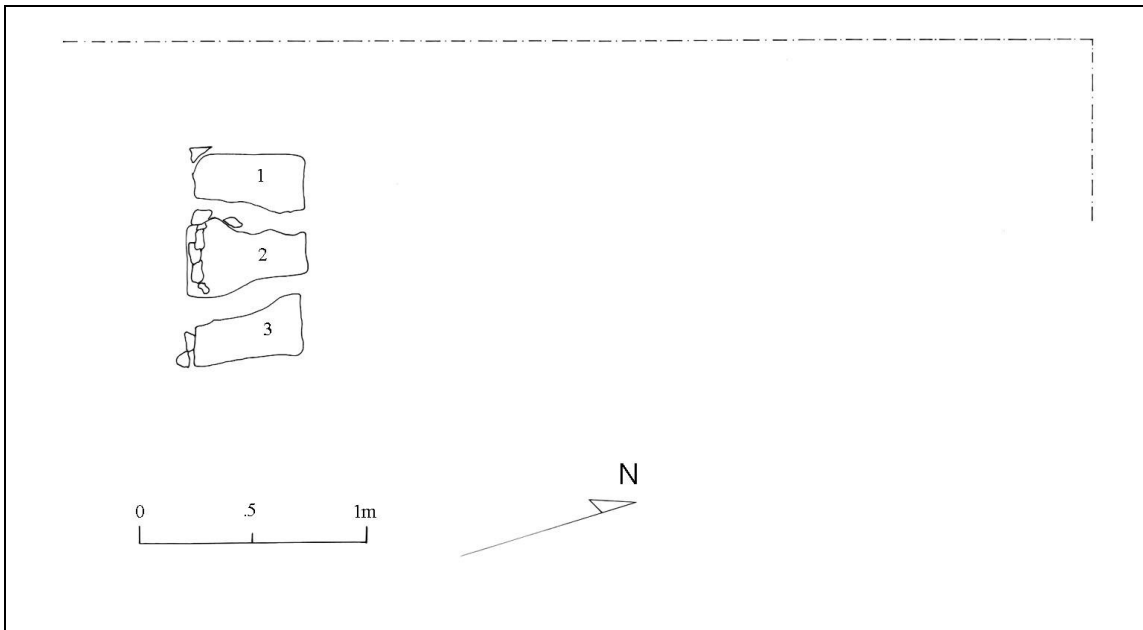


Figure 9.225 Location of Panel 2 in unit CAN16-9 (Drawing by L. Luin, VCAP)

The panel, named Panel 2, is of rectangular shape, measuring 90.3 cm long by 52 cm wide, with 10.5 cm in width. The carved scene has a 6 cm wide frame, and has two individuals facing each other, with glyphic texts on the upper center and upper left and upper right corners (Figure 9.226). The person on the right side is holding an object and it is offering it to the other one. Unfortunately the central and right texts are totally illegible. Nevertheless, the text and scene indicate that portrays ruler *Taj chan Ahk* receiving a royal symbol, probably from his father or any other predecessor, as part of the accession ceremony (See full interpretation under epigraphy section) (*Ibid*).

Units CAN 16-18 (2 x 1 m) and CAN 16-23 (2 x 2 m) were located on the room entrance, in order to find a dedicatory cache, but their excavation only revealed the platform construction, consisting of a plaster floor supported by a dark greenish brown clay fill (*Ibid*).



Figure 9.226 Panel 2 *in situ* inside Structure K7-3 (Photo by T. Barrientos, VCAP)

Unit CAN 16-19 (2 x 2 m) was located near on the interior west wall just where Panel 2 was found. After excavating 40 cm into the construction fill, five large plain stone slabs appeared in the eastern half of the unit (Figure 9.227). Small triangular shaped stones supported the slabs on their extremes. The western half of the unit showed a semicircular feature made with medium sized stones. This unit was extended to all sides through units CAN 16-20, 21 and 22, revealing the top of a tomb chamber, named Burial 50. It measured 2.2 m long and 0.8 m wide, was covered with a total of six long stone slabs, and was aligned with the north-south axis of the building (Figure 9.228). A thin plaster layer (10 cm thick) sealed the tomb. Unit CAN 16-20 was excavated outside the tomb perimeter, in order to expose its northern wall (Figure 9.229).

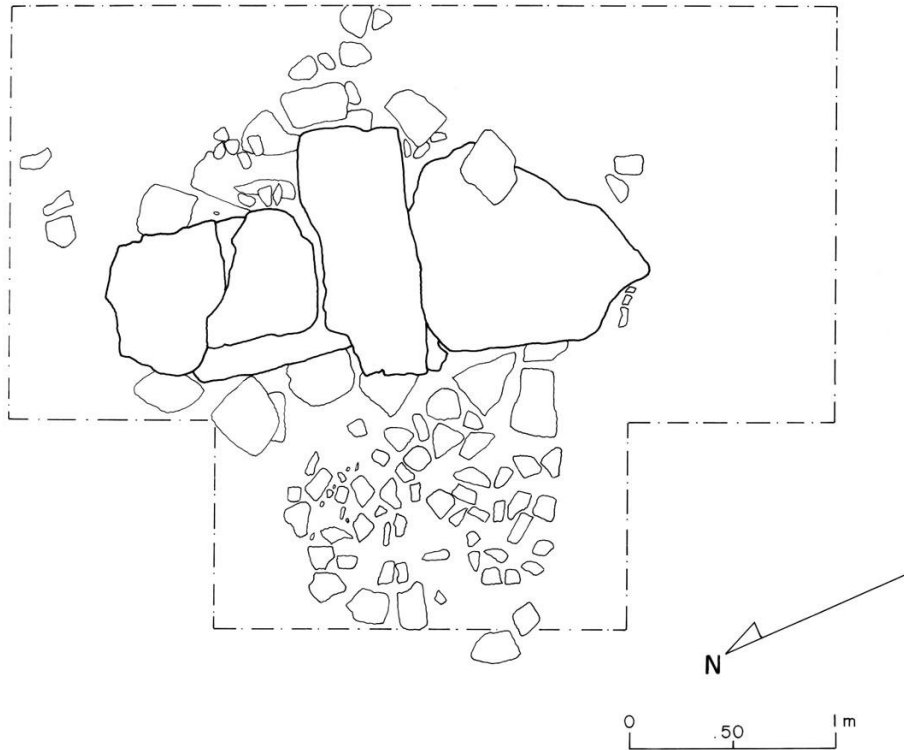


Figure 9.227 Large stone slabs covering Burial 50 (Drawing by L. Luin, VCAP)

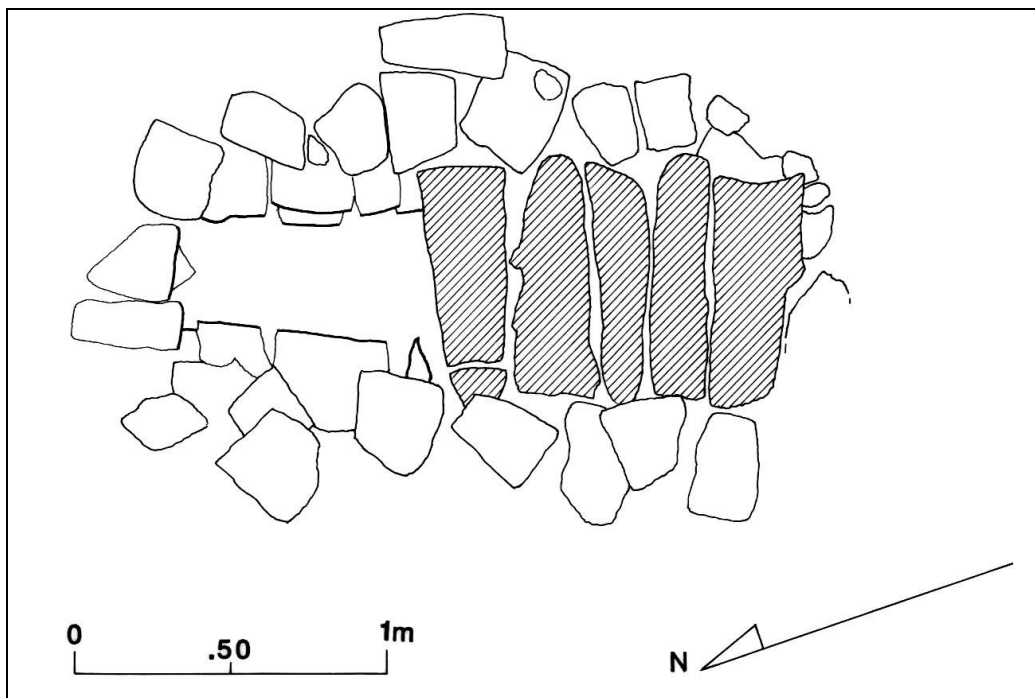


Figure 9.228 Second layer of flat stones covering Burial 50 (Drawing by L. Luin, VCAP)



Figure 9.229 Excavation of Burial 50 and Structure K7-3 (Photo by T. Barrientos, VCAP)

After going through a fill of brown clay, the wall was exposed, measuring 0.8 m high and consisting of eight rows of masonry blocks. After removing the tomb wall and roof, various thin stone slabs in vertical and inclined position were noticed inside, which originally formed the cist floor (Figure 9.230). The weight of the structure fill made the cist walls to sink, making the thin slabs to rise in the middle and to move the bones and offerings to the sides. After removing the thin flat stones, a hard and compact brown clay surface was found in the bottom of the cist. (*Ibid*, 125-127).

The human remains were very incomplete, given that only a long bone was found in the northeast quadrant, and small bone fragments throughout the northern side, on top of some thin stone slabs.

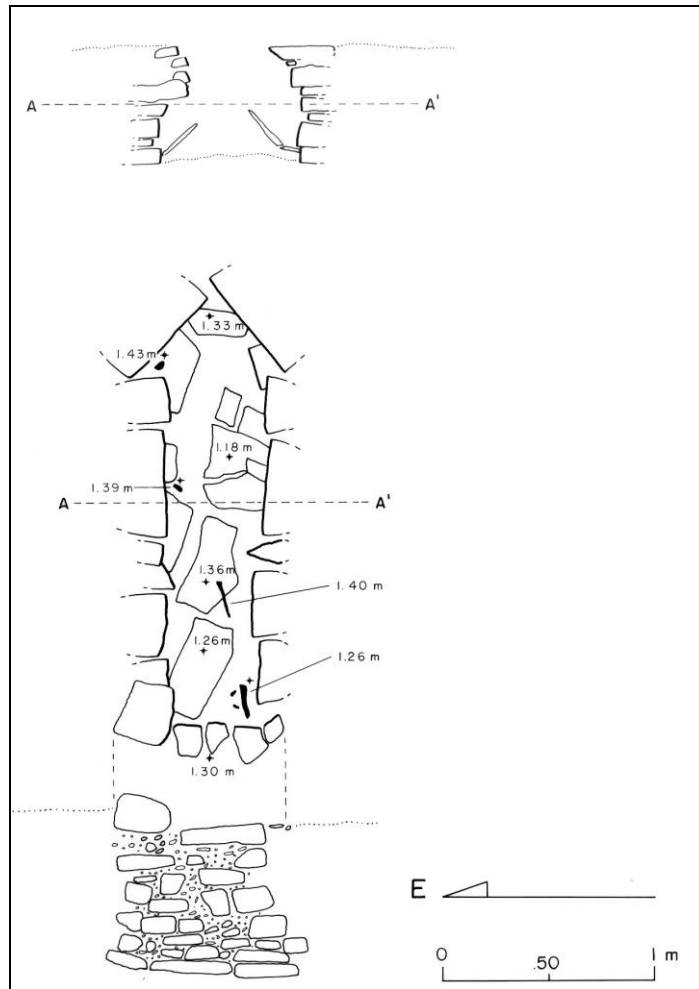


Figure 9.230 North profile (above) and plan view (center) of Burial 50 crypt and its northern wall (below)
(Drawing by L. Luin, VCAP)

Some loose teeth were found in the southeast part of the tomb, and a mandible fragment appeared in the middle southern part. All bones were fragile, suggesting that they were exposed for a long time or that they were affected by a specific type of pathology. Although the incompleteness of the bone remains suggests that it corresponds to a secondary deposit, the distribution of bone fragments show a pattern of head parts (teeth, mandible) in the southern side and other bones of the lower body in the northern half (see details in Chapter 10, under burials section) (*Ibid*, 126-128).

The excavation of the tomb interior revealed a Saxche-Palmar polychrome plate in the northeastern corner (Vessel 1, CANV-25), a flat based Cocalas Bichrome orange bowl in the southwest corner (Vessel 2, CANV-37), and an eroded Saxche-Palmar polychrome vase (Vessel 3, CANV-61) in the southeast corner (see detailed description in Chapter 10, under ceramics section). Eight jade objects were also part of the funerary offering. Jades 2 and 4 were identical and consisted of two very thin (almost transparent) carved imperial jade plaques. The carving bears an U-shaped and “X” design found on the *huunal* or “Jester God” forehead, and seven holes drilled on the plaque edges indicate that they were worn as royal diadems. Other 4 jades found (Jades 3, 5, 7 and 8) consist of two earflares, being Jades 3 and 7 one set and Jades 5 and 8 another one. Jade 1 is a large bead with a large hole in the middle (*Ibid*, 127) (Figure 9.231).

The archaeological evidence suggests that Structure K7-3 had a funerary function. The basal platform seems to have been built in a single phase in order to contain Burial 50. The superstructure was made of perishable materials, probably as a shrine dedicated to the occupant of Burial 50, who could be an early ancestor (*Chan Ahk Wi' Taak Kay?*) or *Taj Chan Ahk's* father. In any case, the jade diadems indicate that the individual had a royal status. About Panel 2, it is not clear if it was originally placed on any of the superstructure walls or in a perishable bench or furniture. The sculpture could had also been initially located on the royal palace and later deposited and broken on Structure K7-3 as part of a termination ritual that also involved the use of the stingray spine and the censer. Given that Panel 2 was placed directly above Burial 50, the most likely option is that the human remains correspond to *Taj Chan Ahk* father or predecessor.

However, Cancuen Panel 1 refers to an exhumation ritual carried out by *Taj Chan Ahk*, related with the burial of *Chan Ahk Wi' Taak Kay*, making it a second option for the identification of the individual buried in Structure K7-3. In any case, the location of Panel 3 and Burial 50 in Structure K7-3 and not in the palace indicates a direct link between these two buildings and a peculiar pattern of a royal burial placed and venerated outside the acropolis.



Figure 9.231 Jades found as part of Burial 50 (Photo by B. Kovacevich, VCAP)

9.6.4 Defensive walls

Since the beginnings of the royal palace exploration, Matt O'Mansky and other project archaeologists identified a series of low wall features in different areas in some interior courtyards, but mainly in the surrounding areas of the acropolis platform.

Excavations in 2001 led by Erin Sears north of Structure K7-1 revealed a low masonry stone wall, consisting of two or three rows of limestone blocks. The wall measured between two and three meters wide, and it extended from Structure K7-1 northeast corner (Figures 9.232, 9.233), to Structure K7-2, and continuing north, reaching the staircase of the Northwest Patio, and finally turning east for 105 m more. It ends in a

“T” shaped feature that is attached to a small mound (Figure 9.234). The total length of the wall is 138 m and given its shallow depth, it was possible to identify a possible entrance or doorway aligned with Structure K7-2 southern edge. No post holes were found in the top of the wall and no evidence was found that connected this wall with Structure K7-3 (Sears and Seijas 2002: 103-4).

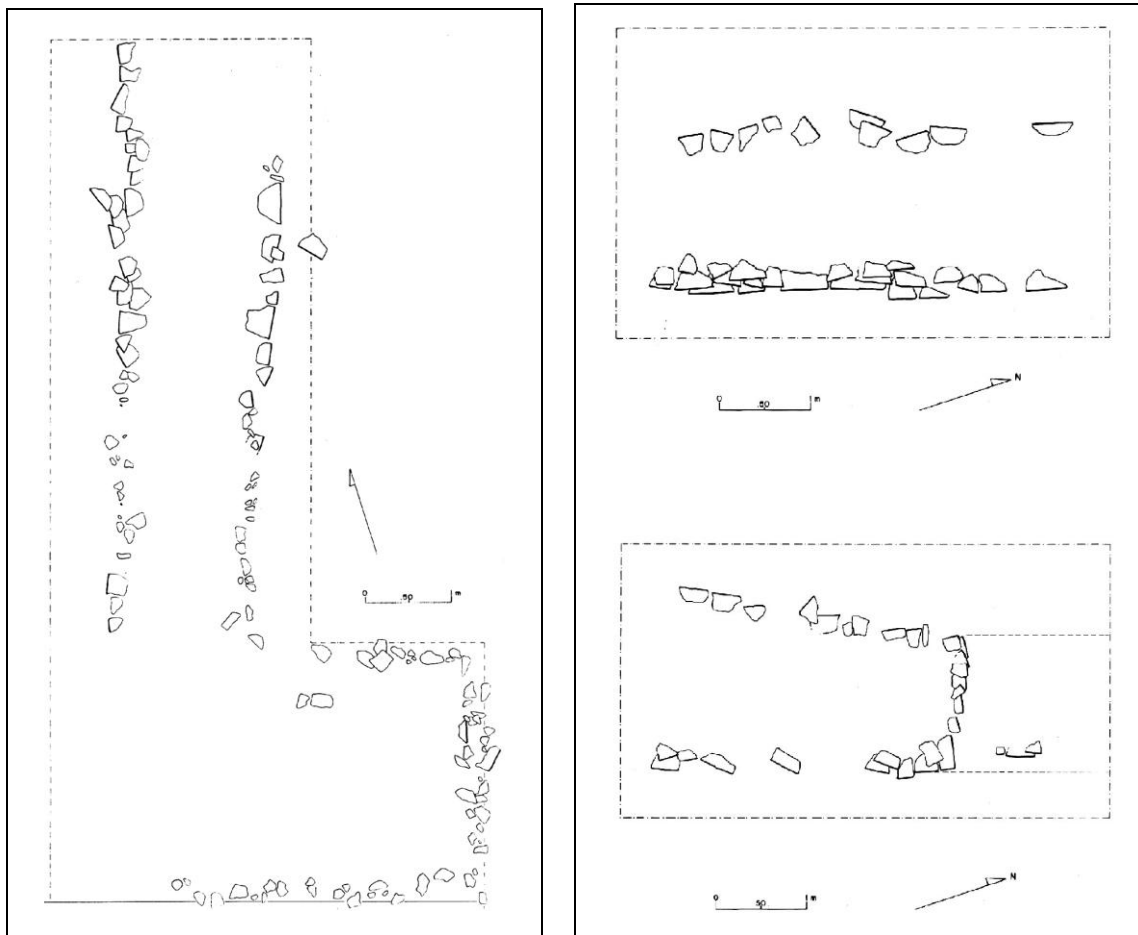


Figure 9.232 Southern limit of West Defensive Wall (left) and excavation of some sections (right)
(Drawings by L. Luin, VCAP)

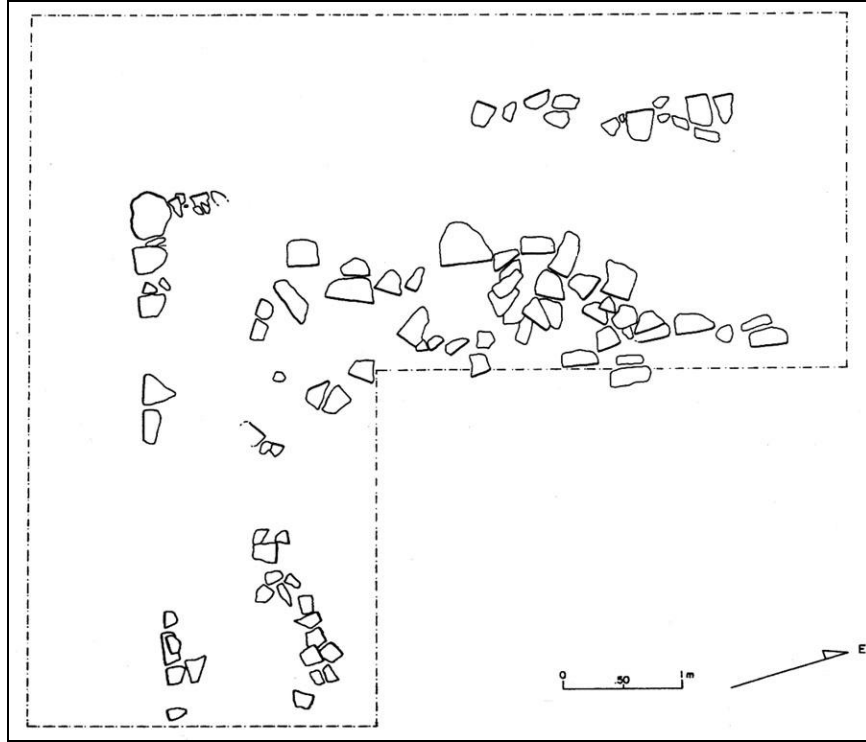


Figure 9.233 Northwest corner of West Defensive Wall (Drawing by L. Luin, VCAP)

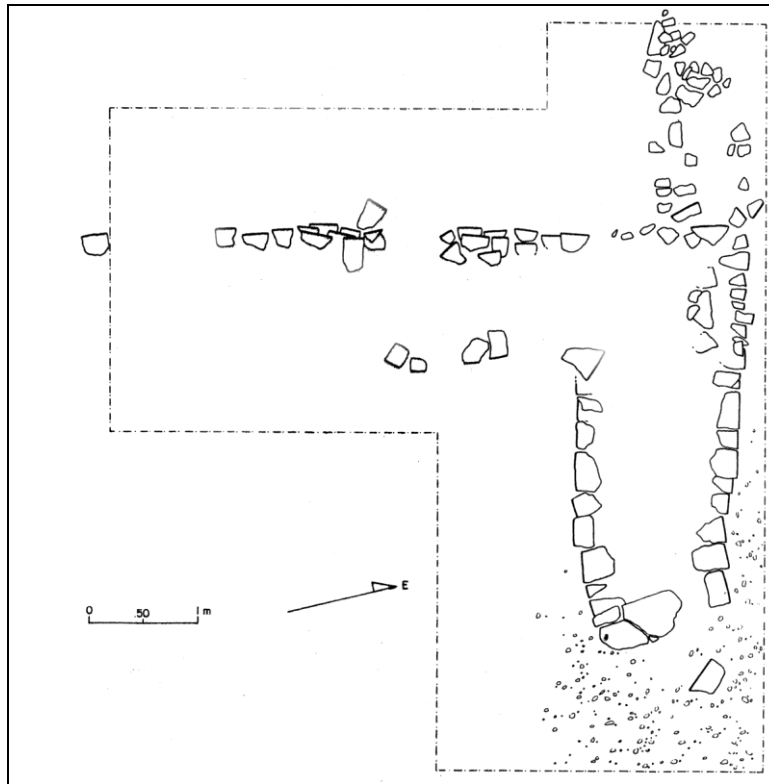


Figure 9.234 Northeast end of West Defensive Wall (T shaped feature) (Drawing by L. Luin, VCAP)

The wall was named West Defensive Wall, and Operation CAN 33 was assigned. Units CAN 33-1 to CAN 33-5 were five 2 x 2 m pits aligned in an east-west axis next to unit CAN 29-6, following the eastern limit of the wall (Figure 9.235). All five units removed collapsed debris from the palace, exposing a pebble floor consisting of white and dark river pebbles, found at 10 to 15 cm below the surface (*Ibid.* 104) (Figure 9.236).

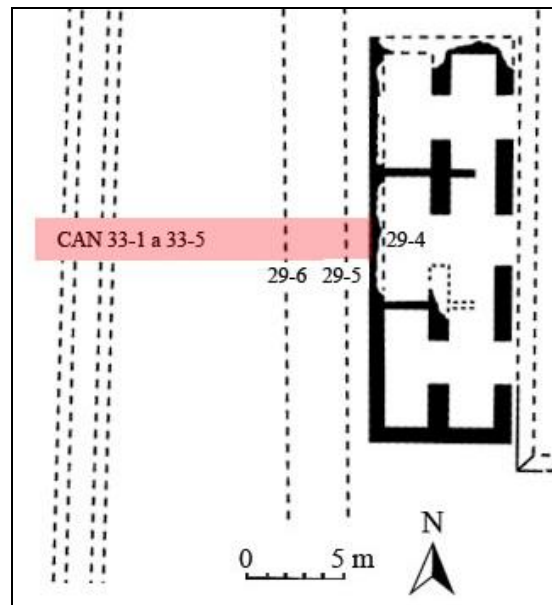


Figure 9.235 Location of Operation CAN 33 excavation units in West Defensive Wall (Drawing by T. Barrientos and L. Luin, VCAP)

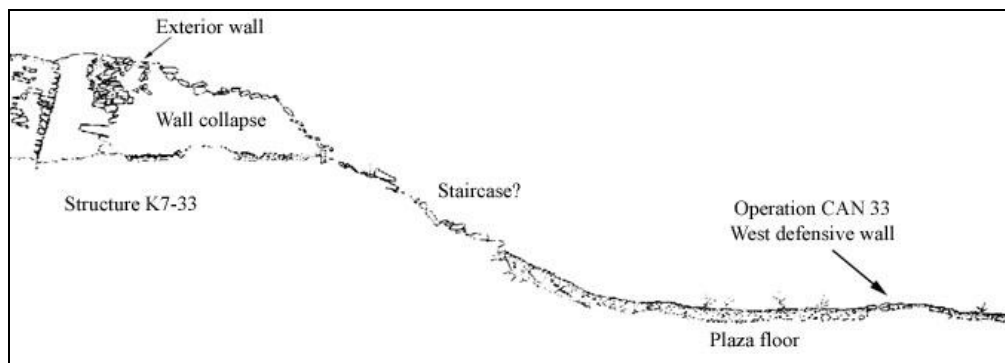


Figure 9.236 North profile of Operation CAN 33: Structure K7-33 and West Defensive Wall (Drawing by L. Luin, VCAP)

Some cultural materials were collected in the surface along the wall. These included figurine fragments, pieces of human bone and teeth, and chert flakes. It is not clear if it had defensive purposes like the ones found in the Petexbatun area (Demarest *et al.* 1997) or just marked a physical boundary around the royal palace that separated an important social or sacred space from the rest of the site. The defensive function of this wall could be related to other three low walls: one was excavated by Edgar Suyuc (Suboperation CAN 34A) south of the Southeast Patio (Figure 9.237); another one was found blocking the access from the Southwest Patio to the Central Patio, joining structures L7-13 and K7-36. Another similar feature was identified in the West Patio, between structures L7-11 and L7-12.

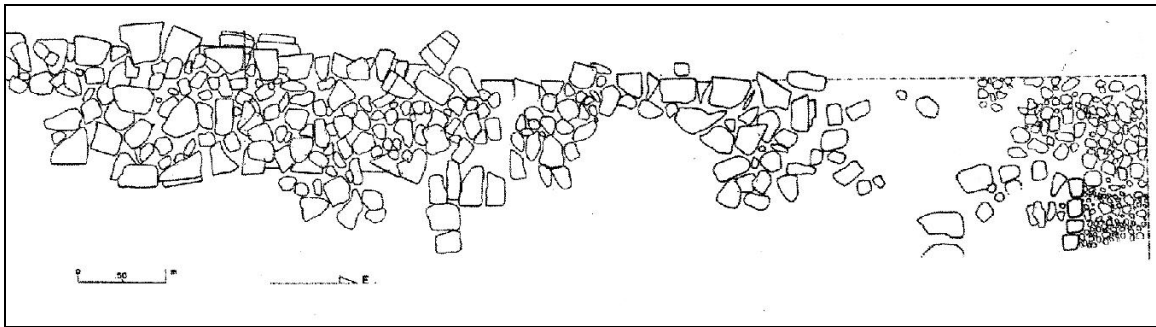


Figure 9.237 Plan view of South Defensive Wall (Drawing by E. Suyuc and L. Luin, VCAP)

9.6.5 East Plaza

Although this plaza is not a physical part of the royal palace compound, it is important to describe some of its architectural and sculptural features that are directly related to Structure L7-27, which functioned as one of the two main entrances. It is of particular importance the layout of the East Plaza in relation to the palace, because it was conceived as an enclosed space for the location of monuments and buildings, creating a scenic area for performing different types of rituals.

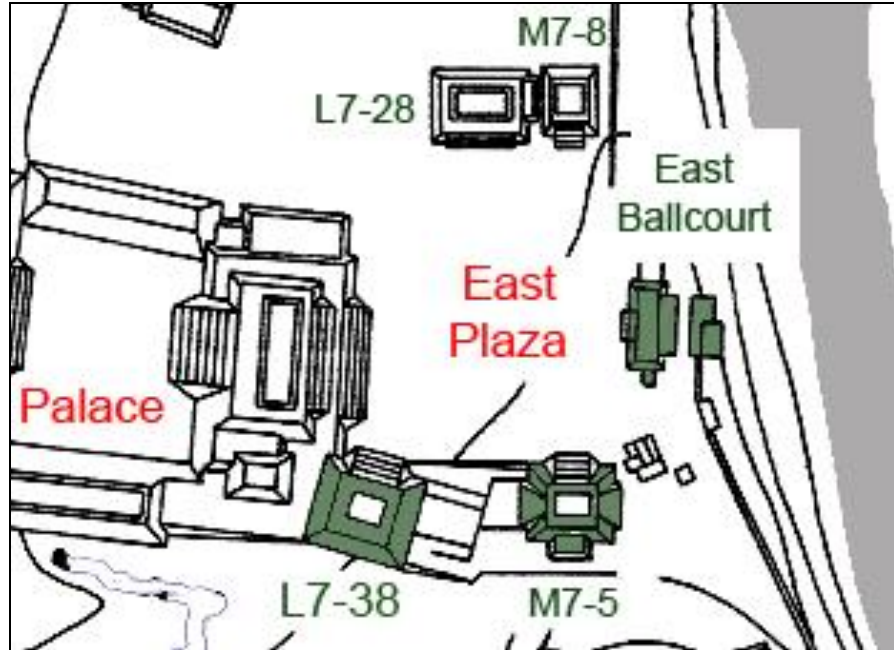


Figure 9.238 Map of the East Plaza of Cancuen (Map by T. Barrientos, L. Luin and M. Wolf, VCAP)

Of particular importance was Structure L7-38, the largest pyramidal building of the site (Martinez 2005), and the East Ball Court, with a facade decorated with water symbolism (Fernandez 2011) and Panel 3 in its interior chamber, as well as four plain stela-altar pairs and three ball court altar-markers in the playing alley. Stela 18 (now looted) and Altar 4 were two carved monuments that stood at the center of the Plaza.

However, the most interesting aspect of the East Plaza is the location of six plain stelae (9, 10, 11, 12, 13 and 16) and two plain altars (i and j) flanking the main staircase of Structure L7-27. Together with the Ballcourt plain stelae (4, 5, 6, 7) and altars (a, b, c, d, e), and another set of plain monuments at the northern side of the plaza (Stela 17 and Altar m), these plain monuments clearly indicate the public nature of the space (Figure 9.239), as opposed to the privacy of the “Main Plaza” located west of Structure L7-27 and the lack of monuments in the North Plaza, which could have a different function.

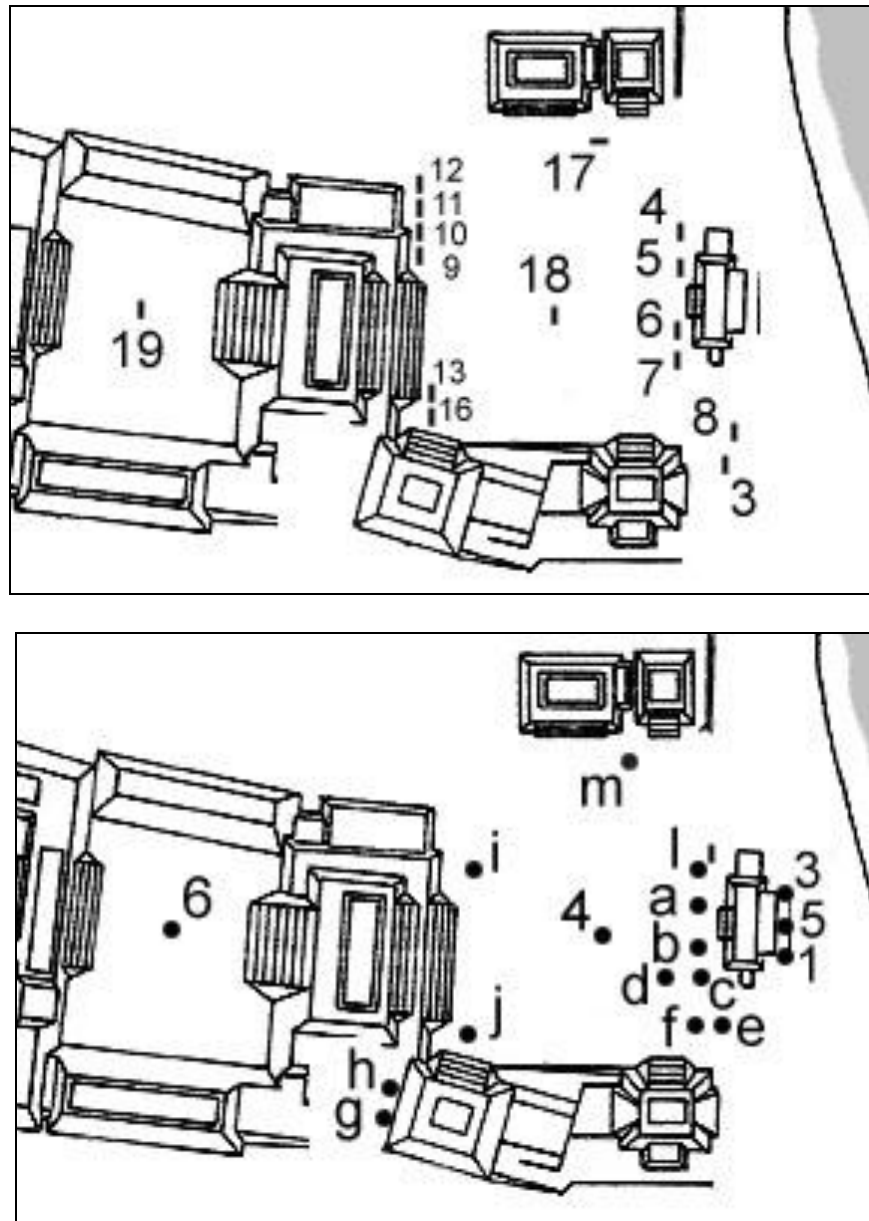


Figure 9.239 Stelae (above) and altars (below) located in the East Plaza of Cancun
(Maps by T. Barrientos, L. Luin and M. Wolf, VCAP)

Furthermore, the direct visual connection between Structure L7-27 eastern façade and the western façade of Structure M7-1 of the East Ballcourt, also suggest a link between the activities of the palace and the plaza. This is also supported by the location of Burial 77 (*K'an Ma'x* tomb), which is aligned with Structure M7-1, whose façade inscriptions could have been commemorated the appointment of *K'an Ma'x* as successor

of *Taj Chan Ahk* (Fernández 2011). In this sense, the function of the East Plaza should not be viewed as apart from the activities carried out in the royal palace, instead, they have to be interpreted as complementary or as part of the same political program. Of particular interest is the location of altars g and h on the western side of Structure L7-38, creating a small enclosed space between this building and the south edge of Structure L7-27, where a small structure is located (C-25 in the Harvard map).

9.6.6 *North Plaza*

Finally, just as the East Plaza played an important role linked with Structure L7-27, the North Plaza of the site was also related with the northern edge of the palace, especially with Structure L7-14 and the Lower North Patio. It is also important to note that Structure L7-1 had two façades, one looking south and the other looking north. From the northern doorway, a staircase descended to the Lower North Patio, and from here to the North Plaza. As it was described at the beginning of this chapter, the North Plaza is open on its west side, and its eastern limit is defined by a line of small and long structures.

East of them, the Northeast Plaza is located, which communicates with the Sacbe, M9 group and Main Port. However, the main feature of the North plaza is the Main Ballcourt, located in alignment with the northern staircase of the royal palace (Figure 9.240). Given its location, the ballgames performed here were watched from the top of Structure L7-1 and the other structures located in the northern end of the palace (structures L7-14, L7-10 and L7-23).

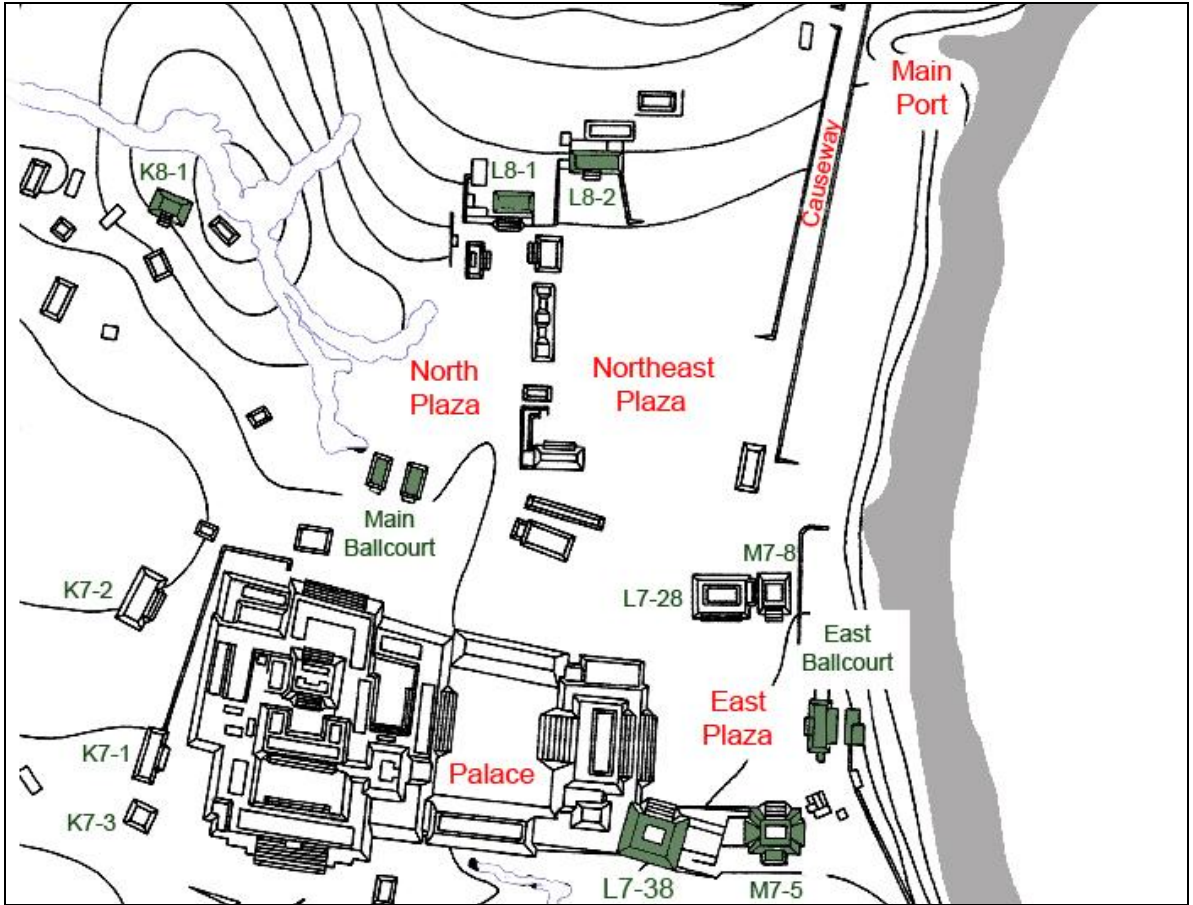


Figure 9.240 Map of the North and Northeast plazas of Cancun
(Maps by T. Barrientos, L. Luin and M. Wolf, VCAP)

9.7 Hydraulic Features

Some important architectural features were identified south and north of the royal palace, which are related to water management activities. Some of these had domestic and drainage functions, while others are more related with a ceremonial use.

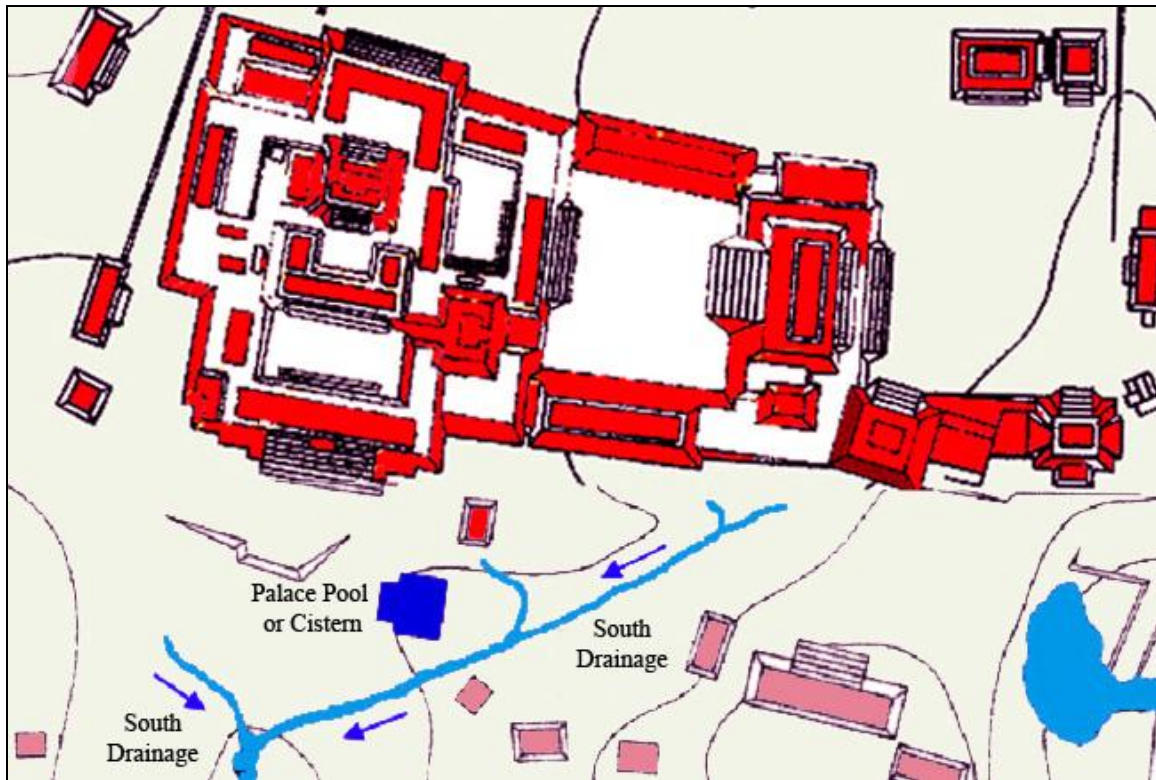


Figure 9.241 Location of hydraulic features in the south side of the royal palace
(Map by T. Barrientos, after L. Luin and M. Wolf, VCAP)

9.7.1 Southern Drainage

A small canal served as the main drainage for the East Plaza and the Palace Main Plaza (Figure 9.241). Operation CAN 20 was defined in 2000 to recover the surface material located in the southern drainage of the East Plaza. During this survey, abundant large ceramic sherds were collected, including large jar rims and complete necks, as well as figurine fragments, chert flakes, and obsidian blade fragments (Barrientos *et al.* 2000). These artifacts seem to reflect water carrying activities, evidenced by the presence of large jars, but the presence of other artifacts seem to be caused by natural erosion of lithic debitage and remains of other activities that could be carried out in the East Plaza and the southeastern section of the royal palace.

In 2005, more excavations were located in association with this drainage, in order to relate it with the Palace Pool. These excavations were carried out by Silvia Alvarado and were defined as part of Operation CAN 42, which had previously included excavations in the South Plaza. Four excavations units (CAN 42-9 to CAN 42-12) were located in order to define the degree of modification of the natural creek. These were small trenches that crossed cut the small canal in order to reveal walls or any other kind of human intervention (Barrientos, Alvarado and Martínez 2005: 453-4) (Figure 9.242).

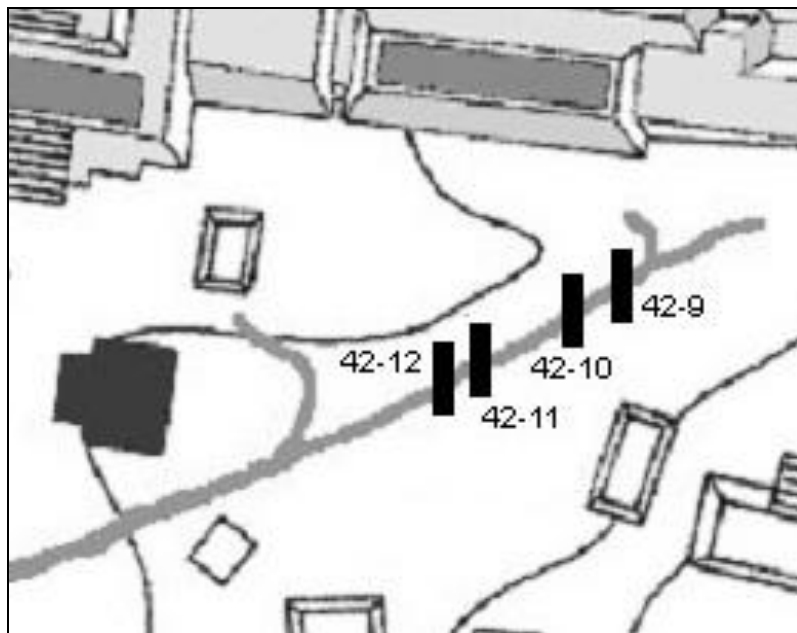


Figure 9.242 Location of Operation CAN 42 excavation trenches in Southern Drainage canal
(Map by T. Barrientos, after L. Luin and M. Wolf, VCAP)

Unit CAN 42-9 was located near the eastern limit of the canal, close to the southeast corner of Structure L7-26 and southwest corner of Structure L7-38, of the East Plaza. The south side contained two large irregular stones within a clay matrix, while the north side had traces of a collapsed small masonry wall near the canal center. West of CAN 42-9, unit CAN 42-10 had a north-south orientation. In this unit irregular stones appeared in the south and north profiles and no remains of any wall (Figure 9.243). To

the west, unit CAN 42-11 revealed irregular stones in the north side of the canal (Figure 9.243). Finally, unit CAN 42-12 also revealed some irregular stones in the north side, with no formal pattern (*Ibid.*) (Figure 9.244)

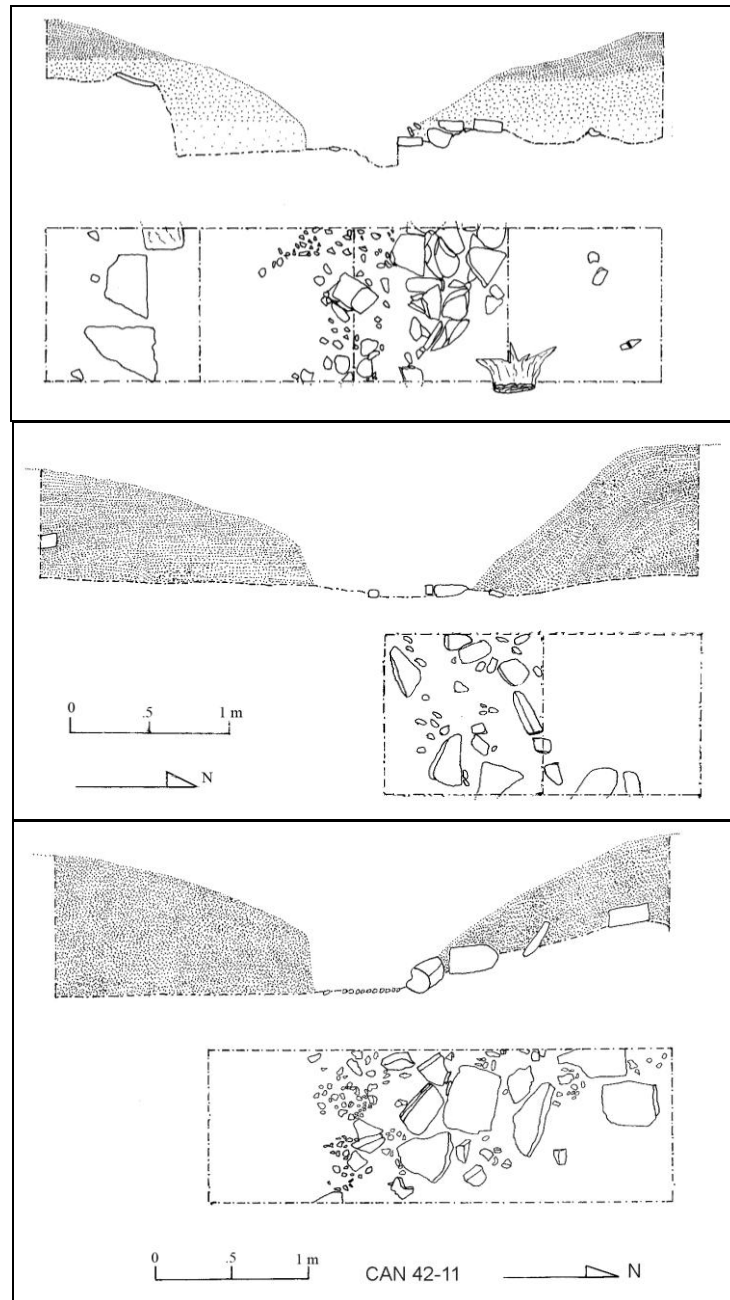


Figure 9.243 Above: West profile and plan view of unit CAN 42-9
Center: West profile and plan view of unit CAN 42-10
Below: West profile and plan view of unit CAN 42-11
(Drawings by S. Alvarado and L. Luin, VCAP)

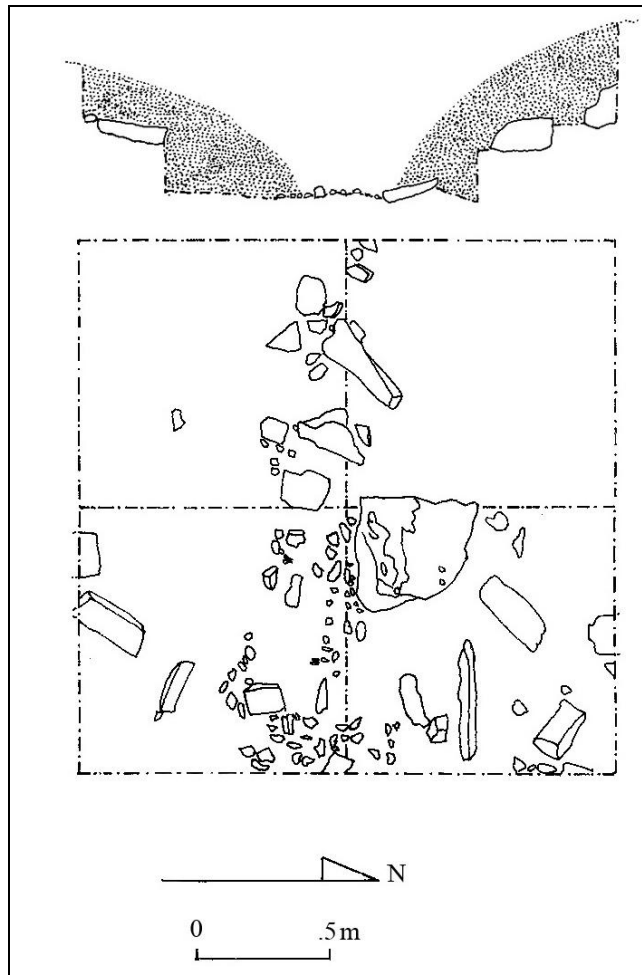


Figure 9.244 West profile and plan view of unit CAN 42-12
(Drawing by S. Alvarado and L. Luin, VCAP)

These excavations revealed some degree of landscape modification of a seasonal stream, mostly in its eastern edge, where the northern side is deeper, probably as a way to avoid erosion of the terrace south of Structure L7-26. As long as the canal became shallow to the west, it did not need any substantial modification, probably only some irregular stones to keep the original direction of the stream. In all units, ceramics and lithics were recovered at the bottom of the canal, evidencing that the water coming from the north side carried these and other materials during the rainy season.

9.7.2 *Palace Pool, South Reservoir or Royal Cistern*

Since the beginnings of the research at Cancuen, some project archaeologists had noted a circular depression just outside the fence that limits the archaeological park in its southern boundary. This “aguada”-like feature filled with water during the rainy season and most of the year, and for that reason, cattle was common in the area (Figure 9.245).



Figure 9.245 Palace Pool before its excavation (Photo by T. Barrientos, VCAP)

During the 2005 field season, the depression dried out, and some masonry stones were visible in its interior; therefore, it was decided that it was the opportunity to investigate it. Initially, with the aid of Silvia Alvarado and as part of Operation CAN 42, six 4 x 2 m units were excavated around and inside water reservoir (CAN 42-3 to 42-8), defining a quadrangular shaped pool built with masonry walls (Alvarado 2011:63-66, Barrientos 2005, Barrientos, *et al.* 2006a: 456-9, Barrientos *et al.* 2006b) (Figure 9.246).

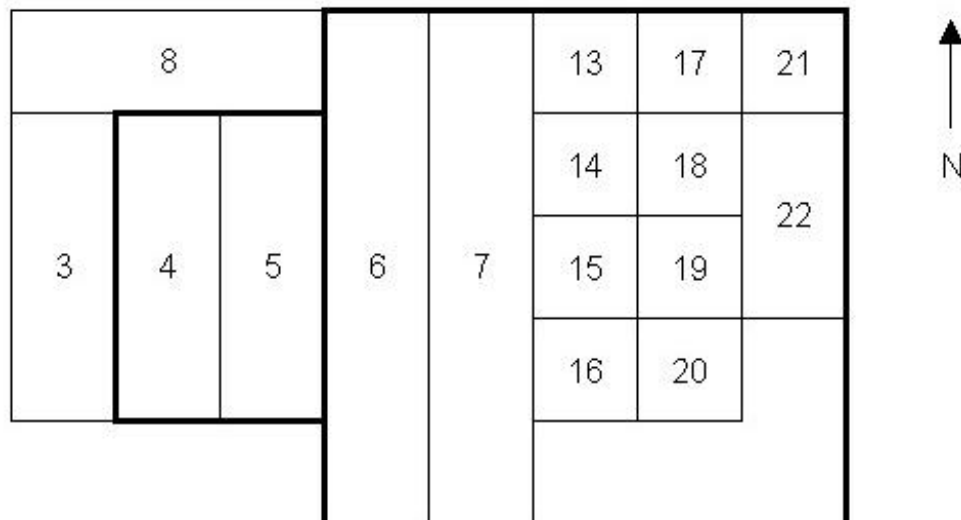


Figure 9.246 Sketch of excavation units in the Palace Pool
(Drawing by T. Barrientos, VCAP)

The two units located in the north and west edges, outside the reservoir (CAN 42-3, CAN 42-8) had a single lot that revealed the plaza floor fill, formed by a mix of medium sized limestone and sandstone blocks (Barrientos, *et al.* 2006a: 456). The other four units were located inside the reservoir, and they were excavated from west to east.

Unit CAN 42-4 was located in the west limit of the water reservoir, revealing the base of the west, north and south masonry walls, thus defining the northwest and southwest interior corners. It also uncovered a floor made with large flat stone slabs.

Within the remains of the upper portions of the collapsed walls, great quantities of utilitarian ceramics and human bones were found lying directly on the floor, as well as white plaster fragments that fell from the walls. Near the southwest corner, various greenstone tubular beads were found, as well as small circular beads made with different types of white, red, orange and purple shell. Within these, an articulated necklace made with greenstone and shell beads was recovered (Figure 9.247). In the northwest corner, near the north wall base, the artifacts recovered on top of the floor included human teeth

and bones, a worked bone, a small obsidian disc (probably part of a stucco sculpture eye), a figurine fragment with blue paint, and a fragment of an alabaster bowl with an incised hieroglyphic inscription (*Ibid.* 457) (Figure 9.247).

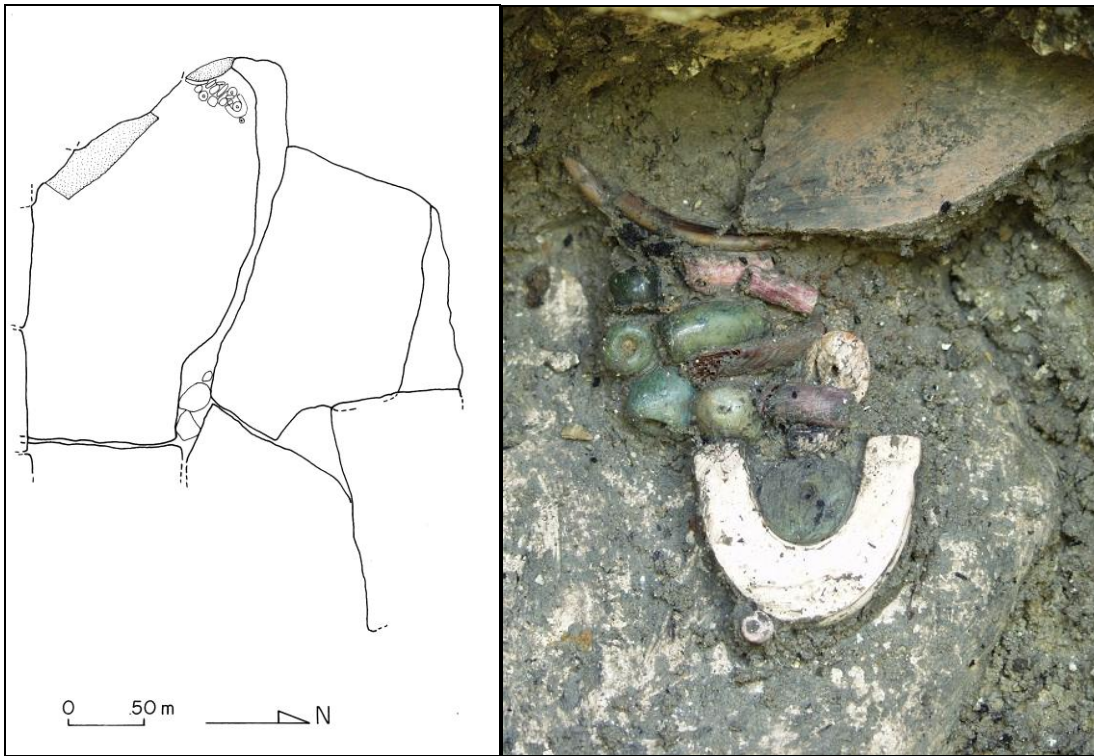


Figure 9.247 Articulated necklace found on top of flat stones near the west end of the pool (CAN 42-4)
(Photo by T. Barrientos, Drawing by L.Luin, VCAP)

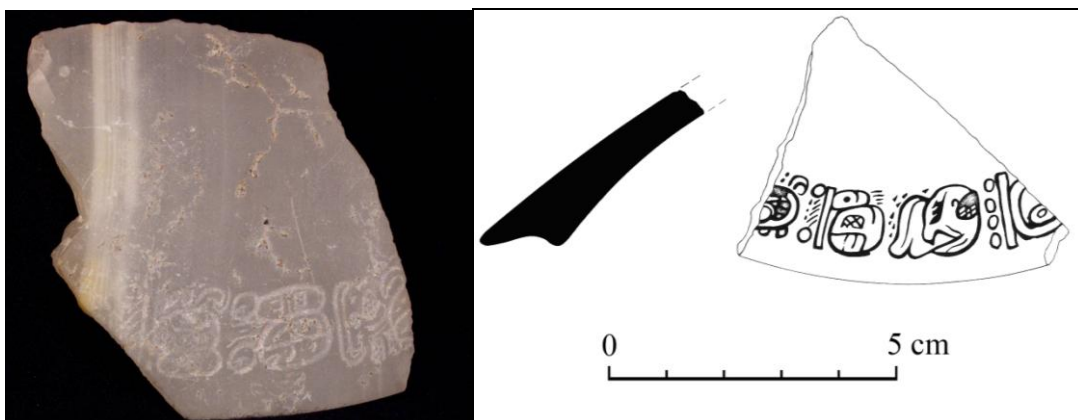


Figure 9.248 Fragments of alabaster vessels found in the Palace Pool
(Photo by T. Barrientos, Drawing by L.Luin, VCAP)



Figure 9.249 Excavation of western half of the Palace Pool (CAN 42-4 & 42-5)
(Photos by T.Barrientos, VCAP)

Unit CAN 42-5 was located immediately east of the previous one. After removing the wall collapse, the stone floor was revealed, but after removing a layer of utilitarian vessel fragments, especially striated jars and other types used for carrying water. A fragment of a mask made of shell, a flower shaped shell ornament and some grinding stone fragments were also found directly on top of the floor. At the southern end of the unit, the excavation showed that the southern wall turned in a corner, extending the width of the reservoir to the south. In the northern wall another corner was found, indicated that the shape of the reservoir was symmetric. The human bones were also abundant, including long leg bones, ribs, vertebrae and a lower jaw. The most interesting feature at this point was the change of level of the floor, because it dropped, almost 0.5 m, in the form of a bench or a deep step (Figure 9.250). Below this point, water covered the entire excavation unit, revealing the presence of a spring below the stone floor (originally, it was thought that the reservoir was fed from the southern drainage described above). This situation made difficult the recovery of human bones and small artifacts (*Ibid.*).

To the east, unit CAN 42-6 removed debris from the fallen walls, and the amount of human bones not only increased, but they were closer to the surface. Artifacts were also abundant, including a fragment of *spondylus* shell, an interior part of a marine conch, and small shell and greenstone beads. Bones and artifacts continued when the excavation reached the water level, and it was decided to continue when the reservoir was dry. The last of the initial units was CAN 42-7, located near the center of the reservoir. After removing the level of fallen wall blocks, the water level appeared, filling the unit rapidly (Figure 9.251). This indicated the possible location of the spring, making it difficult to recover bones, ceramics and other types of artifacts. Among them, two chert projectile

points were recovered, as well as a complete figurine and other lithic tools. The excavation was suspended due to the amount of water (*Ibid.* 458-9).



Figure 9.250 Excavation of stone floor at the center of the Palace Pool (CAN 42-6 & 42-7)
(Photo by T. Barrientos, VCAP)



Figure 9.251 Excavation of fallen South Wall of the Palace Pool (Photo by T. Barrientos, VCAP)

Given the amount of human bones, it was clear that this water reservoir was part of a special deposit of human remains in an extraordinary degree of preservation. For that reason, the project directors ask for support to the Forensic Anthropology Foundation (Fundación de Antropología Forense de Guatemala, FAFG), which has had long experience in investigating clandestine cemeteries and other large bone deposits associated with the civil war in Guatemala. Archaeologists José Suasnívar, Heidi Quezada, Guillermo Martínez and Horacio Martínez continued the excavations on the reservoir, defining 4 more units (Figure 9.252).



Figure 9.252 Excavation of bones by the FAFG team (Photo by T. Barrientos VCAP)

For nomenclature purposes, the previous six units were renamed as CAN 42-13 to CAN 42-18, and the new ones were CAN 42-19 to CAN 42-22. In general all 10 units had an initial level of wall collapse debris, containing masonry blocks that were more

abundant in the north and south edges. It was followed by a second level of soil beneath the stones, consisting of grayish clay containing high amounts of human bones and cultural material, mostly utilitarian ceramics, fine ornaments and chert projectile points (*Ibid.* 459) (Figure 9.253). In unit CAN 42-13 (former CAN 42-3), the FAFG excavations revealed that the grey clay level had 0.23 m of depth, which is almost the same in all other units. In unit CAN 42-21, the collapsed wall level measured 1.30 m from the surface, and the amount of bones and artifacts diminished. At the northeastern corner of the reservoir, the wall was better preserved, measuring 1.2 m in height (*Ibid.* 462).

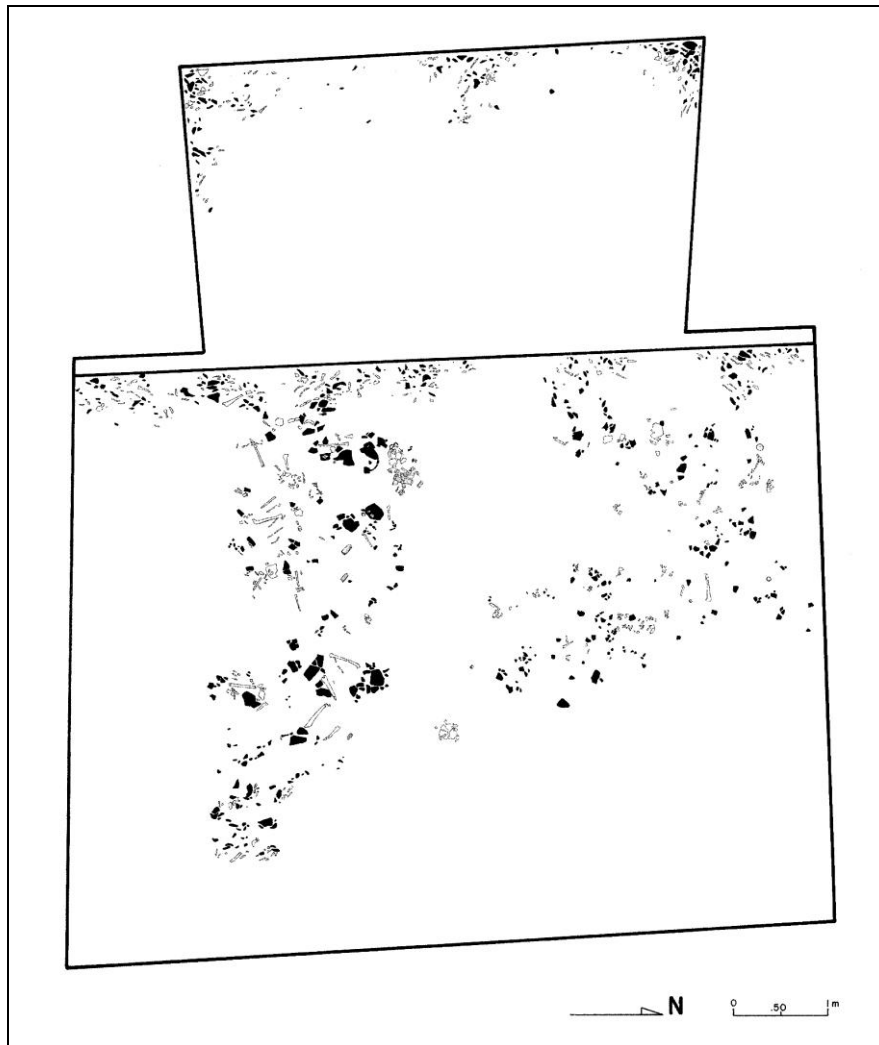


Figure 9.253 Distribution of artifacts and bones found in the Palace Pool floor (Drawing by L. Luin VCAP)

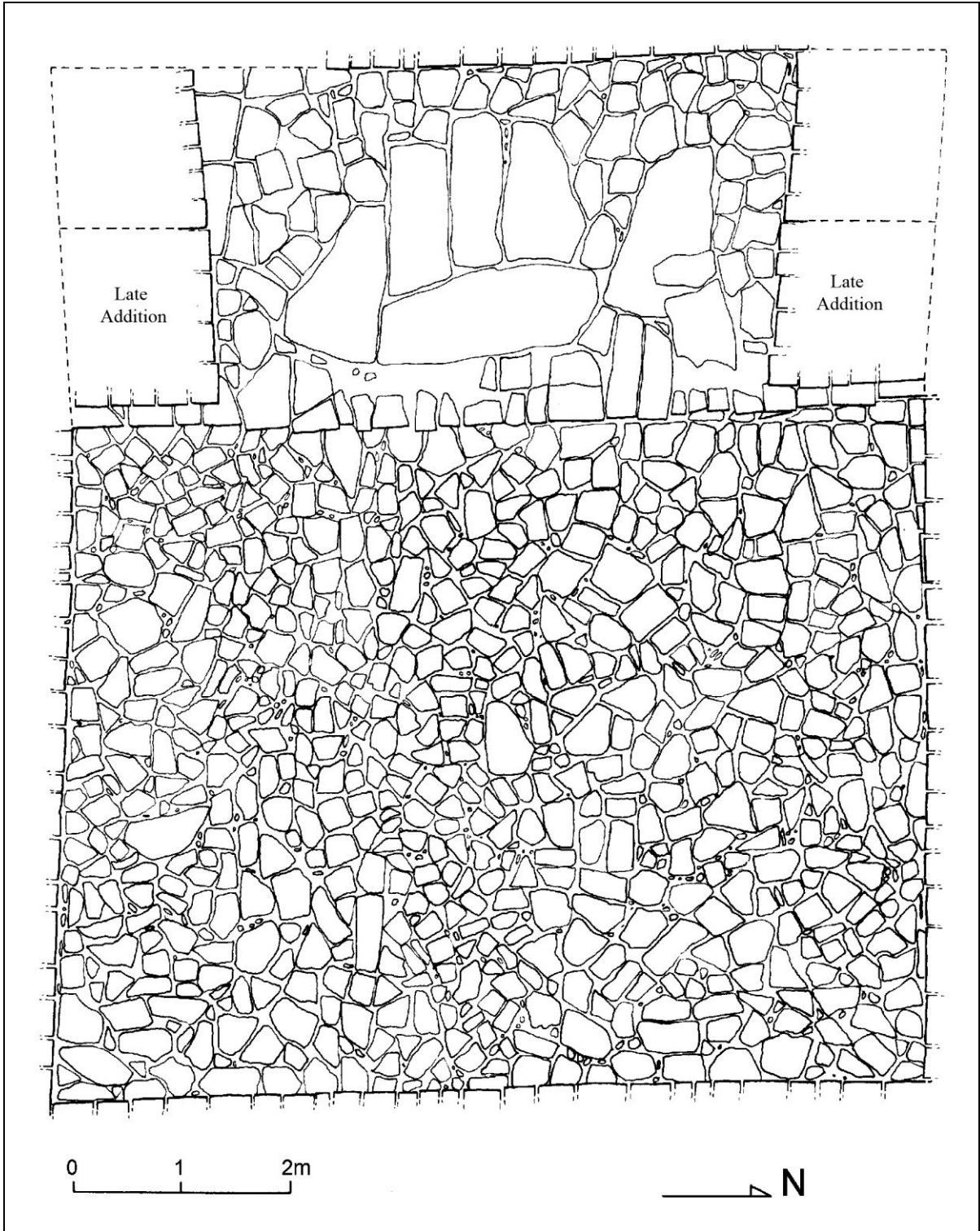


Figure 9.254 Plan view of excavations in the Palace Pool
(Drawing by L. Luin, VCAP)

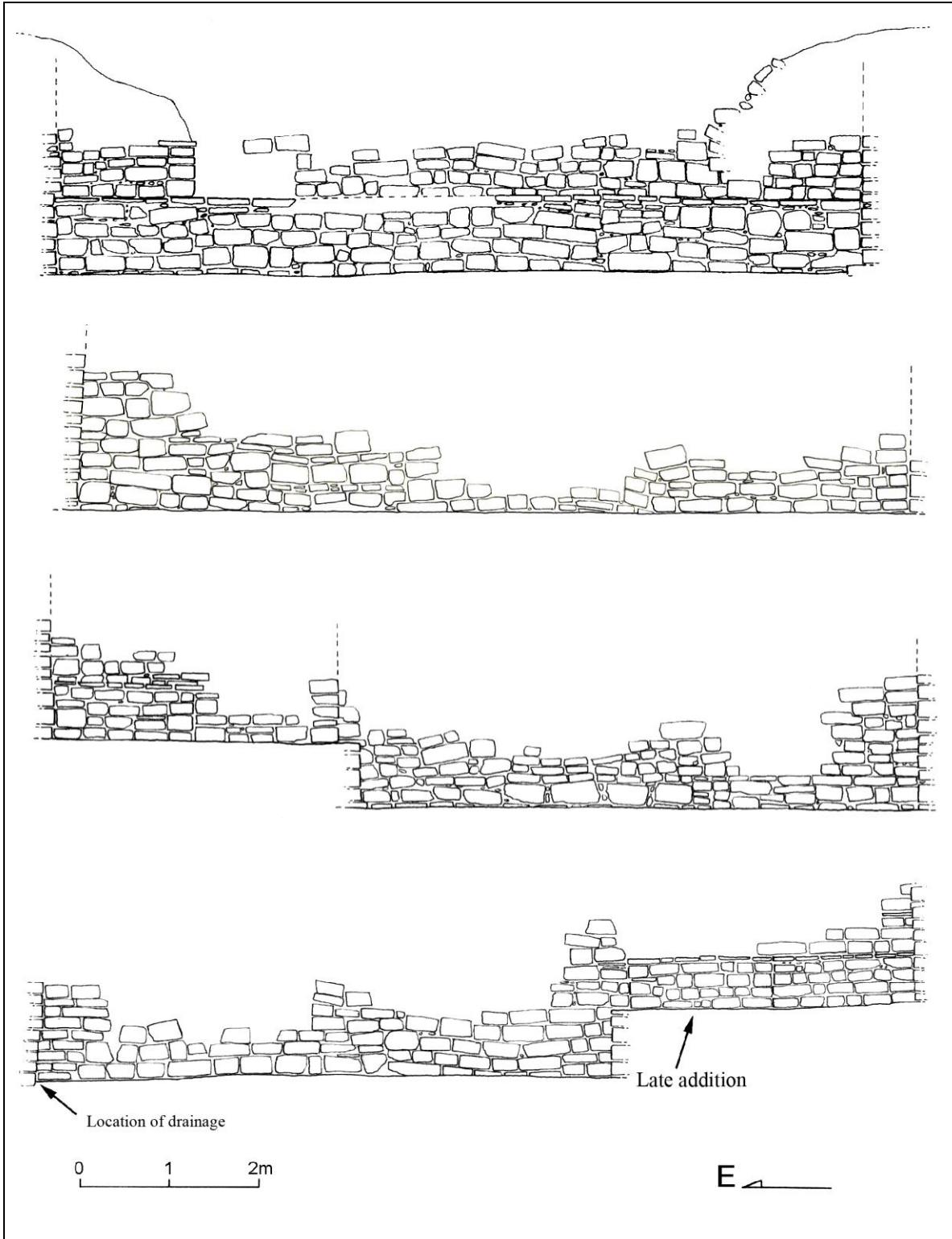


Figure 9.255 West (above) east (center above), north (center below) and south (below) walls of Palace Pool
(Drawings by L. Luin, VCAP)

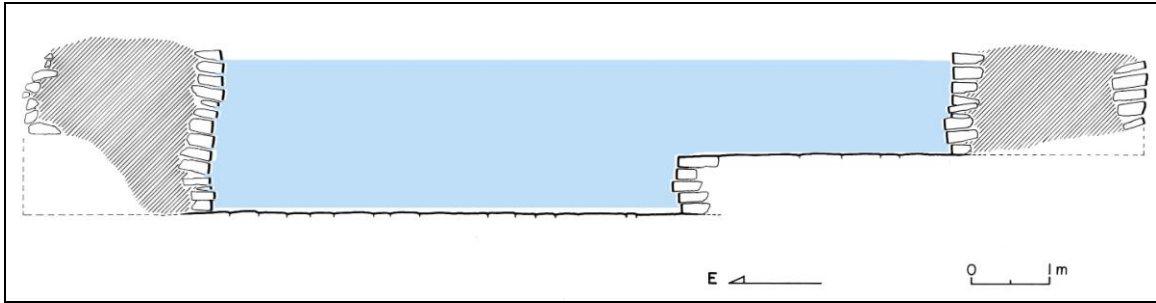


Figure 9.256 East-west section of Palace Pool (Drawings by L. Luin, VCAP)

After these excavations, Luis Fernando Luin directed restoration activities, which allowed the establishment of the total measurements of the pool and to define its shape (Luin 2008). It was thus determined that the water reservoir had the characteristics of a quadrangular pool built with masonry walls, whose blocks had the same construction techniques than the buildings of the royal palace and other elite structures at the site, suggesting that it was an important feature related to the main southern entrance of the palace. Given that this feature consisted of a construction around a natural spring, it was decided that the term *aguada* was not proper, because its function was not related to water catchment. Instead, its use was associated with containing clear spring water, probably for a restricted use by the palace occupants or visitors. The palace pool consists of a unique water reservoir, compared only to another pool located in Cancuen's northern plaza. Its plan is quadrangular, but the floor elevates in its west side, where two staircases are located in both north and south sides. The width of the floor is thus reduced on this part, making a plan of a half cross or "quatrefoil". In total, the palace pool measures 8 m from north to south, and 9.69 m from east to west (72 m²). On its west narrow portion,

the depth is only 0.6 m, and 2.2 m in the remainder east section. In total, the pool can contain 148 cubic meters of water. (Luin 2008: 275; Alvarado 2011:63-4).



Figure 9.257 Palace Pool restored (Photos by T. Barrientos and L. Luin, VCAP)

Given its location on the royal palace entrance, the most likely functional explanation is ritual, although it is possible to consider a domestic function related to the presence of a large food preparation area in Group L6, located nearby to the southeast (Alvarado 2011:106). The availability of clear spring water could have been related to cleaning and other types of ceremonies, linked conceptually to evidence of use of cave spring water, called *suhuy ha'* by the present-day Maya Q'eqchi'. In addition, there is abundant evidence of water symbolism in Classic Maya iconography (Fash, n.d., Scarborough 1998), which relates water control with political power, expressed in water management systems that not only served for subsistence purposes, but also as means of

ideological communication. In this sense, epigraphic studies have identified sacred mythological places linked to water, such as “water mountains” or “water caves”.

Within this context, the palace pool could have played a crucial role for defining the royal palace as a water mountain, but mostly as a physical place to perform ritual activity related to these concepts (Barrientos 2005, Barrientos *et al.* 2006b).

The evidence of a large amount of human remains and personal ornaments has been interpreted as a massive killing or massacre that happened at the end of the site occupation. The human bones found inside the grey clay level, and directly on top of the stone floor, include cranial fragments, teeth, mandibles, ribs, vertebrae, pelvis fragments, and leg and arm bones. Osteological analysis by FAFG members have defined a minimum total of 38 individuals deposited in the palace pool, included two children and two neonates (Figure 9.258).



Figure 9.258 Bones from the Palace Pool in analysis at FAFG

Most individuals show evidence of trauma caused by sharp instruments, including a cranium wound directly associated with a chert projectile point (Figure 9.259). The reconstruction of events indicates that the individuals may have been killed outside the pool (probably in the royal palace), then perhaps dismembered, dragged to the pool and placed into the water. With time, the walls collapsed and fell on top of the bodies or body parts (Suasnávar *et al.* 2007: 26-27).



Figure 9.259 Bones with trauma and chert projectile points found in the Palace Pool

The artifacts found directly associated with the bones and the stone floor, have been interpreted both as trash and personal ornaments of the individuals, as they were placed wearing them (Figure 9.260). Among the artifacts, 11 projectile points were found, probably representing some of the weapons used in the event. Ceramic fragments included Saxche-Palmar polychrome plates, Chablekal Fine Gray local imitation, and Encanto Striated jars (see Chapter 10 for a more detailed description).



Figure 9.260 Shell ornaments found in the Palace Pool floor

9.7.3 *North Drainage and North Pool*

The North Plaza is crossed by four fine masonry canals, including one that drains the Northeast Plaza and another one canal that drains a natural spring that comes out beneath the Main Ballcourt western structure. Two of these canals feed a stone masonry reservoir that drain through a check dam and a buried canal that connects with a stream running 27 m to the west, towards residential Group K8 (Figure 9.261).

Excavations in this northern pool or northern reservoir revealed a similar construction than the palace pool, with masonry blocks and the location of a permanent natural spring. It measures 7.3 m from east to west, and 6 m from north to south, and a total depth of 3.12 m in its deepest side (west). A 0.85 m high bench is located on its eastern side. In total, it can contain 137 cubic meters of water. In addition, well preserved

human bones of at least 15 individuals were found in association with ceramics (2 complete and 11 semi-complete vessels) and remains of textiles, shell ornaments, bone needles, remains of rubber and wooden artifacts, including a paddle (Alvarado 2011:68-80).

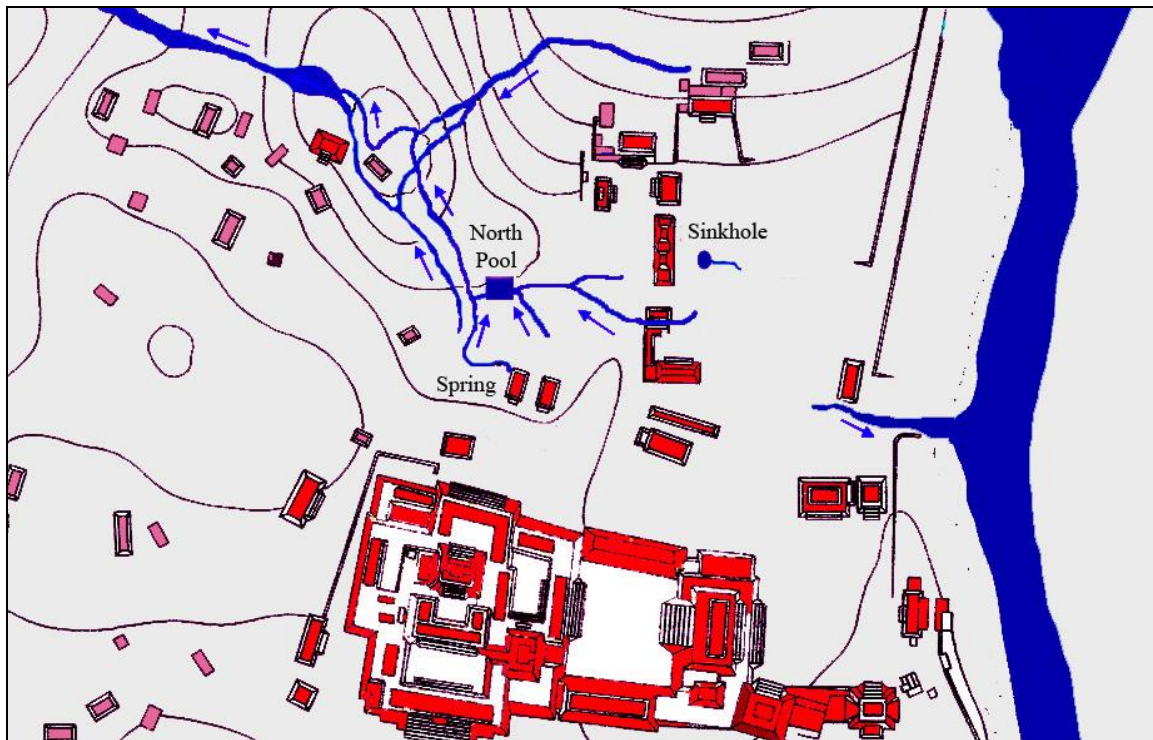


Figure 9.261 Location of North Drainage canals and North Pool

It is thus interesting that the royal palace compound was flanked on its south and north sides by two small scale hydraulic systems, each one with a masonry pool. This suggests that the location of the acropolis could have been chosen by its relation to various natural springs, which would have given a special symbolism associated with water. This association was enhanced with the construction of the Main Ballcourt on top of one of these springs. As it is widely known, ball courts were buildings associated with a complex mythological, religious and political symbolism and meaning.

CHAPTER X

THE ROYAL PALACE OF CANCUEN: ARTIFACTS AND BURIALS

All the excavations previously described gathered a vast amount of artifacts and data concerning the history and function of the royal palace of Cancuen. This chapter presents the analysis of ceramic and lithic artifacts (ceramics and lithics), as well as the osteological material found in burials recovered during the excavations.

10.1 Ceramics

Archaeological contexts associated with the royal palace of Cancuen did not present large accumulations of artifacts. As it has been discussed above, this is in part due because these buildings received periodical maintenance, and most rooms were cleaned before being completely filled. In addition, no termination rituals, rapid abandonment residues or late squatter middens were found, with the exception of ceramic and lithic artifact concentrations in the South Patio and Main Plaza. As a result, a relative low frequency of ceramic sherds was recovered in most excavation units. In fact, the larger ceramic deposits were found in the earliest and lowest levels of excavation, representing middens associated with the first phases of occupation and the construction fills that covered them. On the other hand, patios and rooms of the later phases were found clean, with almost no remains of activity areas. Funerary offerings were also limited to the earliest and latest phases, and only six burials have been found inside the palace complex.

The analysis of Cancuen ceramics was carried out initially by Cassandra Bill, Jeanette Castellanos and Michael Callaghan, between 2000 and 2004, using the type-

variety system (Bill 2000, Bill and Callaghan 2001, Bill, *et al.* 2002; Castellanos *et al.* 2002, Callaghan and Bill 2003, Callaghan *et al.* 2004). More recently, Melanie Forné and Paola Torres continued the ceramic studies, reanalyzing all materials based on new information and both a typological and modal analysis system (Forné *et al.* 2007a, 2007b, 2008a, 2008b, 2009, 2010, 2011, 2012; Forné and Torres 2011, Torres and Forné 2012). Within these analyses, 23 lots from the royal palace have been examined. These include operations CAN 3, CAN 4, CAN 23A, CAN 26, CAN 27, CAN 28, and CAN 43, which are the ones with significant numbers of ceramic fragments.

In general, the ceramic chronology of Cancuen has been defined with three phases: Concordia, Los Laureles and Chaman (with an early and late facet), plus a small Postclassic re-occupation phase. The distribution of ceramics in these phases at the site corresponds to a 65.4% for the Chaman phase, 12.7% for Los Laureles, and 21.9% for the Concordia (Forné *et al.* 2008:134). The correspondence of the new sequence with the previous one is shown in Table 10.1, which also includes the main diagnostic types for each ceramic phase.

10.1.1 General characteristics of the royal palace ceramics

Most ceramic deposits recovered within the royal palace are distinguished by their good preservation, compared with the rest of the site. All contexts show high typological variability, though the soft and carbonated pastes predominate. The most common types found are Cambio and La Isla groups, followed by Tinaja, Saxche-Palmar, Sendero, Raxruhá, La Unión, and Infierno groups. Some groups like Saxche-Palmar, Raxruhá and

Sendero present better preservation in the palace because most of them were found in sealed contexts (Forné and Torres 2012: 257-8).

The different ceramic groups in Cancuen have been related to four different “traditions” or “sets” (Forné *et al.* 2011); some of them as imports from other regions of the Maya area. The majority of the site’s ceramics correspond to the Lowland tradition (59.8 %), represented by three major groups: Saxche-Palmar, Cambio and Tinaja. From the first one, the striated jars (Encanto Striated) are almost absent. Of the Tinaja Group, the most common types are Pantano Impressed and Tinaja Red, while others like Subin Red, Zopilote Smoked and Chaquiste Impressed appear in very low frequencies. From the Saxche-Palmar Group, the most common type is the Saxche-Palmar Orange, especially tripod plates, with some almost absent types such as Desquite Red on Black, and Yuhactal Black on Red. Some types of the Infierno Black group, also have been recognized (*Ibid.* 18-22).

The Cancuen local tradition is the second (21.4%), represented mostly by the types El Zapotal Impressed and La Isla Orange (La Isla Group), unique to the site and its sustaining area, and characterized by a polished orange slipped surface. Important are the small orange bowls (Cocales Bichrome), as well as Chapayal Incised (*Ibid.* 22-24).

The ceramics of the Highlands Tradition makes 10.1 % of the sample and includes three groups: Cebada, Raxruha, and Chichicaste. The first one corresponds to large jars previously recognized in Alta Verapaz and Salinas de los Nueve Cerros, while the other two groups is represented by service wares such as Chichicaste Brown and Nitro Incised. This latter is characterized by a cream slip, very similar to the examples described in Chipoc (*Ibid.* 24-28).

		Ceramic Sequence by Bill, Callaghan and Castellanos	Ceramic Sequence by Forné and Torres	
1000	Postclassic	Chilo Unslipped, Pozo Unslipped, Paxcaman Red, possible Plumbate	Postclassic	Chilo Unslipped, Pozo Unslipped, Paxcaman Red, possible Plumbate and Samaj Complex
950				
830				
820	Tepeu 2b	Few Fine Orange, Chablekal Fine Gray, Chapayal Incised, abundant Saxché-Palmar polychrome plates, Zacatal Polychrome disappears, Chaquiste Impressed almost absent, El Zapotal Impressed Form B larger than Form A	Late Chaman	Introduction of Fine Orange (Campamento Fine Orange) from Southern Veracruz, increase of Verapaz types (Cebada Porous, Osoquin Unslipped)
810				
800				
790				
780				
770	Tepeu 2a/2b Transition	Chablekal Fine Gray appears, same quantities of El Zapotal Impressed (Forms A and B).	Los Laureles	Introduction of Fine Gray paste (Group Chablekal) imported from a region near Palenque, increase of Raxruha and Tinaja groups
760				
750	Tepeu 2a	Absence of fine paste ceramics. Few Chapayal Incised, Zacatal Polychrome, Chaquiste Impressed, and El Zapotal Impressed Form A more abundant than Form B.	Concordia	Presence of characteristic types for the Late Classic Lowlands: Tinaja Red, Corozal Incised, Saxché-Palmar, Pantano Impressed (all varieties). Local types: Polished Black, Group La Isla, Group Raxruha, and El Zapotal Impressed.
740				
730				
720				
710				
700	Early Tepeu 2	Absence of fine paste ceramics. Saxche-Palmar forms equally distributed, larger diameter in Saxche-Palmar plates, modeled flanges, peach colored paste		
690				
680				
670				
660				
650				

Table 10.1 Ceramic Chronology of Cancuén made by Forné and Torres (2011)

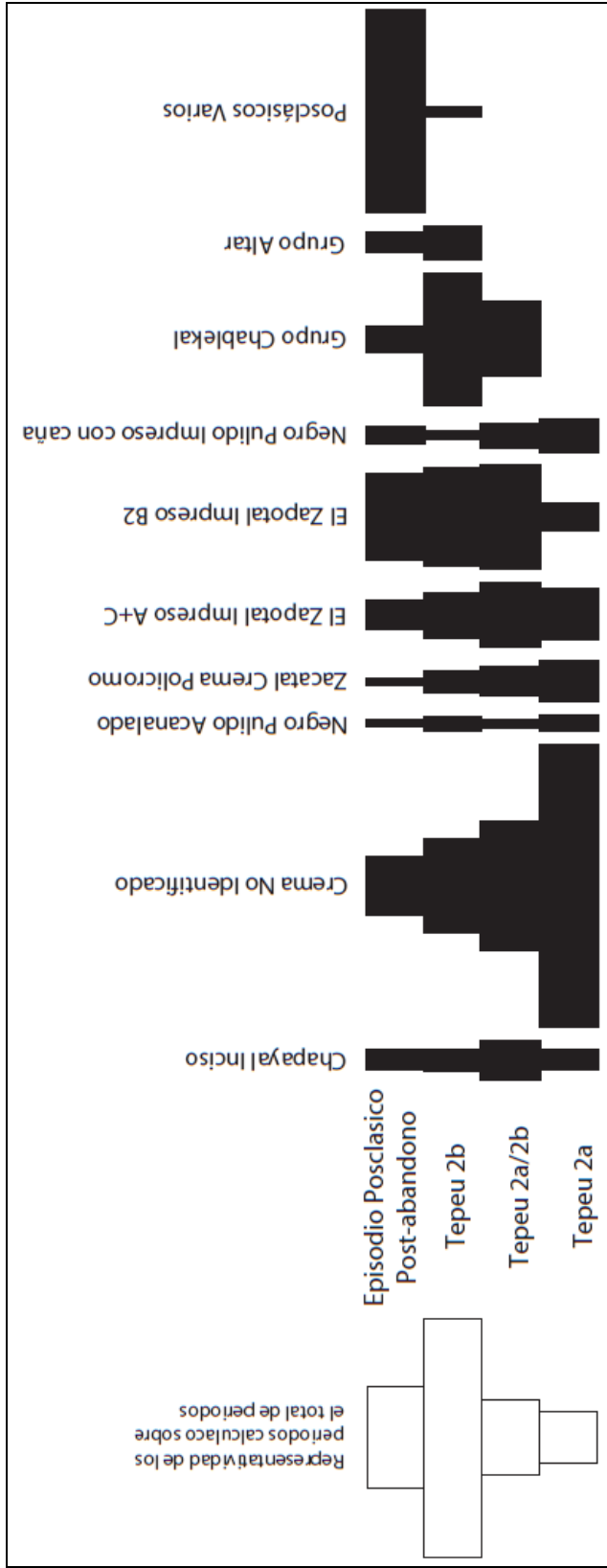


Chart 10.1 Chronological distributions of most significant ceramic types according to Callaghan and Bill (Forné, *et al.* 2009: 163)

The Gulf Coast Tradition is represented by the Chablekal and Campamento Groups. The Chablekal Group (Usumacinta Tradition) includes the types Chablekal Grey, Chicxulub Incised, Telchac Composite and Alta Gracia Grooved. These fine gray types, characterized by a high chromium composition, came from the Lower Usumacinta region around 760 C.E. and present almost no variation in form, paste and size. The fact that the Chablekal vessels are more abundant in domestic contexts outside the royal palace (Callaghan *et al.* 2004, Callaghan and Bill 2004:378), especially the port areas, indicate that its presence or absence in certain palace areas could reflect a more social or ritual aspect, instead of a chronological one. What has also been called Mexican Tradition corresponds to the Campamento Fine Orange type, which came from the Chontalpa region of southern Veracruz around 780 C.E. (Forné *et al.* 2010). This fine paste type is different from the Altar Fine Orange, which has been dated after 830 C.E. (Adams 1971: 151). These two groups conform 1 % of the site's sample (*Ibid.* 27-29).

Initially, the ceramic chronology was originally tied to the presence or absence of fine paste diagnostic types, such as Chablekal or Campamento. However, Forné has improved that sequence by using modal analysis. For example, plates with flanges decorated with excisions seem to diminish towards the end of the Late Classic, while the development of thin appliquéd flanges tends to increase (Forné and Torres 2011).

In order to understand the ceramic contexts of the palace in a wider context, it is important to note that the percentage of Lowland Tradition types is considerably higher than the rest of the site (with the exception of La Isla), especially if compared with residential units outside the site's epicenter (Chart 10.2).

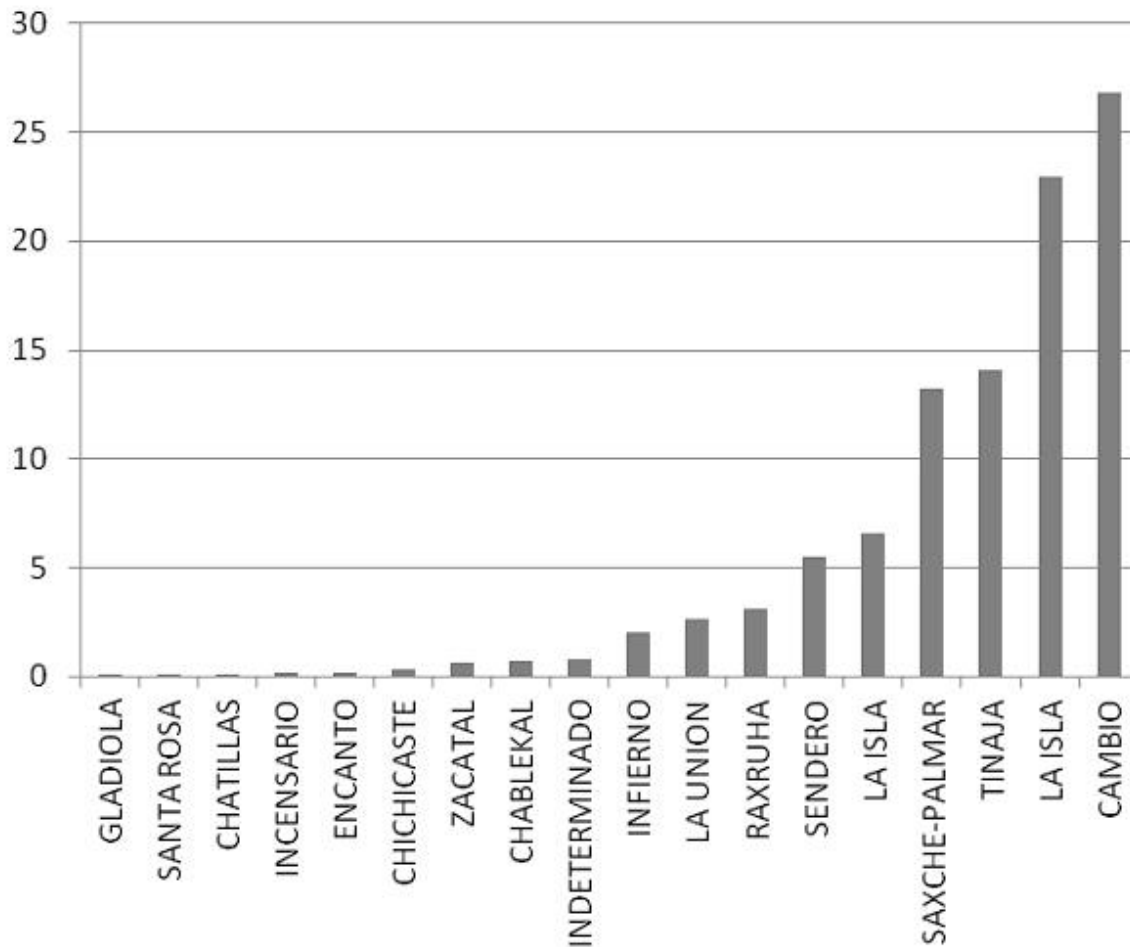


Chart 10.2 Distribution of ceramic types in most significant operations in the royal palace (Torres and Forné 2012: 268)

The presence of few ceramic deposits in the royal palace has limited the scope of interpretation for the chronology and function of its different buildings, making it necessary to rely on architectural analysis, complemented by iconographic studies of stucco decoration, epigraphy of the associated inscriptions, and a contextual analysis of the few burials found. Nevertheless, some stratigraphic contexts did contain diagnostic ceramic types, making it possible to date the different construction stages of each patio and the entire palatial complex. In addition, some ceramic deposits have provided some

ideas about the function of specific buildings or rooms. For that reason, only the most relevant ceramic contexts will be treated in this chapter, which have been chosen by the presence of diagnostic types, complete vessels or middens.

10.1.2 Southeast Patio (Operation CAN 3)

The stratigraphic excavations in the Southeast Patio were the first ones that revealed a construction sequence in the palace complex. In fact, these lots provided the initial stage for defining a ceramic typology and chronology for the site (Bill 2001). Two important deposits were found in units CAN 3-1, CAN 3-2, CAN 3-4 and CAN 3-5:

- 1) Between floors 2 & 3, from 0.7 m to 1.4 m below the surface. A total of 20 bags of ceramics were recovered (lot CAN 3-2-6), which included polychrome and fine paste types, but were covered with white plaster, because this level was a construction fill made of river pebbles and shells mixed with stucco.
- 2) Below Floor 4, located between 2.4 m and 3.5 m below the surface. Deposit next to the west façade of a possible substructure, probably as part of a midden, given its association with chert, obsidian, grinding stones, figurines and animal bones. Within this construction fill, 19 bags of ceramics were recovered (lots CAN 3-2-9, CAN 3-2-10, CAN 3-2-11), and the frequency diminished as the excavation went deeper.

Initial analysis of the midden below Floor 4 (CAN 3-2-9) included 29% of utilitarian wares (10% La Isla, 37% El Zapotal, 29% Cambio, 24% Tinaja) and 71% of fine wares (73% Saxche-Palmar, 8% Cream Polychrome, 10% Polished Black, 9% Cream slip), that were dated to Early Tepeu 2 phase (Bill and Callaghan 2002: 254) (Table 10.2, Bill *et al.* 2003: 518). A more recent analysis of the Southeast Patio ceramics

indicates that Deposit 1 (CAN 3-2-6) was not a primary one, but a reutilization of another deposit (possibly Deposit 2?) in order to mix it with the river pebbles that preceded Floor 3 (Torres and Forné 2012: 259).

CERAMIC TYPES/MODES	Early Tepeu 2 (N = 201 rims)	Tepeu 2a (N = 100 rims)	Tepeu 2b (Surface) (N = 358 rims)
Utilitarian Wares			
La Isla Orange			
Jars	100% of type	15% of type	0% of type
Bowls	0% of type	85% of type	100% of type
El Zapotal			
Form A	52% of type	6% of type	3% of type
Form B1	14% of type	2% of type	0% of type
Form B2	10% of type	77% of type	85% of type
Form C	24% of type	15% of type	12% of type
Cambio Unslipped			
Form A Jars	14% of jars	73% of jars	98% of jars
Form B Jars	86% of jars	27% of jars	2% of jars
Fine Wares	% Fine wares	% Fine wares	% Fine wares
Saxche-Palmar Orange Polychrome	73%	58%	31%
Zacatel Cream Polychrome	8%	0%	0%
Polished Black	10%	8%	6%
Cream Slipped	9%	8%	3%
Orange Bowls with Black Rim	0%	8%	29%
Red / Orange Incised	0%	8%	8%
Chablekal Fine Gray	0%	8%	21%
Fine Orange	0%	0%	2%

Table 10.2 Ceramic Types/Modes identified in the Southeast Patio (Bill 2011)

10.1.3 West Patio (Operation CAN 28)

Unit CAN 28-14 explored the complete construction sequence at the West Patio, and defined two major episodes associated with ceramic deposits:

- 1) The first stage consisted of a platform made with different layers of clay placed on top of sterile soil. It measured approximately 1 m high, and its surface was a compact clay floor, possibly plastered (Floor 2). The platform fill contained a midden of ceramics, figurines and carbon, dated to Early Tepeu 2 (now Concordia phase).
- 2) The second stage consisted of a 6.5 m high fill initially made with “clay stone”, followed by a fill of limestone and sandstone blocks, including a retention wall. This construction fill contained a low frequency of ceramics, although a concentration of sherds was found next to the retention wall. However, a small dedicatory offering was found lying on top of the first platform, consisting of two almost identical Chablekal Fine Gray vessels, placed lip to lip. This allowed dating this stage to Tepeu 2b, which would correspond to either Los Laureles or Chaman phases.

10.1.4 Northwest Patio (Operation CAN 21)

Although this area of the palace has had only one stratigraphic excavation, its ceramic deposits confirms the chronological pattern observed in other nearby contexts, such as the west and north patios. Unit CAN 21-1 and its extension, CAN 21-2, revealed two or three construction stages:

- 1) Defined by traces of a pebble floor (Floor 1) between 10 and 20 cm below surface.
- 2) At 90 cm of depth, traces of another floor were visible on the profiles (Floor 3). Just at this point, a midden was found between 0.9 and 1.5 m, within a matrix of reddish

brown and dark brown clay (lots CAN 21-1-6 and CAN 21-2-6). Another ceramic deposit was found in lot CAN 21-1-8 (1.5 to 1.7 m below surface), within a greenish light brown clay fill, where large red slipped sherds were abundant.

3) Floor 3 found at 2.25 m below the surface, covering a cist that contained Burial 12.

The analysis of these ceramics, carried out by Forné (Torres and Forné 2012:259), gives the two ceramic deposits a date to the Chaman phase (Figure 10.1), while the construction fill associated with the Floor 3 has been dated to Concordia phase (Chart 10.3).

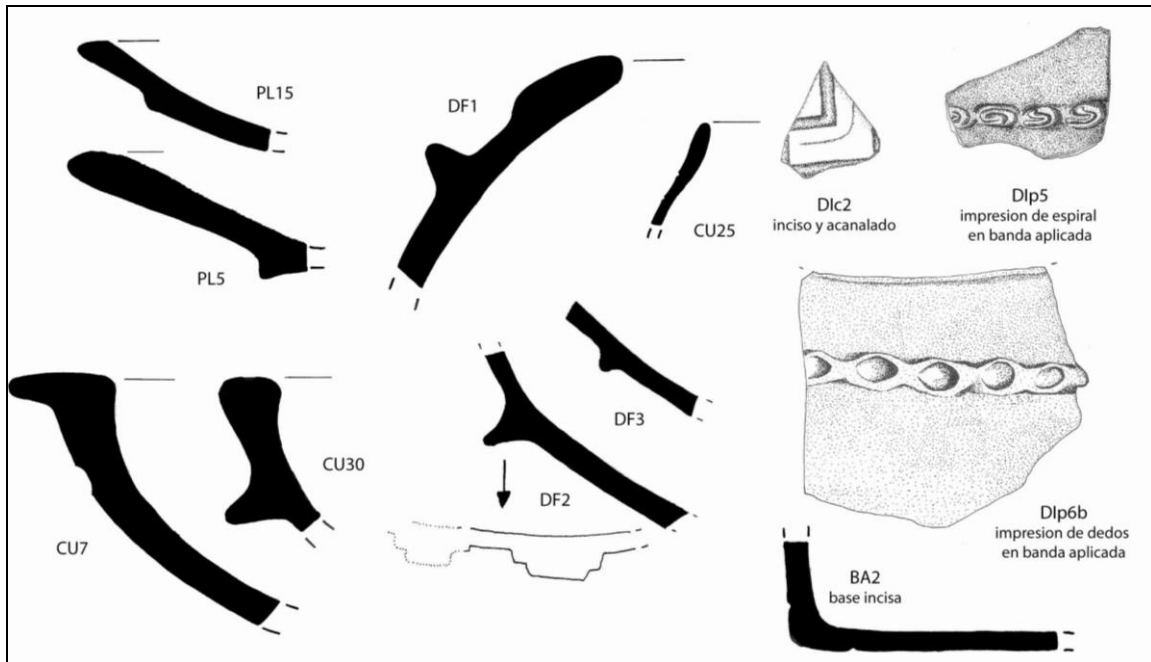


Figure 10.1 Ceramic modes identified in Operation CAN 21 (Torres and Forné 2012: 189)

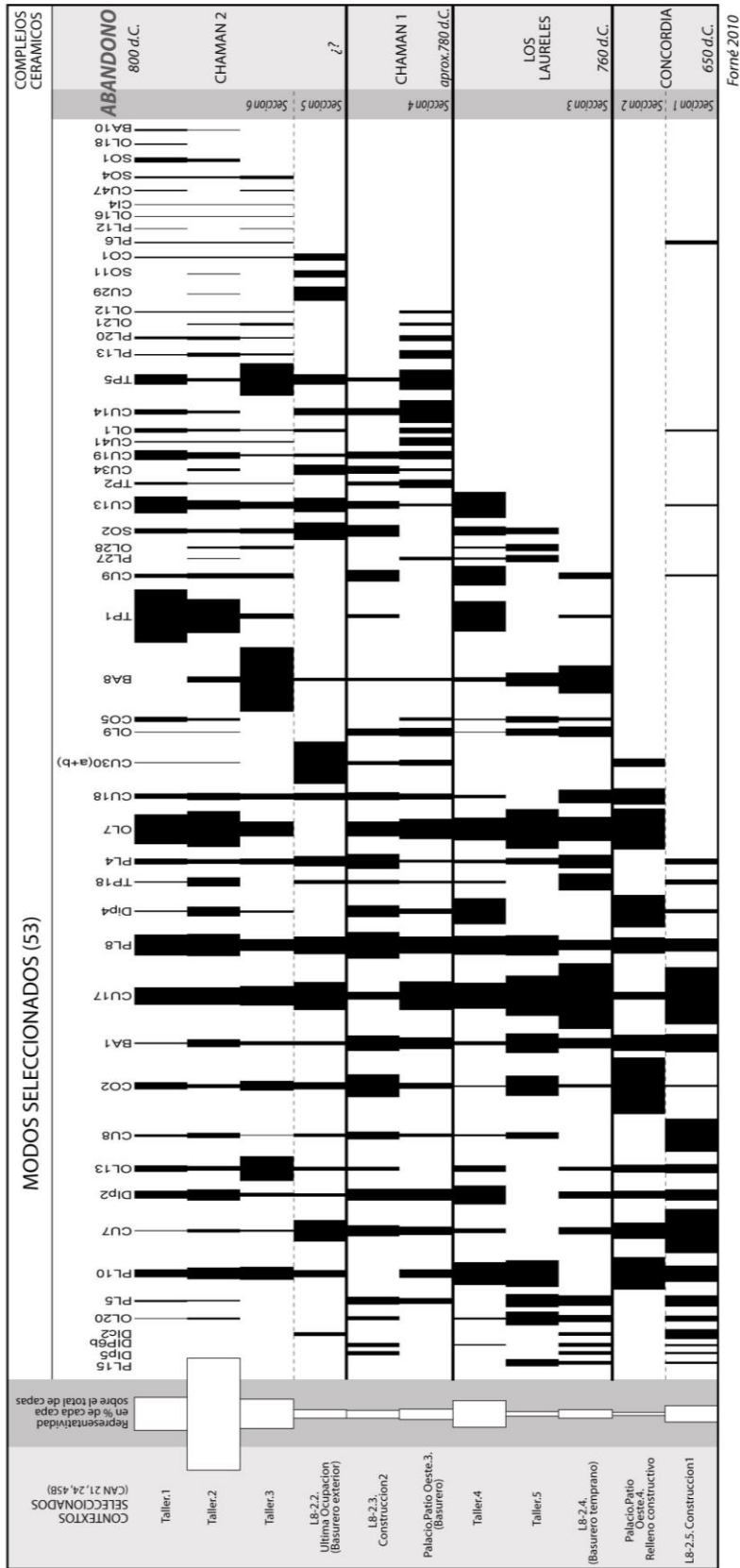


Chart 10.3 Sequential modal seriation of various contexts at Cancuen, including the deposits found in the Northwest Patio of the royal palace (Torres and Forné 2012: 187)

10.1.5 North Patio (Operation CAN 26)

The deepest stratigraphic excavations were carried out in the North Patio. Although no significant ceramic deposits were found in the construction fills of units such as CAN 26-14, important ceramic evidence was recovered in the earliest levels. During the excavation of tunnel CAN 26C-1A, a midden-like deposit was located on top of sterile soil, pointing to the earliest level of occupation at the palace, if not the site itself. It consisted of a 10 cm dark brown clay stratum that was found throughout most of the tunnel (10 m), stopping at 4 m south of what seems to be a retention wall of Structure L7-1-Sub-2. This would suggest that the midden is associated with that structure. A grey clay fill of 1 m high was placed on top of this midden, consisting of the main fill of Structure L7-1 Sub-2. Although the ceramics of suboperation CAN 26C have not been analyzed yet, the presence of Burial 83, found next to the retention wall, and below the plaster floor, dates the midden and the construction of L7-1 Sub-2 to the seventh century C.E. (Concordia phase). This is based on the only funerary offering, a Mataculebra type vase (CANV-133).

The excavation of unit CAN 26C-1A also recovered two sherds of Chablekal Fine Gray next to a masonry wall (L7-14-Sub-3) located at the northern edge of the tunnel. This context is problematic because it is not clear if Structure L7-14-Sub-3 is contemporaneous or later than L7-1-Sub-2 and L7-1-Sub-1. With the information available, the proposed hypothesis is that L7-14-Sub-3 covered L7-1-Sub-2, and was contemporaneous with L7-1-Sub-1. The Chablekal sherds would then correspond to the time when L7-14-Sub-3 and L7-1-sub-1 were cancelled by the Lower North Patio platform, probably around 760 C.E.

10.1.6 *Central Patio (Operation CAN 27)*

The main stratigraphic excavation in the Central Patio corresponds to unit CAN 27-19, which revealed 17 cultural strata representing two major construction stages:

- 1) Platform built with olive green clay and covered with white plaster, located on top of sterile soil. A dedicatory cache offering was found in a hole cut into the plastered floor in front of the platform south wall, containing an incense burner decorated with two rows of spikes (type Miseria Appliqué) and a lid with handle (CANV-99). The offering dates to the moment to when the platform was buried, given that it was covered directly with the construction fill.
- 2) The second episode consists of a massive 7 m high construction fill of different clay types that covered the first platform. The lowest level of this fill contained a layer of many El Zapotal Impressed and other La Isla Group fragments, piled in a relative order with clay and mortar. This feature, located between 6 and 5 m below the surface, contained other ceramic types, including 2 Campamento Fine Orange sherds.

A total of 40 ceramic bags were recovered in this unit, but no formal analysis has been done with the total sample. A preliminary analysis by Callaghan indicated a Tepeu 2 date for the offering (Laureles or Chaman). A more recent analysis by Forné revised the lot corresponding to the ceramic deposit (Phase 1B), indicating that the concentration of El Zapotal sherds is part of a primary deposit (Torres and Forné 2012: 259). Most large sherds seem to correspond to partial or complete vessels that were broken in a single episode, possibly as part of a termination ritual that had previously involved the location of the Miseria censer inside the plaster floor.

10.1.7 Southeast Corridor (Operation CAN 23A)

Excavations in this open area south of the East Patio found a complex stratigraphic pattern, related to a buried structure named L7-17-Sub-1. Although no excavation penetrated the building fill, units CAN 23A-7 and 6 explored various architectural features around it. These can be summarized in the following chronological sequence, although the ceramics have not been analyzed yet:

- 1) Plaster floor placed directly on top of sterile soil (Floor 10), which covered Burial 58, at 4.5 m below surface. This was covered by Floor 9, separated by less than 10 cm of thin red clay fill (Phases 3A and 3B). Some sherds of Chablekal Fine Gray were found on top of the floor, giving a date of 760 C.E. or later for the next phase.
- 2) A Platform built with irregular limestone and sandstone blocks, and covered with plaster (Phase 2A) was built after the previous phase. The platform sustained Structure L7-17-Sub-1, which had 1.6 m in height. A cache of a complete El Zapotal bowl was found on top of the platform floor, at 2.45 m below the surface (lot CAN 27A-7-8).
- 3) Modifications of Structure L7-17-Sub-1 included the addition of a 0.5 m high ramp that descended to the southern side of the platform, built with a retention wall and 4 successive floors (Phases 2A to 2D). Later on, the basal platform was enlarged with a new fill and a retention wall that covered almost the entire staircase with another plaster floor (Floor 8). This modification also included a new ramp that also presented 5 successive floors (phases 3B to 3F).
- 4) Finally the entire Structure L7-17-Sub-1 was buried and the area covered by Floor 1. Within this construction fill, ceramics were mostly utilitarian jar sherds.

10.1.8 Palace Pool (Operation CAN 42)

Excavations in the palace pool recovered a total of 4,943 sherds, from 27 excavation lots. A preliminary analysis defined a majority of ceramics from the Lowland tradition (26%), especially Cambio Unslipped large jars. From the Tinaja Group, many sherds correspond to the type Pantano Impressed: Stamped variety, with 27 different designs (Figure 10.2). The Cancuen tradition was also represented (5.4%) by the Zapotal Impressed and La Isla Orange types, with different rim forms. A new type was defined in this context, labeled Linterna Impressed with slip: Linterna variety, and consisting of small bowls with impressions in the surface and covered with a light beige slip. The sample from the palace pool had a low presence of Highland tradition (0.5%) and Mexican tradition (0.5%) types (Alvarado 2011:66-68, Anexo 3).

Given presence of a natural spring in the pool, ceramics and other materials had been under a permanent humid environment. The particular conditions of this context allowed the excellent preservation of human bones, but at the same time caused that the color, slip and other ceramic surface treatments eroded. For this reason, a high percentage of sherds were classified as eroded (56.5%) or unidentified (11%) (Alvarado 2011: Annex 3).

The ceramic patterns found in the palace pool confirmed the idea that the occupants of the royal palace were more affiliated with the Lowland tradition than the Highland tradition. However, the local Cancuen tradition is well represented, indicating that the Zapotal and La Isla bowls were used throughout the site. For chronological purposes, the material found in the palace pool could be dated to Tepeu 2a and 3 phases, but its deposition should be dated to the end of the site occupation.



Figure 10.2 Restored Pantano Impressed jar recovered from the Palace Pool excavations (Forné, *et al.* 2008: 272)

10.1.9 Funerary and dedicatory offerings

Given the lack of substantial ceramic deposits in some parts of the royal palace, the presence of ceramic funerary and dedicatory offerings has been important for the chronological and functional interpretation of different construction fills and other architectonic contexts. For this reason, it is important to list the presence of complete or semi-complete vessels associated with the royal palace (descriptions were made by Paola Torres and Melanié Forné):

Type	Vessel Code	Lot	Context
Nitro Incised	CANV-10	CAN 21-2-10	Burial 12 Vessel 1
Volcancito Composite	CANV-13	CAN 21-2-10	Burial 12 Vessel 2
Hinojo Negative	CANV-14	CAN 17-5-14	Burial 31 Vessel 1
Cocales Bichrome	CANV-2	CAN 17-5-14	Burial 31 Vessel 2
Hinojo Negative	CANV-29	CAN 17-5-14	Burial 31 Vessel 3
Saxche-Palmar Polychrome	CANV-25	CAN 16-24-1	Burial 50 Vessel 1
Cocales Bichrome	CANV-37	CAN 16-24-1	Burial 50 Vessel 2
Saxche-Palmar Polychrome	CANV-61	CAN 16-24-1	Burial 50 Vessel 3
Mataculebra Cream Polych.	CANV-133	CAN 26C-1-37	Burial 83 Vessel 1
Puerto Incised	CANV-126	CAN 26B-1-6	Burial 75 Vessel 1
Sendero Black	-----	CAN 43-4-5	Burial 77 Vessel 1
Raxruha Cream	CANV-102	CAN 43-4-5	Burial 77 Vessel 2
Saxche-Palmar Polychrome	CANV-108	CAN 43-4-5	Burial 77 Vessel 3
Saxche-Palmar Polychrome	CANV-109	CAN 43-4-5	Burial 77 Vessel 4
Saxche-Palmar Polychrome	CANV-128	CAN 43-4-5	Burial 77 Vessel 5
Not analyzed	-----	CAN 43-64-8	Burial 96 Vessel 1
Kanalcan Incised	CANV-139	CAN 43-64-8	Burial 96 Vessel 2
Not analyzed	-----	CAN 43-64-8	Burial 96 Vessel 3
Chablekal Fine Gray	CANV-23	CAN 28-14-17	West Patio offering
Chablekal Fine Gray	CANV-57	CAN 28-14-17	West Patio offering
Orange on Cream Incised	CANV-90	CAN 28-14-18	West Patio fill
Miseria Appliqué	CANV 99	CAN 27-19	Central Patio offering
Orange on Cream	CANV 98	CAN 23A-7-2	Southeast Corridor fill
El Zapotal Impressed	CANV-95	CAN 23A-7-8	Southeast Corridor fill

Burial 12

The two vessels that were recovered in Burial 12 allowed its dating to the Concordia phase, and both belong to the Highland Tradition. Nevertheless, the shape of CANV-13 may suggest a Los Laureles date, given its similarity with Chablekal forms.

CANV-10

Type: Nitro Incised

Pastel temper and firing: Fine volcanic paste, grayish brown (10 YR 7/2); uniform firing with surface remains of biotite.

Surface treatment and decoration: Slip without polishing. Exterior decoration: thick cream slip, with an orange rim band (10 R 5/8) followed by a double incised line and a horizontal band with incised pseudo-glyphs (5 repeated pairs) limited by another incised line. Interior: Smudged or polished black (7.5 YR 3/1) very eroded.

Form: Tripod cylindrical bowl, rounded lip, direct rim, slightly outward walls, flat base with an impressed circle in the center, semispherical hollow feet without rattle (Figure 10.3).



Figure 10.3 CANV-10 (Photo by M. Callaghan, drawing by L. Luin, VCAP)

CANV-13

Type: Volcancito Composite (Polished Black with Maya blue paint, Fine Gray imitation?)

Paste, temper and firing: Fine yellowish red volcanic paste (5 YR 6/8) of soft texture, compact consistency and light weight. Pumice inclusions, uniform firing, no dark core.

Surface treatment and decoration: Polished finished. Interior and exterior black smudging or polishing (2.5 Y 3/1) and black rim. Remains of pink and maya blue plaster in the exterior.

Form: Bowl with composed silhouette, rounded lip, direct rim, straight divergent walls, basal angle, and convex hollow base with 30 rattles (Figure 10.4).



Figure 10.4 CANV-13 (Photo by M. Callaghan, drawing by R. Macario, VCAP)

Burial 31

One of the vessels of this burial (CANV-2) corresponds to the local Cancuen tradition, while the other two belong to the Highland Tradition, indicating that the earliest level of Structure K7-1, dated to Concordia phase, had a link with a highland population.

CANV-14

Type: Hinojo Negative, imported from Chipoc (according to INAA analysis)

Paste, temper and firing: Fine volcanic paste of reddish color (10 YR 4/8); volcanic ash temper with pumice particles; differential firing with thin dark core without dark clouds.

Surface treatment and decoration: Black slipped finish with negative color decoration (chart 1 8/N) of squares with three dots or “x” inside (see K. Brown in *Ceramics of Kaminaljuyú* pp. 153-171, for basic motifs in Usulután negative decoration).

Form: Bowl with square lip, rim slightly curved outward, flat base without feet (Figure 10.5).

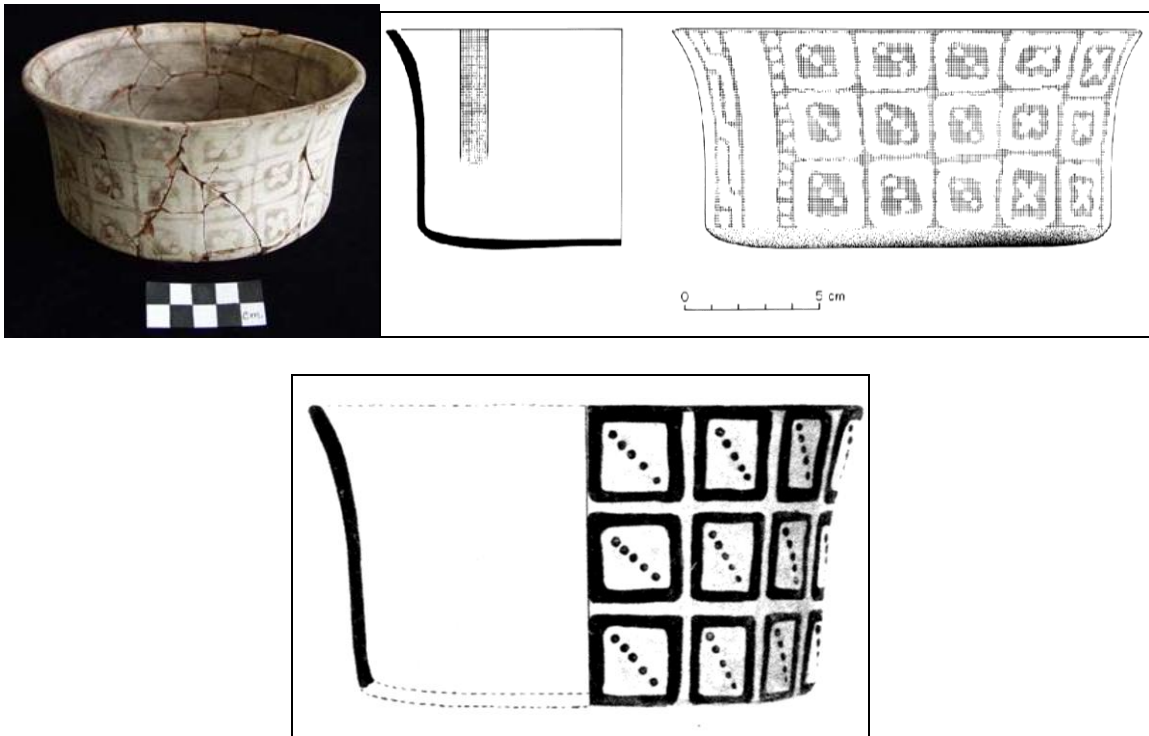


Figure 10.5 CANV 14 (above) (Photo by M. Callaghan, drawing by L. Luin, VCAP) and vessel from Chipoc (below) (Smith 1952: fig.17)

CANV-2

Type: Cocalés Bichrome

Paste, temper and firing: Fine and hard past compact texture with fine limestone temper and ferruginous particles. Orange paste (5YR 6/6) with dark core and dark firing clouds in the exterior base.

Surface treatment and decoration: Slipped and polished (glossy). Grayish cream slip base, (2.5Y 8/1) and reddish orange slip (2.5YR 4/8) with an inferior black lip band (7.5 YR 3/2).

Form: Tripod bowl with slightly beveled lip, direct rim, straight divergent walls, flat base and hemispheric hollow feet with rattle and deep incisions in the base (Figure 10.6).

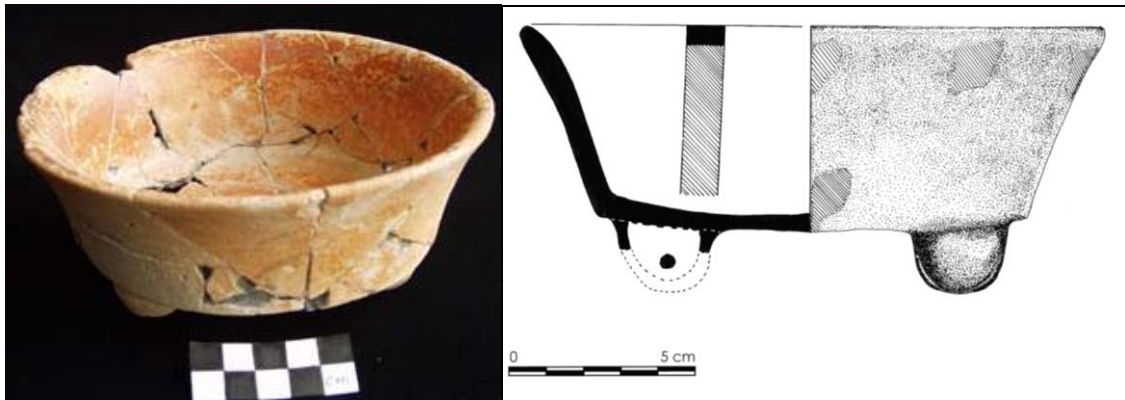


Figure 10.6 CANV-2 (Photo by M. Callaghan, drawing by R. Macario, VCAP)

CANV-29

Type: Hinojo Negative (Raxruha Group)

Paste, temper and firing: Medium-textured carbonate paste with crushed calcite inclusions and ferruginous nodules. There is no dark core and firing appears uniform. Paste color is reddish yellow almost pink (5YR 7/6).

Surface treatment and decoration: Interior: entire interior smudged black and possibly polished, surface is eroded. No other decoration is present. Exterior: Exterior of vessel is decorated in a combination of cream base slip, brown or black slip, and resist or negative painting technique. Extending approximately 1.8 cm down from the lip is a band of brown or black polished or burnished slip that continues around the circumference of the cylinder. Beneath this band begins a thick band composed of a combination of resist dots and thick lines (Figure 10.7).

Form: Vase with rounded lip, slightly thickened exterior rim, very slightly outcurved sides, and flat base (10.4 cm diameter)



Figure 10.7 CANV-29 (Photo by R. Macario, VCAP)

Burial 50

This burial may represent a secondary deposit of the remains of an early Cancuen ruler (*Chan Ahk Wi' Taak Kay*) or *Taj Chan Ahk* predecessor. The three vessels that were part of the funerary offering correspond to the Lowland tradition, indicating some sort of affiliation with the Peten populations, as opposed to the two early burials described above. The ceramics don't allow dating the burial to a particular phase, making it feasible to belong to Late Concordia, Laureles or Chaman.

CANV-25

Type: Saxche-Palmar Polychrome Orange

Paste, temper and firing: Medium textured paste with medium calcite inclusions and small ferruginous inclusions. Color is pale brown (10YR 7/4) with dark core.

Surface treatment and decoration:

Principal design is on the interior. Lip is painted red (2.5YR 4/8) and the rest has an orange base slip that ranges from dark (5YR 5/8) to light (7.5YR 6/8). Between a thin black band and the interior basal-break of the vessel, a number of repeating designs appear, similar to what Smith (1955:62) refers to as a bracket arrangement. Two pairs of brackets, each bracket outlined in a thin black line of paint and painted red (2.5YR 4/8), enclose a small loop or teardrop. The teardrop is composed of a thin black line framed by a thick red outline. The bracket and teardrop design appears twice on the interior walls of the vessel. Between each of the two sets of brackets on either side of the plate is one thick black painted arc outlined by a thin black painted line. The interior base of the plate is decorated in a series of geometric painted designs forming a band stretching across the bottom of the plate. Two bands of black paint encircle the band and entire base of the plate. Design elements within the band are framed by a series of three thin black painted lines and three black and red arcs. These lines and arcs mimic one another on either side of the band. The actual band is composed of two “diamond and triangle” (*Ibid.* 63), “sky band” (*Ibid.* 73) or even “dress shirt” (*Ibid.* 63) motifs enclosing a rectangular shaped box outlined in thin black lines. On either side of the box, two painted black triangles point toward one another. In the negative space created by these triangles appear two orange triangles each with either two or three red dots in them. A thick red line outlines the walls of the box within the rectangle between the two diamond motifs. Within the box is a series of red blotches possibly created by short quick strokes. In the center of the box (and center of the bottom interior of the plate) is a thin black loop or teardrop similar to those seen on the walls of the vessel, but lacking the red outline (Figures 10.8, 10.9).

In the exterior, the red painted band along the interior lip of the vessel extends down the exterior walls of the plate. The remainder of the area beneath the band is filled with parallel lines or stripes alternating between faded red paint and an orange base slip. Just above the basal ridge is a thin band of red paint. On one side of the plate traces of post-fire applied blue paint appear above the red paint/slip where the basal ridge begins and on the ridge itself. The ridge is notched in a series of seemingly arbitrary patterns of deep thin slashes and sharp notches. Groups of thin slashes (3-5) occur between pairs of deep sharp grooves on the ridge. Excess clay remains on the ridge where the thin slashes have been made. The base of the vessel is neither slipped nor painted. There are two dark clouds on the base as well as two splotches of red paint near one foot – it does not appear the splotches were intended as a design element.

Form: Plate with rounded lip, direct rim, flared sides, notched basal ridge, flat base, and hollow oven rattle tripod feet each containing 2 rectangular or slot-like ventilation holes.



Figure 10.8 Photo of CANV-25 (Photo by M. Callaghan, VCAP)

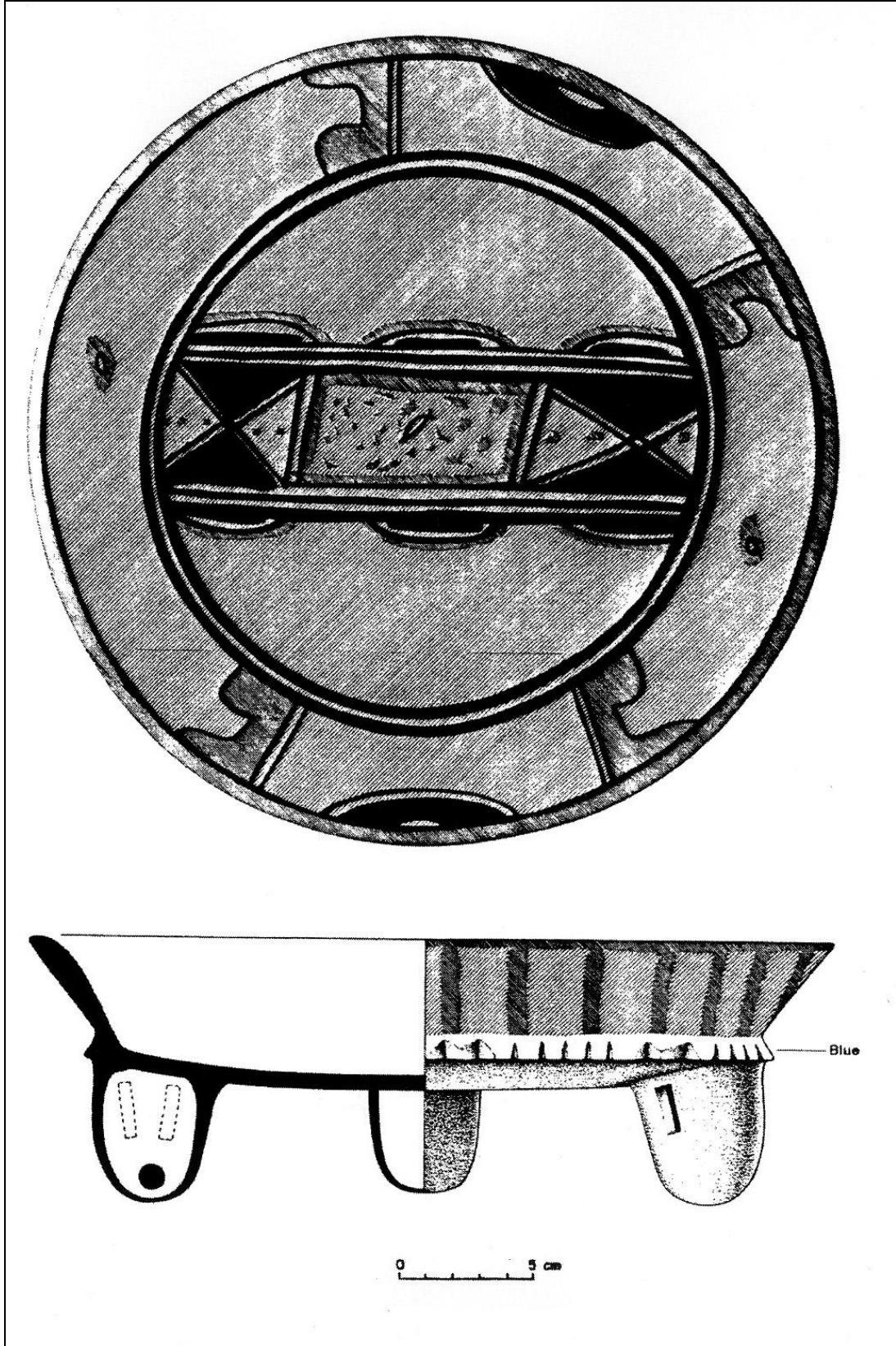


Figure 10.9 Drawing of CANV-25 (Drawing by L. Luin, VCAP)

CANV-37

Type or preliminary category: Cocalés Bichrome

Paste, temper and firing: Medium-textured paste with crushed calcite and ferruginous inclusions. Paste color is orange (5YR 7/6). An opaque core may be present.

Surface treatment and decoration: Interior: Top surface of lip is painted black. The remainder of the interior of the vessel is slipped orange (5YR 5/8). Exterior: The black painted band on the top surface of the lip extends down the rim. The base is slightly pushed in with various incisions or scratches (Figure 10.10).

Form: Bowl with slightly pointed lip, direct rim, slightly incurved sides, and flat base.



Figure 10.10 CANV-37 (Photo by M. Callaghan, VCAP)

CANV-61

This vessel corresponds to a Saxche-Palmar Polychrome cylinder, but it has not been reconstructed, making difficult its detailed description (Figure 10.11).



Figure 10.11 CANV-61 sherds (Photo by M. Callaghan, VCAP)

Burial 83

This early burial may be contemporaneous with burials 12 and 31, dated to Concordia phase. However, the only ceramic offering (CANV 133) is a Mataculebra cylinder, which corresponds to the Lowland Tradition, not to the Highland Tradition represented by the other two burials.

CANV-133

Type: Mataculebra Cream Polychrome

Paste, temper and firing: Red paste (2.5YR 5/8) of fine texture, homogeneous and compact. Some white calcite inclusions and minor quantities of pumice and brilliant particles.

Surface treatment and decoration: Interior: Smoothed surface with light horizontal striations caused by smoothing, and cream slip (Figure 10.12). Exterior: Polychrome paint on red slip, cream pre-slip, and black delineate. Approximately 1 cm. below the rim, a cream horizontal band of cream pre-slip made with negative or reserved decoration

and red pseudo glyphs delineated with black. Below the band, the main motifs were painted, covering 10.5 cm of height. Two anthropomorphic faces were painted, one with a zoomorphic headdress and feathers in its right side (Figure 10.12). The other one has an oval element over the head, with two scrolls, and the same feather decoration, which seems to represent the iconographic element known as the *serpent-wing* named by Maudslay, and associated with the Principal Bird Deity (Bardawil, 1976). There are iconographic similarities with a bowl of the same type found in Burial 39 at El Perú/Waka' (Pérez 2008:258, photo 27), which also seems to represent the Principal Bird Deity with the serpent-wing element.

Form: Cylindrical vase with simple direct border, rounded lip, straight vertical walls and flat base.

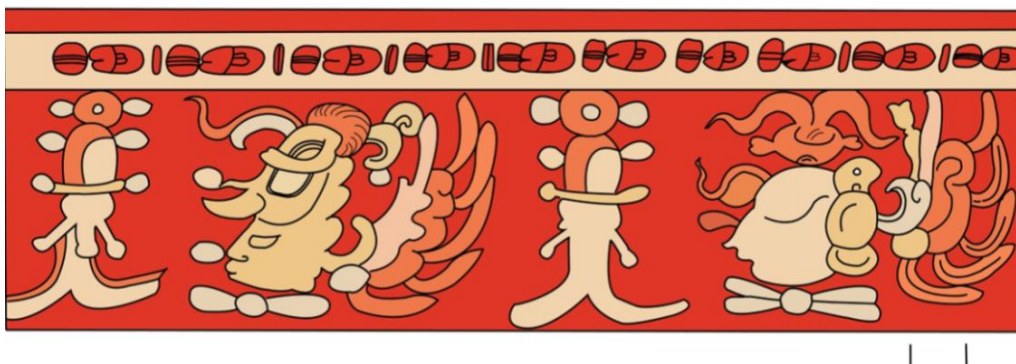


Figure 10.12 Photo and rollout drawing of CANV-133 (Photo by R. Bishop, drawing by J. Saravia, VCAP)

Burial 75

This dedicatory burial found at the base of the northern staircase of the Lower North Patio had a single funerary offering, consisting in vessel CANV-126.

CANV-126

Type: Puerto Incised: Puerto variety

Paste, temper and firing: TP10, of reddish orange color (5YR 6/6) and homogeneous texture. Numerous temper with many ferruginous and white inclusions.

Surface treatment and decoration: Interior: remains of black slip 5YR 2.5/1, very eroded at the base. Exterior: same black slip, matte surface, with slight polish. Decoration: At approximately 1.6-1.9 cm. from the lip, two fine horizontal incisions (0.60 cm between each other) surround the vessel. Below them are 13 incised curvilinear decorative motifs in the shape of petals (Figure 10.13).

Form: Bowl with simple direct border, curved divergent convex walls presenting a slight change of orientation, turning straight -vertical near the border; rounded lip; and flat base.



Figure 10.13 CANV-126 (Photo by R. Macario, drawing by A. Cajas, VCAP)

Burial 77

This burial found in Structure L7-27 corresponds to the resting place of ruler *K'an Ma'ax* and should be dated to the final occupation at the site. It included five vessels as

part of a complex funerary trousseau. One of these vessels has not been restored yet, but it correspond to a cylindrical vase of the type Sendero Black, Black Variety, which is a local type and present remains of painted stucco decoration and a small band of red paint in the border and another one in the base. The remaining four vessels are CANV-102, CANV-108, CANV-109, and CANV-128.

CANV-102

Type: Raxruhá Cream: Ahumado Variety.

Paste, temper and firing: TP10 of pinkish red color 2.5 YR 7/8; yellowish red 5 YR 7/6., of homogeneous texture, porous and median fracture. Temper is numerous and small white particles (lime) are visible.

Surface treatment and decoration: Interior: black slip on well smoothed and slightly polished surface. Exterior: slip is highly eroded, though some remains of cream slip and black paint are visible. At the base there is a slight fine striation caused by smoothing.

Form: Cylinder (CI2) with simple direct border, flat lip and straight vertical wall; flat base (Figure 10.14).



Figure 10.14 CANV-102 (Photo by R. Macario, VCAP)

CANV-108

Type: Saxche Palmar Polychrome on Orange.

Paste, temper and firing: TP10 of orange color (7.5 YR 8/6) of homogeneous compact and fine texture. Numerous temper with many white inclusions, and some ferruginous too. With 4X lens some small mica inclusions are visible.

Surface treatment and decoration: Interior: presents very eroded surface in the interior and exterior, with remains of orange slip and red paint better preserved in the interior walls and in the lip, in the form of a horizontal band. In the bottom are visible remains of dark reddish brown paint (10R 2.5/3). Exterior: very few remains of red paint; the base and the three feet are slightly burned (Figure 10.15).

Form: Tripod plate with direct border, straight divergent walls, rounded lip, convex base, and large cylindrical feet, hollow, with ventilation holes on its sides, and rattle.



Figure 10.15 CANV-108 (Photo by R. Macario, VCAP)

CANV-109

Type: Saxche Palmar Polychrome on Orange.

Paste, temper and firing: TP7 of orange color (7.5 YR 6/6) with black center due to firing. Numerous temper with white inclusions (calcite); large and small ferruginous nodules; some small mica inclusions.

Surface treatment and decoration: Exterior: smoothed surface with a light layer of orange slip (2.5 YR 6/8) that is not present at the base. In the border zone presents an horizontal band of red paint (10R4/8). Interior: The same band or red paint (approximately 1.20 cm width), under the band some remains of black paint are visible, extending to the walls and base. On top of the cream slip base (2.5 YR 8/1) some unidentified motifs in red paint (10R 4/8) are visible at the bottom of the vessel (Figure 10.16).

Form: Tripod plate with simple direct border, rounded lip, concave curved divergent walls, basal flange, flat base, and large hollow cylindrical feet with two ventilation holes on their sides, with rattle.



Figure 10.16 CANV-109 (Photo by R. Macario, VCAP)

CANV-128

Type: Saxche Palmar Polychrome on Orange.

Paste, temper and firing: TP14 of orange color (7.5 YR 7/6) of fine, homogeneous, compact and hard texture, with black center due to firing and smoked zones in the feet exterior. Numerous temper with white inclusions (calcite).

Surface treatment and decoration: Interior: smoothed and very eroded surface, with remains of orange slip. Exterior: In the border presents a circumferential band of dark red (10R 3/6) paint of approximately 1.30 cm width. Background color is cream; in the interior wall presents three very thin lines of black paint; below them there is a band of pseudo glyphs. In the break zone between the bottom and the wall there is a black line of 0.70 cm wide. At the bottom are visible remains of red paint, with unidentified motifs.

Form: Tripod plate with simple direct rim, straight divergent walls, rounded lip, slightly thinner in the interior, flat base, and large hollow feet, with two rectangular ventilation holes at their sides (Figure 10.17).



Figure 10.17 CANV-128 (Photo by R. Macario, VCAP)

Burial 96

This burial was also found in Structure L7-27, near and at the same level as Burial 77, suggesting that it could correspond to *K'an Ma'ax* wife, a close relative, or an important ally. Its funerary offerings included three vessels, but only one (CANV-139) has been reconstructed and analyzed. The other two are fragmented, and include a polychrome vessel with uncommon motifs (Figure 10.18)



Figure 10.18 Sherd of polychrome vessel of Burial 96 (Photo by T. Barrientos, VCAP)

CANV-139

Type: Kanalcan Gouged Incised: Variety Kanalcan

Paste, temper and firing: TP10. Fine and red paste with little temper.

Surface treatment and decoration: Surface has a reddish slip a little stronger than the paste, applied only in the incised decorative panels. The space between both panels is covered with blue paint, as well as the superior and inferior parts, though very eroded. The decoration was done with thick and deep incisions. The two rectangular panels show iconographic motifs whose main element is a profile face of a mythical character, possibly the god *K'awil* (God K), with his distinctive long nose and crossed eyes,

wearing an earflare that supports a hanging jade pendant and a pectoral. From his forehead a semicircular element emerges with a scroll. These panels are separated by two rectangular panes subdivided in four blocks with incised pseudo glyphs (Figure 10.19).

Form: Cylindrical vase with straight vertical walls, direct simple border, rounded lip and flat base (Figure 10.19). Its design is very similar to a set of 13 vases found in Tikal Burial 196 and a vase found in Tikal Burial 116 (Claudia Quintanilla pers. com. 2012, see Hellmuth 1990:138).

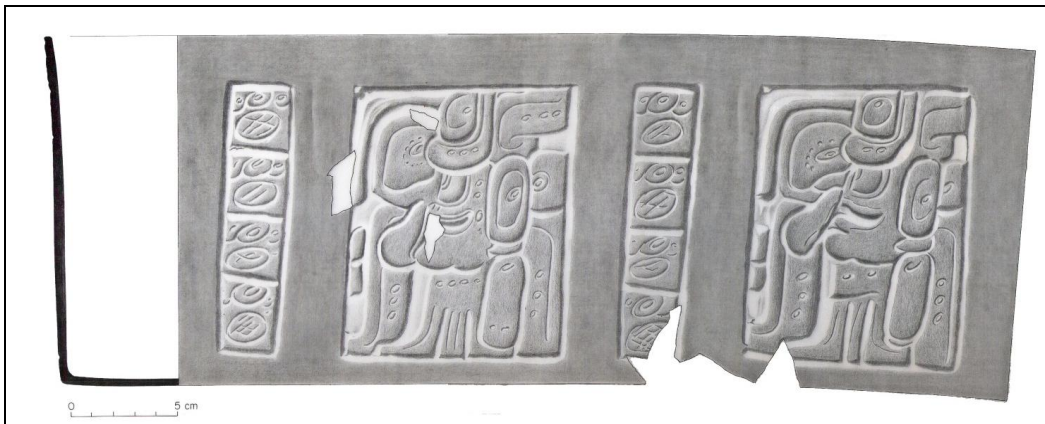


Figure 10.19 Photo and rollout of CANV-139 (Photo by R. Macario, drawing by L. Luin, VCAP)

West Patio

The excavations in the West Patio identified an early clay platform buried by a massive construction fill. Just on top of the platform, a dedicatory offering was placed before it was covered by the new stage. This consisted of the two following Chablekal vessels that date the second stage to either Los Laureles or Chaman phase:

CANV-23

Type: Chablekal Fine Gray: Telchac Composite

Paste, temper and firing: TP1. Very fine homogeneous light gray paste (10YR 7/1), with some grey, white and quartz particles.

Surface treatment and decoration: Interior: Possibly slipped, but no slip remains. There are patches of white residue on the base and walls. Exterior: Badly eroded black slip remains on the sides of the vessel near the basal break. Below the folded exterior rim is a panel with a potentially repeated design composed of incised geometric shapes and two long curling shapes on either side almost resembles a Mexican year sign (Smith 1955: 72). In the background behind the two designs is a series of horizontal lines of dentate punctations. These incised designs could have been zone slipped black (Figure 10.20).

Form: Small bowl with rounded slightly flattened lip, folded rim, flared walls, and z-angle rounded slightly flattened base with three globular rattle feet.

CANV-57

Type: Chablekal Fine Gray: Telchac Composite

Paste, temper and firing: Very fine light gray paste (10 YR 6/1) seemingly without temper.

Surface treatment and decoration: Interior: Possible black slipped band around the rim. Exterior: Exterior rim is folded and painted black. Below, two panels of incised designs are separated by a black vertical bar or band on either side. The two panels each display one incised monkey, facing left, squatting, with facing arm bent upwards and hand bent toward face, and tail curling down and out behind the body. In the background behind the monkeys appear a series of horizontal and diagonal lines of dentate punctations (Figure 10.20).

Form: Small bowl with rounded lip, exterior thickened rim, flared walls, and z-angle rounded slightly flattened base with three globular rattle feet.



Figure 10.20 CANV-57 (left) and CANV-23 (right) (Photos by A. Demarest, VCAP)

CANV-90

Type: Chapayal Incised

Paste, temper and firing: Hard, homogeneous and compact light orange paste (2.5YR 7/6 light red), with numerous white particles, distributed uniformly in the entire surface, which presents an eroded slip. Few ferruginous particles were also observed.

Surface treatment and decoration: Interior: black slip, smoothed and polished, with lustrous appeal (texture with some erosion but uniform color). Exterior: smoothed and polished surface, with an eroded slip that has been preserved in certain areas. Presents incised decoration starting with two circumferential horizontal bands located at 0.4 cm and 0.8cm from the lip. Vessel walls have two panels 15cm wide, framed by two superior and inferior horizontal parallel incisions that surround the base at 6 cm and 6.5 cm from the lip. The two panels are framed by their sides by two vertical parallel lines, separated by 0.5cm. Each panel is separated by 3 cm. The central motif of each panel is a cormorant bird, in profile, accompanied by two bands of chevron designs with incised lines in zigzag. One of the birds presents a circle under the neck (Figure10.21).

Form: Bowl with rounded lip, direct simple border, concave curved divergent walls and circular flat base.



Figure 10.21 CANV-90 (Photo and drawing by R. Macario, VCAP)

Central Patio

Stratigraphic excavations in the Central Patio identified two major construction episodes. The first one is a plastered clay platform that was covered by a large fill. Before that new stage, an offering was placed inside the plaster floor in front of the platform. It consisted of a Miseria Appliqué censer (CANV 99) (Figures 10.22, 10.23).

CANV-99

Type: Miseria Appliqué

Paste, temper and firing: (TP 24) Light orange or pink paste, carbonated with homogeneous texture in some parts and heterogeneous in others; coarse and compact. Temper of ferruginous particles, mica, white and some quartz.

Surface treatment and decoration: Coarse surface with decoration of three spikes applied below the border, each pair separated by approximately 6 cm. The interior presents some smoked areas.

Form: Incense burner with rounded lip, horizontal border flaring outside, straight walls and flat base. Its lid has a spherical handle with appliqués (Figures 10.22, 10.23).



Figure 10.22 CANV-99: censer (left), handle (center) and lid (right) (Photos by M. Callaghan, VCAP)

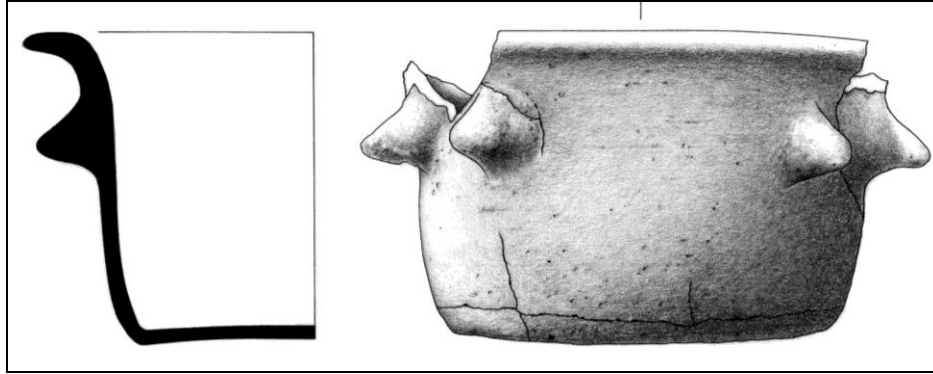


Figure 10.23 CANV-99 (Drawing by L. Luin, VCAP)

Southeast Corridor

Excavations in the Southeast Corridor uncovered Structure L7-17 Sub. This early building and its basal platform was modified several times, and the first of these was associated with a cache of a Zapotal Impressed vessel (CANV 95) (Figure 10.24), which corresponds to the local Cancuen Tradition. Another vessel (CANV 98) of Saxche Palmar Polychrome type was found associated with the later construction stage that covered Structure L7-17 Sub (Figure 10.25).



Figure 10.24 CANV-95 (Photo by M. Callaghan, VCAP)



Figure 10.25 CANV-98 (Photos and drawing by L. Luin, VCAP)

10.2 Osteological data from burials

Only six burials have been found within the royal palace complex: burials 12, 53, 83, 77, 96, and 101. Of these, all had relevant funerary offerings except burials 53 and 101. For that reason, we only have a sample of 4 individuals that could represent occupants of the palace. The osteological analysis has been carried out by Luis Ríos (Ríos and Seijas 2002), Carrie Anne Berryman (2003) and Claudia Quintanilla (2009, 2013), which is summarized here:

10.2.1 *Burial 12*

This burial was found in the deepest excavation level in the Northwest Patio of the royal palace (Figure 10.26). Together with burials 53 and 75, they represent osteological evidence of the first occupants of the acropolis and the site. Its dating seems to correspond with Burial 31, found in Structure K7-1, near the Northwest Patio. The analysis of Burial 12 bones indicates that the individual is a male young adult, with a slight tabular cranial deformation (Quintanilla 2013: 147).

10.2.2 *Burial 53*

This burial found in the lower levels of the Southeastern Corridor was not removed from its original context, due to its poor preservation. However, during the excavation it was possible to distinguish it as an adult individual (possible female), with tabular cranial deformation and jade decorations (type E1 and *Ik'* pattern in inferior arcade) in her teeth (Quintanilla 2013: 154), indicating a high social status.

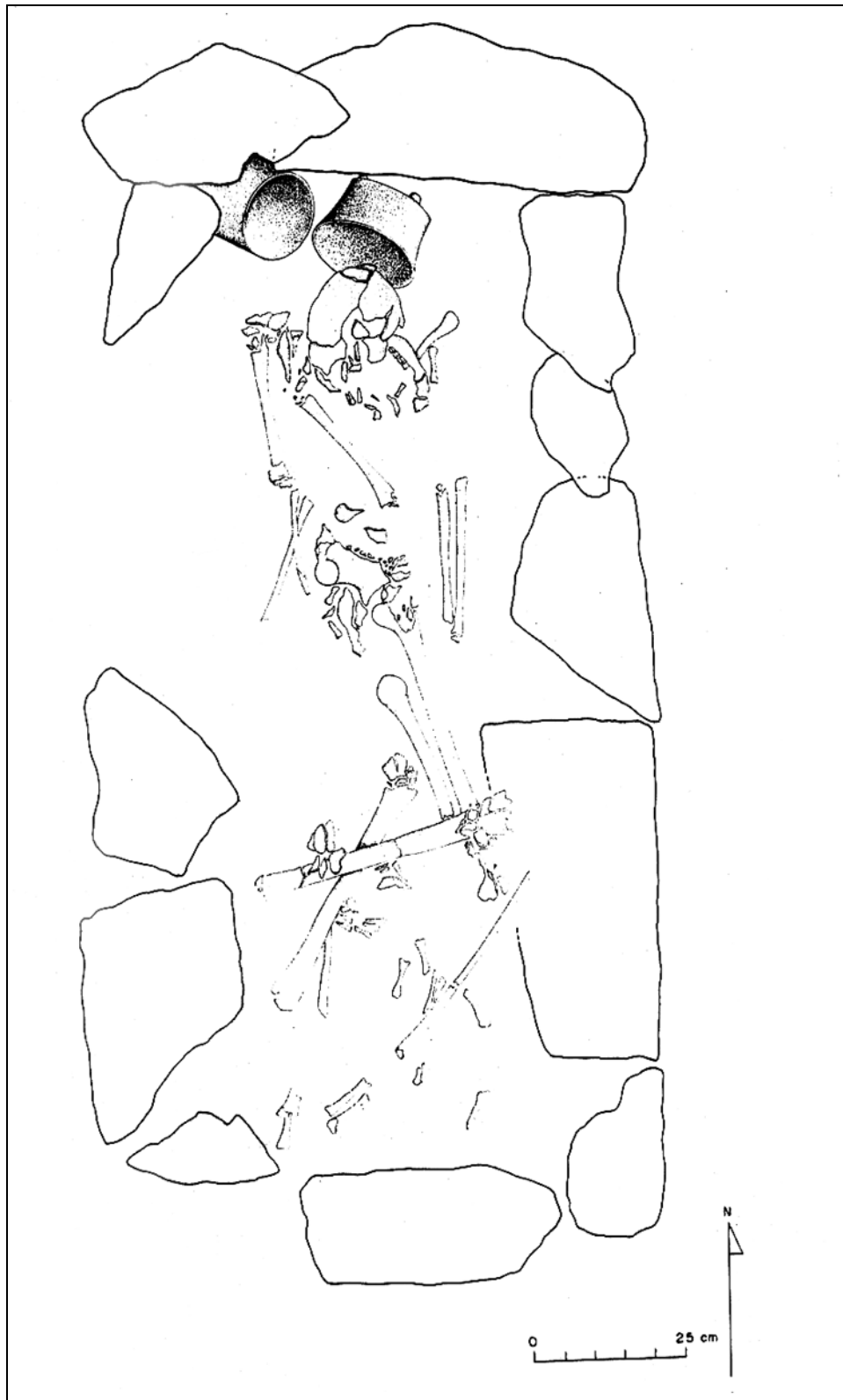


Figure 10.26 Burial 12 (Drawing by L. Luin, VCAP)

10.2.3 Burial 83

This is one of the three early burials found in the royal palace, placed directly on top of sterile soil, during the first occupation phase of the site (Concordia). It has been analyzed by Claudia Quintanilla (2009, 2013). The axial skeleton included a bad preserved cranium, 19 vertebrae (one axis arch, 7 bodies and 11 unidentified), rib and pelvis fragments (Figure 10.27). The appendicular skeleton was well preserved, and included both humerus, right ulna, right femur and both tibiae, carps, metacarpi, three phalanges of left hand, and left calcaneus.



Figure 10.27 Burial 83 (Photo by M. Callaghan, drawing by L. Luin, VCAP)

The dental registry lacked pieces 8, 16, 24, 25 y 29. Its preservation was from poor to regular, being unable to determine the sex. The age is a young adult, no more than 18 years old (based on bone fusion and teeth). No pathologies were present, and dental pathologies included caries in pieces 1, 2, 3, 4, 13, 14, 15, 17, 18, 30, 31, 32; hypoplasia in pieces 1, 6, 11, 12, 13, 17, 20, 28; periodontal sickness determined by calculus in pieces 2, 4, 6, 9, 11, 13, 14, 15, 18, 19, 20, 21, 22, 27, 28, 30 and 31; and light incisor wear in pieces 6, 10, 11, 14, 18, 23 and 27. Given that the cranium was not restorable, no

cranial deformation was determined, though the dental decoration included an upper left central incisor with intentional wear of type B4 (*Ik'* pattern) (Figure 10.28). In addition, enamel pearl was observed in piece 20, and also splintering in mesolingual cusp in dental piece 15 (Quintanilla 2009: 200-1; 2013: 158).



Figure 10.28 Decorated teeth of Burial 83 (Quintanilla 2013: 105)

10.2.4 Burial 77

This corresponds to one of the four known kings of Cancuen, *K'an Ma'ax*. Given that it was buried without a formal cist or crypt, and close to the surface, his bones did not preserve well, making it difficult to determine the cause of death, and consequently, it is not possible to prove that it was part of the events that led to the deposition of 38 individuals in the royal pool (although the ceramic and architectonic evidence suggests that it was contemporaneous). The axial skeleton included small fragments of frontal, parietals, occipitals and temporal, as well as fragments of mandibles, vertebrae and ribs. Both patellae were present and small fragments of almost all long bones, excepting the right fibula. Some fragments of the left hand and foot were also identified (Figure 10.29). The dental registry missed pieces 1, 2, 14, 18, 19 and 32. In general, the preservation of the bones was poor, although regular in small fragments.

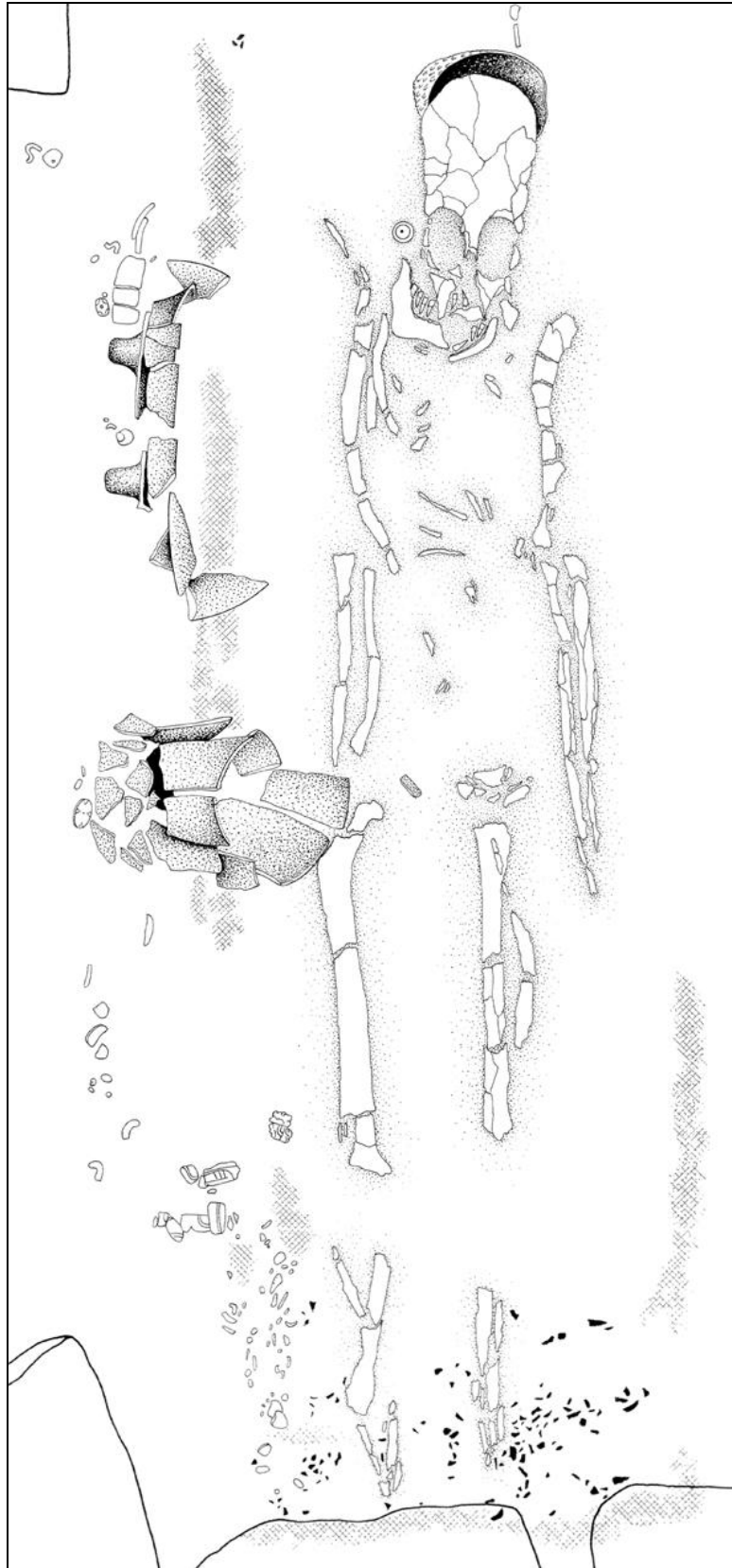


Figure 10.29 Detail of human remains, Burial 77

The sex was determined as male (based on mandible) and the age was adult (based on dental registry and bone robustness). No pathologies were observed, and dental pathologies included severe attrition in most pieces, and severe periodontal sickness, due to calculus in all pieces. Hypoplasia was observed in some pieces and calculus in all of them, and dental wear was moderate to severe. No cranial deformation was detected because the cranium was not restorable, and the dental decoration included greenstone inlays of E1 type in front teeth: in two incisors the inlays were present, while in the lateral and canines, only the perforation (Figure 10.30). However, during the cleaning process, these missing inlays were found. The lower incisors present some wear, indicating a possible A4 type modification. Most of the bones presented red coloring, indicating a possible cinnabar covering. In general, the data from the bones confirm that it was a medium male adult (Quintanilla 2009: 196-7; 2013: 158).



Figure 10.30 Decorated teeth of Burial 77 (Quintanilla 2009: 225)

10.2.5 Burial 96

The bones of Burial 96 were in very poor state of preservation (Figure 10.31). For that reason, the sample of bones that were extracted disintegrated completely. Therefore, it was not possible to prove if the buried individual corresponds to *K'an Ma'ax* wife.

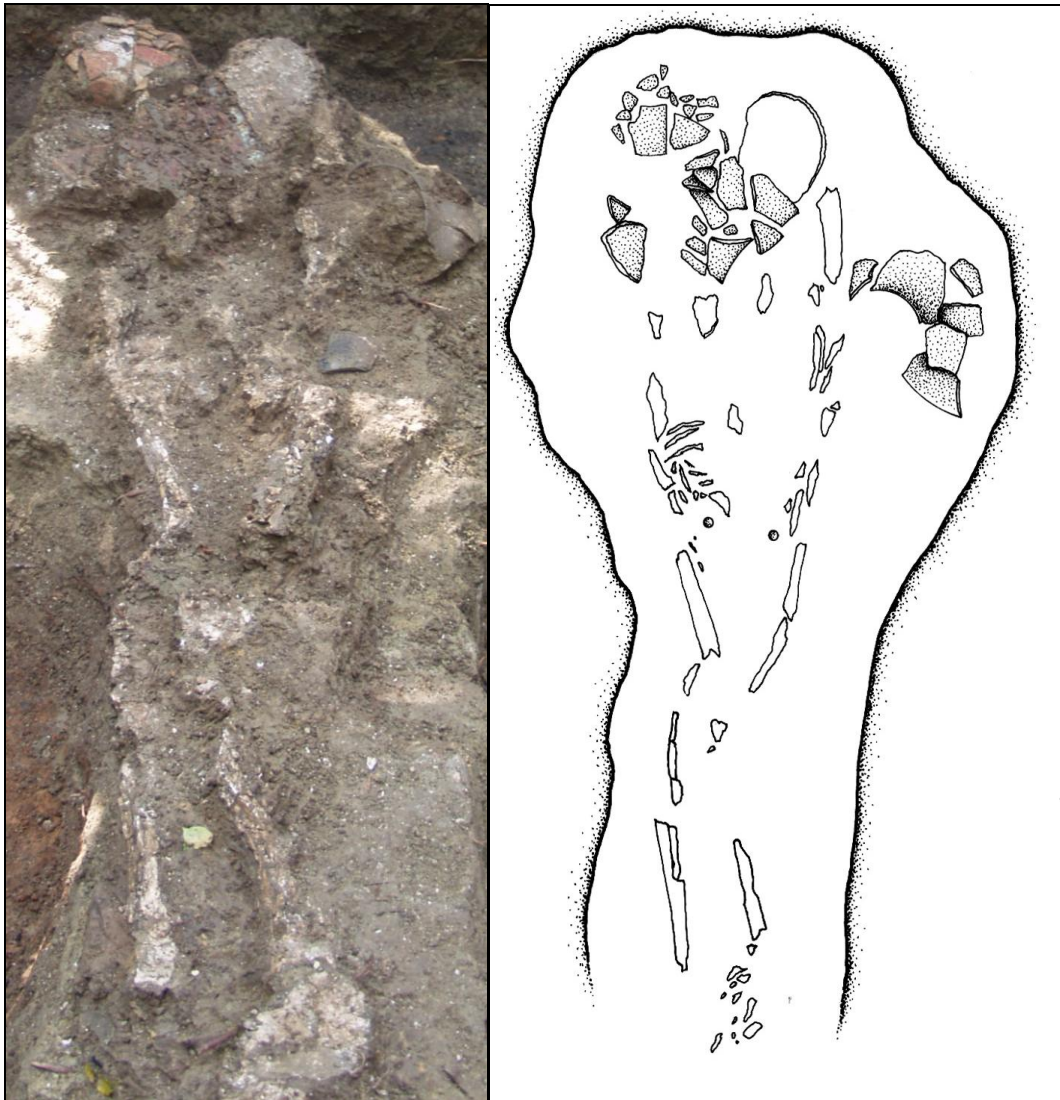


Figure 10.31 Burial 96 (Photo by T. Barrientos, drawing by L. Luin, VCAP)
Note the bad preservation of bones

Four burials have been found directly in front of the royal palace complex and have been considered important for its interpretation: 30, 31, 75, and 50.

10.2.6 Burials 30 and 31

These two burials were found during the excavations of Structure K7-1. Burial 30 was not extracted due to the presence of a large tree. However, some arm, cranial, ankle and hand bones were recovered in a sparse pattern around it. Burial 31 was found deeper, associated with the first version of Structure K7-1. It corresponds to a female medium adult individual (Quintanilla 2013: 150) (Figure 10.32).

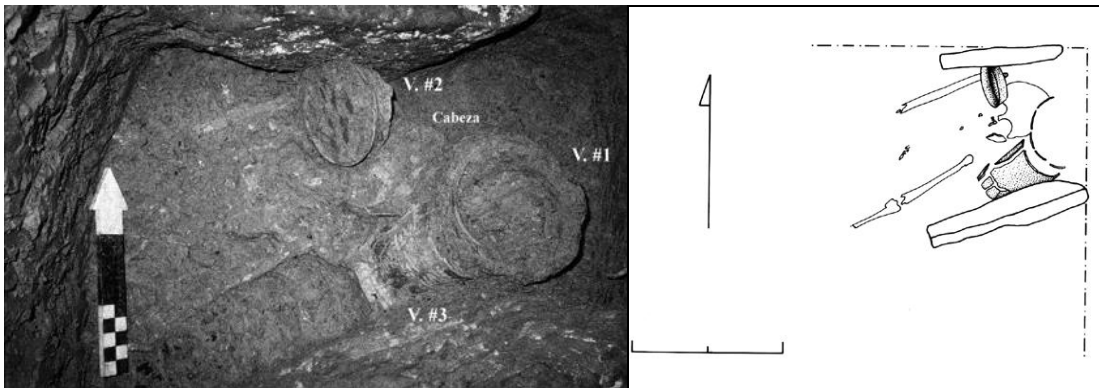


Figure 10.32 Burial 31 (Photo by E. Sears, drawing by L. Luin, VCAP)

In this area also, some sparse bones and an articulated arm were found on top of Structure K7-2 rubble (Figure 10.33)

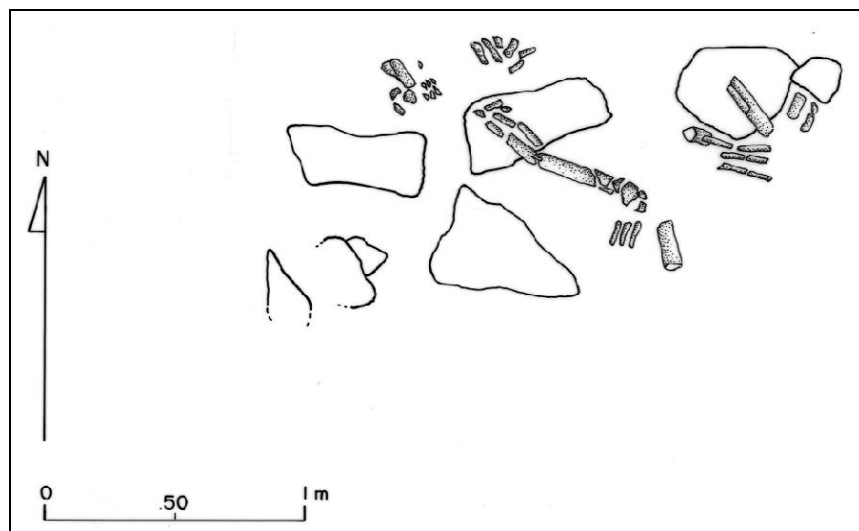


Figure 10.33 Articulated arm in Structure K7-2 (Drawing by L. Luin, VCAP)

10.2.7 Burial 50

This burial may represent an early Cancuen ruler, but most likely, *Taj Chan Ahk* father or predecessor, given its location under Panel 2, in Structure K7-3. The skeleton was incomplete, probably because some bones disintegrated, but the presence of cinnabar makes it likely that the missing bones were removed as part of rituals that involved re-entering the tomb in one or different episodes (Figure 10.34).

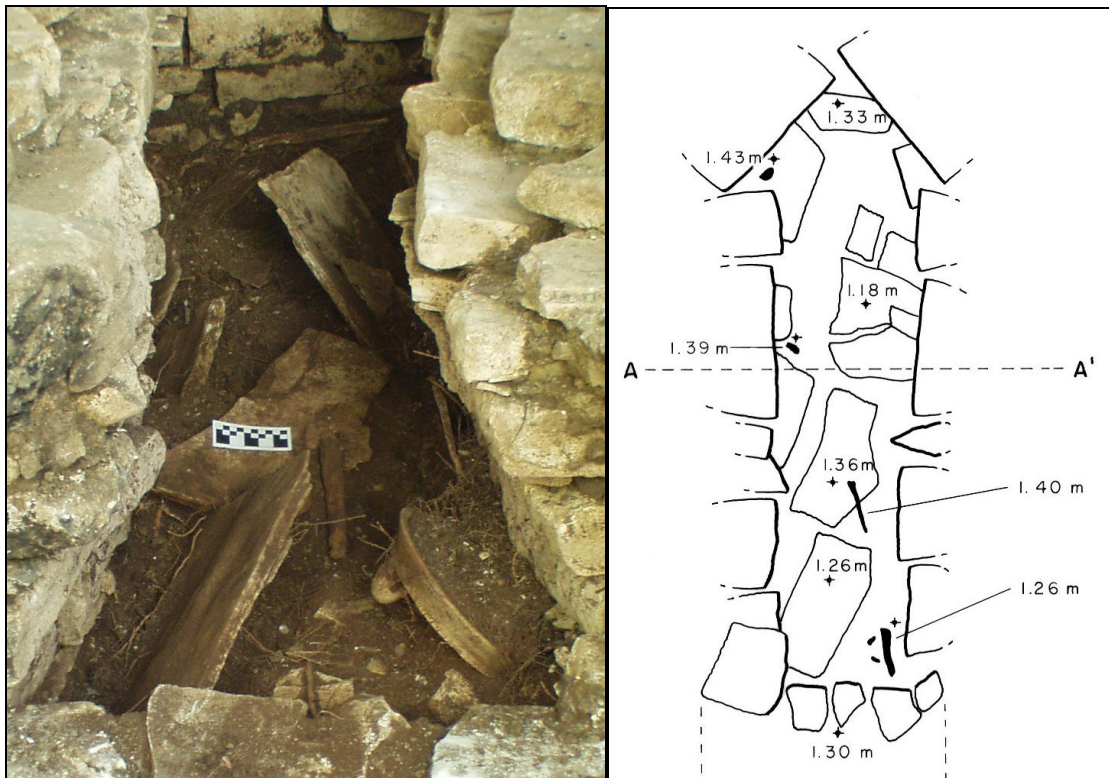


Figure 10.34 Interior of Burial 50, Structure K7-2, showing location of human remains
(Photo by A. Demarest, drawing by L. Luin, VCAP)

For this reason, it is possible that these remains and grave goods belong to *Chan Ahk Wi' Taak Kay*, because Panel 1 refers to a ritual carried out by *Taj Chan Ahk* at the tomb of that early ruler in the year 799 C.E. The analysis was made by Carrie Anne Berryman (2003:593) determined an age between 18 and 25 years, based on dental attrition and epiphyseal fusion.

The sex was not determined, mostly because less than 25% of the skeleton was found, also in extremely poor preservation. Only small fragments of long bones and mandible were in better shape, and all teeth were present excepting the third inferior and superior molars (congenital?). No pathologies were observed and dental pathologies included 8 teeth with hypoplasia, and 5 teeth with caries. Distal modifications included the removal from the upper right canine, central incisors, upper left canine, and lower right and left canines. Also the distal corner and medial were removed from inferior incisors, and the upper lateral incisive may had its entire surface filed in order to reach the adjacent cuts of the central incisor. Quintanilla (2013: 153) confirms the identification as a young adult of undetermined sex, and identifies its dental decoration as an A2 type with *Ik'* pattern (Figure 10.35).



Figure 10.35 Decorated teeth of individual of Burial 50 (Photo by C. Quintanilla, VCAP)

10.2.8 Burial 75

This burial was found directly in front of the central axis of Structure L7-14, on top of the North Plaza floor. It probably represents a dedicatory offering. The skeleton was present in an 80%, including fragments of parietal, occipital, frontal, temporal and mandible. The postcranial bones included right clavicle, scapulae, fragments of sacrum, some vertebral bodies and arcs without any determined numeration, and a fragment of axis. Presence of superior and inferior long bones well preserved, carps, metacarpi and phalanges of both sides and feet bones with medium preservation (Figure 10.36).



Figure 10.36 Burial 75 (Photo by M. Callaghan, VCAP)

The dental registry included pieces 2, 4, 7, 14, 17 to 19 in alveolus, 20, 22, 23, 26, 28, 29 to 31 in alveolus, and 32. The general preservation was regular, allowing the identification of probable female sex (based on dental registry) and age between 20-35 years (based on dental registry, bone robustness and closed sutures in fragments). Pathologies included possible porous hyperostosis, and evidence of severe anemia. Dental pathologies were severe periodontal sickness. The cranium was almost complete and restorable, showing erect tabular deformation, in its bi-lobular variety (Figure 10.37). The dental decoration included perforation for inlay type E1 in upper right lateral incisor, without the inlay material present (Quintanilla 2009: 194-5; 2013: 157) (Figure 10.38).



Figure 10.37 Restored cranium of Burial 75 (Quintanilla 2009: 224)



Figure 10.38 Decorated teeth of Burial 75 (Quintanilla 2013: 105)

10.3 Lithics

The amount of lithic artifacts recovered in almost all contexts of the royal palace is very low, making it difficult to infer any kind of functions from their frequency and/or spatial distribution. Given that most samples come from construction fill or offerings, there is no certainty about the fact that they correspond to local production or use. Nevertheless, there are some particular artifacts or artifact concentrations that deserve to mention them. One is an obsidian debitage concentration found on top of the plaster floor at the South Patio southeastern corner (lot CAN 4-104), associated with remains of broken ceramic vessels, thus suggesting some kind of abandonment deposit that involved fabrication or retouching obsidian tools (Andrieu, pers. com.). Nevertheless, the most important one correspond to the lithic deposits associated with burials 77 and 96, which contain large amounts of chert and obsidian. In addition, it will be important to review some individual artifacts made of jade and other types of greenstone, as well as a limestone earflare polisher. The analysis of these artifacts was carried out initially by Brigitte Kovacevich from 2000 to 2004, and reanalyzed by Chloe Andrieu from 2008 to present time.

10.3.1 Jade artifacts and production in the royal palace

The analysis of production patterns of jade artifacts in Cancuen was addressed initially by Kovacevich (Kovacevich 2000, 2001a, 2002, 2006, 2007; Kovacevich *et al.* 2003d, 2004, 2006, 2007) and reanalyzed by Andrieu (Andrieu 2008, Andrieu and Forné 2010, Andrieu and Quiñonez 2010; Andrieu *et al.* 2011a, 2011b, 2012, in press). The discovery of a jade workshop in the northern area of the site allowed the identification of

debitage associated with the production of different types of artifact preforms. Initially it was thought that some final stages of manufacture (carving and polishing) could have been associated with elite contexts. The recovery of a limestone ear flare polisher in the fill of Room 6 of Structure L7-9 (unit CAN 4-79) suggested that polishing of artifacts could have been carried out in some parts of the palace (Figure 10.39). However, taking in consideration the lack of debris from late stages of production in the entire site, Andrieu considers that it is unlikely that elite artisans could have worked jade artifacts at the royal palace (Andrieu and Forné 2010, Andrieu *et al.* 2011a, 2011b, 2012). The archaeological context of the limestone polisher supports the idea, because it was not found in association with the floor of the room; instead, it was located on top of more than 4 m of stone and clay fill, after the entire building was cancelled.



Figure 10.39 Earflare polisher found in a room fill of Structure L7-9 (Photo by T. Barrientos, VCAP)

The very few pieces of jade found in funerary or ritual contexts in the royal palace were made of the finest imperial jade or show the highest quality of work (Kovacevich 2007: 82). The *huunal* jewel found in the Throne Room Cache of Structure L7-1 represents the most elaborated piece recovered in Cancuen up to now (Figure 10.40). In addition, the two jewels of Burial 50 were made with an almost transparent imperial jade and show a very skilled work, given the thin width of the pieces and its delicate carving (Figure 10.41).

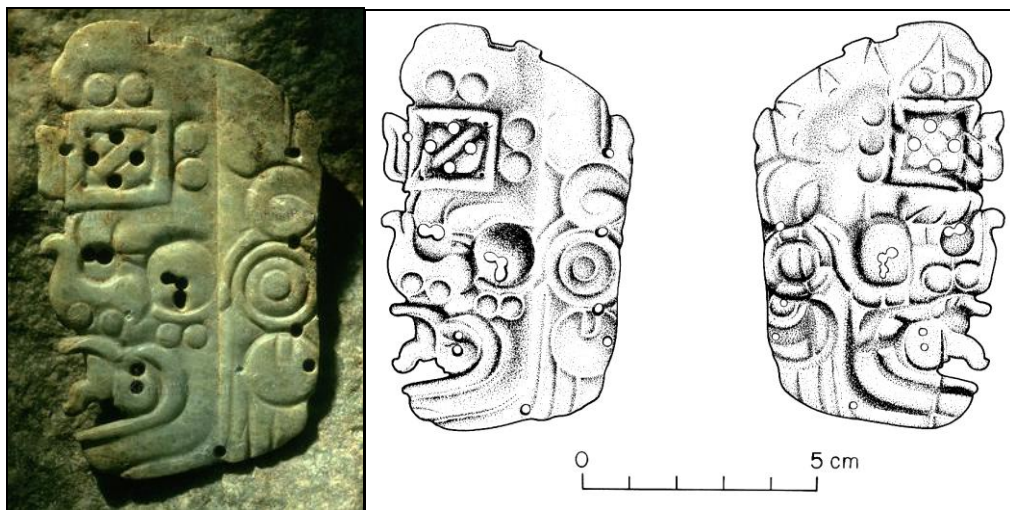


Figure 10.40 *Huunal* jewel found in royal cache, Structure L7-1 (Drawing by L. Luin, VCAP)

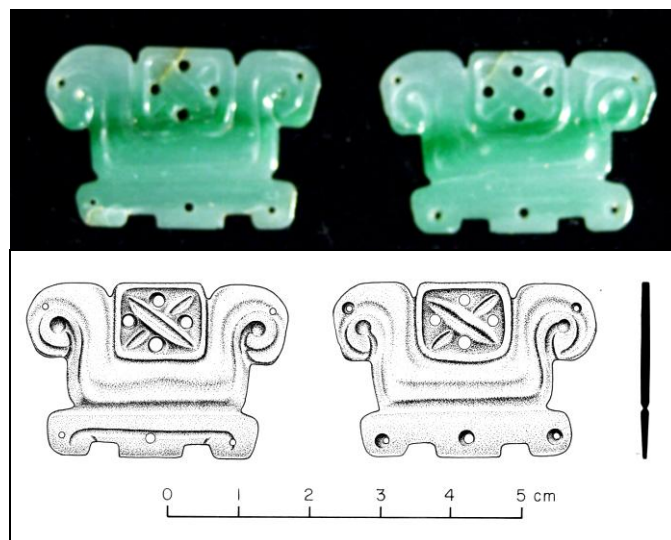


Figure 10.41 *Huunal* jewels found in Burial 50 (Drawing by L. Luin, VCAP)

However, the diachronic analysis done by Andrieu indicates that these two pieces predate the jade workshop of Cancuen, meaning that they were imported as finished artifacts (Andrieu *et al.* in press). In addition, it is important to notice that in general, Cancuen has a very low number of finished jade artifacts compared with other Maya sites (Andrieu *et al.* 2012).

Other less elaborate pieces such as the ear flares and beads of burials 50, 77 and 96 were also made with imperial jade, something expected for royal burials (Figure 10.42, 10.43). In addition, Burial 77 offerings included a small mosaic consisting in fine and very thin transparent imperial jade plaques, and a small human head pendant made with imperial jade was part of the royal cache of Structure L7-1 (Figure 10.44) These examples show marked differences with other artifacts found in domestic contexts, including the jade workshop itself.

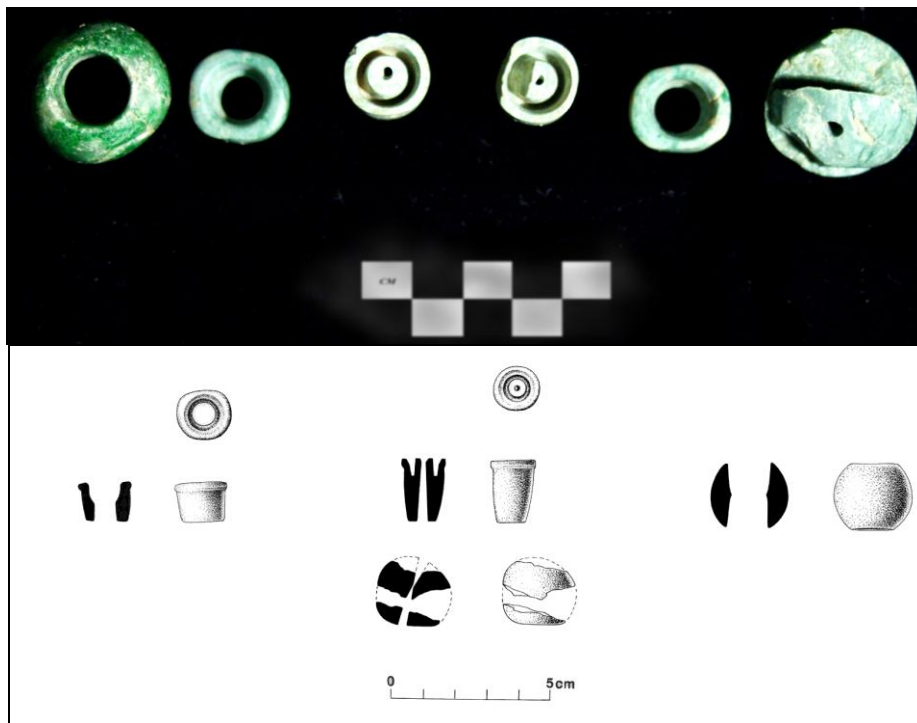


Figure 10.42 Ear flare pieces and beads found in Burial 50 (Drawing by L. Luin, VCAP)



Figure 10.43 Jade earflare and greenstone pendant found in Burial 96 (Photo by T. Barrientos, VCAP)



Figure 10.44 Small imperial jade human head and large earflare found in Royal Cache in Structure L7-1 (Photos by M. Callaghan, VCAP)

10.3.2 Obsidian and chert from burials 77 & 96

Kan Ma'ax tomb (Burial 77), found in Structure L7-27 of the royal palace, contained a deposit of 750 obsidian artifacts and 1,044 chert flakes, which represents the largest concentration of these two minerals in the entire site (Andrieu 2009: 176). This deposit not only is important for the economic and ritual interpretation of the burial itself, but it is also an important context for understanding the organization of obsidian blade production in Cancuen. In the tomb, the obsidian and chert were separated: all obsidian cores, blades and flakes were placed near the feet and all chert flakes near the head.

The obsidian artifacts included 697 flakes (166 flakes of second series, 195 rehabilitation flakes for polyhedral cores, 66 prismatic blades broken in the fabrication process, 123 flakes from core destruction) and 64 core fragments that made a total of 32 complete or semi-complete cores (Figure 10.45, Chart 10.4). These core destruction flakes don't have any technical value, and are produced only as a consequence from breaking an exhausted core (*Ibid.* 177).

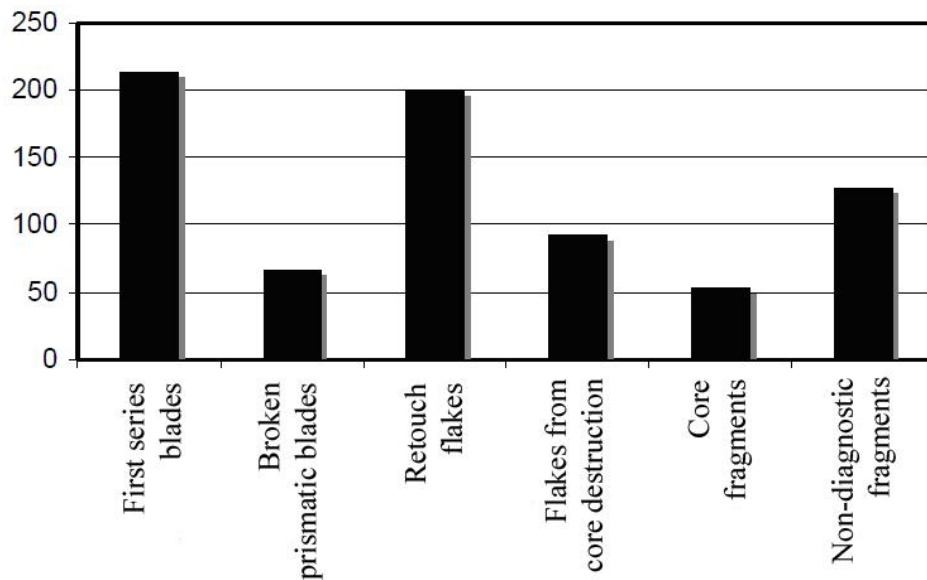


Chart 10.4 Distribution of obsidian artifacts in K'an Ma'ax tomb (Andrieu 2008: 177)



Figure 10.45 Obsidian flakes and exhausted core fragments found in Burial 77

(Photo by T. Barrientos, VCAP)

All chert flakes measured between 2 and 4 cm, were made from 3 types of chert and correspond to bifacial production, which include projectile points or laurel shaped knives (Figure 10.46). A broken point found within this deposit confirms this hypothesis. However, no hard percussion flakes with convergent negatives were found, which are diagnostic of the first stage of bifacial production. In addition, no retouching flakes were found too, which are part of the last stages of production (Chart 10.5) (*Ibid.*). This indicates that the flakes were collected selectively from distant workshops within the site periphery, and then brought to the burial as part of a symbolic offering.

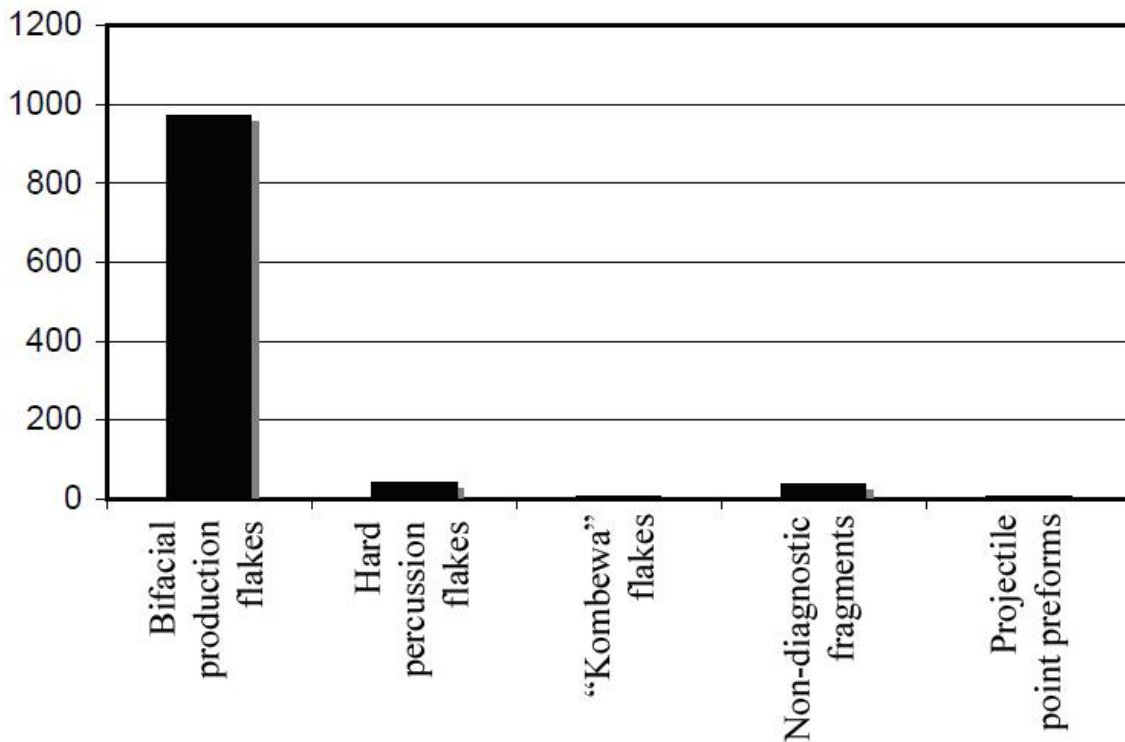


Chart 10.5 Distribution of chert artifacts in K'an Ma'ax tomb (Andrieu 2008: 178)

Burial 96 also contained 654 chert flakes, made from five different types, and they were smaller than the ones found in Burial 77. All these corresponded to retouching of bifacial artifacts, which were absent in Burial 77, possibly as a means to represent some complementariness between both burials. This marked distinction also indicates that both sets of flakes could have come from different production places, indicating some degree of division of labor between bifacial production and retouching (Andrieu 2011: 204). (Table 10.3)



Figure 10.46 Chert flakes found in Burial 77 (Photo by T. Barrientos, VCAP)

	Burial 77	Burial 96
Large flakes of hard percussion with convergent negatives		
Large bifacial production flakes (soft percussion)	53	
Medium bifacial production flakes (soft percussion)	991	
Retouching flakes (soft percussion)		642
Total	1044	642

Table 10.3 Differences in chert flake types in burials 77 & 96 (Andrieu 2008)

The presence of this large amount of lithic debitage in the tomb has been interpreted by Andrieu (2008: 178) as a means to establish a strong symbolic relationship between the king and the economic process of lithic tool making, thus indicating that the royal nobility of the site had some degree of control of it.

10.3.3 Lithics from the Palace Pool

This is another important concentration of lithic artifacts associated with the royal palace. A total of 251 pieces were found on the stone floor of the palace pool, which is composed by 39 of jade or greenstone, 82 obsidian, 126 chert, and the rest include pieces of quartz, alabaster, volcanic tuff and sandstone. Most obsidian comes from El Chayal and includes 55 prismatic blade fragments, an exhausted prismatic core and a unipolar flake core. Chert bifacial artifacts include 8 fragments and 7 complete projectile points and leaf shaped knives (Figure 10.47). The types of chert include common types for Cancuen and one kind of yellow chert previously unknown for the site, which points to the idea of foreign attackers as responsible for the mass killing associated with the 38 bodies found inside the Palace Pool. Jade artifacts were mostly necklace beads that were worn by the individuals who were thrown into the pool (Andrieu 2011).



Figure 10.47 Chert bifacial projectile points found in Palace Pool deposit (Photo by A. Demarest, VCAP)

CHAPTER XI

THE ROYAL PALACE OF CANCUEN: ARCHITECTURE AND CHRONOLOGY

The royal palace of Cancuen has a complex set of architectural characteristics (construction materials, techniques, and decoration) that combined with hieroglyphic inscriptions allow a chronological reconstruction. Based on these data, the chronology of the royal palace is reconstructed through six major building episodes, each one correlated with the main historical events of the Pasion River zone and other Lowland areas that affected Cancuen.

11.1 Architecture

As a result of all the excavations described above, and with the aid of Rudy Larios, it is now possible to summarize the general characteristics of the royal palace architecture, defining certain styles that have been identified depending on the use of specific construction materials or their combination as construction fills, façades or decorative elements. This distinction of these features has been the base of an architectural seriation that correlates with the broad ceramic phases defined for Cancuen and the absolute dates coming from its inscriptions. This has been useful because most construction episodes and remodeling of buildings of the royal palace happened in such short periods of time that dating cannot be based solely on ceramic diagnostic types or radiocarbon.

It has been proposed recently that the analysis of construction materials can also identify a particular “school” of architecture, just as it has been defined for calligraphic

and artistic styles for painted polychrome ceramics (Anabella Coronado, pers. com.). If we can identify the products of particular architects, masons and other specialists in Cancuen, such as stucco sculptors, it could help to detect a direct influence of foreign elements and styles, or even to propose the importing of artists from other sites that had long architectural and sculpting traditions, such as Palenque.

11.1.1 Construction Materials

The two basic materials used in Cancuen's royal palace are the different types of stone and clay. All materials are found in the site vicinity, some near than others. For the stone, these are the ones identified in the different excavations:

Worked hard limestone blocks

Most buildings with masonry walls and vaulted chambers were constructed using rectangular or triangular shaped blocks of a hard limestone of good quality. Walls used small rectangular blocks (Figure 11.1), while vaults present long and thin blocks (Figure 11.2). Until now, the provenience of this hard limestone is still unknown, since no quarry has been found around the site. Nevertheless, given the large amount of these, is very unlikely that it was carried from a long distance.

Irregular hard limestone

Most construction fills in the royal palace contain small, medium or large irregular limestone rocks (Figure 11.3). Small sized stones were used commonly as

plaster floor fill, while the larger ones have been found in deep fills, sometimes mixed with medium sized rocks of the same kind or sandstone.



Figure 11.1 Hard limestone masonry walls (Photos by T. Barrientos, VCAP)



Figure 11.2 Hard limestone vaults made with thin stones (Photo by M. Callaghan, VCAP)



Figure 11.3 Use of hard limestone irregular stone as construction fill (Photo by T. Barrientos, VCAP)

Irregular hard white limestone

This is a kind of limestone found in the river shores, and it is characterized by its white color and rounded edges, as a product of water erosion. Although this material is the most common in residential units, its use in the palace is limited, mostly to the very late constructions, such as Structure L7-27 (Figure 11.4). They can be found in triangular shaped facing stones or irregular forms.



Figure 11.4 Alignment made with irregular white limestone rocks

Worked soft limestone blocks

Some earlier constructions and most of the later ones used a very soft and porous white limestone (similar to pumice stone) for wall facades and staircase steps (Figure 11.5). Even the buildings with hard limestone masonry used this kind of soft limestone in their cornices and other upper portions, probably because of their light weight and less smooth surface, ideal to hold a stucco cover. However, besides its facility to cut and shape, it is very vulnerable to erosion, water dissolving, and other types of destruction. Up to now, no quarry has been identified; however, it is very likely that it was extracted from the many karstic hills that surround the area, especially to the south, near Raxruha and Chinaja. Its light weight facilitated its transport, probably by river.



Figure 11.5 Early (left) and late (right) staircase made with cubic soft white limestone blocks
(Photos by M. Callaghan and T. Barrientos, VCAP)

Irregular sandstone

Many construction fills consisted of medium sized sandstone rocks, mostly of a yellowish color (Figure 11.6), although reddish sandstone blocks were used too. The source of this sandstone is local, and can be found throughout the region.



Figure 11.6 Late construction fill made with yellowish sandstone rocks (Photo by T. Barrientos, VCAP)

Irregular grey sandstone blocks (clay stone or *cascajo*)

The use of sandstone also included grayish colored sandstone that can be found as the sterile soil throughout most of the site, and it is also very common to see layers of this material in the exposed profiles of the river shore (Figure 11.7). These layers are formed as part of sedimentation and metamorphic processes, and they break naturally in rectangular blocks. This sandstone, known locally as “clay stone” or “cascajo” was extracted from the natural sterile layers found at the site (Figure 11.7), and used in the form of broken blocks as part of the deepest construction fills.



Figure 11.7 Grayish sandstone layers found in La Pasion river shore or as “bedrock” deposits at Cancuen (Photos by T. Barrientos, VCAP)

River pebble

Some of the finest plaster floors at the palace presented a very compact construction fill consisting of small disc-shaped pebbles (Figure 11.8). A large deposit of these has been identified in the Pasion River, just at the conjunction of the Santa Isabel stream. This material was thus extracted from the shallow pools at this portion of the river and then taken to the site by boat.

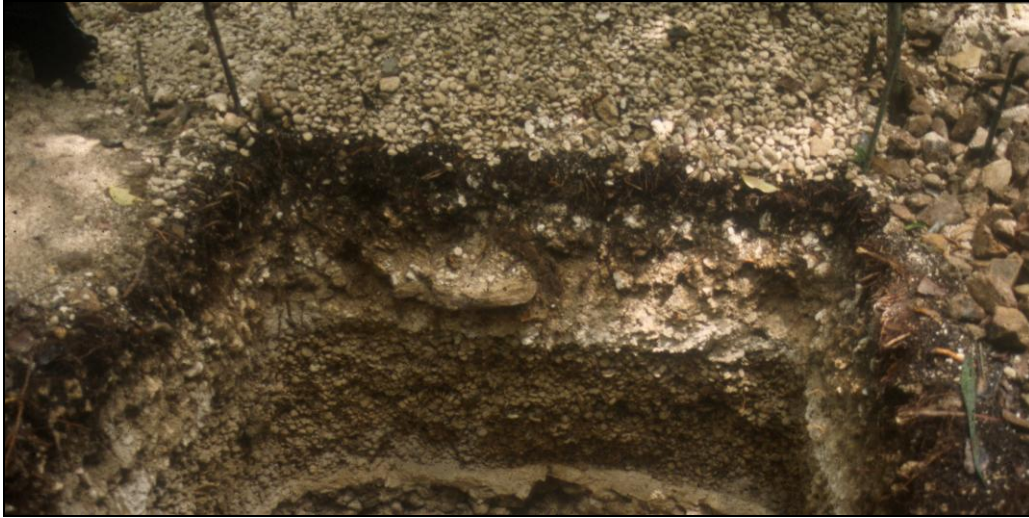


Figure 11.8 Construction fill made with river pebbles (Photo by B. Kovacevich, VCAP)

Clay

The other major construction material in Cancuen's royal palace was clay. The earliest buildings were made entirely of clay, sometimes using rectangular adobes. While later buildings combined the use of stone and clay, some large platforms dated to the last construction episode show a return to the initial tradition of clay architecture, probably using stone masonry retention walls.

Given that Cancuen is located in the transition from highlands to lowlands, its surrounding region is rich with different types of clay. These vary from an iron rich reddish color, to yellowish brown, olive green, grayish brown and dark brown (Figure 11.9). Some construction fills combined layers of these different types, whereas other deep fills consisted in only one type. The use of different kinds of clay has been also associated with certain chronological phases. For example, the olive green clay has been found in early low platforms, and the reddish clay has been found as mortar for the hard limestone masonry of the late eight century buildings (Figure 11.10). The latter one was also used in architecture restoration, extracted near the modern town of La Union.



Figure 11.9 Different clay fills of early constructions (Photos by M. Callaghan and T. Barrientos, VCAP)



Figure 11.10 Reddish clay used as mortar in stone masonry constructions (Photo by M. Callaghan, VCAP)

Stucco

Another important construction material is stucco, basically made with lime, sand, and water, with the addition of unknown organic products as adhesives. As a byproduct of limestone, stucco was used to make exterior and interior floors, to cover interior and exterior walls (Figure 11.11), benches, vaulted roofs and to produce reliefs and tridimensional sculpture. Some plastered walls have presented areas with red paint, and for the case of the central corridor of Structure L7-9, remains of mural painting are visible on both sides, which includes colors like yellow, black, and blue-green.



Figure 11.11 Remains of white stucco in collapsed walls (Photo by T. Barrientos, VCAP)

11.1.2 Construction Techniques

The partial but careful excavation of 12 buildings in and around the royal palace has provided enough data to summarize some construction techniques used during the different chronological phases. Some of these are similar to the practices reported in other Lowland Classic Maya sites, but other ones represent a local architectural tradition that blended highland and lowland materials and techniques.

Plastered clay platforms

The lowest levels in the royal palace revealed some structures built with clay, including structures L7-9-Sub-1 and L7-1-Sub-1, whose fill consisted of rectangular adobe bricks made with different types and colors of clay. The most interesting feature of these buildings is that the clay fill was covered with white stucco plaster, giving them an external appeal like the buildings made with limestone fills.

Soft limestone masonry

Some early structures of the royal palace (L7-1-Sub 1, L7-17-Sub 1) were built with soft limestone blocks, cut in almost cubic shapes. Little is known of these early masonry buildings; however, some excavations have uncovered construction fills made with clay layers combined with irregular hard stone retention walls. The use of soft limestone masonry continued during the later phases, combining it with hard limestone blocks. Most soft limestone blocks are found as steps in plastered staircases and cornice facades, although most aggregated walls and late additions to basal platforms were also made with this particular technique. The softness of this construction material make it

very delicate and vulnerable to suffer degradation by climatic conditions or anthropogenic use. However, in all cases these blocks were plastered, not only indicating the need for protecting them, but also the advantage of its rough surface for stucco adherence. In addition, its light weight was proper for cornices and it was also easy to work than the harder limestone blocks coming from the river and quarries.

Masonry walls

The best quality architecture in Cancuen can be found in the royal palace, exemplified by structures with stone masonry of medium sized rectangular blocks, made with fine grain limestone. The size of blocks varies from 0.10 to 0.20 m in thickness, 0.20 to 0.40 wide, and 0.20 to 0.75 in length (Urquizu and Torres 2013: 37). The firmness of these walls was improved by the use of small limestone wedges in between the blocks. Red sandy clay mixed with brown soil and small limestone and river pebbles was used as mortar or agglutinant. In sum, this technique allowed the construction of buildings with walls that reached 4 m in height.

Masonry corbelled vaults

Hard limestone blocks were also used for making corbelled vault roofs in most of buildings with masonry walls (e.g. L7-14, L7-16). In Cancuen, vaults were constructed with thin and long slabs, very similar to those used in the Usumacinta region and some residential groups at Palenque, especially the Murciélagos and North groups (Figure 11.12). One of the most interesting aspects of Cancuen vaults is the use of a counterweight for structures with two adjacent vaulted rooms. These special

counterweights were located in the division wall of the structure, and have a groove in each side in order to fit two slabs in each side.



Figure 11.12 Architecture of Murciélagos (above, bottom right) and North (bottom left) groups, Palenque

(Photos by T. Barrientos)

Non-vaulted roofs

Some structures with masonry walls did not present evidence of vaulted roofs, and some rooms were too wide to support them. However, large flat stone slabs were recovered as part of the rubble. For these cases, it has been proposed that the walls did not support corbelled vaults, but large wooden beams that also supported the large stone slabs cemented with plaster (e.g. L7-9). This system has been reported at other sites and structures, such as Piedras Negras Structure P-7 (Barrientos *et al.* 2003: 51).

Clay filled platforms

Some masonry rooms were found entirely filled with clay and remains of the collapsed roof and walls (e.g. L7-9, K7-33). The evidence suggests that these were in the process of becoming large clay platforms that covered previous buildings, similar to what happened to Structure L7-14. However, since only one of these platforms (L7-27) was almost completed, it is clear that the acropolis was abandoned before these buildings were finished. The excavations in L7-27 did not find retention walls, and most of the stone used in terraces and staircases was yellowish sandstone, probably coming from the river shores.

11.1.3 Decoration

One of the most remarkable features of the royal palace is its decoration with stucco sculpture in the form of friezes and human portraits. More than 10 buildings evidenced this type of decoration, but it is possible that more had stucco reliefs in their walls or cornices.

Evidence of mural painting has been also found in the central corridor of Structure L7-9. Many plaster fragments painted in red, yellow, green and black colors were recovered during the excavations, and some designs can still be seen in the restored walls, especially in the western wall that divides rooms 9 and 10. The painting seems to have phytomorphic attributes: a green maize plant painter over a red background (Figure 11.13). Other areas show red designs and possible glyphs painted over a white background.



Figure 11.13 Fragment of painted plaster from Structure L7-9 (Photo by A.Demarest, VCAP)

11.2 Sculpture and Iconography

The excavations carried out in the royal palace of Cancuen have revealed the presence of thousands of stucco sculpture fragments that were part of friezes that once decorated the cornices and facades of most of its buildings. These fragments have been found mostly as part of collapsed walls and roofs, mixed with architectural debris. In

some cases, the sculpted motifs fell in large portions that remained articulated, but very fragmented and fragile, making impossible to recover them without the aid of consolidants and other conservation procedures. In other cases, these sculptures were found upside down, and it was not possible to document them *in situ*. Nevertheless, many sculptures have been found in excellent state of preservation and constitute some of the finest artistic expressions recovered at Cancuen.

Up to now, 9 of the 23 buildings of the royal palace have presented evidence of stucco sculpture decoration: L7-1, L7-2/L7-3/L7-4/L7-5, L7-8, L7-9, L7-12, L7-22, L7-24, K7-36, and K7-33. Outside the palace, structures M7-1, M7-5, M7-8, L7-28 and M9-1 present evidence of this kind of architectural decoration, but usually not as elaborated as the royal palace buildings. However, it is important to note that only Structure M7-1 (East Ballcourt) has evidence of hieroglyphic inscriptions modeled in stucco (Fernandez 2010), since no stucco glyphs have been reported from the royal palace, with the exception of a possible glyph cartouche found in Structure L7-24 surface (Barrientos and Luin 2002: 46) and a plaster glyph reported by the Harvard Team in the Central Patio (Tourtellot III, *et al.* 1978: 218-9, 224).

Given the high amount of stucco sculpture fragments recovered in all excavations at the royal palace, no formal analysis has been carried out yet, like the one done by Carlos Enrique Fernandez (2010) with Structure M7-1 façade decoration and inscriptions. However, a catalogue of 560 selected fragments recovered during the 2001 and 2002 field seasons was done by Alejandro Seijas, under the supervision of Tomás Barrientos. In addition, cleaning and conservation practices were carried out with some special fragments by Constantino Armendariz and Rudy Larios as part of the 2002, 2003 and

2004 field seasons (See Chapter IV for a detailed description of these procedures). As a result, large fragments and frieze portions were removed from their original locations, properly packed with aluminum foil, plastic screen, medical gauze, dentist plaster, and polyurethane foam, and moved to the laboratory in Guatemala City.

11.2.1 Structure L7-9: Stucco Portraits and Frieze

Structure L7-9 is one of the largest buildings of the royal palace. It functioned as one of the two main entrances to the palatial complex, and for that reason, its south and northern facades were highly decorated, possibly because it was visible from far distances. This decoration was composed by a complex frieze relief that included life-sized human portraits located above the doorways.

The first evidence of stucco sculpture in Structure L7-9 was found in the 2001 test trenches excavation. It consisted of a human head with headdress, which was completely excavated the following year (CAN 4-3).

During the 2002 field season, more than 3,000 fragments were recovered in 35 excavation units (2 x 2 m) in the northern staircase, indicating the high density of these materials compared to other locations in the royal palace and the site in general. Among all these fragments, three human figures were located: one in the central north doorway initially found the previous year (CAN 4-3); one laying in the fifth step of the southern staircase (CAN 4-36) that could have been the one located above the central south doorway; and one at the entrance of Room 7 (CAN 4-35) (Barrientos *et al.* 2003: 51-4).

The 2003 field season recovered approximately 2,000 additional stucco fragments, and located two more human portraits (Barrientos, *et al.* 2004). The first

human head was found in the eastern end of the northern staircase (CAN 4-90), that probably fell from the doorway of Room 11 (Figure 11.14). Other body parts of this figure were found in units CAN 4-84 and CAN 4-104. The other human head was located in the western façade, but was excavated during the following year.



Figure 11.14 Human heads with headdresses, Structure L7-9 (Photos by T. Barrientos)

In 2004, three portraits were excavated in the south and west facades (Barrientos *et al.* 2006). Units CAN 4-127 and CAN 4-137 exposed the collapsed cornice of the west façade, and unit CAN 4-126 revealed the entire human sculpture that was located above the doorway entrance of rooms 1 and 2. The sculpture was found lying upside down, almost complete. The torso was made with stone, covered with plaster, including the

neck, shoulders and waist. In the same area, other body parts were recovered: right forearm, right thigh, and belt fragments. Many feather fragments were also found sparse around the body. Other human sculpture fragments were found in CAN 4-149, suggesting another portrait in Room 4 entrance. Finally, in unit CAN 4-132 a high amount of human fragments suggested the presence of another portrait in Room 8, though the main finding consisted in a large profile head made in Usumacinta style (Figure 11.15). The latter one could have been part of the cornice decoration or more likely, as part of a Palenque-style relief in the west door jamb of the central corridor, or the wall between rooms 6 & 8.



Figure 11.15 Human head of Usumacinta style, Structure L7-9 (Photo by T. Barrientos, VCAP)

Given all the heads and body parts recovered, the human figures located above the doorways can be partially reconstructed as it follows: the figures were in a seated position, carrying a wide belt that suggests a ball player costume. Heads were very

realistic with inlay obsidian discs in the eyes (CANE 375). The elaborated headdresses are different for each individual and show a wide variety of elements, including deity masks, feathers, water lily, and water bird motifs (Figures 11.17, 11.18, 11.19).



Figure 11.16 Human head fragments, Structure L7-9. CANE-334 (left), CANE-67 (right)
(Photos by T. Barrientos and A. Seijas, VCAP)



Figure 11.17 Headdress ornaments, Structure L7-9. Above: CANE-560, CANE-451
 (Photos by A. Seijas, C. Armendáriz and T. Barrientos, VCAP)



Figure 11.18 Ear flare fragments, Structure L7-9. CANE-433 (left), CANE-32 (right)
 (Photos by A. Seijas, VCAP)



Figure 11.19 Feather fragments, Structure L7-9. CANE-433 (left), CANE-32 (right)
 (Photos by T. Barrientos and A. Seijas, VCAP)

Other ornaments include necklaces, chest pendants, and wrist bracelets. Hands were in closed position with no evidence that they carried scepters or other artifacts. Finally, the forearm fragments suggest that they were in extended position (Figure 11.20).



Figure 11.20 Arm and hand fragments, Structure L7-9:
 CANE 21(left), CANE13, CANE38, CANE 480 (right)
 (Photos by A. Seijas, VCAP)

The amount of full figure torsos, heads and other body parts found in the western and central section of the building suggests the presence of three portraits in the southern façade, three portraits in the northern façade and one in each doorway at the east and west facades, making a total of 8 human portraits. Nevertheless, it is possible that the southern façade had five, not three portraits, making a total of 10 human figures.

At the moment it is not possible to determine the identity of these human figures. In other structures such as M7-1 and L7-28, the cornice decoration had only one human figure that could be identified as either *Taj Chan Ahk* or *K'an M'aax*. However, the presence of 8 or 10 human portraits in Structure L7-9 cannot be explained easily. One possibility is that they represent ancestors, but the short dynastic history of the site does not support the hypothesis. The other option is that they represent important allies or subordinate nobles, as it has been suggested for the human portraits that were part of the cornice decoration of Copan Structure 10L-22a, also known as the *Popol Nah*. Another similar case is the figures that decorate the cornice of the *Codz Pop* building in Kabah. This latter interpretation can be associated with the function and location of Structure L7-9: It was designed to be a public entrance, and its multiple rooms could have been used by dignitaries of the royal court or secondary nobles. In addition, it should be noted that the Altar-Markers 2 and 3 of the East Ballcourt show non-royal nobles or allies playing ball with the king, making thus possible that the figures dressed as ball players in Structure L7-9 cornice could also represent *Taj Chan Ahk* allies from other sites or heads of foreign lineages that resided in Cancuen at that time, as it has been suggested by ceramic and architectural evidence in other parts of the site. Other human faces could

have also decorated parts of the frieze, or could have been masks decorating the main figures, or even portraits located in the door jambs (CANE-67, CANE-314, CANE-331)

Surrounding these human portraits, the cornice was fully decorated with a frieze that contained different iconographic elements. Although the remains of that frieze are too fragmented and don't favor a direct reconstruction, it is possible to create a hypothetical reconstruction using the main elements and symbols found as part of the collapsed building. First, no true glyphs seemed to be part of the frieze, though a pseudoglyph was found in unit CAN 4-112, lying on one of the steps of the southern staircase and other fragments such as CANE-42 (Figure 11.21). The most common element found is a wide scroll decorated with groups of three "dots" in the interior; their high frequency and size variation indicate that they were present in many parts of the frieze (Figure 11.22). These types of scrolls usually represent liquids such as water or blood, or parts of plants, as it can be seen in Panel 3 frame and water lily motifs, or as part of Ceibal Structure A-3 frieze, reconstructed by Tatiana Proskouriakoff (Smith, 1982:16) (Figure 11.23).



Figure 11.21 Fragment of glyph or pseudoglyph (CANE-42) (Photo by A. Seijas, VCAP)



Figure 11.22 Examples of scrolls with dots. Above: CANE-1, CANE-23, CANE-322
 Bottom: CANE-367, CANE-398 (Photos by A. Seijas, VCAP)

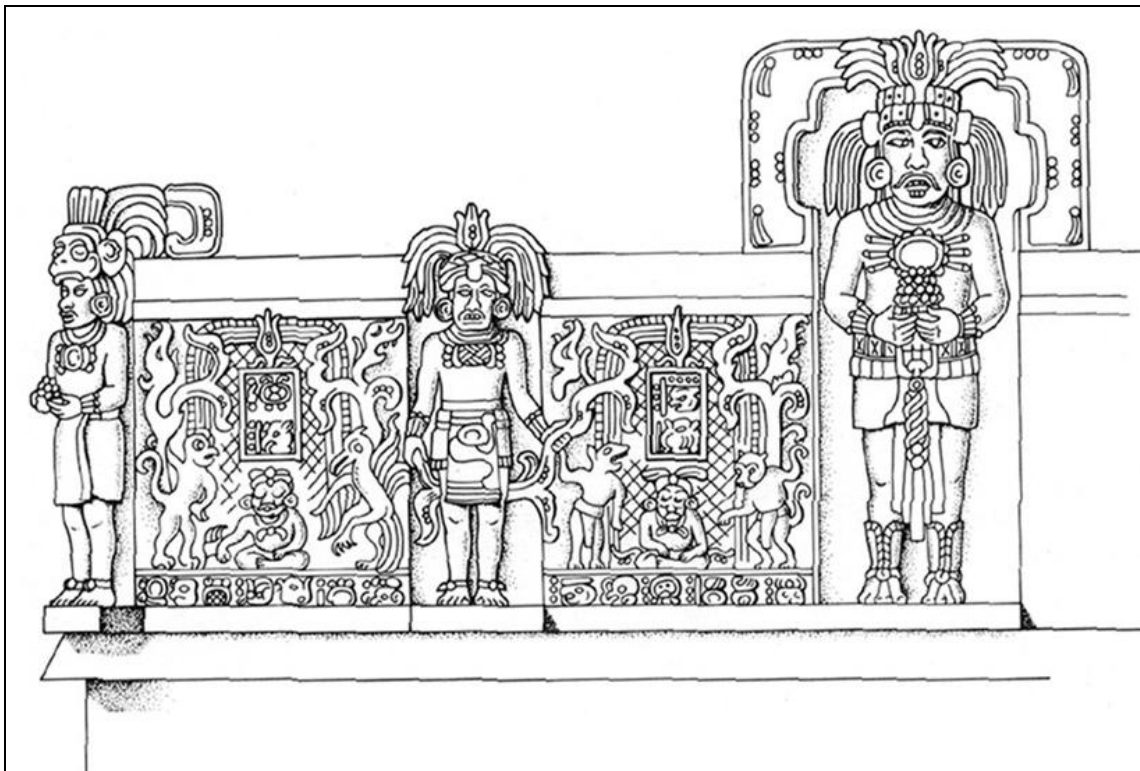


Figure 11.23 Reconstruction of Ceibal Structure A-3, by Tatiana Proskouriakoff
 (Smith 1982: 16)

Other relief borders or moldings that do not seem to represent scrolls, have shapes that resemble sections or borders of the mountain glyph *witz'* (CANE-20, CANE-171, CANE-387, CANE-436), such as the Aguateca toponym. These fragments were common among the M7-1 stucco reliefs (Figure 11.24).



Figure 11.24 Examples of shapes with scrolls or frames. From left: CANE-171, CANE-387, CANE-322, Bottom: CANE-405, CANE-247 (Photos by A. Seijas, VCAP)

Other fragments show a chevron pattern that could represent a mat, similar to the one represented in the *otot* glyph for “house” (CANE 313, CANE 315) (Figure 11.25).



Figure 11.25: Stucco fragments with chevron patterns CANE-315 (left) and CANE-313(right) (Photo by A. Seijas, VCAP)

In sum, the stucco decoration of Structure L7-9 consisted in an elaborated frieze located on the cornice, which included life-sized human portraits dressed as ball players and located above the doorway entrances in both south and north facades. For that reason, this structure has been named as the “Building of the Portraits”. A pattern of scrolls and

moldings framed the scene, possibly representing mountains, water, and other symbols related to sacred or mythical geography, similar to what has been defined for Structure M7-1 façade decoration. The absence of water lily flowers suggests that the frieze of L7-9 was different from the one in M7-1, although both seem to have in common the use of scrolls representing water or other types of plants.

The evidence also suggests that the stucco decoration in L7-9 was not confined to the cornice. Some relief fragments were parts of headdresses elaborated in flat high relief, which are different from the full 3D relief of the sculptures. This thus suggest the presence of profile human portraits located in the door jambs and other flat surfaces, such as the shallow “niche panels” located between rooms 3 & 7 and rooms 11 & 15.

8.6.1 Stucco sculpture from other buildings

Test excavations in 2001 found evidence of stucco sculpture decoration in the North Patio quadrangle, defined initially by structures L7-1, L7-2, L7-3, L7-4 and L7-5. Some large fragments indicated the presence of human figures in lots CAN 26-12-1 and CAN 26-10-1. Another stone fragment found in this area also suggests the presence of stepped “almenas” as part of the cornice decoration that resembles the shape of many stelae at Cancuen. Recent excavations in Structure K7-33 have found remains of one or various human portraits with elaborated headdresses, as well as other stucco fragments with the shape of marine shell ornaments (Rodas *et al.* 2012: 59).

The stucco from the other buildings has not been analyzed yet, but the scale and elaboration is much smaller than L7-9. For that reason, there is no doubt that L7-9 stands out as the most decorated building of the entire site of Cancuen.

8.6.2 Stucco sculpture typology in Cancuen

Although not part of the royal palace, Structure M7-1 stucco sculpture is very important for understanding the decoration of buildings such as L7-9. Enrique Fernández (2010) analyzed 333 fragments recovered during the excavation of M7-1 western façade, creating a typological classification that can be applied to all other buildings that present remains of stucco reliefs. In general, Fernandez created three categories: sculpture, iconographic elements and glyphs (*Ibid.* 42). Among the iconographic elements, the following were identified: quatrefoil, plant elements, bird mask, feathers, pectoral, textile designs (Figure 11.26), circular elements (spheres, discs, rings) (Figure 11.27), and moldings (Figure 11.28). Among these, the plant and circular elements were present in L7-9 and other buildings of the royal palace, sometimes in high frequencies. As it was mentioned before, the fragments of human sculptures made a large percentage of the fragments recovered in L7-9.



Figure 11.26 Fragment of jaguar pelt, Structure L7-9 (CANE-539)
(Photo by A. Seijas, VCAP)



Figure 11.27 Examples of stucco circular elements found in Structure L7-9 (Photos by A. Seijas, VCAP)



Figure 11.28 Stucco moldings, Structure L7-9 (CANE-554 and CANE-145) (Photos by A. Seijas, VCAP)

8.6.3 Stucco sculpture techniques used in Cancuen

Special attention was taken to the manufacturing techniques in human sculptures and other stucco reliefs, because they provide data that indicate the presence of foreign artists in Cancuen during the reign of *Taj Chan Ahk*.

During the excavation of the fallen sculpture fragments, restoration expert Rudy Larios noticed the presence of techniques and styles similar to the ones used in some stucco friezes at Palenque. Undoubtedly, the most notorious one was the use of thin limestone slabs as tenons or “skeletons” that gave strength to the human sculptures (Figure 11.29). The use of these thin slabs was documented in the Temple XIX stucco friezes, which date to the early VIII century C.E. (Figure 11.30). In addition, it was also clear that some body parts such as torsos and forearms were originally carved in stone and later covered by a thick plaster layer, with some applique additions for the external ornaments. In some cases, it was noted that the artists reused cylindrical grinding manos for making arms or head tenons (Figure 11.31).



Figure 11.29 Thin limestone slabs used to support stucco sculpture, Structure L7-9
(Photo by T. Barrientos, VCAP)

In some fragments it was possible to detect two plaster layers. The first one is generally thinner than the later one, as it was observed by Fernández (2010: 71-3) in the M7-1 fragments.



Figure 11.30 Thin limestone slabs used in the stucco sculptures, Temple XIX, Palenque
(Photos by T. Barrientos)



Figure 11.31 Cylindrical stones (reused manos?) used to support stucco sculpture, Structure L7-9
(Photos by A. Seijas, VCAP)

8.6.4 Conclusions about the royal palace stucco friezes

The partial and hypothetical reconstruction of M7-1 façade revealed that this frieze included one human figure, possibly *Taj Chan Ahk* or *K'an M'aax*, surrounded and framed by water motifs in a pattern almost identical as Panel 3 (Fernández 2010: 96-105). When compared to the fragments recovered in L7-9, it is likely that its decoration, as well as most other buildings of the royal palace, was also related with water iconography elements. If we consider the presence of two water reservoirs and an elaborated system of canals surrounding the acropolis, then it is not difficult to conceive an iconographic program based on water symbolism, which could have attributed the entire palatial complex a concept of a “water mountain”.

The evidence provided by the stucco sculpture fragments also points to foreign influences coming to Cancuen, most likely from the Usumacinta region, during *Taj Chan Ahk's* reign. First, the use of thin slabs is a particular technique used in Palenque during the first half of the eight century. Second, a human profile found in L7-9 south staircase was made in a style that is particular to Palenque and the Lower Usumacinta region.

In conclusion, the high quality of sculpture and the complexity of friezes and portraits in Cancuen during this time cannot be explained through a local sculptural tradition, because there is no evidence of similar artistic expressions in the previous occupational periods. The creation of the architectural and sculptural masterpieces in the royal palace and East Plaza buildings was thus achieved only by bringing artists from kingdoms such as Palenque and Piedras Negras. This hypothesis is supported by patterns of ceramic importing from the northwestern border of the Maya region, indicating relations between Cancuen and the Lower Usumacinta and Veracruz/Tabasco area.

11.3 Hieroglyphic Inscriptions

The historical events recorded in hieroglyphic inscriptions of Cancuen and other related sites constitute an invaluable source of information for building the chronology of the royal palace, especially when combined with ceramic and architectonic data. In addition, more detailed information contained in these inscriptions also help to infer some functional aspects of the areas of the palace that are directly related with the monuments or artifacts that contain such texts.

Despite the existence of a considerable corpus of inscriptions in Cancuen, very few texts can be directly associated with the royal palace. In fact, only the Hieroglyphic Staircase, Altar 6 and the Burial 77 shells have been physically found within the acropolis, though most of the carved blocks of the staircase were looted or taken out of the site. Nevertheless, other monuments like Panel 2 have been found near the palace and could have been originally located in one of its structures. The source of Panel 1 is puzzling, because even when it is more likely to have been looted from the royal palace, its original location could also have been Structure M7-1 (west structure of the East Ballcourt). In addition, all sculptures associated with the East Ballcourt (Panel 3 and the Ballcourt altars/markers) contain key historical information about rulers *Tajal Chan Ahk* and *K'an Ma'ax*; Panel 3 could even represent a scene in the royal palace.

Other relevant monuments found outside Cancuen include the Early Classic stelae of Tres Islas, the Dos Pilas Panel 19 (portrays the “Lady of Cancuen”), the Dos Pilas “Throne Bench” of the “Lady of Cancuen”, and some stelae of Machaquila. In addition, the Hieroglyphic Staircase of La Linterna also provides some clues for the possible

hostile relations between Cancuen and the sites located in the Chinajá region of the Northern Maya Highlands.

In sum, the epigraphic overview of these monuments will bring all historical information together in order to make a time frame with absolute dates that could be matched with the particular sequences of the excavated buildings and the three ceramic phases already defined for the site. It is hoped that the construction sequence of the royal palace can be associated with important historical events recorded in Cancuen and other sites of the region, in order to explain how architectural modifications reflect changes in the sociopolitical structure of the site and the Maya lowlands towards the end of the eight century.

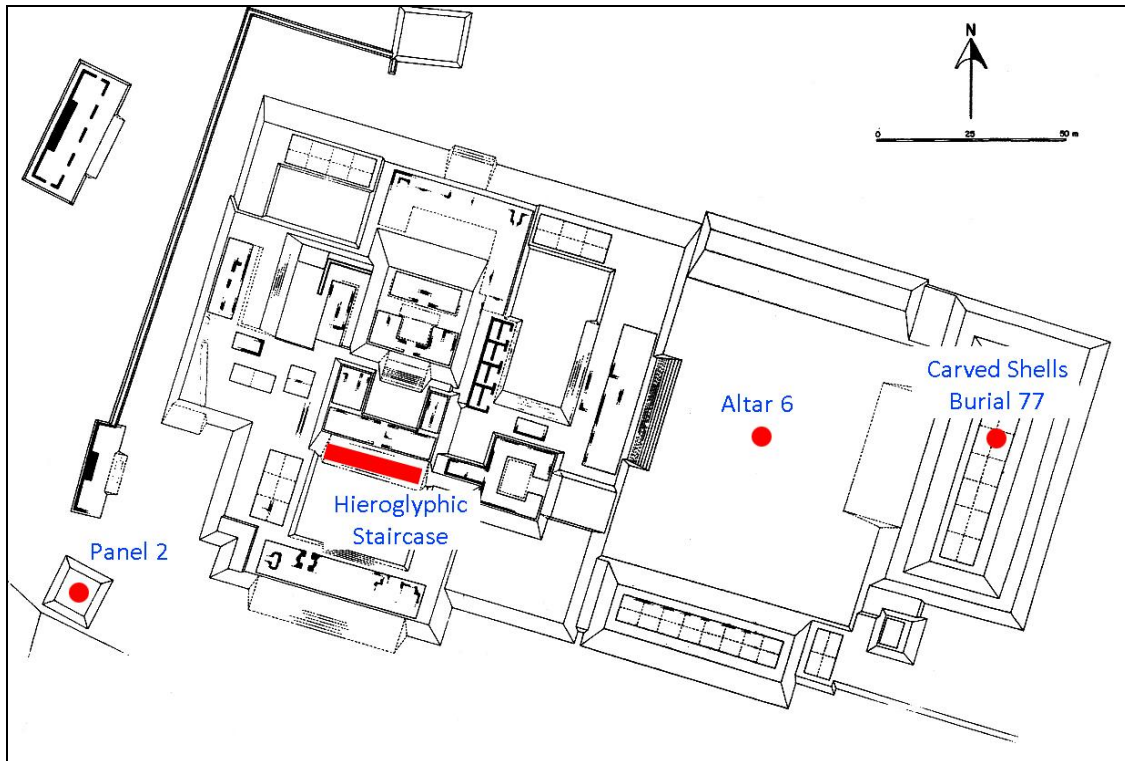


Figure 11.32 Location of carved monuments in or near the royal palace
(Map by T. Barrientos and L. Luin, VCAP)

11.3.1 Cancuen Hieroglyphic Stairway

The Hieroglyphic Stairway of Cancuen constitutes the most important text directly related to the royal palace. It was located as part of the southern access and façade of Structure L7-8, in the Southern Patio. The staircase was built with long rectangular hard limestone blocks. Unfortunately, during its excavation, no carved block was found *in situ*, due to looting activities that took place during the 80's (Figure 11.33).



Figure 11.33 Blocks of the Hieroglyphic Stairway as they were found in 1999
(Photos by T. Barrientos and M. Del Cid, VCAP)

A total of 53 blocks have been registered: 12 carved and 41 plain. Of the carved ones, Federico Fahsen identified five in Tikal National Park (Figure 11.34), three in the National Museum of Archaeology and Ethnology, and three from private collection photographs, plus the one found at the site (Figure 11.35).



Figure 11.34 Blocks of the Hieroglyphic Stairway stored at Tikal National Park storage facility
(Photos by T. Barrientos and F. Fahsen, VCAP)



Figure 11.35 Block 1 of the Hieroglyphic Stairway, found at the site (Photo by L. Luin, VCAP)

No photography of the staircase *in situ* has been found in previous reports, although the Harvard team did photograph some of the blocks (blocks 5 and 6) and made a reconstruction sketch of the stairway and a cross section of a step with two glyph panels (Tourtellot III *et al.* 1978: 231-2). However, the careful recording of the 41 plain blocks found at the site allowed their classification according to their size. In addition, the excavations of 2003 found two plain blocks (O-14 and O-15) still in their original location (Barrientos, *et al.* 2004). A bibliographical revision of the Harvard expedition in 1969 also provides a reference to the staircase:

“The glyphs occur on the risers of the stops in distinct panels, some with two panels (apparently the first step only) and some with one. Unfortunately, few of the stairs are still *in situ*” (Tourtellot III *et al.* 1978: 231).

With all this information, the staircase was restored in 2008 (Luin 2008, 2009). During the restoration process, the first part of the Initial Series Introductory Glyph was identified as the carved block previously recorded at the site (Block 1). The restoration was based primarily on the pattern suggested by size of the blocks, which indicated the presence of three steps. Using the notes of the Harvard team, Ian Graham, and Karl Herbert Mayer, the glyphs were grouped in three sets for each step (each set corresponds to an event), with the vertical one as part of the upper central one. The glyph sets were located at the center and both extremes (east and west) of each step.

Based on this distribution, the minimal number of carved blocks for the entire text would be 24, but it could be higher, given that some sets have more than two carved blocks. In any case, the suggested text is composed in the following way (blocks identified with letters have not been found or are hypothetical) (Figures 11.36, 11.37):

- STEP 1: SET 1 (west) Block 1, Block 2, Block 3 & Block A
 SET 2 (center) Block 4 (vertical), Block 5, Block B? & Block C?
 SET 3 (east) Block D?, Block 6, Block E? & Block 7
- STEP 2 SET 4 (west) Block F? Block G?
 SET 5 (center) Block 8 & Block H?
 SET 6 (east) Block I? & Block 9
- STEP 3 SET 7 (west) Block J? & Block 10
 SET 8 (center) Block K? Block 11 & Block L?
 SET 9 (east) Block M? & Block 12

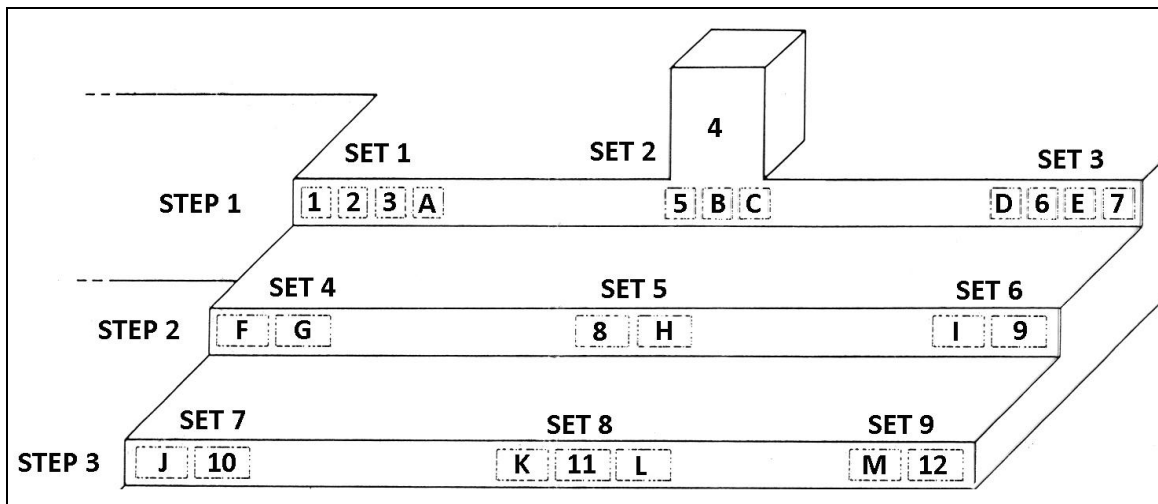


Figure 11.36 Reconstruction of the Hieroglyphic Stairway of Cancuen, indicating set and block numbers (Drawing by L. Luin and T. Barrientos, VCAP)

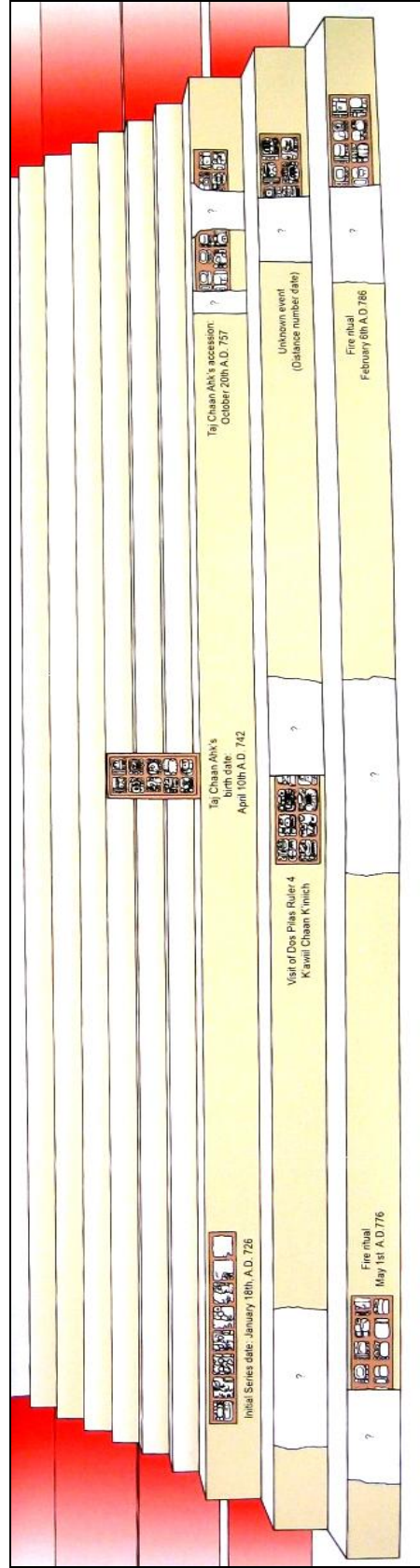


Figure 11.37 Reconstruction of the Hieroglyphic Stairway of Cancuen, indicating missing blocks
(Drawing by L. Luin and T. Barrientos, VCAP)

The text covers a time frame between the long count dates of 9.14.14.6.0 (742 C.E.) and 9.17.15.4.4 (786 C.E.) (Fahsen, *et al.* 2003: 27-42). The first set carries the initial series of the text, although the tzolkin date is missing (Block A). Set two includes a vertical panel (Block 4) with the next event, corresponding to *Taj Chan Ahk* birth. A distance number and the expression *u ti ya*, precedes that event, signaling the existence of another event that is posterior to the birth, which could be the 2 *Ajaw* date on Block 5 and two possible more blocks (B, C). The fourth event corresponds to *Taj Chan Ahk* accession (Block 6), whose style suggests that Block 7 was part of the same set, plus two other missing blocks (D, E).

The first set of the second step is totally missing, corresponding to two hypothetical blocks (F, G). The next event could have been the record of the Dos Pilas Ruler 3 visit (Block 8) and at least another block (H). According to the carving style, Block 9 is the best candidate for the next set, also preceded by another hypothetical block (I). Dos Pilas Ruler 4 (*K'awiil Chaan K'inich*), appears with the title “Captor of *Ahkul Ahaw*” and the Dos Pilas toponym with a dragon logogram. Given that the “Lady of Cancuen” was probably his mother or aunt; his visit to Cancuen would indicate the importance that Cancuen acquired after that marrying alliance.

The lower step could have started with one of the two fire ceremony events (Block 10) preceded by a missing block (J). Similar in style, Block 11 could have been part of the center set, accompanied by at least two other ones (K, L). Finally, the last event seems to be the other fire ceremony (Block 12) preceded by a missing block (M).

SET 1 (Figure 11.38)

Block 1

A1: Initial Series Introductory Glyph (half) Part of Initial Series date

Block 2 (Figure 11.39)

A1 Initial Series Introductory Glyph (half) Part of Initial Series date

B1 9 *B'aktun* Long Count, Initial Series

C1 14 *K'atun* Long Count, Initial Series

D1 14 *Tuun* (half) Long Count, Initial Series

Block 3 (Figure 11.39)

D1 14 *Tuun* (half) Long Count, Initial Series

E1 6 *Winal* Long Count, Initial Series

F1 0 *K'in* Long Count, Initial Series

G1 5 (*Ajaw*) Tzolkin date, Initial Series

Block A: Missing, remainder of Initial Series date

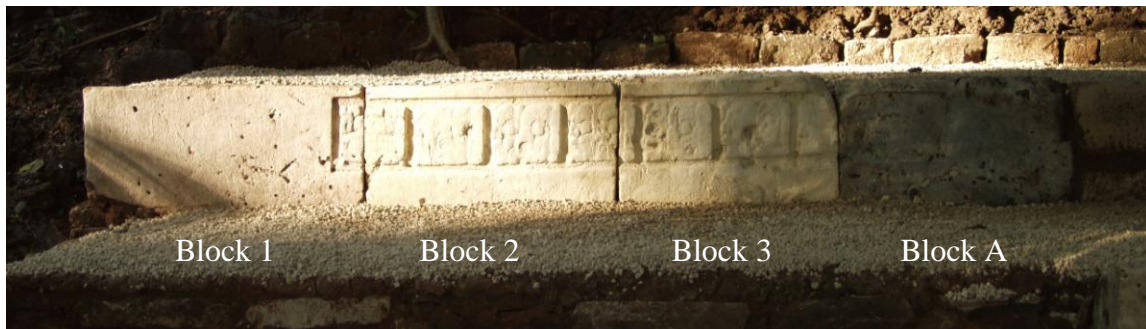


Figure 11.38 Restored portion of the Hieroglyphic Stairway of Cancuen (Set 1) (Photo by L. Luin)

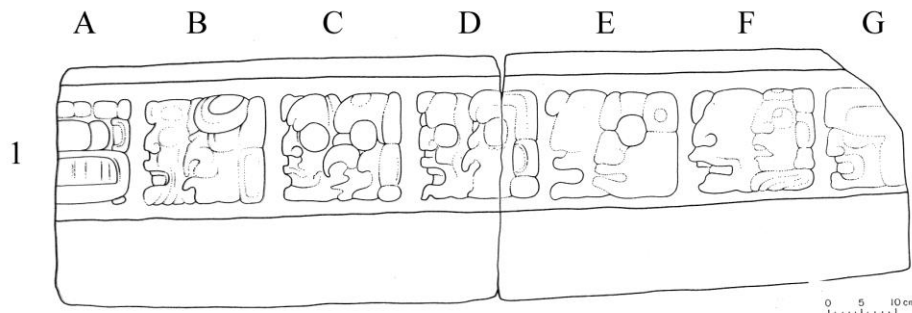


Figure 11.39 Blocks 2 and 3, Hieroglyphic Stairway of Cancuen (Drawing by L. Luin, VCAP)

SET 2

Block 4 (Figure 11.40)

A1 13 *Winal* 12 *K'in* distance number

B1 15 *Tuun* distance number

A2 *u tiy* it happened before

B2	3 <i>Kimi</i>	Tzolkin date
A3	4 <i>Zotz'</i>	Haab date
B3	<i>Siyah</i>	was born
A4	<i>Taj Chan Ahk</i>	Cancuen ruler name
B4	?	personal title
A5	<i>u tzakaj</i>	it changed
B5	<i>i uut</i>	and then it happened

Block 5 (Figure 11.41):

A1 2 *Ajaw*

Block B: Missing

Block C: Missing

Tzolkin date (possible 9.16.0.0.0 PE)
 remainder of calendar round
 period ending?

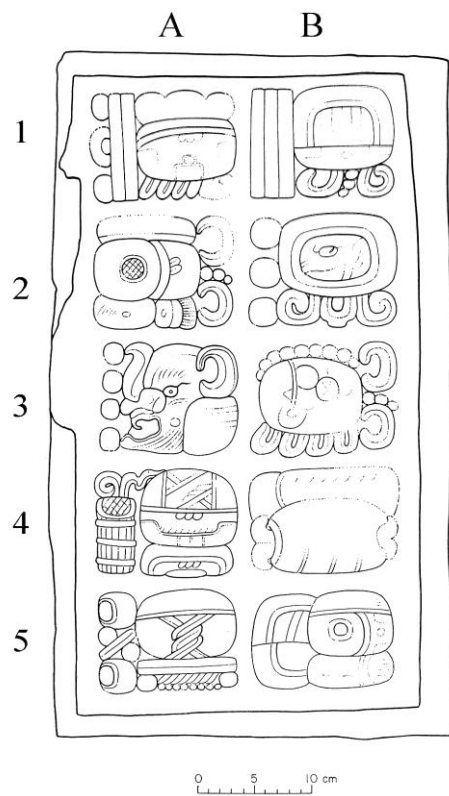


Figure 11.40 Block 4, Hieroglyphic Stairway of Cancuen (Drawing by L. Luin, VCAP)

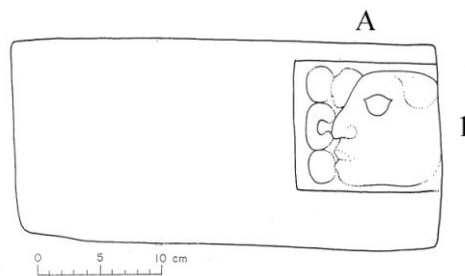


Figure 11.41 Block 5, Hieroglyphic Stairway of Cancuen (Drawing by L. Luin, VCAP)

SET 3

Block D: Missing

half of Block 9 A1 and A2 glyphs

Block 6 (Figure 11.42):

A1 ?

?

A2 ?

?

B1 7 *Etz'nab*

Tzolkin date

C1 1 *K'ank'in*

Haab date

B2 *u cham*

acceded to the throne

C2 ?

place name (Machaquila?)

Block E: Missing

Block 7 (Figure 11.43):

A1 ?- ? - *nah*

place name?

B1 ?

?

A2 *K'uhul* - ? - *Ajaw*

Divine Lord of Cancuen (Cancuen Emblem Glyph)

B2 ? - ? *chi*

fire ceremony

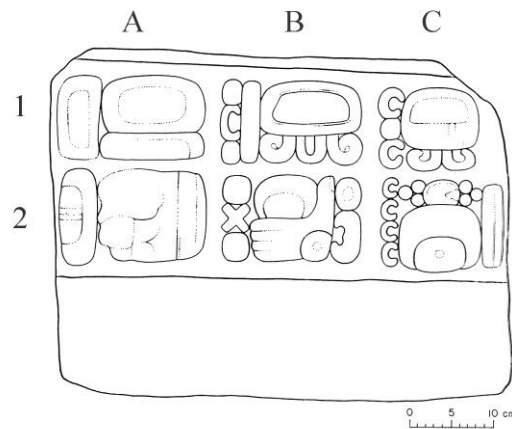


Figure 11.42 Block 6, Hieroglyphic Stairway of Cancuen (Drawing by L. Luin, VCAP)

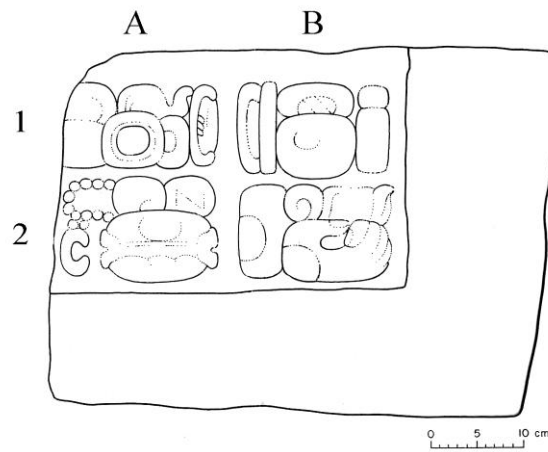


Figure 11.43 Block 7, Hieroglyphic Stairway of Cancuen (Drawing by L. Luin, VCAP)

SET 4

Block F: Missing

Block G: Missing

Date of Set 4 event?

Date of Set 4 event?

SET 5

Block 8 (Figure 11.44):

A1-B1 *K'awiil Chaan K'inich*

A2 *u chan*

B2 *Ahkhul Ajaw*

C1 *K'uhul Mutal Ajaw*

D1 ?

C2 ? - *ha*

D2 *u tiy*

Block H: Missing

Dos Pilas Ruler 4 name

captor of

lord of Akul

Divine Lord of Mutal (Dos Pilas Emblem Glyph)

Title?

Dos Pilas toponym

it happened before

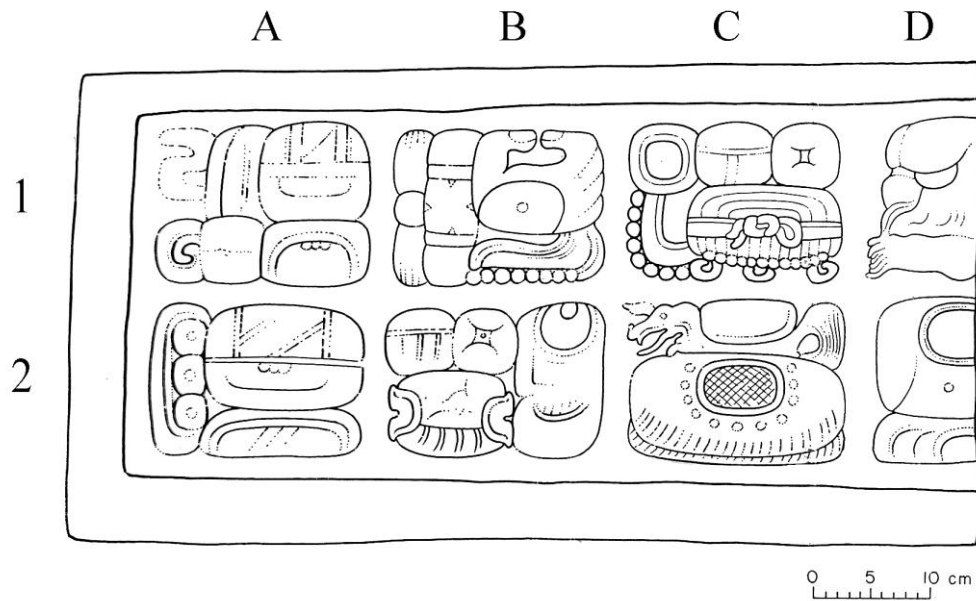


Figure 11.44 Block 8, Hieroglyphic Stairway of Cancuen (Drawing by L. Luin, VCAP)

SET 6

Block I: Missing

Block 9 (Figure 11.45):

A1 ? *Muluk*

A2 *i uut?*

B1 *16 K'in 2 Winal*

C1 *7 Tuun*

B2 *1 K'atun*

C2 *i uut*

Tzolk'in date

and then it happened?

distance number

distance number

distance number

and then it happened

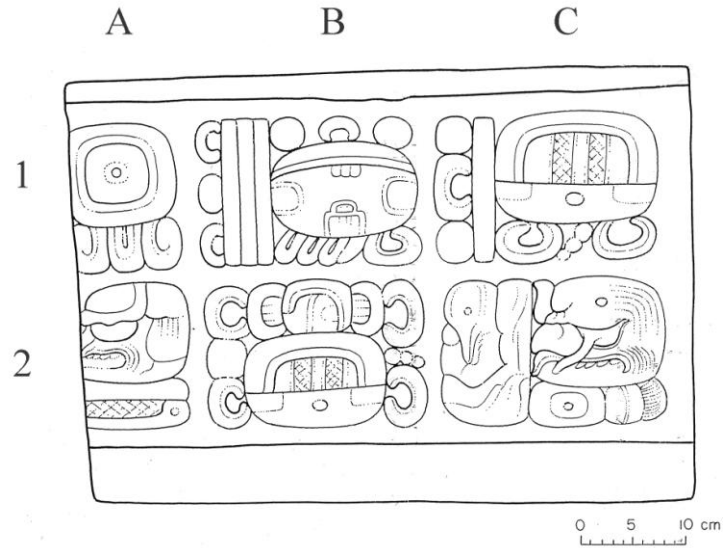


Figure 11.45 Block 9, Hieroglyphic Stairway of Cancuen (Drawing by L. Luin, VCAP)

SET 7

Block J: Missing

Block 10 (Figure 11.46):

A1	<i>2 Kimi</i>	Tzolkin date
B1	<i>14 Tzek</i>	Haab date
A2	<i>i uut</i>	and then it happened
B2	<i>4 k'ak' - ?</i>	fire ceremony
C1	<i>K'uhul - ? - Ajaw</i>	Divine Lord of Cancuen (Cancuen Emblem Glyph)
D1	<i>u - ?</i>	title?
C2	<i>?</i>	title?
D2	<i>Ajaw - ? - ?</i>	title?

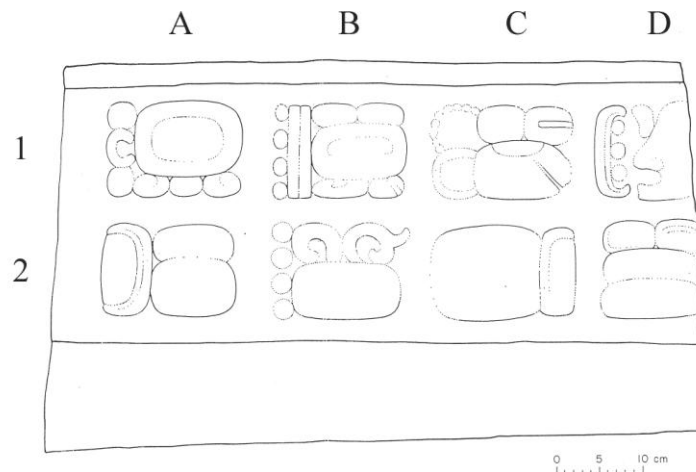


Figure 11.46 Block 10, Hieroglyphic Stairway of Cancuen (Drawing by L. Luin, VCAP)

SET 8

Block K: Missing

Block 11(Figure 11.47):

A1	? - <i>ya</i> (half)	?
A2	? (half)	?
B1	?	personal name?
C1	?	personal name?
B2	?	?
C2	? - <i>chi?</i> - <i>ha</i>	?
D1	?	?
E1	?	?
D2	?	?
E2	?	?

Block L: Missing

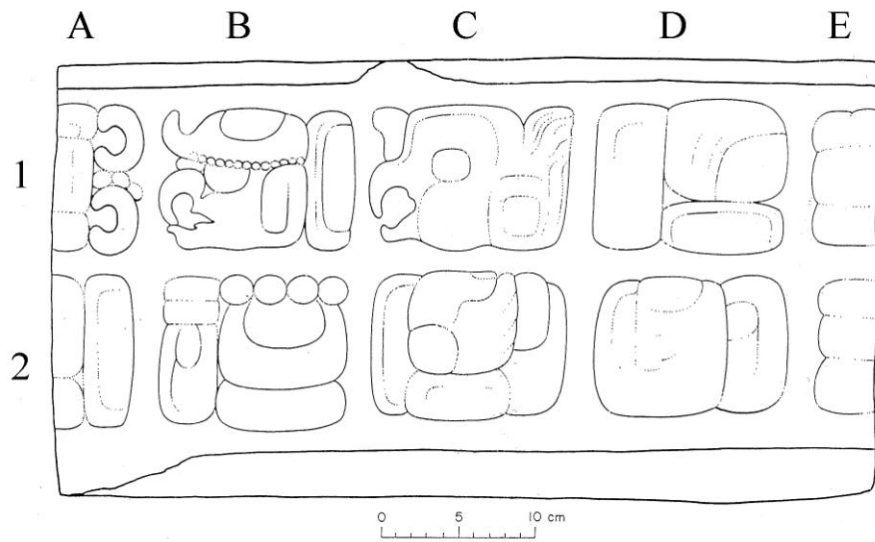


Figure 11.47 Block 11, Hieroglyphic Stairway of Cancuen (Drawing by L. Luin, VCAP)

SET 9

Block M: Missing

Block 12 (Figure 11.48):

A1	8 <i>Ix</i>	Tzolkin date
B1	12 <i>Pop</i>	Haab date
A2	<i>i uut</i>	and then it happened
B2	<i>u k'ak'</i> - ?	fire ceremony
C1	?	personal name?
D1	<i>Wak - Ajaw?</i>	title?
C2	<i>ajaw?</i> - ?	lord or Machaquila?
D2	? - 7 - ?	title?

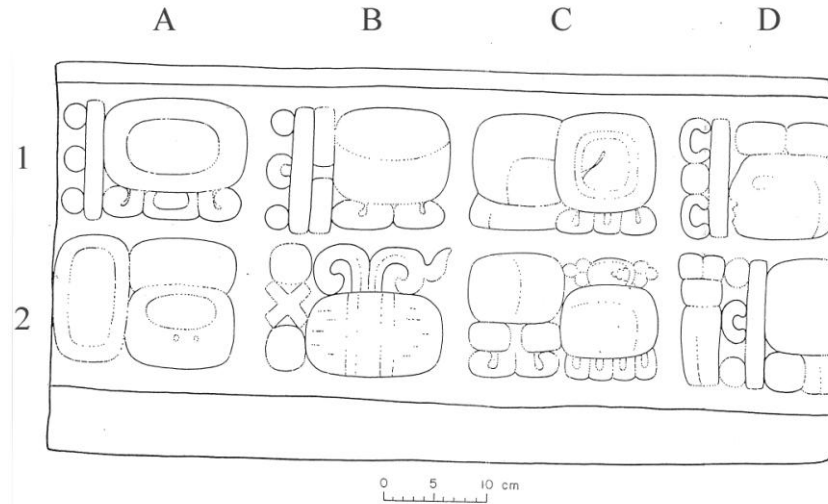


Figure 11.48 Block 12, Hieroglyphic Stairway of Cancuen (Drawing by L. Luin, VCAP)

11.3.2 Panel 1

This extraordinary sculpture with 160 glyphs was looted from Cancuen and its exact provenience is still debated. It corresponds to the second part of a long text whose first part is missing. Kistler (2004: 5) suggests that it was the back of a throne, and the missing part corresponds to the carved seat, in a style similar to Piedras Negras Throne 1 (Figure 11.49). The text compiles nine events that include accession dates, building dedications, and other rituals carried out by almost all known rulers of Cancuen. Although it is likely that the panel was found inside of one of the royal palace rooms, the relative low quantity of looted rooms makes that possibility questionable. The other option is Structure M7-1, which was also looted. The fact that Panel 3, found in Structure M7-1 staircase, shows the same carving style than Panel 1 also suggests that both monuments were not only carved by the same sculptor, but also that both monuments were displayed together. Kistler (2004) suggests that the panel may have been in Machaquila or another Pasión river site outside Cancuen.

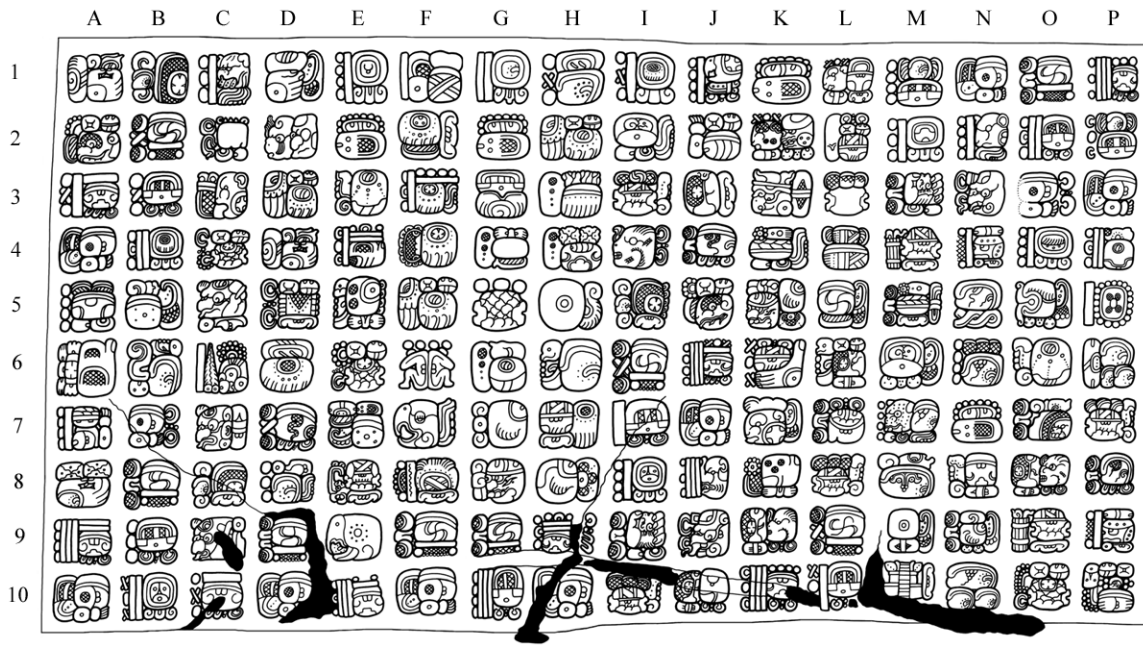
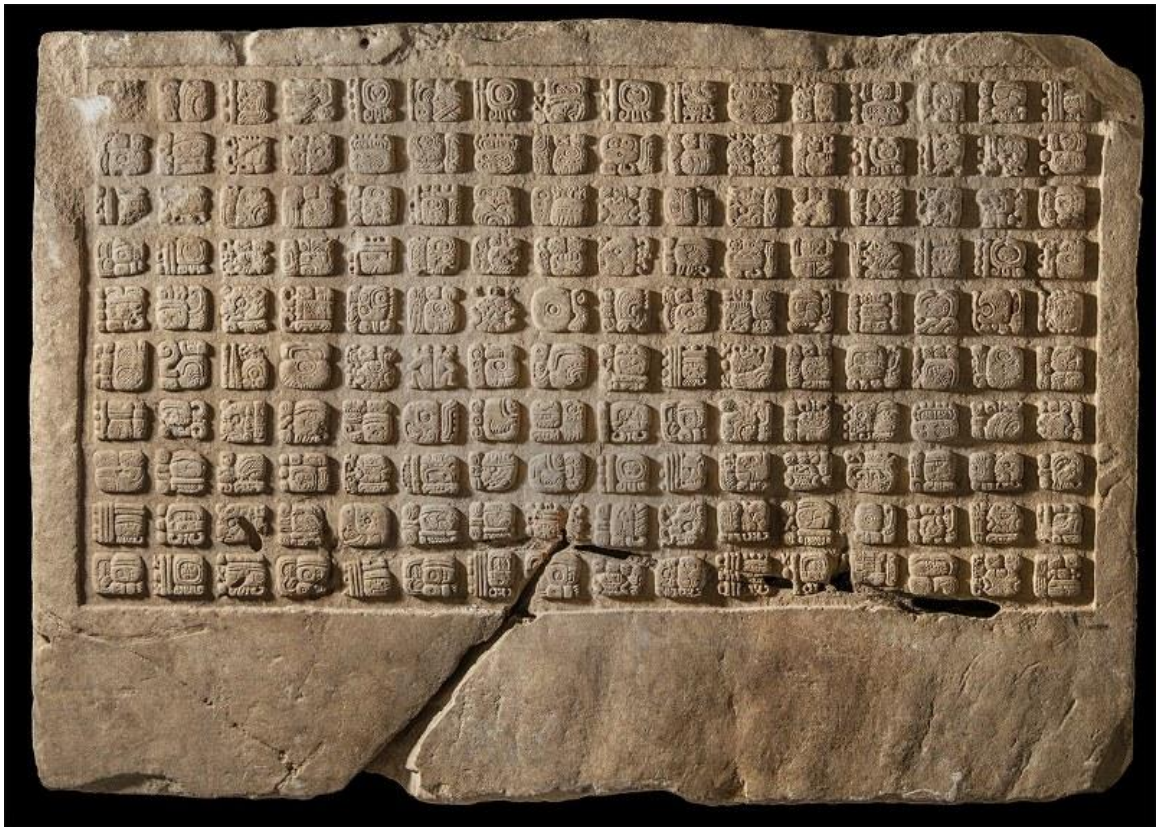


Figure 11.49 Panel 1 of Cancuen (Photo by Fundación Ruta Maya, drawing by Yuriy Polyukhovych)

The panel inscription was first read by Federico Fahsen and Sarah Jackson (2002), followed by Stanley Guenter (2002). A summary of these two versions is compiled next:

First event, February 8th, 652 C.E. (Figure 11.50)

A1	<i>yichnal</i>	in company of
B1	<i>Yuk'noom Ch'een</i>	Calakmul ruler
A2	<i>K'uhul Kan Ajaw</i>	Lord of Kan Kingdom

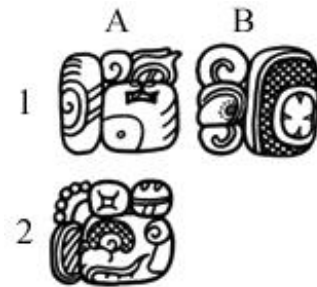


Figure 11.50 Glyphs A1-A2, Panel 1 of Cancuen (Drawing by Yuriy Polyukhovych)

Second event, May 20th, 653 C.E. (Figure 11.51)

B2	<i>u tz'akaj</i>	it changed
A3	<i>7 K'in, 5 Winal,</i>	distance number
B3	<i>1 Tun</i>	distance number
A4	<i>i uut</i>	and then it occurred
B4	<i>12 imix</i>	Tzolkin Date
A5	<i>4 Sek</i>	Haab Date
B5	<i>och' b'ijaj</i>	died
A6-B6	<i>K'inich K'ap Neel Ahk</i>	personal name
A7	<i>Bolon Yotoot</i>	place name
B7	<i>utiyy</i>	it happened at
A8	<i>Chiik Nahb</i>	Calakmul

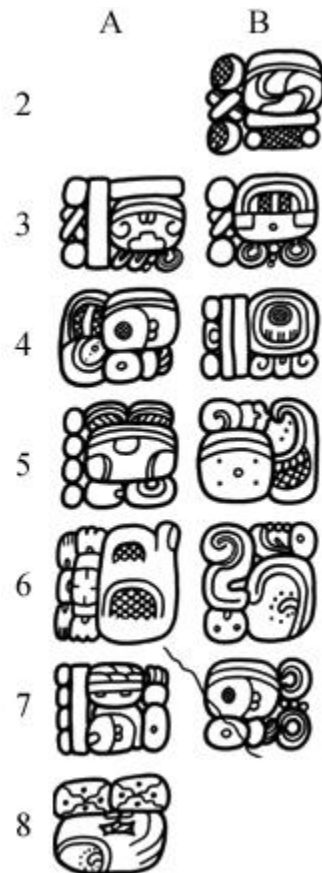


Figure 11.51 Glyphs B2-A8, Panel 1 of Cancuen (Drawing by Yuriy Polyukhovych)

Third event, December 9th, 656 C.E. (Figure 11.52)

B8	<i>u tz'ajaj</i>	it changed
A9	<i>19 K'in 10 Winal</i>	distance number
B9	<i>3 Tun</i>	distance number
A10	<i>i uut</i>	and then it occurred
B10	<i>11 Ajaw</i>	Tzolkin Date
C1	<i>8 Muwaan</i>	Haab Date
D1	<i>k'alaj</i>	it was wrapped
C2	<i>Sak Huun</i>	the white headband
D2	<i>K'awiil - ?</i>	of K'awiil
C3	<i>tu baah</i>	on his head
D3	<i>K'iib' Ajaw</i>	Cancuen ruler name
C4	<i>K'uhul Ajaw - ?</i>	Divine Cancuen Lord (Cancuen E.G.)
D4	<i>yichnal</i>	in the presence of (3 patron deities)
C5-D5	<i>Kaloomte' Yajaw Man</i>	deity name
C6	<i>Ho Kokaj K'uh</i>	deity name
D6-C7	<i>Yaxha'al Chaak</i>	deity name
D7	<i>u kab'jiy</i>	supervised by
C8	<i>Yuknoom Ch'een</i>	Calakmul king
D8	<i>Ux Te' Tuun</i>	Calakmul place
C9	<i>Kaloomte'</i>	Title of the king

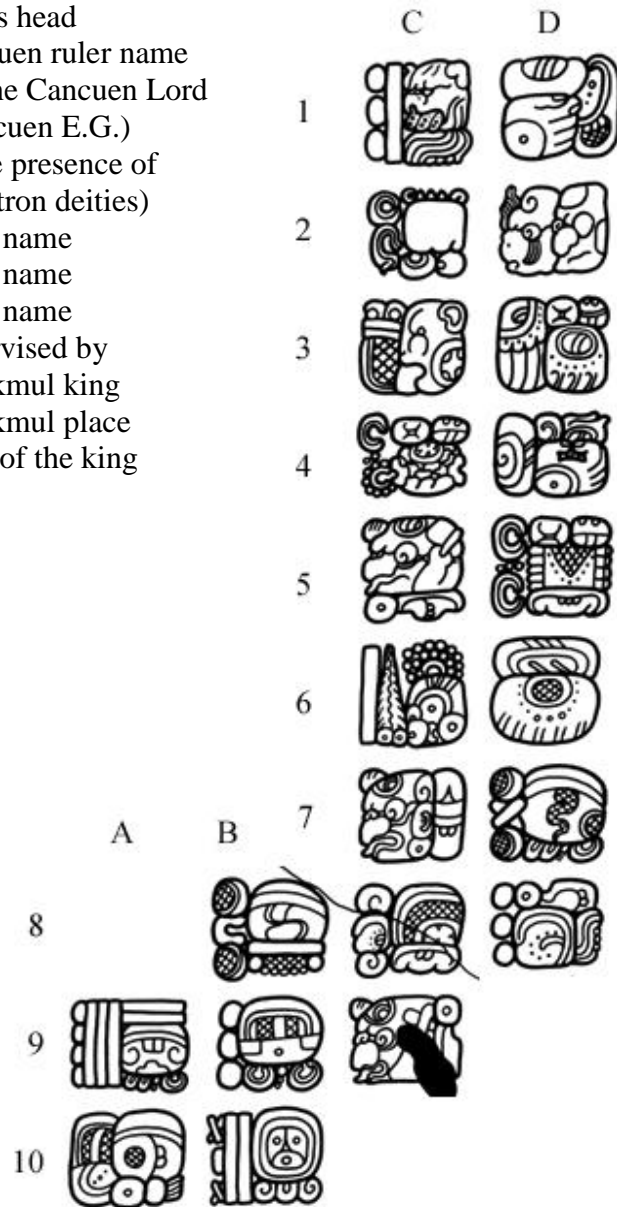


Figure 11.52 Glyphs B8-C9, Panel 1 of Cancuen
(Drawing by Yuriy Polyukhovych)

Fourth event, March 21st, 657 C.E. (Figure 11.53)

D9	<i>u tz'akaj</i>	it changed
C10	<i>2 K'in 5 Winal</i>	distance number
D10	<i>i uut</i>	and then it occurred after
E1	<i>9 Ik</i>	Tzolkin date
F1	<i>5 Wo</i>	Haab date
E2	<i>huli</i>	he arrived at
F2-E3	<i>Makan Witz</i>	place name (Naj Tunich? mountain in Southern Peten?)
F3	<i>7 - 9 - ? - n(i)</i>	place or symbol related to royalty? eclipse?
E4	<i>6 12 k'a</i>	?
F4	<i>ju - ba?</i>	place name (toponym)? he paddled?
E5	<i>Aj A'kot no'm</i>	the giver
F5	<i>K'iib' Ajaw</i>	Cancuen ruler name
E6	<i>K'uhul Ajaw - ?</i>	Divine Cancuen Lord (Cancuen Emblem Glyph)
F6	<i>4 - ?</i>	it changed?
E7	<i>chak jalib'</i>	was exiled?
F7	<i>aan</i>	transitive root
E8-E9	<i>? Chan Aj T'zan Mo'</i>	person name (previous Cancuen ruler?)

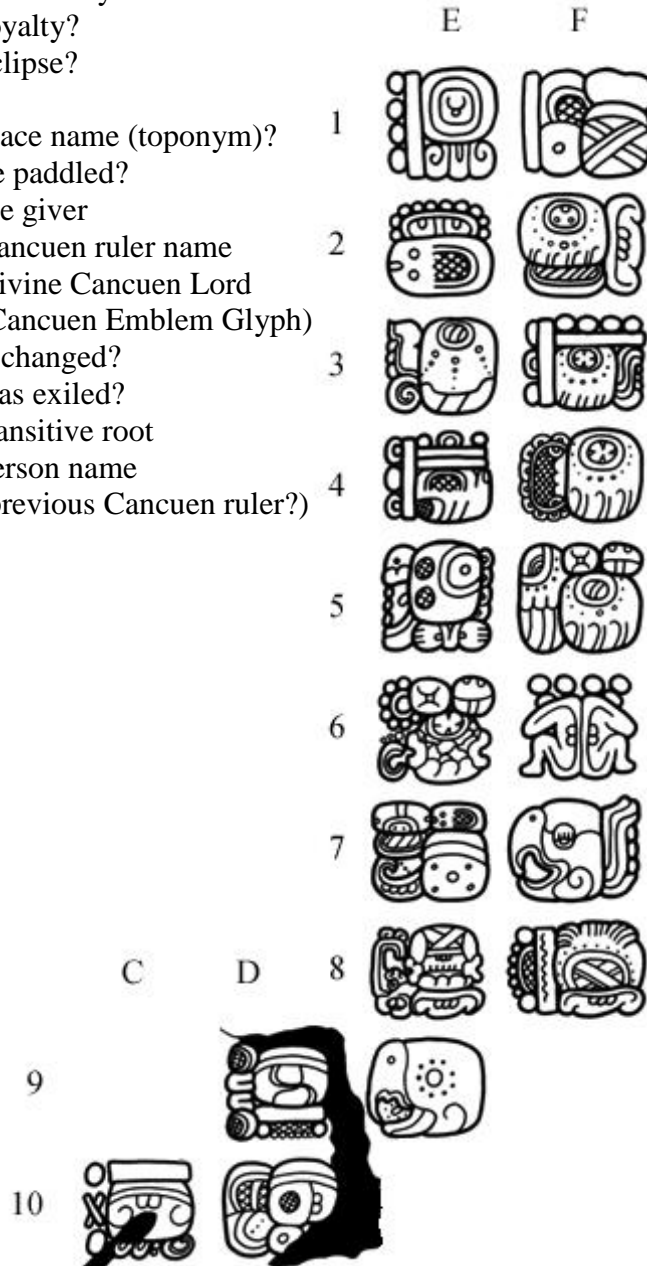


Figure 11.53 Glyphs D9-E9, Panel 1 of Cancuen
(Drawing by Yuriy Polyukhovych)

Fifth event, August 25th, 657 C.E. (Figure 11.54)

- | | | |
|-------|-------------------------|----------------------------------|
| F9 | <i>u tz'akaj</i> | it changed |
| E10 | <i>17 K'in 12 Winal</i> | distance number |
| F10 | <i>i uut</i> | and then it occurred after |
| G1 | <i>10 Kawak</i> | Tzolkin date |
| H1 | <i>2 Yax</i> | Haab date |
| G2 | <i>huli</i> | he arrived (at Cancuen?) |
| H2 | <i>K'iib' Ajaw</i> | Cancuen ruler name |
| G3 | <i>haab'yi</i> | was dedicated or was established |
| H3 | <i>wal menal</i> | deity name? |
| G4 | <i>wal ma-?-ka</i> | deity name? |
| H4 | <i>wal nab nab</i> | deity name? |
| G5-H5 | <i>Ox Ahk Peten</i> | three turtle island? |

G6-H7 *wal yohl ahk yul Chanha'* heart of turtle?
(place name?)

G8-H8 *Haluum* place name?
(toponym of Cancuen?)

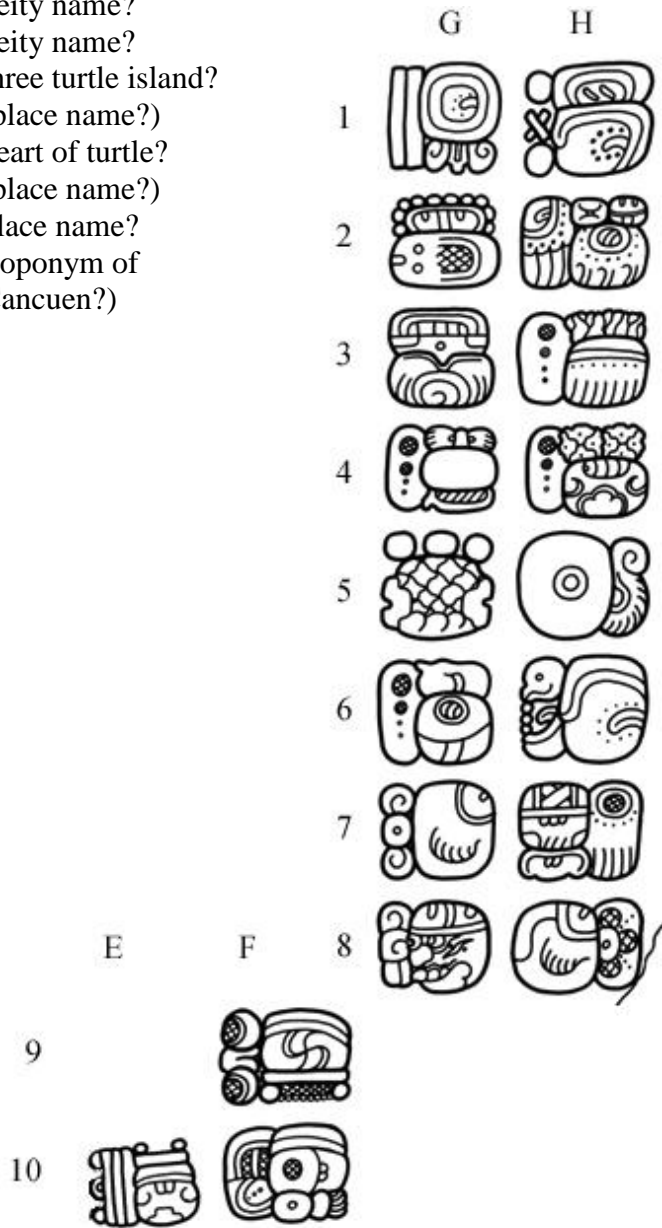


Figure 11.54 Glyphs F9-H8, Panel 1 of Cancuen
(Drawing by Yuriy Polyukhovych)

Sixth event, January 14th, 677 C.E. (Figure 11.55)

G9	<i>u tz'akaj</i>	it changed
H9	<i>2 K'in 14 Winal</i>	distance number
G10	<i>19 Tun</i>	distance number
H10	<i>i uut</i>	and then it occurred after
I1	<i>7 Imix</i>	Tzolkin date
J1	<i>9 K'ayab</i>	Haab date
I2	<i>chumwaan</i>	he was seated
J2	<i>ti ajawlel</i>	as lord
I3-14	<i>Chan Ahk Wi' Taak Kay</i>	Cancuen ruler name
J4	<i>u kab'jiy</i>	it was overseen by
I5	<i>Yuknoom Ch'een</i>	Calakmul ruler name
J5	<i>K'uhul Kaan Ajaw</i>	Divine lord of Kaan



Figure 11.55 Glyphs G9-J5, Panel 1 of Cancuen
(Drawing by Yuriy Polyukhovych)

Seventh event, May 7th, 682 C.E. (Figure 11.56)

I6	<i>u tz'akaj</i>	it changed
J6	<i>19 K'in 6 Winal</i>	distance number
I7	<i>5 Tun</i>	distance number
J7	<i>i uut</i>	and then it occurred after
I8	<i>9 Ajaw</i>	Tzolkin date
J8	<i>18 Zotz'</i>	Haab date
I9	<i>u tzakaj</i>	he conjured
J9	<i>K'awiil</i>	K'awiil
I10-J10	<i>? Chan Ahk Wi' Taak Kay</i>	Cancuen ruler name
K1	<i>huli</i>	they arrived
L1	<i>Jun Ch'ok Chan</i>	deity name (upperworld)
K2	<i>Jun Ch'ok -?- Xib</i>	deity name (underworld)
L2	<i>Mu ya Chan Ajaw</i>	deity name
K3	<i>Yebeet</i>	the messenger
L3	<i>?</i>	<i>?</i>
K4	<i>patwaan</i>	it was built
L4	<i>?</i>	building / throne name
K5	<i>Haluum</i>	place name? (toponym Cancuen?)
L5	<i>tz'akaj</i>	it changed
K6-L6	<i>Jun Yal Chan Ajaw</i>	Venus associated phenomenon or deity
K7	<i>b'aahaj</i>	it is the image
L7	<i>u yaak'</i>	the darkness of
K8	<i>ch'ajoom</i>	Ch'ajoom, the "scatterer" (title)
L8-K9	<i>? - Chan Ak Wi' Taak Kay</i>	Cancuen ruler name

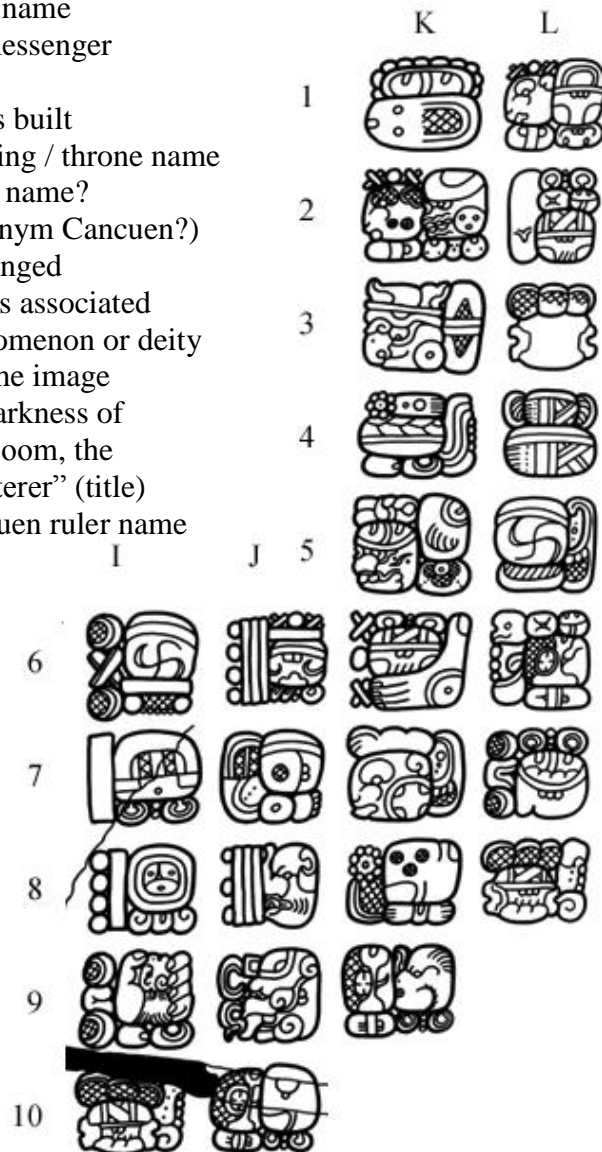


Figure 11.56 Glyphs I6-K9, Panel 1 of Cancuen
(Drawing by Yuriy Polyukhovych)

Eight event, May 17th, 767 C.E. (Figure 11.57)

L9	<i>u tz'aka'</i>	it changed
K10	<i>16 Kin 9 Winal</i>	distance number
L10	<i>6 Tun</i>	distance number
M1	<i>4 K'atun</i>	distance number
N1	<i>i uut</i>	and then it occurred after
M2	<i>8 Kib</i>	Tzolkin date
N2	<i>9 Xul</i>	Haab date
M3	<i>u tzakaw</i>	he conjured
N3	<i>K'awiil</i>	K'awiil
M4	<i>Taj Chan Ahk</i>	Cancuen ruler name
N4	<i>Aj Chaak Ju'te'</i>	Title
M5	<i>otoot?</i>	sacred house? building?
N5	<i>kab'</i>	pawahtuun altar? or "earth place"
M6	<i>chumlaj</i>	they were seated
N6	<i>4 Pawahtuun</i>	deity name
M7	<i>4 Xiiw Tuun</i>	deity name
N7	<i>huli</i>	he arrived
M8	<i>?</i>	at a cave? stone-star place? (place name)
N8	<i>winik</i>	person
M9	<i>petaj</i>	was encircled
N9	<i>u mulaj</i>	the base of
M10	<i>?</i>	pyramid name
N10	<i>?</i>	at the three stone place or altar

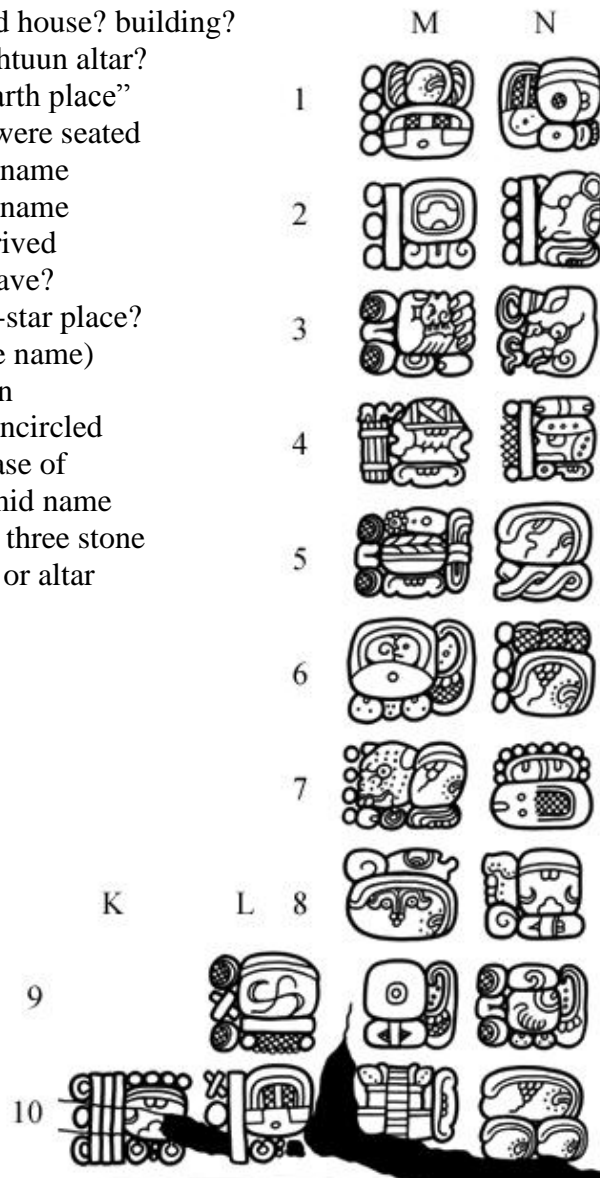


Figure 11.57 Glyphs L9-N10, Panel 1 of Cancuen
(Drawing by Yuriy Polyukhovych)

Ninth event, June 7th, 799 C.E. (Figure 11.58)

O1	<i>u tz'ajaj</i>	it changed
P1	<i>18 K'in 1 Winal</i>	distance number
O2	<i>12 Tun</i>	distance number
P2	<i>1 K'atun</i>	distance number
O3	<i>u tiiy</i>	it happened
P3	<i>i uut</i>	and then it occurred
O4	<i>9 Hix</i>	Tzolkin date
P4	<i>12 Kumk'u</i>	Haab date
O5	<i>ilaj</i>	it was seen
P5-O6	<i>5 Janaab' Witz</i>	Five Flower Mountain
P6	?	?
O7	<i>u muknal</i>	the tomb of
P7-O8	<i>? Chan Ahk Wi' Taak Kay</i>	Cancuen ruler name
P8	<i>u kab'jiy</i>	it was overseen by
O9	<i>Taj Chan Ahk</i>	Cancuen ruler name
P9	<i>Aj Chaak Ju'te'</i>	Title
O10	<i>K'uhul Ajaw - ?</i>	Divine Cancuen Lord (Cancuen E.G.)
P10	<i>K'uhul Ajaw - ?</i>	Divine Machaquila Lord (Machaquila E.G.)



Figure 11.58 Glyphs O1-P10, Panel 1 of Cancuen
(Drawing by Yuriy Polyukhovych)

11.3.3 Panel 2

This monument was discovered inside the single room of Structure K7-3 perishable superstructure (Sears 2003: 123-4), although it is not clear if it was its original location. Its highly eroded carved scene shows two seated individuals in front of each other. The right person wears a more elaborated costume than the other one, and gives

him an object he is holding with the right hand. The inscription in the left side can be read, but the right one is totally unreadable (Figure 11.59).

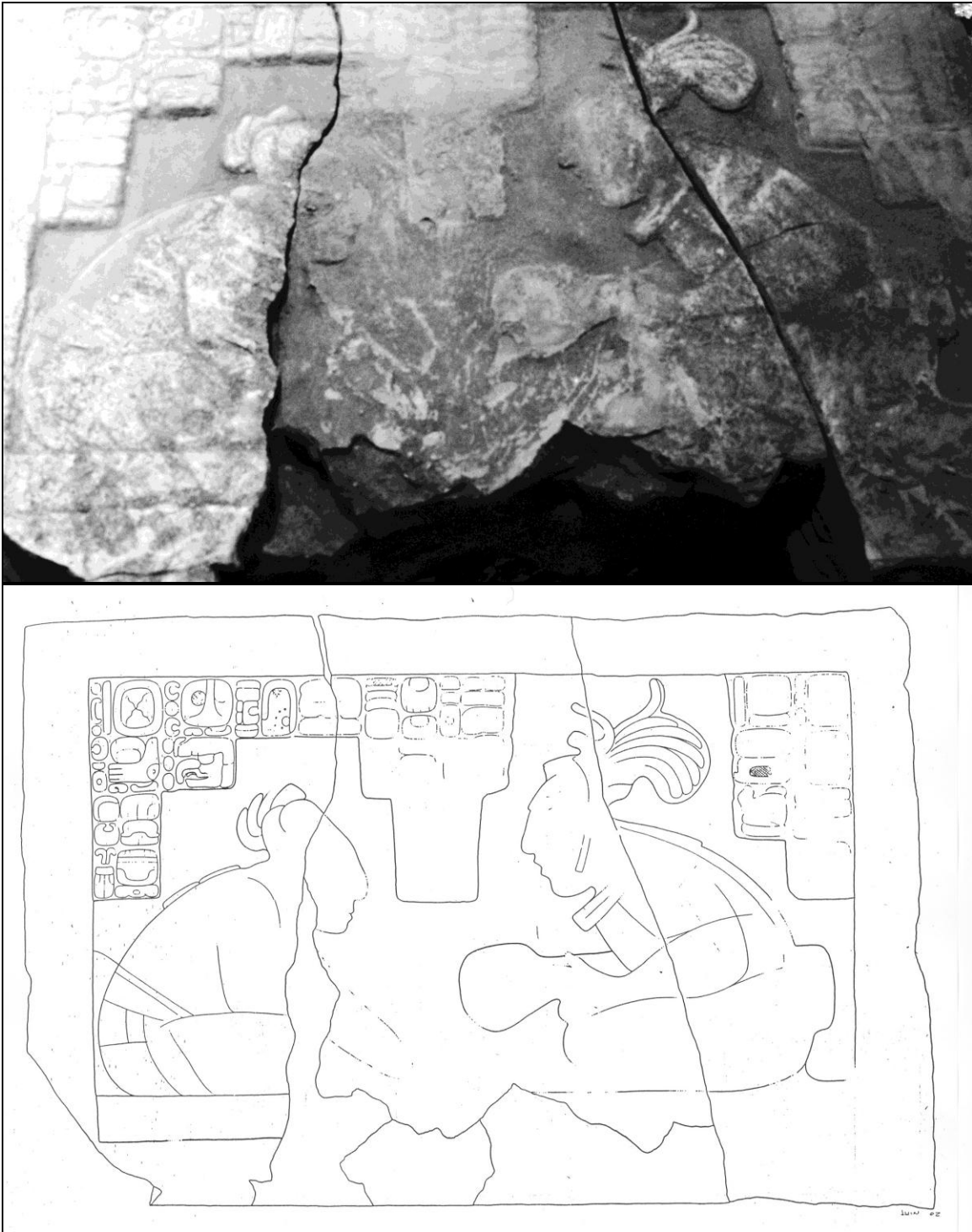


Figure 11.59 Panel 2, Cancuen
(Drawing by Photo by T. Barrientos, drawing by L. Luin, VCAP)

Given that the same date appears in Block 6 of the hieroglyphic stairway, it is clear that the scene shows *Taj Chan Ahk*'s accession. In addition, the fact that this monument was located directly above Burial 50, suggests that the tomb in Structure K7-3 corresponds to one of the individuals portrayed in the panel, presumably *Tak Chan Ahk*'s father or predecessor. The reading of the preserved glyphs goes in the following way (Fahsen, *et al.* 2004: 30):

A1 7 *Etz'nab*
 B1 1 *Kankin*
 A2 *U-Ch'am-wa*
 B2 *ox (?)*
 A3 *K'awil?*
 A4 *Taj Chan*
 C1 *a(h)-K'u*
 D1 ?
 E1 *ti-ba-?*
 F1 *ti-ajaw?*

11.3.4 Panel 3

The East Ballcourt is located directly in front of Structure L7-27 eastern façade, as part of the East Plaza. Given the importance of this public space, the monuments of the East Ballcourt can be directly correlated with the activities that took place in the palace. The most important of these is Panel 3, found in the western facade of Structure M7-1 (East Ballcourt). Its carving style is very similar to Panel 1, making it very likely that these two sculptures were made by the same artist. The scene portrays ruler *Taj Chan Ahk* seated in a water lily serpent effigy throne, accompanied by two noblemen: on the left, *Aj Tz'akb'u*, who carries the title of *Aj K'uhuun* (book keeper, priest or worshiper) and on the right side, *Aj Ox Tok'na* or *Aj Ox Jol-na*, who carries the title of *Sahal*. The complete scene is framed by an aquatic quatrefoil, which symbolizes the entrance of a watery cave (Figure 11.60).



Figure 11.60 Panel 3, Cancuen (Photo by T. Barrientos, drawing by L. Luin, VCAP)

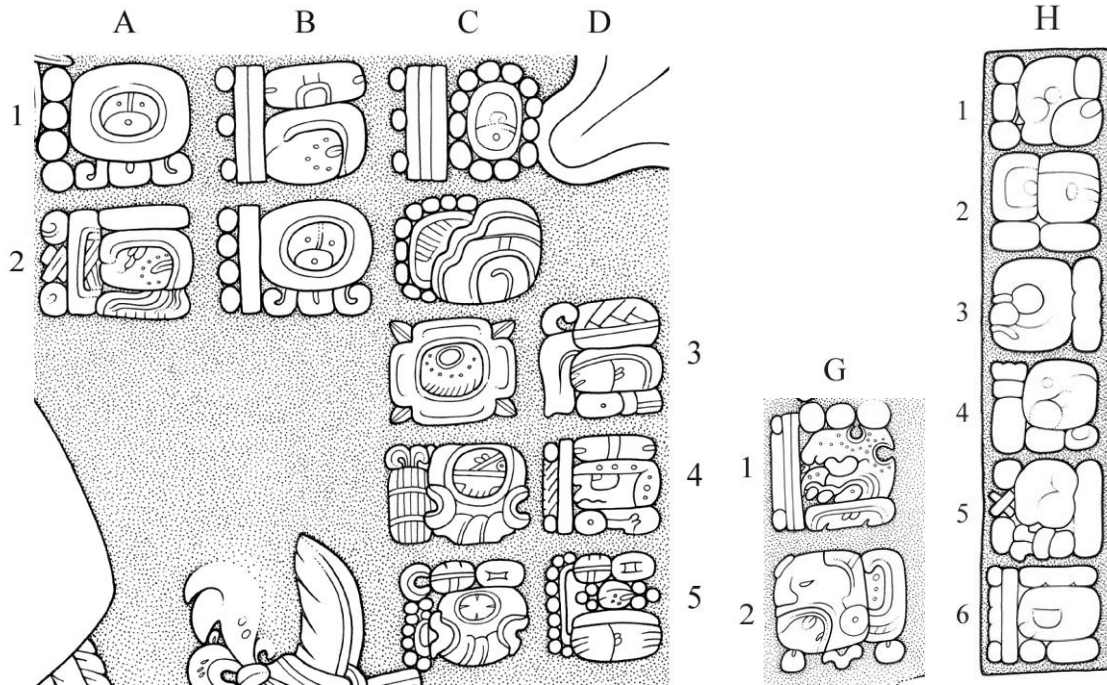


Figure 11.61 Hieroglyphic texts, Panel 3, Cancuen (Drawing by L. Luin, VCAP)

A1	<i>4 Ajaw</i>	Tzolkin date
B1	<i>13 Keh</i>	Haab date
A2	<i>u na hotun</i>	ended his first five year period
B2	<i>9 Ajaw</i>	Tzolkin date
C1	<i>18 Mol</i>	Haab date
C2	<i>t'ab'yi</i>	was dedicated
C3	<i>panha'</i>	watery cave?
D1	<i>yotoot</i>	the house of
C4	<i>Taj Chan Ahk</i>	Cancuen Ruler name
D2	<i>Aj Chaak Ju'te'</i>	Ruler title
C5	<i>K'uhul - ?- Ajaw</i>	Divine Cancuen Lord (Cancuen Emblem Glyph)
D3	<i>K'uhul - ?- Ajaw</i>	Divine Machaquila Lord (Machaquila Emblem Glyph)
E1	<i>Aj Tz'ak b'u</i>	personal name (he who orders)
F2	<i>Aj K'uhuum</i>	title (book keeper)
G1	<i>Aj Ox Tok'na</i>	personal name
G2	<i>Sajal</i>	title (provincial governor)
H1	<i>yuxul</i>	his carving
H2	<i>?</i>	personal name (sculptor)
H3	<i>? - ja?</i>	personal name (sculptor)
H4	<i>ti - ? - wa?</i>	title?
H5	<i>baah chehb?</i>	head-quill (title)
H6	<i>Aj Chaak Ju'te'?</i>	Lord title (<i>Taj Chan Ahk</i>)

11.3.5 Ballcourt Altar-Markers

The three altar-markers originally located in the playing alley floor of the East Ballcourt provide important clues to understand Cancuen's dynastic history and external political affiliations. Altar-Marker 1 was first noticed by Morley in 1915 (Morley 1936-7), and it was thought to be a single sculpture located at the center of the ballcourt. However, in 2001, a new altar-marker was revealed by the heavy rains of Hurricane Iris, but instead of being reported to the authorities, it was looted from the site. With the aid of local communities, the altar was recovered in 2003, suggesting the existence of a third one, as part of a tripartite pattern previously recorded in sites with north-south aligned ballcourts (Holden 2009: 29), like Copán (Freidel, *et al.* 1993: 352-73), Caracol (Helmke, *et al.* 2006), Pusilha, (Wanyerka 2003:152-161), and Lubaantun (*Ibid.* 14-24). As it was predicted, Altar-Marker 3 was found in 2004 at the center of the ballcourt playing alley (Torres and Mullane 2006). It became thus clear that Altar-Marker 1 was originally placed in the southern end, while Altar-Marker 2 in the northern end of the ballcourt (Figure 11.62).

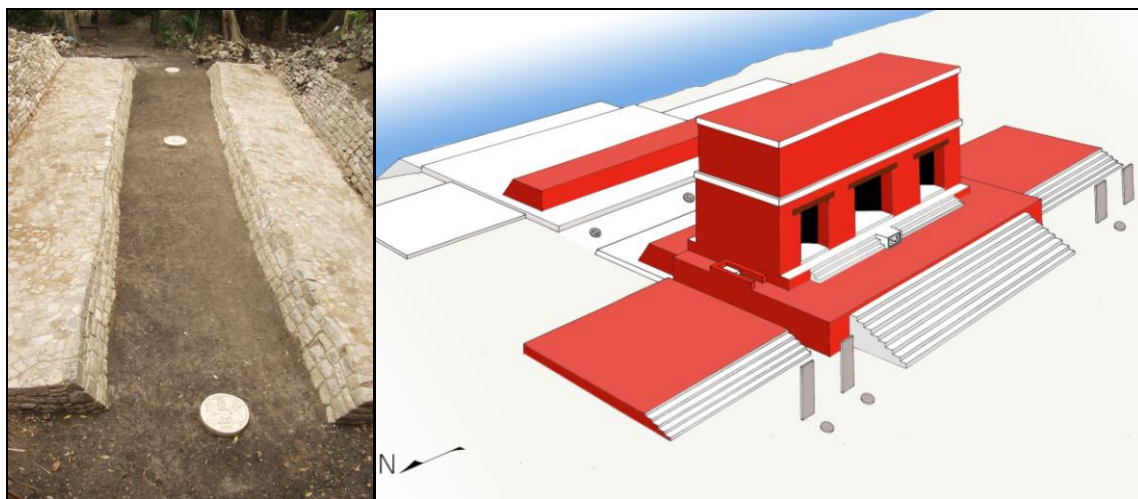


Figure 11.62 Restoration (left) and reconstruction (right) of East Ballcourt, Cancuen, showing altar/markers (Photo by T. Barrientos, drawing by L. Luin, VCAP)

The Altar-Marker 2 is the most elaborate of the three, and probably the first one to be carved. Its scene portrays ruler *Taj Chan Ahk* playing ball with another individual, probably an important ally (Figure 11.63), who is described as the captor of two rulers, one from Machaquila and the other one from a place called “White Mountain”, probably the actual site of La Linterna 2, where a hieroglyphic stairway mentions a ruler named *Sak Ajaw*, or “White Lord” (Figure 11.64). The site of La Linterna 2 represents one of various small kingdoms located around the Chinaja Mountains that could have competed with Cancuen for the control of the salt beds in Salinas de los Nueve Cerros. Near this site, another monument has been reported in the site of Yalpemech, which depicts a captive and its style dates to the end of the Late Classic (Dillon 1978).



Figure 11.63 Photo and drawing of Altar/Marker 2 (Photo by A. Demarest, drawing by L. Luin, VCAP)

Its inscription has been transcribed and translated by Fahren and Barrientos (2004) (Figure 11.64):

A1	<i>6 Ix / Kan / Kawak</i>	Tzolkin date
B1	<i>12 Wo / Zip / Tzek</i>	Haab date
A2	<i>patwan</i>	was made
B2	<i>ch'a tzap tuun ch'uch</i>	and set the stone altar
A3	<i>u ch'ab hijiy</i>	for
B3-A4	<i>Taj Chan Ahk</i>	Cancuen Ruler name
B4	<i>Aj Chaak Ju'te'</i>	Ruler title
A5	<i>K'uhul - ? - Ajaw</i>	Divine Lord of Cancuen (Cancuen Emblem Glyph)
B5	<i>iyay</i>	in company of
C1	<i>u chaan</i>	captor of
D1	<i>ajaw</i>	lord of
E1	<i>sak witz'</i>	white mountain (place name)
F1	<i>u chaan</i>	captor of
G1	<i>Chaak yotot? B'ahlam</i>	ruler name (Jaguar of the Red House?)
H1	<i>K'uhul - ?- Ajaw</i>	Divine Lord of Machaquila

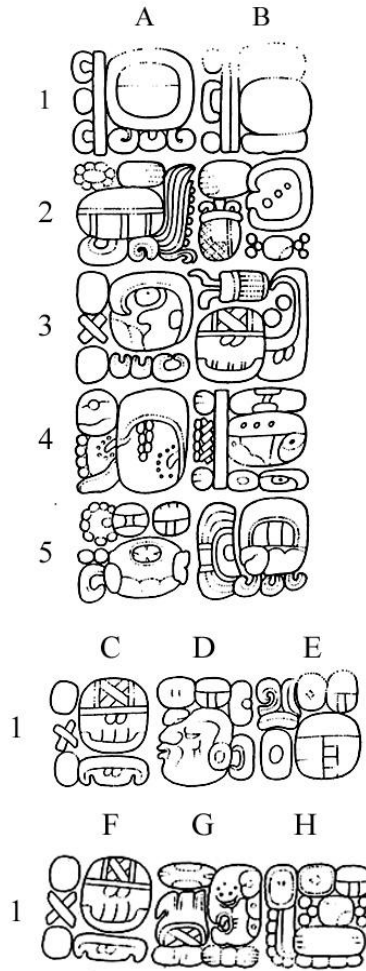


Figure 11.64 Inscription of Altar/Marker 2 (Drawing by L. Luin, VCAP)

The Altar- Marker 1 portrays ruler *Taj Chan ahk* to the left and his son, *K'an M'aax* to the right (Figure 11.65). The latter one can be identified by the glyph T533 *NICH* or *NIK*, which means “son”, located as part of his headdress. This sculpture was dedicated four years after Altar-Marker 2, and could have been commemorated *K'an M'aax* designation as heir to the throne. If this is correct, this important event occurred in 795 C.E included a ballgame ceremony involving father and son.



Figure 11.65 Altar/Marker 1 (Photo by A. Demarest, drawing by L. Luin, VCAP)

The glyphic text has been transcribed and translated by Federico Fahsen (Fahsen and Barrientos 2006):

A1	4 Ajaw	Tzolkin date
A2	13 Keh	Haab date
A3	<i>pitz'?</i> - ?	played ball at the ballcourt
A4	<i>K'an Ma'ax</i>	Cancuen Ruler name
A5	<i>Aj</i> - ?	title
B1	<i>u ch'ab hijiy</i>	of
C1	<i>Taj Chan Ahk</i>	Cancuen Ruler name
D1	<i>Aj Chaak Ju'te'</i>	Ruler title
E1	<i>K'uhul</i> - ?- Ajaw	Divine Lord of Cancuen (Cancuen Emblem Glyph)

Finally, the Altar-Marker 3 seems to be the final one of the set. Although the inscription is highly eroded, it suggests that *Taj Chan Ahk* was already dead at the time of its dedication, giving it a probable date of 800 C.E. One of the two individuals is *K'an M'aax*, probably acting now as the king of Cancuen. He plays ball with an unknown character, very likely to be an important ally, similar to the Altar-Maker 2 scene. It is worth noting that the background portrays a ballcourt with benches and sloping walls almost identical to the actual East Ballcourt of Cancuen (Figure 11.66). The inscription has been analyzed by Fahsen (*Ibid.*):



Figure 11.66 Altar/Marker 3 and its legible text (Photo by A. Demarest, drawing by L. Luin, VCAP)

A1	? – <i>chi</i> - ?	?
B1	<i>K'an - Ma'ax?</i>	Cancuen Ruler name
A2	<i>K'uhul - ? - Ajaw</i>	Divine Lord of Cancuen (Cancuen Emblem Glyph)
B2	<i>K'uhul - ? - Ajaw</i>	Divine Lord of Machaquila
A3	<i>kotaj</i>	is the image of
B3	<i>ti ajaw</i>	the lord

11.3.6 Altar 4

This is a circular altar, found at the center of the East Plaza in 2004. It measures 0.92 m in diameter and 0.16 m in height, and was originally placed together with Stela

18, at 46 m east of Structure L7-27 facade. Its carving presents a large *4 Ajaw* date, with a head variant for the Tzolkin glyph (Barrientos and Fahsen 2006: 61) (Figure 11.67). Given its location in the East Plaza, the *4 Ajaw* date may refer to the same date depicted in Panel 3 and Altar-Marker 1: *4 Ajaw 13 Kej* (9.18.5.0.0).

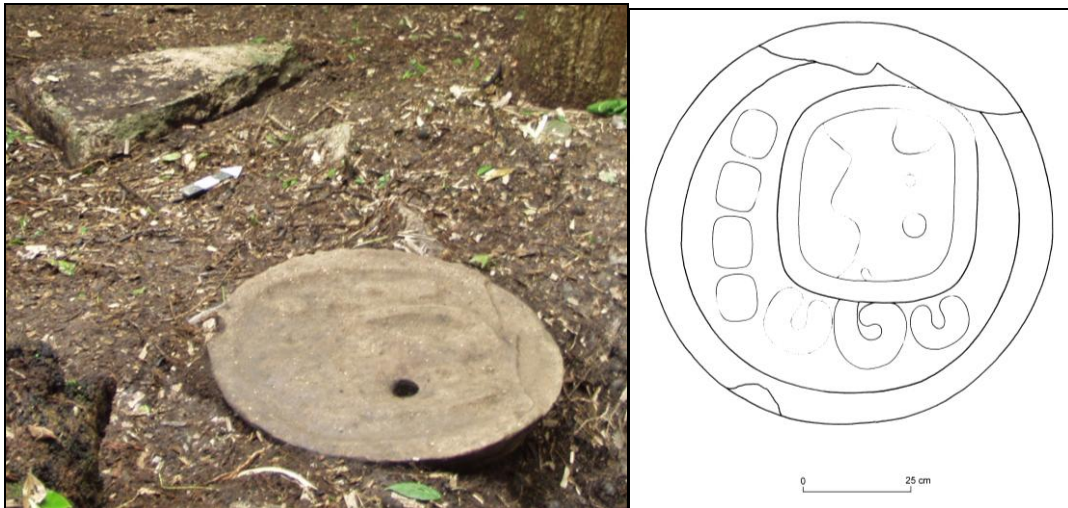


Figure 11.67 Altar 4 and its relation with Stela 18 remains (left), drawing of Altar 4 (right)
(Photo by T. Barrientos, drawing by L. Luin, VCAP)

11.3.7 Burial 77 shells

As part of *K'an Ma'ax* funerary offerings (Burial 77), a set of 15 carved nacre shells was found aligned on the north side of the burial. Each shell represents a glyph cartouche, and formed a glyphic inscription that resembles the syntax of Primary Standard Sequence texts found in ceramic vessels and other artifacts (Figure 11.68). Given that the entire burial was covered by hard brown clay, some shells disintegrated by the heavy weight of the construction fill, nevertheless, 10 of the 15 shells were recovered almost intact and their carving was recognized as readable glyphs. A tentative reading of the glyphs has been proposed by Federico Fahsen and Marc Zender, and it goes in the following manner:

- A: u-?-?-li (possessed noun?) PSS Introductory Glyph?
- B: T'AB (God N head)
- C: 4 TUUN-ni (*Chan tuun*, four stones)
- D: Ch'o-ko?-(*ch'ok*, young)
- E: K'UH ya-[K'IN]AHK AJAW (*K'uhul Yahk K'in Ajaw*, Cancuen Emblem Glyph)
- F: a-AJAW-wa
- G: AJ bo-to (*Aj Bot*, title common in the Pasion region during the IX century)
- H: YAX – hi-?
- I: K'INICH?--?--?
- J: hi-?
- K: ?-ni (*K'an?*)
- L: ma-xi (*Ma'ax*)
- M: pa-?
- N: ?

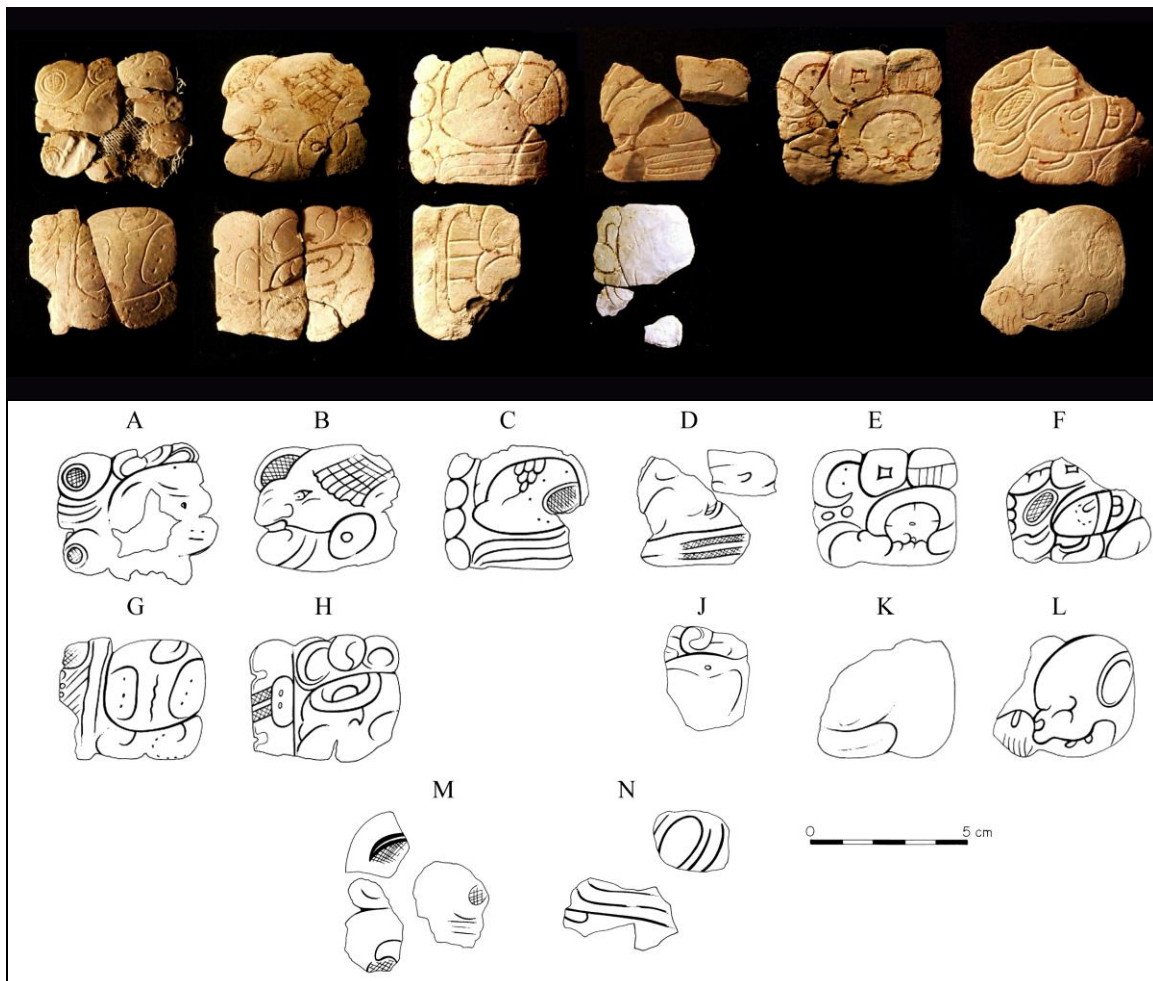


Figure 11.68 PGlyphs carved in nacre shell, Burial 77 (Photos and drawings by L. Luin, VCAP)

11.3.8 Brussels Shell

The shell contains an incised text, and it is part of a private collection that was part of the exhibit "Tresors du Nouveau Monde" (Barrientos and Fahsen 2006: 63). The text contains 20 glyphs that start with the date 6 *Chicchan* 13 *Xul* and refers to *K'an Ma'ax* and his father identified as "Four *K'atun Ajaw A Tz'ak Ajaw*". The inscription makes reference to an event interpreted as a deer hunt (*ji hul wa chij*) (Figure 11.69). The entire text is transcribed as follows:

- A1: WAK CHICCHAN
- B2: OXLAJU'N XUL
- A3: YU?-HUL-WA
- A4: CHI-j(i)
- A5: a-o-la-a?
- A6: PE-TE
- A7: K'AN MA'AX
- A8: ?-nal-?
- A9: a-??-ka-la
- A10: Cancuen Emblem Glyph
- A11: ba-ka-b'(a)
- A12: -mijin-LI
- A13: HAN-WINAKHAB'
- A14: a-TZ'AK-AJAW-WA
- A15: ji-CH'OKTE'NA
- A16: u-NEN (e)
- A17: b'a-ka-b'(a)
- A18: KU' HUL AJAW?
- A19: Cancuen Emblem Glyph
- A20: b'a-ka-b'(a)

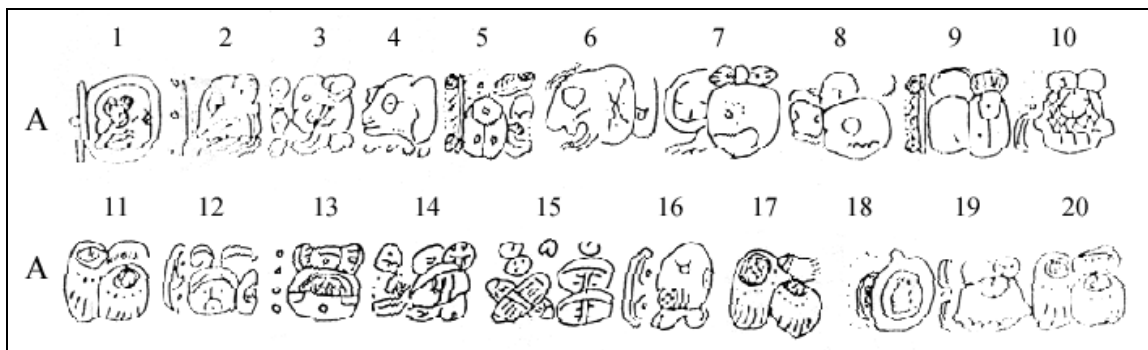


Figure 11.69 Brussels Shell inscription (Drawing by F. Fahsen)

The text describes K'an Ma'ax is son of an individual referred as a Four K'atun Ajaw. This is problematic because Taj Chan Ahk was not 80 years old, given that he was born in 742 C.E. The only alternative is to take the glyph "a-TZ'AK-AJAW-wa ji-CH'OKTE'-NA-ta-t(a)" as referring to Taj Chan Ahk as the fourth in the dynastic line since the founder, which is also suggested by Panel 1 text. What is undoubtedly clear is the direct family relationship (u-MIJIN-il) with the royal dynasty of Cancuen (Ibid. 63-4).

11.3.9 Stela 1

This monument bears the last known text from Cancuen, marking the end of its dynasty in 800 C.E. It commemorates the period ending 9.18.10.0.0 and seems to portray *Taj Chan Ahk* in one side, seated in a wooden throne wearing a jade beads skirt. The other side portrays a standing figure that could be *K'an Ma'ax* (Figure 11.70).



Figure 11.70 Both sides of Stela 1, portraying Taj Chan Ahk (left) and K'an Ma'ax (right) (Maler 1907)

11.3.10 Altar 6

This altar was found in 2004 in association with Stela 19 at the center of the “Main Plaza” of the royal palace. Its carved surface was destroyed intentionally, something that is not common in Cancuen. After excavating around the altar, five fragments were found, making it possible to recover most of the inscription (Figure 11.71). It is not very legible, showing only six glyphs that have been interpreted by Marc Zender:

- A: ka-yi?
- B: u-KAB-ya
- C: TAJ-ja-la
- D: CHAN-na
- E: a-ku-?
- F: Aj-CHAK-ju'te'?



Figure 11.71 Inscription of Altar 6 (Photo by T. Barrientos, VCAP, text by M. Zender)

The transcription reads as this: *kaay? ukab[j]iiy tajal chan a[h]k*. The upper part of the text surely starts with a date and the name of a person whose name ends with *Kaay*, and the verb indicating that the action was overseen by *Tajal Chan Ahk* (Marc Zender, personal communication). Given the structure of the text, which is very similar to the final phrase of Panel 1, it is very likely that it refers to ruler *Chan Ahk Wi' Taak Kay*, and probably the same event performed by *Tajal Chan Ahk* at his tomb in 799 C.E. Nevertheless, the scene seems to portray a palatial scene, which could well correspond to a different event involving a subordinate lord, like it was portrayed in Panel 3.

11.3.11 References outside Cancuen

Dos Pilas Panel 19 was discovered in 1990, broken in many pieces in a small building (Structure K4-2) located 300 m northwest of the Main Plaza (Palka 1997: 300). It carries a possible Calendar Round date of 10 *Imix* 9 *Yax* (728 C.E.) and portrays Ruler 3 (*Toh K'in K'awil*) with his wife or mother, the “Lady of Cancuen”, and a young Ruler 4 (*K'awiil Chan K'inich*), performing a bloodletting ritual in front of a Calakmul visitor (Houston 1993: 114-5; Fahsen and Demarest 2001: 9, Guenter 2003:7) (Figure 11.72).

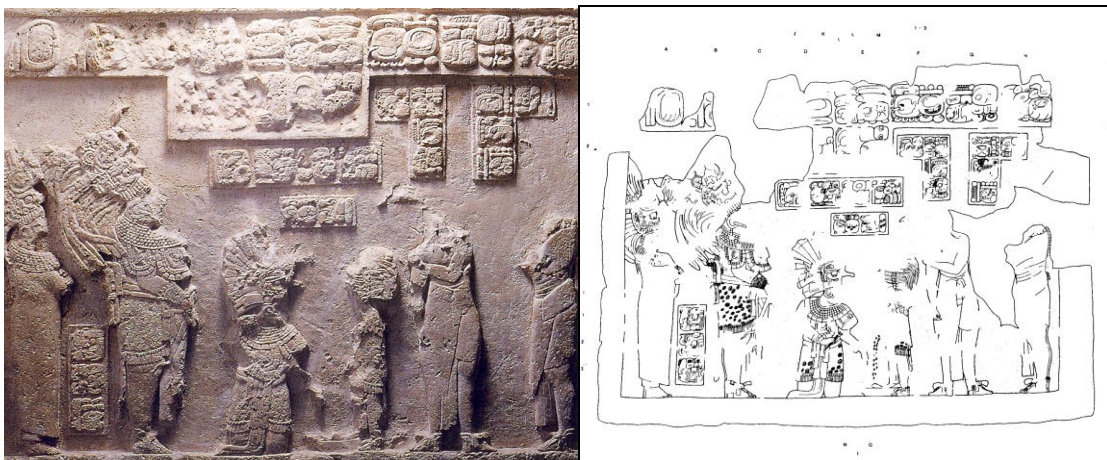


Figure 11.72 Dos Pilas Panel 19 (Photo by A. Demarest, drawing from Houston 1993: 115)

This is one of the two monuments that make reference to the “Lady of Cancuen” and serves as a reference to the relation between both sites when Dos Pilas seemed to dominate the entire Pasion river region.

The other monument in Dos Pilas that is related to Cancuen is the Hieroglyphic Bench 1 or “Lady of Cancuen Bench”, found in 1989 in Structure L4-41, also known as the “Lady of Cancuen Palace” in Group L4-4. The bench was found broken in pieces, left by ancient looters on the interior floor of the room (Palka 1997: 301) (Figure 11.73). It contained 23 glyphs carved in a single row in the front side of the seat (glyphs from H to P are missing) and each support has a quadrangular medallion of four glyphs, making a total of 29 glyphs (Figure 11.74). The medallions in each throne support (glyphs X2 to A’2) record the death of the Lady of Cancuen in 742 C.E. (Houston 1990: 106-8, 114-6). Beneath this floor, Burial 20 was excavated, containing the remains of the Lady of Cancuen. Her funerary offerings included large quantities of jade and greenstone beads, worked shell, polychrome vessels, and an imported hieroglyphic vase of the Ik’ style (Palka 1997: 301; Wooley and Wright 1990).



Figure 11.73 Detail of Dos Pilas Bench 1 (Lady of Cancuen Bench) inscription (Photo by A. Demarest)

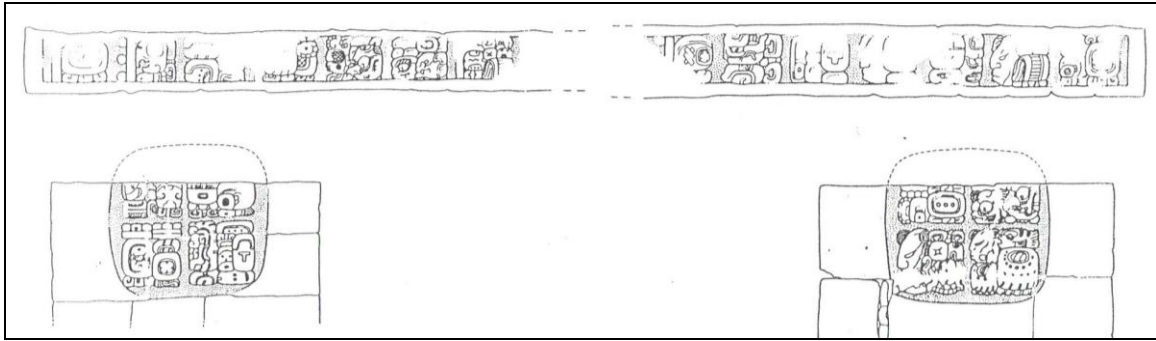


Figure 11.74 Original layout of Dos Pilas Bench 1 (Lady of Cancuen Bench)
(Drawing from Houston 1993: 108)

Various monuments of Machaquila also provide important dates that help to interpret the relationship between this site and Cancuen. In fact, the monuments of Tres Islas seem to indicate that during the Early Classic, these two kingdoms could have had a shared origin (Fahsen and Demarest 2001: 33) or a defined boundary (Lacadena 2011: 211). However, it is also likely that both kingdoms had Early Classic capitals in different locations than their known Late Classic capitals. In any case, during the Late Classic, Machaquila and Cancuen were independent and rival kingdoms. What is relevant is the use of the Machaquila Emblem Glyph by the rulers of Cancuen, starting in 795 C.E. by *Taj Chan Ahk* (Panel 1 and Panel 3) and followed by his son, *K'an Ma'ax* (Altar-Marker 3 and possibly Stela 1). For understanding the relationship between these two kingdoms, it is important to note that there seems to be a short hiatus in the Machaquila inscriptions, starting around 775 C.E., and ending in 800 C.E. (Lacadena 2011: 217). This period may correspond to the domination of Cancuen over Machaquila and most of the Upper Pasión region. Stela 18 of Machaquila seems to portray ruler *Chak Yotot B'ahlam*, who celebrated the Period ending of 9.17.5.0.0 (Barrientos and Kovacevich 2000:11; Just 2007:7) (Figure 11.75) but was captured by Cancuen sometime afterwards, as recorded in Altar-Marker 2. Stela 18 is thus the last one before the hiatus.

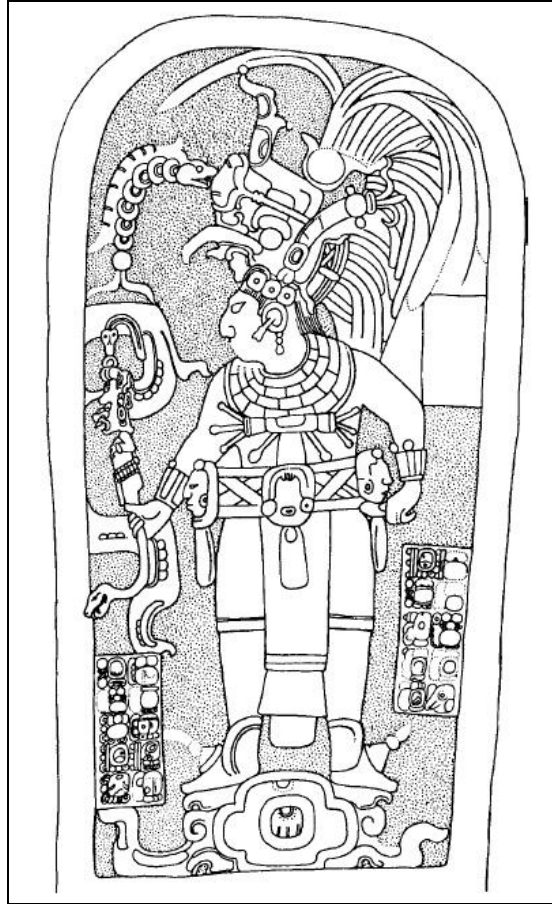


Figure 11.75 Machaquila Stela 18 (Drawing from Reise 1998: 97)

The next known inscription in Machaquila corresponds to Stela 2, which portrays ruler *Ochk'in Kalo'mte'*, who could be the son of *Chak Yotot B'ahlam*. This stela is the most elaborated in the site's history and was dedicated in 801 C.E., but it commemorates the accession of *Ochk'in Kalo'mte'* the year before (Barrientos and Kovacevich 2000: 11) (Figure 11.76). Given the correlation of Stela 2 dates and the last dates of Cancuen, the demise of Cancuen in 800 C.E. can be directly associated with the accession of *Ochk'in Kalo'mte'* the same year (Lacadena 2011: 216-221). This also makes *Ochk'in Kalo'mte'* one of the main suspects for the assassination of the royal family and other nobles of Cancuen, represented by the bone remains found in the two masonry pools and two

portage areas of the site. Nevertheless, it is important to note that no military victory over Cancuen appears in any of the well preserved Machaquila monuments dated after 800 C.E., which would be expected if *Ochk'in Kalo'mte'* actually conquered Cancuen. This opens the possibility that the assassination was perpetrated by a competing Highland center, such as Raxruha Viejo, which didn't have a tradition of written historical records.

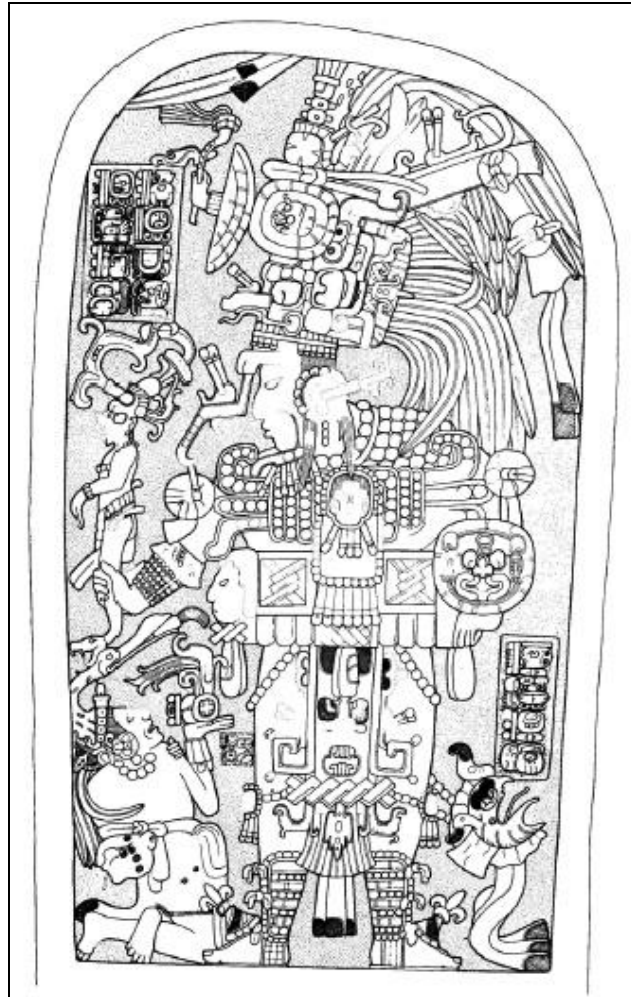


Figure 11.76 Drawing of Machaquila Stela 2 (Drawing from Graham 1967: 58)

11.3.12 Summary of Cancuen Historical Events

Table 11.1 summarizes the most relevant events recorded in Cancuen monuments texts as well as inscriptions from neighboring sites such as Dos Pilas and Machaquila:

Monument	Long Count	Round Calendar	Gregorian Date	Event
Cancuen Panel 1	9.10.19.5.14	13 <i>Ix</i> 7 <i>Kumk'u</i>	Feb 8 652 C.E.	First date known in Cancuen, in missing first part of Panel 1 text (distance number)
Cancuen Panel 1	9.11.0.11.1	12 <i>Imix</i> 4 <i>Sek</i>	May 20 653 C.E.	Death of <i>K'inich K'ap Neel Ahk</i> in Calakmul
Cancuen Panel 1	9.11.4.4.0	11 <i>Ajaw</i> 8 <i>Muwan</i>	Dec 9 656 C.E.	Accession of <i>K'iib' Ajaw</i> of Cancuen, supervised by <i>Yuknoom Ch'een</i> of Calakmul
Cancuen Panel 1	9.11.4.9.2	9 <i>Ik'</i> 5 <i>Wo</i>	Mar 21 657 C.E.	<i>K'iib' Ajaw</i> arrives at <i>Makan Witz'</i> during the spring equinox
Cancuen Panel 1	9.11.4.16.19	10 <i>Kawak</i> 2 <i>Yax</i>	Aug 25 657 C.E.	<i>K'iib' Ajaw</i> dedicates buildings at <i>Haluum</i> (Cancuen)
Dos Pilas HS 2	9.11.11.9.17	9 <i>Caban</i> 5 <i>Pop</i>	Feb 29 664 C.E.	<i>B'ajlaj Chan K'awiil</i> of Dos Pilas defeats <i>Taj Mo'</i> of Machaquila (Boot 2002: 12; Guenter 2002:21-2, Lacadena 2011:212)
Cancuen Panel 1	9.12.4.11.1	7 <i>Imix</i> 9 <i>K'ayab'</i>	Jan 14 677 C.E.	Accession of <i>Chan Ahk Wi' Taak Kay</i> by <i>Yuknoom Ch'een</i> of Calakmul
Dos Pilas HS2	9.12.6.16.17	11 <i>Caban</i> 10 <i>Zotz'</i>	Apr 30 679 C.E.	Defeat of <i>Nun Ujol Chaak</i> of Tikal by <i>B'ajlaj Chan K'awiil</i> of Dos Pilas (Boot 2002: 18; Guenter 2002:27)
Cancuen Panel 1	9.12.10.0.0	9 <i>Ajaw</i> 18 <i>Zotz'</i>	May 7 682 C.E.	Period ending. <i>Chan Ahk Wi' Taak Kay</i> conjured <i>K'awiil</i> , persons or deities arrived, and a stair was built at <i>Haluum</i> (Cancuen)
Cancuen HS Blocks 1-3	9.14.14.6.0	5 <i>Ajaw</i> 3 <i>Kumk'u</i>	Jan 18 726 C.E.	Hieroglyphic Stairway Initial Series date
Dos Pilas Panel 19	9.14.16.17.01	10 <i>Imix</i> 9 <i>Yax</i>	Aug 16 728 C.E.	Bloodletting of Dos Pilas Ruler 4, overseen by his parents, Ruler 3 and the "Lady G1-K'awiil of Cancuen"
Cancuen HS Block 4	9.15.10.14.6	3 <i>Kimi</i> 4 <i>Zotz'</i>	Apr 6, 742 C.E.	Birth of <i>Taj Chan Ahk</i>
Dos Pilas HB1	9.15.10.17.15	7 <i>Men</i> 13 <i>Yaxkin</i>	Jun 16, 742 C.E.	Death of the "Lady G1-K'awiil of Cancuen"
Cancuen HS Block 5	9.16.0.0.0	2 <i>Ajaw</i> 13 <i>Tzek</i>	May 7, 751 C.E.	Period ending
Cancuen HS Block 6	9.16.6.9.18	7 <i>Etz'nab</i> 1 <i>Kankin</i>	Oct 16 757 C.E.	Accession of <i>Taj Chan Ahk</i> (15 years old)
Cancuen Panel 2	9.16.6.9.18	7 <i>Etz'nab</i> 1 <i>Kankin</i>	Oct 16 757 C.E.	Accession of <i>Taj Chan Ahk</i> (15 years old)

Cancuen Panel 1	9.16.16.4.16	8 <i>Kib' 9 Xul</i>	May 17, 767 C.E.	<i>Taj Chan Ahk</i> conjured <i>K'awiil</i> , arrival of two deities or persons, and construction of a building (re-founding of the site?)
Machaquila Stela 18	9.17.5.0.0	6 <i>Ajaw 13 K'ayab</i>	Dec 27 775 C.E.	Period ending by <i>Chak Yotot Bahlam</i> of Machaquila (last inscription before its hiatus, Just 2000: 7)
Cancuen HS Block 10	9.17.5.6.6	2 <i>Kimi 14 Tzek</i>	May 1, 776 C.E.	Fire ceremony
Cancuen HS Block 11	9.17.15.4.14	8 <i>Ix 12 Pop</i>	Feb 6, 786 C.E.	Fire ceremony (at Machaquila?)
Cancuen Altar-Marker 2	9.17.19.6.14	6 <i>Ix 2 Uo</i>	Feb 25 790 C.E.	Ballcourt marker dedication. <i>Taj Chan Ahk</i> , plays ball with the captor of <i>Chak Yotot B'ahlam</i> of Machaquila and a lord from <i>Sak Witz'</i>
Cancuen Stela 2	9.18.0.0.0	11 <i>Ajaw 18 Mak</i>	Oct 9 790 C.E.	Period ending (K'atun) and possible previous military victory by <i>Taj Chan Ahk</i>
Cancuen Panel 3	9.18.5.0.0	4 <i>Ajaw 13 Keh</i>	Sep 13 795 C.E.	Period ending (<i>Hotun</i>) by <i>Taj Chan Ahk</i> , accompanied by <i>Aj Tz'ak b'u</i> (<i>Aj K'uhun</i>) and <i>Aj Ox Tok'-na</i> (<i>Sajal</i>)
Cancuen Altar-Marker 1	9.18.5.0.0	4 <i>Ajaw 13 Keh</i>	Sep 13 795 C.E.	Ballcourt marker dedication, <i>Taj Chan Ahk</i> plays ball with <i>K'an Ma'ax</i> , identified with the <i>Aj Chak Ju'te'</i> title
Cancuen Panel 1	9.18.8.6.14	9 <i>Ix 12 Kumku'</i>	Jun 7 799 C.E.	<i>Taj Chan Ahk</i> oversaw rituals at the tomb of <i>Chan Ahk Wi' Taak Kay</i> .
Brussels shell	9.18.9.13.5	6 <i>Chikchan 13 Xul</i>	May 12 800 C.E.	Deer hunt by <i>K'an M'aax</i>
Machaquila Stela 2	9.18.9.15.10	12 <i>Oc 18 Mol</i>	Jun 28 800 C.E.	Accession and conjuring event by <i>Ochk'in Kaloomte'</i> (first event recorded in Machaquila after its hiatus)
Machaquila Stela 2	9.18.9.16.3	12 <i>Akbal 11 Chen</i>	Jul 13 800 C.E.	Unknown event by <i>Ochk'in Kaloomte'</i>
Cancuen Stela 1	9.18.10.0.0	9 <i>Ajaw 18 Mol</i>	Aug 17 800 C.E.	Period ending (<i>Hotun</i>). Last date recorded in Cancuen?
Machaquila Stela 2	9.18.10.0.0	9 <i>Ajaw 18 Mol</i>	Aug 17 800 C.E.	Period ending by <i>Ochk'in Kaloomte'</i>
Machaquila Stela 2	9.18.10.7.5	12 <i>Chikchan 13 K'umk'u</i>	Jan 9 801 C.E.	Dedication of Stela 2
Cancuen Panel 3	9.19.0.0.0	9 <i>Ajaw 18 Mol</i>	Jun 26 810 C.E.	Period ending projected by <i>Taj Chan Ahk</i>

11.4 Chronological Reconstruction

Like all the other acropolis-type compounds built by the Maya, the royal palace of Cancuen was built in successive stages. According to this accumulative pattern, most individual structures visible today cover previous versions that were located in the same location. Other substructures were totally covered by construction fills and plastered floors.

In order to understand the constructive history of the royal palace, all stratigraphic data was analyzed in a comparative manner, trying to correlate the architectural features recorded in the different test pits located in plazas, patios and inside building rooms. For this purpose, all floors, platforms, substructures, and successive construction fills were numbered in a correlative sequence and then compared with other ones recorded in other areas of the palace.

In other Maya sites with long occupational histories, construction stages are correlated with ceramic phases, in order to place buildings within the general chronology of each site. In Cancuen, its relative short occupation (150 years) makes difficult to rely solely on ceramic phases to date the construction stages, making it necessary to use long count dates carved in monuments to assign absolute dates to each episode. Nevertheless, few monuments with long count dates have been found directly in the palace. For that reason, its architectural chronology has been defined through a comparative analysis of construction materials and techniques, in order to create a seriation of architectural modes that can be put in a chronological order (Table 11.2).

	Ceramic	Historic		Palace Architecture
		Cancuen	Other Sites	
650	CONCORDIA		Calakmul Hegemony	Episode I
655				
660		<i>K'iib' ajaw</i>		
665				
670				
675				
680		<i>Chan Ahk Wi' Taak Kay</i>	Dos Pilas hegemony	Episode II
685				
690				
695				
700				
705				
710				
715				
720				
725				
730		<i>Lady G1-K'awiil</i>		
735				
740				
745				
750			Episode III	
755	LOS LAURELES			
760				
765				
770	EARLY CHAMAN	<i>Taj Chan Ahk</i>	Domination over Machaquila	Episode IV
775				
780				
785	LATE CHAMAN		Episode V	
790				
795				
800		<i>Kan Ma'ax</i>		Episode VI

Table 11.2 Ceramic, historic and architectural chronology of Cancuen

This has been particularly useful for analyzing the buildings that correspond to *Taj Chan Ahk* reign, because single structures were modified up to five times in 40 years. Therefore, this micro-chronology can only be defined based on architectural styles and modifications found in sequential contexts, sometimes associated with Long Count dates or with diagnostic ceramic markers.

The first attempt to define a general chronology for the royal palace was done with the aid of Michael Callaghan, using stratigraphic, architectural, and ceramic data gathered between 1999 and 2005 (Callaghan and Barrientos 2005). This sequence has been improved with the new ceramic phases (Torres and Forné 2012) and architectural data coming from later excavations, providing a wider comparative database (Table 11.2). Although some floors, fills and structures cannot be directly related with each other, a general pattern has been found in all areas of the royal palace, which defines six major construction episodes, each one comprising stages of structures and patio floors:

11.4.1 Episode One: The First Palace Complex (657-682 C.E.)

The deepest levels reached in stratigraphic excavations revealed three small buildings resting on a low basal platform that constituted the first version of the acropolis (L7-1-Sub-2, L7-1-Sub-3, L7-8-Sub-3), located below the north, central, and west patios (Figure 11.77).

Structure L7-1-Sub-2 is the best defined building of this first episode of the palace. It consists of a plastered clay and adobe platform measuring more than 7 m east-west and 1 m high, with a staircase containing three steps. There is also the possibility

that the platform was wider, reaching the west patio area. The length is problematic, because no back wall was visible, but it could have reached 10 m in the north-south axis. In any case, there is no doubt that it was the most important of its time, due to its location directly below Structure L7-1, the highest and most central building of the later palace complex. In its interior, Burial 83 was found, a male individual that probably was part of the founding elite of the site. Its single offering consisted of a polychrome vase similar to one found at the site of *Waka'*, confirming its association with the expansion of the *K'aanal* kingdom during the VII century C.E.

Structure L7-1-Sub-3 is a platform located 4.5 m south of L7-1-Sub-2, with crude masonry walls measuring 1.5 m high. Although its corners were not located, it had a frontal ramp facing west, and measured more than 6.5 m in its east-west axis.

Structure L7-8-Sub-3 consists of a low platform made with soft limestone and plastered façade, measuring 0.57 m high. Although it is located at the same level as the other two platforms, its dimensions are unknown.

Other constructions of this episode include Structure L7-9-Sub-2 and Structure K7-1-Sub-1. Structure L7-9-Sub-2 was found in the excavation inside Room 5 of Structure L7-9, indicating that the early epicenter extended to this point. The structure consists of a platform made with adobe bricks, with low walls also built with adobes. Floor 3 of the excavation pit constitutes the interior floor of one of its rooms. This structure was built on top of Floor 4, which represents the earliest version of the South Patio and could have functioned as a plaza between L7-9-Sub-2 and L7-8-Sub-3 (Figure 11.77).

Structure K7-1-Sub-1 was built west of the central courtyard of the first acropolis. The location of Burial 31 in its interior suggests that this building could have been an

elite residence. It contained three vessels (two Hinojo Negative and one Cocalés Bichrome), making it the richest burial of this episode found near the royal palace. One of the Hinojo Negative vessels was imported from Alta Verapaz, suggesting a direct relationship with that region.

The deepest excavations in the royal palace also found evidence of early floors that belong to this first episode. In the Southeast Corridor, Floor 10 and Floor 9 covered Burial 53, an elite female individual with no offerings. To the east, Floor 4 of the Main Plaza is a compact clay surface found in front of Structure L7-26. To the west, Floor 2 of the West Patio and Floor 3 of the Northwest Patio seem to be contemporaneous too. The latter one covered Burial 12, an individual probably of highland origins, as suggested by its two funerary ceramic offerings (Nitro Incised and Volcancito Composite).

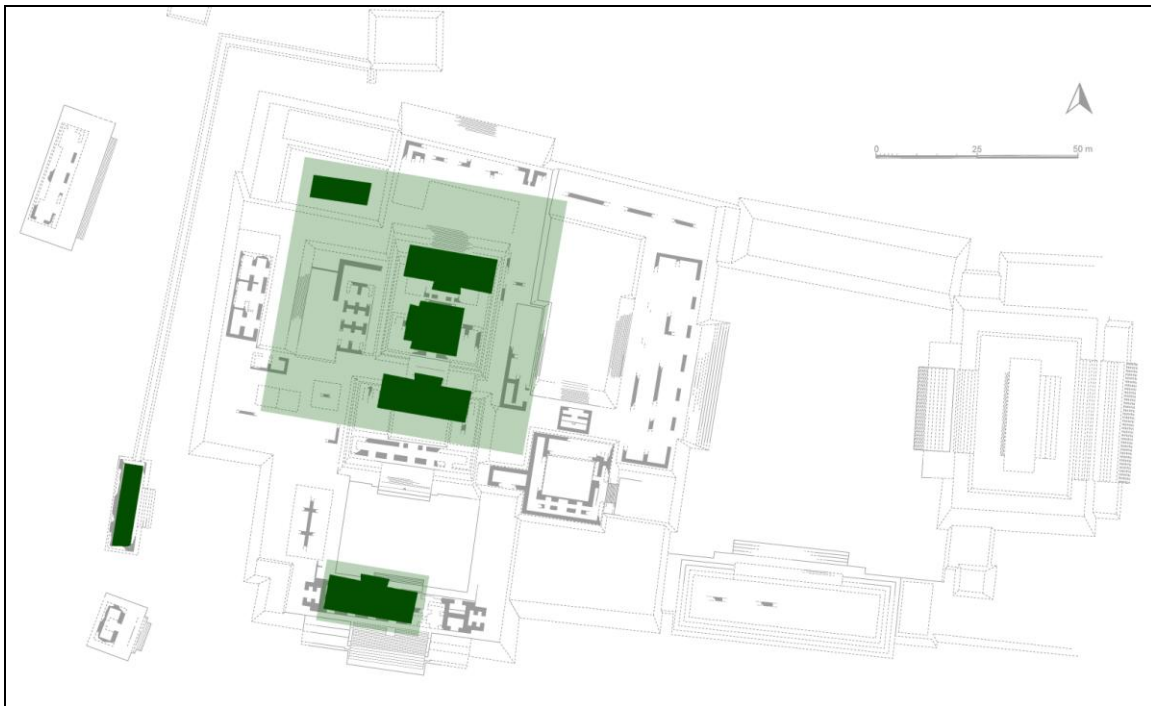


Figure 11.77 Map of the royal palace showing earliest clay buildings (Episode 1)
(Drawing by T. Barrientos)

Although structures L7-1-Sub-2 and L7-1-Sub-3 show stone masonry walls and plastered surfaces, these buildings were mostly made with clay fills or clay adobes. This contrasts with the stone architecture that is found in all Lowland Maya cities at this time. These uncommon features show an architectural style that imitates conventional lowland architecture, indicating that the Cancuen area was originally settled by populations affiliated with the Highlands, where clay architecture is more common. This hypothesis has been supported by the ceramics associated with the early clay platforms, because they include a high percentage of types from Alta Verapaz, such as cream slip with negative painting.

Epigraphic evidence throughout the Maya region has defined the seventh century as the time when Calakmul, capital of the Snake Kingdom, experienced its maximum expansion. According to Cancuen Panel 1, that holds the earliest historical record of the site, the city was founded in the mid seventh century under Calakmul's patronage. The text indicates that the local ruler *K'ii' b Ajaw* arrives at Cancuen in 657 C.E., after being entitled *K'uhul Ajaw* in Calakmul the previous year, under the auspices of ruler *Yuknoom Ch'een*.

The Cancuen Panel 1 text provides more information on the foundation events at Cancuen, because it mentions that *K'ii' b Ajaw* "established" three patron deities: *wal menal*, *wal ma-?-ka*, and *wal nab nab*, at a place named *Ox Ahk Peten* (three turtle island?) and *wal yohl ahk yul Chanha'* (heart of turtle?). Perhaps the association of this event with a place name related to turtles is an indicator of a dynastic foundation, because the Cancuen Emblem Glyph main sign is a turtle shell. Also, Ruud van Akkeren (2012: 27) points that Yol was the name of the Cancuen region during the colonial period. An

alternate interpretation of the event is that the “three turtle island” refers to the origin of these deities in the Early Classic site of Tres Islas. As it was described in previous chapters, it is a small site located downstream from Cancuen, where three small islands become visible in the river during the dry season, when the water level is low. The site lacks a residential occupation, because the few mounds are directly related to three stelae, whose inscriptions bear the earliest known depiction of the Cancuen Emblem Glyph. Therefore, the establishment of the patron deities of Tres Islas at Cancuen would represent the foundation of a new capital for a kingdom that existed many centuries before.

Given that Cancuen has very scarce evidence for Preclassic and Early Classic occupation, the true first architectural evidence in Cancuen corresponds to the acropolis first episode, which seems to correspond to the buildings dedicated by *K'ii'b Ajaw* in 657 C.E. If the central part of this compound included three platforms, it could well represent the place called heart of the turtle, or a new version of it. The presence of various natural springs north and south of the royal palace could also suggest that the term “three turtle island”, which refers to a location surrounded by water (“*Peten*”), means that the location of the acropolis was chosen by the presence of these aquatic features.

For chronological matters, it is important to note that the Mataculebra vessel that was placed as the funerary offering in Burial 83 dates the Structure L7-1-Sub-2 to the sixth century C.E., which correlates very well with the proposed foundation event recorded in Panel 1.

If the Calakmul expansion during the reign of *Yuknoom Ch'een* was the main force behind the foundation of Cancuen, it was part of a very successful political program

that also affected other sites of the Pasión River region and the Maya Lowlands in general. In fact, *Yuknoom Ch'een* created a “royal road” that linked the Northern Maya Highlands with Calakmul (Canuto and Barrientos 2013), as means to procure jade, obsidian, quetzal feathers, and other prestigious exotic goods only found in the Maya Highlands. This is clearly seen in the inscriptions of Dos Pilas, where ruler *B'ajlaj Chaan K'awiil* and his successors express their loyalty to the Calakmul kings during the second half of the sixth century. Other sites like *Waka'* (El Peru) and *Sak Nikte'* (La Corona) that are located along this route, had more direct ties to the *K'aanal* Kingdom through marriage alliances that lasted various generations. It is also important to note that the influence of Calakmul in La Corona included the incorporation of a new triad of patron deities (Baron 2013), just as *K'iib' Ajaw* did in Cancuen.

The use of clay architecture and the presence of ceramics of the highland tradition in the earliest levels of occupation in the royal palace suggest that the original population of the Cancuen area had affiliations with the Verapaz region. Hence, the arrival of *K'iib' Ajaw* as a vassal of the *K'aanal* Kingdom can be interpreted as the foundation of a new center by a foreign Lowland elite, just as it has been noted in Copán with the arrival of its dynastic founder, *K'inich Yax K'uk Mo'*. If that is the case, Cancuen was, since its very origins, a multicultural or multiethnic center, where a local population that had contacts with the Verapaz region, interacted with a new lowland group, who brought their own art, architecture, and all the associated symbolic systems and paraphernalia of the *K'uhul Ajaw* dynastic ideology. As in Copán, there is no evidence at Cancuen that this combination of cultural traits from three regions could indicate any kind of conflictive process during its dynastic foundation.

11.4.2 *Episode Two: The First Monumental Acropolis (682-757 C.E.)*

The second episode of the acropolis is the least understood, because it falls sometime between 682 and 757 C.E, a 75 year period when no historical records are known for Cancuen. As it was explained previously, there are no ceramic or other chronological markers that could narrow the chronology of the royal palace into more precise periods that could be correlated with the sequence of floors, construction fills or buildings. In addition, the structures that covered the early platforms have different characteristics and do not correspond to the same moment, making it difficult to separate the buildings from the first and second halves of Episode Two.

With all these limitations, the definitions of architectural features that have been assigned to this episode rely on the presence of sealed contexts that precede Los Laureles phase, associated with the introduction of Chablekal Fine Gray ceramics (not before 760 C.E.). Surprisingly, there are few of these ones, indicating that the construction activities before the accession of *Taj Chan Ahk* were very limited (Figure 11.78).

The area that could have some construction activity for this episode is located north of the first acropolis, below the Lower North Patio. A crude masonry wall (L7-14-Sub-3) could have been part of a platform that covered structures L7-1-Sub-2 and L7-1-Sub-3, and Floor 2 of the Northwest Patio also seems to correspond to this episode, given that it was placed immediately after Burial 12.

Structure L7-8-Sub-2 is another early building that seems to correspond to this episode. It consists of a platform made with red clay fill, with a ramp in its southern side. Its architectural style suggests an early date, but its stratigraphic location puts it later than

L7-9-Sub-1, L7-1-Sub-3, and possibly contemporaneous with L7-1-Sub-1. This would mean that it belongs to the late part of Episode Two.



Figure 11.78 Map of the royal palace showing first monumental acropolis (Episode 2)
(Drawing by T. Barrientos, VCAP)

If the second constructive episode focused in the north and central area of the royal palace, it is very likely that the monumental Structure L7-1-Sub-1 (Coche) also dates to this moment. This hypothesis is based on the epigraphic interpretation of Cancuen Panel 1, because it states that the successor of *K'iib' Ajaw* dedicated one or various buildings, probably associated with a new triad of patron gods. The mention of this building dedication as part of the retrospective history of the site, recorded in this panel, suggests that it refers to a significant construction, and not to a minor modification of the previous buildings.

According to Panel 1, *Chan Ahk Wi' Taak Kay* acceded to the throne of Cancuen in 677 C.E., probably as the second ruler of the new dynasty. Just as his predecessor, he became ruler of Cancuen under the auspices of *Yuknoom Ch'een* of Calakmul. Five years later, he celebrated the period ending 9.12.10.0.0 (May 7th, 682 C.E.), a day when three new patron deities “arrived” at Cancuen: *Jun Ch'ok Chan*, *Jun Ch'ok Xib* and *Muya Chan Ajaw*. The text also mentions that a new building was dedicated, probably as a shrine for the new patron gods. Structure L7-1-Sub-1 is a good candidate, because it is a building (probably a pyramidal platform) with a frontal staircase, that elevates approximately 7 m from a basal platform that covered the earlier platforms of Episode One. It was built with soft limestone blocks covered with white plaster, and its construction fill consisted of various layers of clay with no use of retention walls.

It is important to note that the dating of Structure L7-1-Sub-1 to 682 C.E. has some problems. The first one is that some sherds of Chablekal Fine Gray have been found in deeper levels, especially associated with Structure L7-14-Sub-3, but it is not clear if this fill corresponds to Structure L7-1-Sub-1 or if it falls outside its basal platform. In any case, these ceramics would put this building to the end of Episode Two or the beginning of Episode Three. The latter hypothesis is supported by the similarity with Structure L7-17-Sub-1, which has been dated to 760 C.E. or later, making it possible that Structure L7-1-Sub-1 was built after 750 C.E. This would put the use of soft limestone masonry from 680 to 767 C.E., being replaced by the use of hard limestone blocks after the accession of *Taj Chan Ahk*. In any case, there is no hard evidence to assign any specific dates to the buildings of the acropolis second episode, mostly due by the total absence of diagnostic ceramics in the construction fill of L7-1-Sub-1.

The inscription of Panel 1 does not provide information regarding the end of the *Chan Ahk Wi' Taak Kay* reign or that of his successor. In fact, there is a 75 year hiatus in the dynastic history of the site, because no ruler is mentioned before the accession of *Taj Chan Ahk* in 757 C.E. The only known ruler of this time is the individual represented in Cancuen Panel 2, who is *Taj Chan Ahk* predecessor, probably his father. In turn, the location of the panel directly above Burial 50 suggests that those human remains corresponds to *Taj Chan Ahk's* father. However, the osteological analysis indicate that Burial 50 might be a secondary interment, opening the possibility that it belongs to an earlier king, probably *Chan Ahk Wi' Taak Kay*, who could have been originally buried within the palace complex. In any case, the location of Panel 2 in the surface of Structure K7-3 would date its construction shortly before or after *Taj Chan Ahk* accession (750-760 C.E.). The use of soft limestone blocks in the superstructure also links this construction with L7-1-Sub-1 and L7-17-Sub-1. In addition, the platform of K7-3 presents a limestone masonry similar to the one used at Dos Pilas at the same time, suggesting a date between 740 and 760 C.E. The ceramic vessels that were part of the funerary offering also seems to date to Late Concordia or Early Laureles phases.

The acropolis second episode also correlates with the decline of the Calakmul hegemony, starting in 695 C.E. with its defeat by Tikal. The beginning of the eight century is also the moment when Dos Pilas rose as a powerful independent state, controlling the entire Pasión River area. Cancuen played a significant role at this time, as evidenced by the marriage alliance with Dos Pilas Ruler 3, around 740 C.E. The fine quality of the jades found in Burial 50 also suggests that Cancuen did benefit from the alliance with Dos Pilas. However, contrary to what has sometimes been suggested before,

the scarce architectural and epigraphic evidence in Cancuen for this period indicate that the relationship between Cancuen and Dos Pilas could have not been equal. Despite the marriage of Dos Pilas Ruler 3 with Lady G1-*K'awiil* of Cancuen, it seems that the hegemony of Dos Pilas may have prevented Cancuen of enjoying a substantial economic or political prosperity. In sum, between 682 and 757 C.E, the modest early acropolis was transformed into a monumental building that could have been the shrine dedicated to three new patron deities. However, no other significant architectural changes occurred.

11.4.3 Episode Three: Taj Chan Ahk's First Palace (757-767 C.E.)

The history of Cancuen reached a turning point between 757 and 761 C.E. The first date corresponds to *Taj Chan Ahk's* accession, and the second one to the fall and abandonment of Dos Pilas. These two political events happened when ceramics of the Usumacinta tradition, mostly represented by the Chablekal Fine Gray type, start to appear at Cancuen. In archaeological terms, buildings of the acropolis third episode are directly associated with the earliest presence of Chablekal ceramics.

During his first three years as Cancuen ruler, *Taj Chan Ahk* was still an important ally of Dos Pilas, as it is evidenced by a visit of Dos Pilas Ruler 4 few months before its defeat, recorded in the Hieroglyphic Staircase. Nevertheless, after the fall of Dos Pilas in 761 C.E., *Taj Chan Ahk* started to create a new independent and flourishing kingdom through a series of strategic moves that took advantage of the political vacuum in the region. Besides political alliances, the most important aspect in the rise of Cancuen was the control in the imports of highland raw materials such as jade, obsidian, and pyrite, and the local production of obsidian blades and cores, and other luxury items and

commodities, possibly pyrite mirrors, which were distributed throughout the Maya lowlands.

Is in this context where the royal palace starts to grow in an unprecedented scale. Therefore, the third episode of the acropolis seems to be a 5 to 10 year period that shows the first architectural innovations introduced at the beginning of *Taj Chan Ahk* reign. These include the elaboration of plaza floors with stone fills, such as the one in Southeast Patio (Floor 5), or plastered floors like the one found beneath L7-9 Room 17 (Floor 6). The area with more remodeling phases during this episode is the Southeast Corridor, which presents a sequence of 5 floors (floors 8 to 4). It is important to note that these floors are located in levels considerably higher than the previous episode, sometimes with construction fills of more than 4 m deep. This evidences a large labor force involved in the enlargement of the acropolis at this time (Figure 11.79).



Figure 11.79 Map of the royal palace at the beginning of *Taj Chan Ahk* reign (Episode 3)
(Drawing by T. Barrientos, VCAP)

Some constructions have been dated to this episode, including the first phase of Structure L7-9, evidenced by a plastered sloping wall and the first version of the southern staircase and façade, which seems to be the main entrance to the acropolis at this moment. The steps were made from soft limestone blocks. The excavations in the Southeast Patio also defined an early platform related to Floor 5 that seems to belong to this episode, whose construction included the use of stone retention walls.

The best known building of this episode is Structure L7-17-Sub-1, located under the Southeastern Corridor. Its basal platform (Phase 2A) measured 1.4 m high and initially had an accession ramp on its south side, and a possible staircase on its west side, that could have had a direct communication with the South Patio. The superstructure measured 1.6 m high and had a frontal staircase of three steps in its west façade. Its construction also shows the same technique of the previous phase, characterized by the use of soft limestone blocks. The ceramics found in the platform fill include sherds of Chablekal Fine Gray, providing its association with the acropolis' third episode.

Structure L7-17-Sub-1 suffered many minor modifications in short periods of time, because the southern ramp shows four successive floors (Phases 2A to 2D), and the basal platform was extended to its west and south sides (Phase 3), associated with a new floor (Floor 7) and a new ramp, which shows five different floor surfaces (floors 6, 5, 4, 3, and 2). It is likely that all these additions were part of episode three, and the later ones maybe part of episode four (floors 3 & 2), because the later platform and ramp shows the use of stone blocks and wedges, something that will be typical of the next episode.

Another area that show significant construction activity is the Lower North Patio, because Structure L7-14-Sub-3 was filled in order to add a high platform that extended the northern end of the acropolis. It is possible that it supported Structure L7-14-Sub-2.

11.4.4 Episode Four: Taj Chan Ahk's Monumental Palace Complex (767-786 C.E.)

Around 770 C.E., *Taj Chan Ahk* had consolidated the position of Cancuen as a major center in the Upper Pasión River region, becoming one of the most powerful rulers in the Maya Lowlands of the time. Given that the last eighth century inscription at Machaquila falls in 775 C.E., it is possible that Cancuen conquered that kingdom shortly after that date, and *Taj Chan Ahk* incorporated the Machaquila Emblem Glyph as part of his titles.

The rapid growth of Cancuen has a striking similarity to other Late and Terminal Classic cities such as Quiriguá. Cancuen and Quirigua were originally created as outposts for larger polities, but their leaders took advantage of regional conflicts to become independent and control the river trade routes where they were located. Therefore, just as *K'ak Tiliw Ch'aan Yop'aat* of Quirigua expressed the prosperity of his recently independent kingdom through the carving of large scale stelae, *Taj Chan Ahk* displayed his privileged economic and political position in the form of a monumental architectural project, which resulted in one of the largest palatial complexes built by the Lowland Maya.

Cancuen Panel 1 offers an important clue to understand the construction of the royal palace, because the inscription refers to an event that happened at 767 C.E., involving the “seating” of two deities (4 *Pawahtuun* and 4 *Xiiw Tuun*) and the dedication

of a building associated with three stones or altars. Therefore, according to the chronology proposed here, this may well represent the dedication of the royal palace fourth episode, given that this location was referred to previously as a three turtle place. However, this event can also be related to another important building, such as the East Ball Court, which has three altars as markers in its playing alley. In any case, the date of 767 C.E. seems to be a good chronological reference for the introduction of a new architectural tradition in Cancuen.

The architectural features present in this episode of the acropolis constitute some of the most characteristic cultural traits of Cancuen. The most relevant ones are the construction of plaza floors with flat stones and the use of high quality hard limestone masonry, in the form of rectangular blocks attached with small limestone wedges. This architectural style is not related to the construction techniques found in other sites of the Pasion River zone, such as Dos Pilas, Ceibal or Aguateca. Instead, it shows similarities with sites of the Lower Usumacinta River area, especially Palenque. In fact, the style of masonry and vaulted roofs is almost identical to the buildings of the Murcielagos group in Palenque, which seems to date to the middle eight century. This is particularly important, because the appearance of Usumacinta-style stone masonry correlates very well with the beginning of the Usumacinta ceramic tradition, represented by Chablekal Fine Gray, indicating strong economic, political and artistic interaction between both sites and their surrounding areas.

The relationship between Palenque and Cancuen during *Taj Chan Ahk's* reign is also supported by the use of stucco reliefs and tridimensional sculptures as the main decoration motifs of the new buildings. The artistic influence of Palenque is notorious in

the style of some human faces, but mostly through the use of thin limestone plaques or tablets inside the sculptures in order to add strength to junctures. In fact, these thin tablets have been reported only in Palenque, particularly in the stucco sculptures of Temple XIX, which correspond to the first half of the eight century C.E.

In order to understand the nature of the architecture and stucco sculpture of the acropolis' fourth episode, it is important to note that the buildings of previous episodes do not show any technique or material that suggest a local origin. For that reason, these new architectural traits are defined as an indicator of the presence of foreign artists and architects that came from the Palenque area. Hence, it is possible that sites like Palenque had already started a decline process, and some artists could have migrated to Cancuen, acquired by ruler *Taj Chan Ahk* in order to create an architectural masterpiece with no precedents in the region.

Other buildings in the East and North plazas, and smaller palace-type structures located in the surrounding residential areas used by "sub-royal" or secondary elites, also show the same construction and decoration techniques as the royal palace, though at a smaller scale.

The construction of the fourth episode of the acropolis followed some basic patterns of previous versions, such as the location of the central patio, but in general, its layout represents a totally new concept of spatial relationships. It is in this moment when the three main areas were shaped: a western section, used for residential purposes; a central section, with a south-north path reserved for important visitors; and the eastern section, related to more ritual activities of less restricted access. The southern façade was probably related with persons coming from the Southeast Port and the use of the South

Pool; while the eastern façade was directly related with the activities carried out in the East Plaza and the causeway coming from the East Port and Group M6. The northern façade had a direct connection with the Main Ballcourt, the North Plaza, and the North Pool; and the western edge could have had a connection with residential structures K7-1 and K7-2. The creation of these specific areas and spaces centered in the royal palace responded to the sociopolitical needs of the new thriving city.

The architectural explosion that happened at Cancuen during this episode changed the shape of the entire acropolis, elevating the level of the basal platforms and interior patios and adding more than 20 vaulted buildings (Figure 11.80).



Figure 11.80 Map of the royal palace with major modifications introduced by *Taj Chan Ahk* (Episode 4)
(Drawing by T. Barrientos, VCAP)

The excavations carried out in plazas, patios, facades and interior rooms have shown many minor modifications that were made in short intervals, 5 or 10 years apart. Given that there is no method that can assign an absolute date to these remodeling phases, they have been divided into the fourth and fifth episodes. If a building shows four phases or floors with the same materials or architectural techniques, half of them have been placed in the fourth episode, and the other two to the fifth one. However, the presence of some variations in the use of masonry materials have allowed to refinement of these sequences, making it possible to have a confident chronological assessment for *Taj Chan Ahk* architectural program in the royal palace compound.

During the fourth episode, the most important plazas of the site were covered with flat stones: South Plaza, East Plaza and the palace Main Plaza (the latter two present a previous plaza floor made with plaster, also part of the fourth episode). At the same time, most interior patios (Central Patio, North Patio, Northwest Patio, West Patio, Southeast Patio, Northeast Patio and Southeast Corridor) present plastered floors with pebble fill, sometimes made with rounded river pebbles mixed with plaster. In some cases, these patios show a sequence of two or three floors during this episode, as the case of the Southeast Patio (floor 2, 3 & 4) and Southeast Corridor (floors 2 & 3). The latter one covered the entire Structure L7-17-Sub-1.

In the North Patio, Structure L7-1 was built probably as the main throne room of the palatial complex. Its interior floor was elevated 2 m from the previous L7-1-Sub-1, reaching a total height of 14 m from the base of the acropolis. L7-1 had two accesses, one leading to the North Patio, and the other leading to the northern staircase that descended to the Lower North Patio, where structures L7-14 and L7-14-Sub-1 were added as part of

the northern limit of the acropolis. To the south, the platform that sustained structures L7-1 and L7-5 descended to the Central Patio, where Structure L7-8-Sub-1 was built in its southern limit, and probably structures L7-7 and L7-6 in the east and west limits. Structure L7-8-Sub-1 was built on top of a platform with two terraces with a staircase made with red clay fill, which descended to the South Patio. It is possible that an earlier version of the Hieroglyphic Staircase was associated with this building, given that its blocks show at least two carving styles. In this scenario, the finest carvings could have belonged to this period, although the most likely hypothesis is that all blocks were carved around 786 C.E. or after, during Episode Five and involving different sculptors.

In the South Patio, Structure K7-36 was built in the west side, and Structure L7-9 was enlarged, with walls reaching 6 m in height and cornices decorated with an elaborated stucco frieze containing 8 or 10 life-sized human portraits. The southern access of this building included a second version of the staircase, made with soft limestone blocks. This episode has been identified in Structure L7-9 as the plaster floor in rooms 8 & 9 (central corridor), and a sequence of two successive plastered floors in Room 5 (floors 1 & 2), Room 15 (floors 3 & 2), and Room 18 (floors 4 & 5). These two floors are directly associated with two construction phases in the south façade (phases 3 & 4), while the northern platform only presents one phase (Floor 1).

In the eastern section of the palace, the excavations in Structure L7-27 revealed a masonry building (L7-27-Sub-1) with an interior plaster floor (Floor 3) and a staircase in its eastern side. This building divided the Main Plaza from the East Plaza, suggesting that originally, both plazas were part of a single open space. During this episode, six plain stelae were placed in front of L7-27-Sub-1 (four near the northeast corner, and two near

the southeast corner), mirroring the four stela-altar pairs that were also placed in front of Structure M7-1. In the Main Plaza, Structure L7-25 was probably added in the north side, and Structure L7-26 was built in the south side. Soon afterwards, its north façade suffered some minor modifications and a stone plaza floor covered the previous one. The Northeast Patio buildings of this episode include L7-17, L7-24, L7-22, and probably L7-23. To the south, the East Patio was built, including structures L7-20 and L7-21. Structure L7-20 has evidence of three plastered floors for this episode (floors 1, 2 & 3), which were added as part of the main access, located in its eastern façade.

The west section of the acropolis had very limited construction activity in previous episodes, indicating that almost all platforms and buildings belong to the fourth and fifth episodes. In the West Patio, Structure L7-12 was built as *Taj Chan Ahk* residence, located on top of a platform facing west. Although it can be speculated that some buildings of the Southwest Patio were also constructed during this episode, more excavations are needed to confirm it.

As it was noted above, other masonry constructions outside the royal palace were built during this episode. One of these corresponds to the South Pool or South Cistern, whose walls were made with the same materials and techniques as the other structures of the royal palace. Finally, the two buildings located in front of the West Patio (structures K7-1 and K7-2) were also built during this episode. As it was discussed above, Structure K7-3 is more likely to belong to the second or third episode, due to the location of Panel 2 and Burial 50. The burial seems to correspond to *Taj Chan Ahk*'s predecessor or *Chan Ahk Wi' Taak Kay*.

11.4.5 Episode Five: A multi-roomed palace compound (786-799 C.E.)

During the second half of *Taj Chan Ahk's* reign, the volume of construction activity in Cancuen diminished, but the political activity increased, as it is evidenced by the proliferation of carved monuments. In fact, the only carved monument that precedes this episode is Panel 2, whose sculpting quality is inferior to the staircase, stelae, altars and panels dedicated between 786 and 799 C.E.

The first of the inscriptions carved during the second half of *Taj Chan Ahk's* reign is the Hieroglyphic Staircase, which records various events in a 60 year period. It starts with an Initial Series date of 726 C.E., followed by *Taj Chan Ahk's* birth, his accession, the visit of Dos Pilas Ruler 4, and different rituals, the last one in 786 C.E. Four years later Altar/Marker 2 was dedicated, which records a military victory over Machaquila and *Sak Witz'*, reflecting the political expansion of Cancuen of this episode. The same year (790 C.E.), Stela 2 was dedicated, also indicating another military victory by the portrait of a captive below the feet of *Taj Chan Ahk*. In 795 C.E., Panel 3 and Altar/Marker 1 were dedicated, this time showing *Taj Chan Ahk's* name with the double emblem glyph title (Cancuen and Machaquila). It is possible that Stela 18 and Altar 4 were dedicated in the same date too. Finally, Panel 1 was dedicated in 799 C.E., being the last one while *Taj Chan Ahk* was ruling Cancuen.

This episode is also characterized by some changes in Cancuen's ceramic inventory, which includes the appearance of types coming from Southern Veracruz (Campamento Fine Orange), and Alta Verapaz (Cebada Porous and Osoquin Unslipped), which are common in residential groups and port areas. This has been interpreted as a result of the economic and political growth of the site, which was accomplished by the

immigration of people from different areas, especially the Northern Highlands, and possibly, populations fleeing from the Petexbatun area, where warfare was reaching an endemic nature. The presence of smaller palaces (M9-1, N11-1, K8-1, K9-1) near residences and workshops suggest a complex economic organization where secondary elites played an important role in administrating a multiethnic work force that produced obsidian blades and jade preforms, and controlled the exchange and redistribution of other valuable highland commodities such as salt and cacao.

Although the royal palace kept its role as the main administrative center of the site, the increase in the elite and non-elite population made it necessary to modify the original layout of the acropolis, especially those buildings that served political and administrative functions such as tribute collecting, visitor reception or captive presentations. In turn, the most important change was the modification of the interior spaces in different structures of the acropolis, which seems to correspond with the increase of nobility members and/or the political participation of lesser lineages in administrative affairs. The addition of more rooms and benches was accompanied by an increase in restriction of access, because some passages between patios were closed by adding walls. Communication within interior rooms was reduced too. While the access to the interior patios was reduced, activities around the acropolis perimeter increased, as it is evidenced by the multiple rooms of monumental range structures.

The construction activities during the acropolis fifth episode include few new buildings or major modifications (Figure 11.81). Instead, it is characterized by minor additions in facades, staircases, and platforms; as well as the addition of interior floors, benches, and division walls. The best evidence comes from Structure L7-9, where high

benches with staircases were added in rooms 5, 8, and 15; and possibly rooms 12 and 13. In fact, a new plastered floor was added in all rooms of the building, and some present two successive floors (Room 18) during this episode. The interior passageways that communicated rooms 10, 8, and 6 were blocked with new walls, as well as the passage from Room 9 to rooms 7 and 11, and from Room 10 to Room 12. In sum, these additions transformed a long gallery to 10 individual rooms. The exterior façades were also modified, with five new wide steps at the base of the southern staircase, and two new terraces made with soft limestone blocks in the southern façade. The northern façade was enlarged with soft limestone masonry (1 m high), and a new wall joined Structure L7-9 northwest corner and Structure K7-36 southeast corner, closing any entrance from the southwest corner of the South Patio.



Figure 11.81 Map of the royal palace at the end of *Taj Chan Ahk* reign (Episode 5)
(Drawing by T. Barrientos, VCAP)

In the Central Patio, the final version of L7-8 was built, which included a central room with a plastered bench and a new basal platform with three terraces and the Hieroglyphic Staircase. Its interior layout was also modified, closing some of the interior doorways. To the north, Structure L7-1 was also modified, presenting a new interior plaster floor and a new northern staircase that descends to the Lower North Patio, where Structure L7-14 was completely filled and covered by a new floor made with flat stones. The staircase continues until reaching the North Plaza, where Burial 75 was placed in the central axis, probably as a dedicatory offering for this final version of the northern façade.

Regarding plaza floors, a new plaster floor covered the flat stone floors of the south and east plazas. The Main Plaza has two new floors for this episode, indicating that the construction activity increased in the eastern edge of the acropolis. Structure L7-27 could have been enlarged by the addition of a new western façade and staircase. Structure L7-26 also shows a new northern façade with inset corners that correlates with the latest floor of the plaza. In the East Patio, a new floor covered the basal platform and access staircase of Structure L7-20, whose main entrance was reduced by a new wall and bench. Some of the doorways that lead to the interior patio were also blocked. In the Northeast Patio, a new interior floor was added in Structure L7-22, modifying the access to the bench in the southern room. New plastered floors were also added to the Southeast Patio, Northeast Patio, and Southeast Corridor.

The west section does not present major modifications in this episode, although Structure K7-33 may correspond to this phase, if its basal platform is considered a late aggregate to the West Patio. In this scenario, Structure L7-12, which faces west, could

have been the first residence of *Taj Chan Ahk*, later substituted by Structure K7-33, which faces east. This made the West Patio more private, closing any visibility from the western side of the acropolis. Outside the palace, only Structure K7-2 has evidence of a remodeling phase during this episode, because a new interior and exterior floor was added. Its construction fill measured 1.2 m and buried a substantial section of the original walls.

The presence of hieroglyphic inscriptions and evidence of economic growth in Cancuen points to the existence of a thriving kingdom. However, as many other similar small centers of the late eighth century C.E., the final years of *Taj Chan Ahk* were probably not as stable as the beginning of his reign. Evidenced by the decrease in quantity and quality of the architecture in the royal palace, the decline of Cancuen seems to be disguised by the register of military victories and ball playing rituals. As soon as *Taj Chan Ahk* died, the kingdom he created fell apart in a dramatic final short episode.

11.4.6 Episode Six: The Unfinished Palace of Kan Ma'ax (799-800 C.E.)

The final modifications of the royal palace date to the short-lived reign of *Kan Ma'ax*, which lasted only one year. The buildings associated with this episode differ totally from the previous one because they represent a return to earlier and local construction techniques.

Short after *Taj Chan Ahk's* death in 799 AD, his son and heir *Kan Ma'ax* took the throne at Cancuen. The prosperous kingdom was already weakened by an ongoing political collapse in the north and the rise of revitalized kingdoms in Ceibal and Machaquila. In addition, southern centers like Raxruha and Sebol, and others located in

the Chinaja Mountains, could also compete with Cancuen for the control of trade routes that connected with Salinas de los Nueve Cerros and other highland sites producing or importing valuable products. As a result, *K'an Ma'ax* could not maintain the presence of foreign artists and architects, as well as a large local labor force. This is evidenced by the construction of platforms made of clay, soft limestone and yellow sandstone, covering the previous stone masonry buildings built during his father's reign. Nevertheless, *K'an Ma'ax* was still able to dedicate some stone monuments: Altar/Marker 3, and Stela 1.

The best evidence of this architectural change has been found in the large Structure L7-27. Structure L7-27-Sub-1 was partially dismantled and entirely covered with a clay platform that was never completed. The west façade included a staircase and a basal wall made with limestone masonry, probably as part of the previous episode, while the eastern façade and staircase was left unfinished. The upper floor of the platform was leveled with a hard clay floor, and the presence of post holes indicates a perishable superstructure. A second floor was added, probably in the final months of 800 C.E., when *K'an Ma'ax* and a companion (wife?) were buried in improvised cists, dug into the clay fill and covered with irregular flat stones (burials 77 and 96). It is possible that a considerable part of the platform or at least its late floor were built after *K'an Ma'ax* death, when other dead nobles were deposited in the South Pool, North Pool, and Main Port, as part of a massive termination ritual before the site was abandoned.

Other buildings that were dismantled during this episode are L7-9 and K7-33, probably because they were among the most important ones of the palatial complex, and thus selected to be transformed in large platforms such as Structure L7-27 (Figure 11.82).



Figure 11.82 Map of the royal palace during the short reign of *K'an Ma'ax* (Episode 6)
(Drawing by T. Barrientos, VCAP)

Unlike the latter one, these two were left unfinished, though their rooms were completely filled, something that allowed that most of their masonry walls to be preserved in good condition.

The archaeological data concerning the period of *K'an Ma'ax* reign indicates that warfare was one important factor in the fall of Cancuen. Improvised defensive walls were added in the west, northwest, and south perimeter of the acropolis, as well in the West Patio and between the Southwest and South patios. However, despite being surrounded by swampy areas, the epicenter of Cancuen was not defensible as other centers like Aguateca. The evidence indicates that it was rapidly attacked, due to the lack of burnt buildings or any other indicators of destruction. A large portion –if not all– of the royal court and nobility was killed, probably inside the palace, other elite residences, and perhaps the Palace Pool. Their bodies were deposited in multiple or massive burials

located in water reserves and river ports as part of a massive termination ritual. The osteological analyses have defined the remains of 53 individuals in the two water reserves, plus 22 individuals in the eastern port, making a total of 75 individuals. However, more human remains have been recently found in the northeast port.

In sum, during the last years of *Taj Chan Ahk* reign, and the short period of *Kan Ma'ax*, Cancuen was slowly losing its reason to exist, given the fall of the main polities in the Pasión River and their associated trade networks. Therefore, its sudden collapse was the direct result of the expansion of rival neighbor states, which were responsible for the final blow. The inscriptions of Machaquila provide a good external chronological reference for the abandonment of Cancuen, because the 25 year hiatus in Machaquila inscriptions ends with a period ending recorded in Stela 2, just two months before the last date at Cancuen (Stela 1).

The discovery of *Kan Ma'ax* tomb in Structure L7-27 and the deposition of bodies in the Palace Pool not only define the very end of Cancuen's kingdom and dynasty, but the role that the royal palace played even in the final hours. Forensic reconstructions of the massacre suggest that the 32 individuals, that could represent the royal family, were perhaps assassinated inside the palace and placed into the pool as part of the termination ritual that preceded the site final abandonment.

In sum, the royal palace of Cancuen can be defined as an important data source that has contributed not only to the interpretations of the site itself, but has provided key data for understanding the expansion of the *K'aanal* "Superstate" in the 7th century C.E. and the overall highland-lowland relations during the Late Classic period. In addition, the royal palace holds the only direct archaeological evidence of the site foundation, and its

architectural traits support the idea of a multicultural or multiethnic population in Cancuen throughout all of its occupation. But without any doubts, the monumental version of palace complex represents the best testimony of the short, but very important, rise and apogee of Cancuen between 757 and 800 C.E. The local and regional importance of the royal palace was recognized until the very final act in the site's history, because it was the place selected to destroy the Cancuen kingdom and dynasty, which ultimately led to the end of the Western Peten trade route. In a few words, "the history of Cancuen is the history of its royal palace".

CHAPTER XII

THE ROYAL PALACE OF CANCUEN: SPATIAL AND FUNCTIONAL ANALYSIS

Besides the detailed chronological sequence described in the previous chapter, the excavations in the royal palace of Cancuen have also produced data that can be used for an approximation of its function. The architecture and archaeological contexts found throughout the palace compound have provided enough data to partially reconstruct the dimensions and other characteristics of the most important buildings and associated patios, in order to suggest possible uses for these built environments.

As it was stated in Chapter 6, the functional analysis of individual buildings and the entire palatial complex of Cancuen will be based on the semiotic concepts of spatial analysis developed by the sociology of architecture and environmental psychology. However, just as chronological or diachronic analyses rely on sequential sets of data, spatial-functional analysis of architecture must be based solely on data that can be related synchronically. In other words, architectural data is spatially and functionally comparable only when it belongs to the same episode. The interpretation of the relationship between features at a site or a given context first requires establishing their contemporaneity, a fact commonly forgotten in recent structural and sociological interpretations.

For that reason, these functional analyses are related to the fourth and fifth episodes of the royal palace, because they are the ones that correspond to the structures built with hard limestone masonry during most of the reign of *Taj Chan Ahk*, and consequently, those contemporaneous and also better preserved.

12.1 Variables of Analysis

In order to achieve a contextual analysis of the royal palace of Cancuen, the remains of activity and residue areas associated with architecture should allow the identification of residential and/or ritual activities. Nevertheless, this palace compound, as well as most Lowland Maya palatial contexts, lacks substantial archaeological evidence of activity. The only traces of ritual activity can be found in the form of cached vessels, burials and other types of dedicatory offerings found mostly in relation to buried buildings. These deposits correspond to the moment when a structure was modified, cancelled or buried, or when a new structure was built. The other type of archaeological evidence corresponds to middens, which can be the result of residential activities or ritual ones, especially after feasts and banquets carried out inside buildings or in open areas. It is thus important to consider that in Lowland Maya palatial contexts, artifact assemblages are limited to the ones described previously, although some special cases may be found, such as the ones discovered in the rapid abandonment of the epicenter at Aguateca.

The limitations in the presence of artifact contexts in the royal palace of Cancuen makes it necessary to rely largely in the careful analysis of spatial relationships that can be found between rooms, buildings, and patios. Following the studies carried out by Donald Preziosi (1979a, 1979b, 1983), architecture must be conceived as multifunctional (see Chapter 6). For that reason, despite previous interpretations in Maya architecture based exclusively on building form, the present analysis is based on the assessment that *form does not necessarily follow function, any more than function is determined by form*. For that reason, Preziosi has defined five different “functional horizons”: **referential**, **allusory**, **territorial**, **aesthetic**, and **individual**. The use of these levels of functionality

allows an interpretation of sets of buildings based in their different types of spatial relationships. Each of the different patios of the royal palace and its associated buildings will be described according to these levels, with the exception of the individual level, because it deals with personal emotions and cannot be inferred through the kind of data provided by the archaeological research. In addition, Jerry Moore (2005), in his analysis of ancient Andean architecture, defines five variables of spatial analysis: **permanence**, **scale**, **centrality**, **uniqueness** and **visibility**. **Access** can be added as another spatial variable that measures the level of internal and external communication within a building and with its immediate surrounding elements.

Another set of variables can be defined according to the behavioral analyses carried out by the sociology of architecture of Guy Ankerl (1981), the environmental psychology of Donald Sanders (1990) and the semiotic architecture of Amos Rapoport (1990). These are qualitative variables such as **proxemics**, **territoriality**, **privacy**, and **boundary control**, which measure the degree of exclusiveness, spatial fixation, distance, communication, volume, shape, and isolation that are required to structure the layout of built environments. Edward Hall (1963) has defined four levels of proxemics or social distance: intimate, personal, social and public; each one differs according to the available space for interaction.

Finally, it will be also important to consider all the architectural modifications that affected each building or patio, in order to identify changes in their shape and function throughout the different architectural phases and episodes described previously.

In sum, each of the different buildings and patios of the royal palace can be analyzed according to 15 spatial and functional variables, in order to determine their

possible role as stages for domestic, ritual or administrative activities. This will allow a more complete assessment of the overall function of the entire palace compound in relation to the rest of the site and its role as an expression of a particular sociopolitical structure.

12.2 Spatial-Functional Analysis of the Central Section

During the first stages in the royal palace investigation, its Central Section was defined as a sequence of three patios with direct spatial communication and links, indicating that they were planned for particular reasons and functions, especially as a route for important visitors (Barrientos 2001). Although these initial functional interpretations were highly preliminary and speculative, they have been supported by the data coming from the excavations carried out in these areas. Before interpreting the central section as a whole, each of its components (North, Central, South, and Lower North patios) will be analyzed separately:

12.2.1 North Patio

1. Permanence: The North Patio is the area of the palace with the longest construction sequence documented so far. Although the materials and dimensions have changed since its first version, this patio probably retained its main function since its beginning, given that its locality did not change through time.
2. Scale: Together with the East Patio, it constitutes the smallest open area of the palace (64 m²). Its two associated buildings (L7-1 and L7-5) were not large, but were as tall as the largest buildings of the acropolis. The size of the patio area could not allow

more than 10 people at the same time, plus another 10 people in the interior rooms, suggesting highly private activities involving no more than 20 persons at the same time.

3. Centrality: This patio constitutes the core of the acropolis, being its highest point. Although it does not represent the physical center of the compound, it was the symbolic center of activities.
4. Uniqueness: The layout of this patio was replicated in the East Patio, suggesting analogous functions.
5. Visibility: Given that this patio is the highest of all in the acropolis; it was visible from long distances from almost every spot of the site. However, the only visible part was the exterior walls and decoration of L7-1 and L7-5, because there was no visual access to the interior of the patio. The northern access of L7-1 during its final version included a small open area between the doorway and the staircase, where the king could have been observed. On the other hand, the visibility from the exterior accesses in L7-1 and L7-5 was magnificent, especially from the northern access of L7-1. Although no bench was identified in the northern chamber of L7-1, the direct visual link between its exterior doorway and the North Plaza indicates that the ruler witnessed ballgame rituals and other activities that took part there, very similar to the function of Temple 11 in Copan, which is also located in front of the main Ball court of the site. The basal platform of the North Patio has a pyramidal shape, making it the center of attention for any person standing in the North Plaza. It is thus easy to imagine that this was one of the main stages for public appearances of the ruler, at least the one where he could keep the distance from the spectators.

6. Access: The North Patio has very restricted exterior accesses, because no lateral doorways or staircases have been found. In fact, it could have been accessed only from the north or south sides. From the north, the original access was through the back of Structure L7-14, but the creation of the Lower North Patio allowed the construction of a direct staircase that led to the North Plaza. From the south side, the North Patio was accessed only from the Central Patio. As for the interior communication, the south façade of L7-1 has three doorways, suggesting a more complex and dynamic interaction between the patio area and the building interiors, which is suitable for witnessing small ritual or political activities. In addition, the lateral interior doorways in L7-1 also indicate some sort of separation between the south and north sides, probably a distinction in the type of activities carried out in each one.
7. Proxemics: The distance behavior in the North Patio falls into the category of personal distance (no more than 1.2 m between actors), which was probably highly intimate, given the limited open space available. The size of chambers, corridors, doorways and the interior patio suggests that the close interaction between people could have been only possible between family relatives, high elite members or close political allies.
8. Privacy: The North Patio had a high degree of privacy, probable the highest of the entire site, suggested not only by the restriction in access and visibility, but also by the reduced space available outside the interior chambers.
9. Territoriality and boundaries: The arrangement of Structures L7-1 and L7-5 on top of a shared basal platform created a physical boundary that enclosed the North Patio in

all sides. Apparently, the two “u shaped” buildings surrounding the small patio did not have an open area or corridor between them, blocking any visibility from the exterior. This boundary was also socio-physical, because the difficultness of access was enlarged by additional boundaries in the other lower patios that had to be crossed in order to arrive to any of its two accesses. In this case, the physical boundary reflects a marked social separation between the persons that could pass through all of these spaces and the ones that did not.

10. Archaeological context: The excavations in the North Patio did not recover any traces of middens that could indicate ritual or domestic activities. In fact, the only artifact assemblage found is the cache located directly beneath the plaster floor in L7-1 south chamber. The cache contained bloodletting related artifacts, as well as green stone ornaments, including a *huunal* jewel. Given the association of *huunal* diadems with rulers, it is clear that L7-1 was a building used only for activities related to the king, and his closest allies. Nevertheless, the lack of a formal bench makes it difficult to interpret it as a throne room, although a niche in the northern room suggests the presence of a wooden throne, probably the one portrayed in Stela 1 or the one in Stela 2 (these moveable wooden thrones are common in Late Classic iconography from other sites).
11. Modifications: The North Patio had at least two previous versions. The first one constitutes the first acropolis of the site, composed by two or three low plastered clay platforms that supported perishable buildings. The second version included a high pyramidal platform, but no traces of the superstructure have been found. The third version is the one visible now, containing structures L7-1 and L7-5. It seems that the

initial version of L7-1 was more related with the private activities carried out in the interior patio, while the later modifications in Episode Five shifted its importance to the North Plaza, where more public activities took place. Although the vaults of both buildings could have been dismantled by Episode Six, no evidence of room filling was found, indicating that the North Patio lost its centrality during the short reign of *K'aan Ma'ax*.

12. Referential function: The North Patio function has been interpreted with reference to its location in a south-north axis, and the internal layout of Structure L7-1. Given that L7-1 served as a throne room for *Taj Chan Ahk*, the enclosed patio could have been used for private rituals and political meetings with important local and foreign visitors, as the final location of a well defined path coming from the South Plaza. In addition, the north side of L7-1 was used as a stage for public appearances, presentations and rituals, also suitable to witness the ballgame rituals played in the North Plaza.
13. Allusory function: The comparative analysis of the North Patio with other enclosed patios is very limited, because this arrangement is not particularly common in other sites. In fact, most enclosed patios of this nature tend to be interpreted as residential. However, its high location, and the lack of archaeological domestic contexts does not suggest the use of structures L7-5 or L7-1 as residences.
14. Territorial function: The vertical and horizontal location of the North Patio represents a statement of its function as a royal territory, where limited activities took place. Local and foreign elites had access to this territory only when the king participated in private rituals and other types of political activities. Of special importance is the

placement of a cache with a royal symbol, the *huunal* maize deity, confirming that L7-1 and its surrounding space was blessed by either the symbolic or real presence of the holy lord of Cancuen.

15. Aesthetic function: Finally, the archaeological evidence indicates that the buildings of the North Patio were decorated with stucco friezes and sculptures. Unlike other buildings of the site, no symbols, glyphs or individuals have been identified from the fallen remains of their decorations. It can be speculated that some decorations framed the ritual and political activities that included important visitors, while other ones were meant to be appreciated from a distance by the entire population. Also of particular importance is the presence of some type of “*almena*” roof decoration, which have been found only in L7-1.

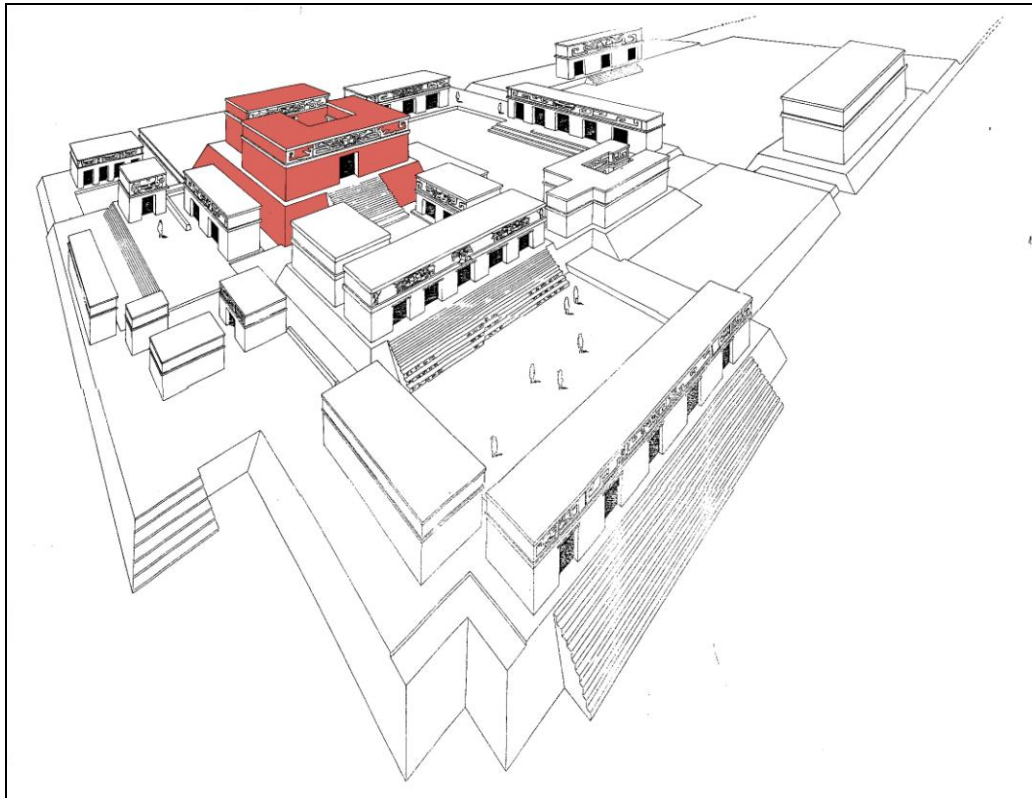


Figure 12.1 Hypothetical reconstruction of the royal palace, showing the visibility of the North Patio (Structure L7-5) (Drawing by L. Luin, VCAP)

12.2.2 *Central Patio*

1. **Permanence:** The area of the Central Patio has early constructions in its lower levels, indicating that it was an important space since the first version of the acropolis. Although there is not enough data that could indicate any continuity in its function, it was an important area during the fourth and fifth episodes.
2. **Scale:** The Central Patio is small in relation to other areas of the royal palace, measuring 156 m², which is more than twice the size of the adjacent North Patio and a fourth of the South Patio area. This relationship of size indicates that the Central Patio was an intermediate area between the other two, with a capacity to hold an approximate total of 40 people (including the interior rooms of structures L7-6 and L7-7), using a conservative rate of personal space of 4 square meters per person. However, for other reasons exposed below, it is unlikely that such a high number of persons accessed this area.
3. **Centrality:** The name Central Patio indicates that this was the middle of a north-south path that defines the Central Section of the royal palace. For that reason, it should not be confused as the center of the acropolis.
4. **Uniqueness:** The layout of the Central Patio is very similar to the North and East patios, but it differs with them because it is partially open in one side (north), and also by the presence of a dominating long structure (L7-8) in one of its ends (south).
5. **Visibility:** This patio was totally invisible from the exterior. In addition, the visibility of its buildings was blocked by large buildings in the east, north and south sides. However, it was highly visible from the southwest side. The same applies for the

visibility from any of its buildings, indicating that they were intended to be of a more private, not public nature.

6. Access: The main access to the patio was through Structure L7-8 and its hieroglyphic stairway, but it is interesting that it did not have a central doorway or staircase in its north facade. Hence, the lateral doorways that conducted to the Central Patio created a circulation path that covered almost all interior chambers of the building, leaving almost no room for residential use. As for lateral accesses to the patio, the absence of excavations in Structure L7-6 has not allowed us to define whether there was any communication between the Central and West patios. In any case, if there was one access, it was very narrow and possibly restricted. To the east, any open space would have led to the roof of Structure L7-16, or to a small and private access to the Southeast corridor, although this is very unlikely. Finally, more excavations will be needed to confirm or rule out the existence of exterior staircases coming out of structures L7-6 and L7-7.
7. Proxemics: The distance behavior in the Central Patio falls into the category of social distance (between 1.2 and 3.7 m between actors), but was probably very private, given the limitations in access. The reduced space in chambers and corridors in L7-8 also suggests that most activities took place in the open patio and not inside the buildings.
8. Privacy: The nature of the Central Patio is highly private, because it is an enclosed area without any visible links to the exterior of the acropolis. The activities that took place in this area were directly related to other patios or buildings, but nothing

suggests any public function, besides the use of L7-8 southern façade as part of the South Patio.

9. Territoriality and boundaries: The Central Patio had a boundary function, because it represents a transitional space between the highly private North Patio and the semi-public nature of the South Patio. In other words, Structure L7-8 served as a “social filter” that defined who had the right to enter royal territory.
10. Archaeological context: No artifact assemblages have been found directly associated with L7-8 or the Central Patio, but some evidence of ritual activity was found in its first phase: a cached Miseria Appliqué censer, and a layer of large burnt sherds of El Zapotal vessels. The presence of Burial 101 also points to a dedicatory context, given the lack of funerary offerings. In any case, it is not possible right now to regard structures L7-6 and L7-7 as residential, but the fact that L7-8 was designed to guide and circulate visitors to the Central Patio makes it very unlikely that it was conceived for domestic purposes. To support this claim, it is important to note that L7-8 probably had a small bench located at the top of the hieroglyphic staircase, which is directly associated with activities that took place in the South Patio. This would then suggest that the Central Patio activities were more related with the staircase that leads to the L7-5 southern façade, than the hieroglyphic stairway.
11. Modifications: Little is known of the first version of the Central Patio, nor of the patio in front of Structure L7-1 Sub-1. However, the excavations in L7-8 show changes in the use of materials and some minor modifications that affected its accesses during Episode Four and Five. Despite these changes in its interior layout, it seems that since its initial construction, its main function was to separate the North and South patios.

12. Referential function: The best way to interpret the function of the Central Patio and associated buildings is through its location in a south-north axis, where Structure L7-8 plays a key role in guiding and “filtering” the access to the royal throne room in the North Patio. In an analogous function with Structure L7-5, L7-8 blocks the visual access to the interior patio, making it necessary to cross its interior chambers and corridors in a non-straight path.
13. Allusory function: The design of Structure L7-8 with multiple doorways and interior chambers falls into the category of “range structure”, or within more proper functional terms, as a “passage palace”, “gateway palace”, “long house”, or “open hall”. Despite the irregularity in the use of functional terms, the key argument is that these buildings reflect a non-residential nature, which suggests their use in ritual or administrative activities. Hence, a speculative interpretation of the Central Patio, including structures L7-6 and L7-7, is that it served as a ritual space for activities that preceded the access to the North Patio, which was directly associated with royalty.
14. Territorial function: The intermediate location of the Central Patio reflects its nature as a transitional space between semi-public and private-royal spaces. Local and foreign elites had access to this territory only as part of a ritual path that led to the royal throne room. The location of a dedicatory cache as part of a previous building in this patio indicates that it was part of the sacred territory shared with other areas of the acropolis.
15. Aesthetic function: There is very limited information concerning the aesthetic aspect of structures L7-6, L7-7, and L7-8. Nevertheless, the absence of large quantities of stucco sculpture fragments on top of the patio floor suggests that its interior

environment was not as decorated as other areas of the palace. The only area with significant aesthetic value is the southern façade of L7-8, but that is considered as part of the South Patio.

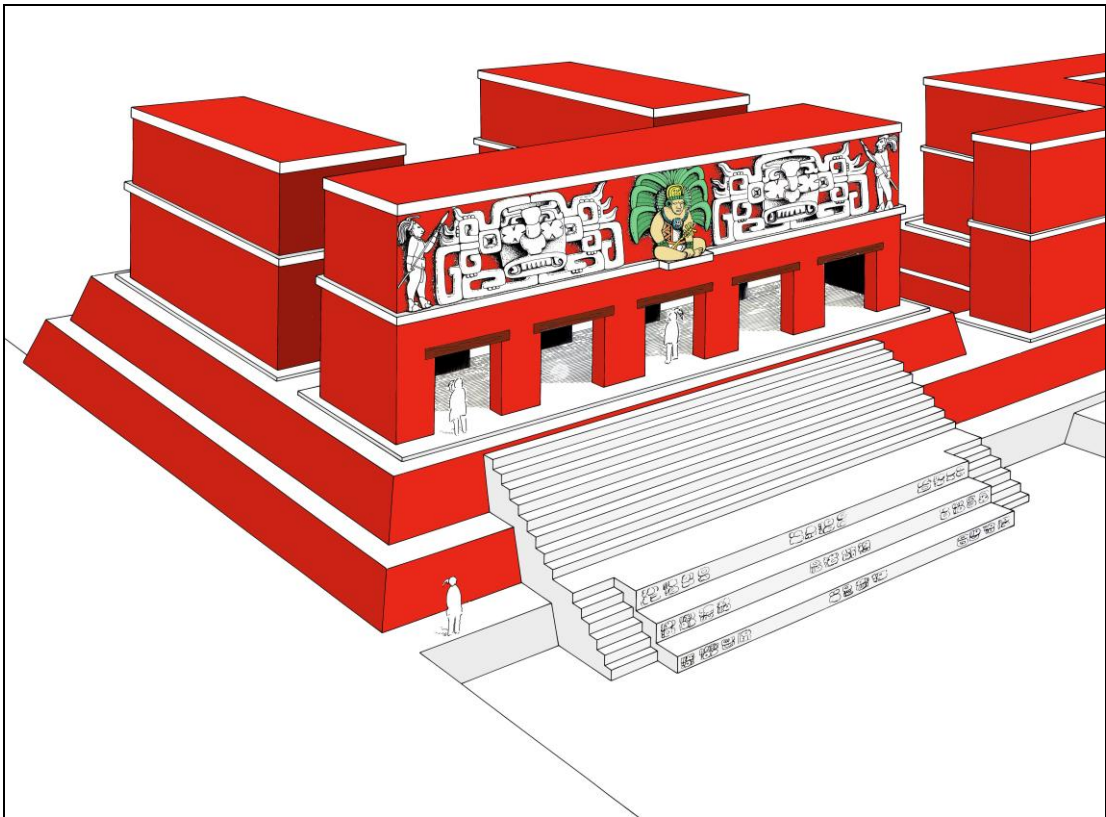


Figure 12.2 Hypothetical reconstruction of Structure L7-8, Hieroglyphic Stairway and Central Patio
(Drawing by L. Luin, VCAP)

12.2.3 South Patio

1. Permanence: This is one of the most important areas of the acropolis, probably since its first version, as it is suggested by the discovery of an early adobe construction beneath Structure L7-9. For that reason, it is possible that the South Patio area always had the function of a main entrance, as a preamble before entering the royal space represented by the North Patio.

2. Scale: The South Patio is the second largest open space of the acropolis (600 m²), which could have held between 100 and 150 people, including the rooms of its three associated buildings (L7-8, L7-9, and K7-36). Given that this patio was enclosed by a 1m high platform which supported the three large buildings in the north, south and west sides, its character was semi-public.
3. Centrality: The South Patio can be defined as a peripheral area, given its direct access to the acropolis southern limit. However, given that Structure L7-9 played an important role as the main entrance, passage or gateway to the Central Section of the palace, its location was also central in relation to the east and west sections.
4. Uniqueness: The layout of the Central Patio is very basic and common for Lowland Maya palace compounds. For that reason, it is difficult to assign a particular function based solely in building arrangement, shape or size. Unlike previous traditional functional interpretations, the analysis of the South Patio will not be done in isolation, but closely related with the surrounding areas. Of particular interest is the layout and location of Structure L7-9, the largest of the patio, because it corresponds to the so-called “range” structures.
5. Visibility: The South patio played an important role as a façade for the entire palatial compound. It was visible from a long distance, probably even from the river shore. For that reason, the south façade of Structure L7-9 was designed to impress any visitor, through an elaborated decoration with relief friezes and human sculptures. The main staircase was also impressive, elevating more than 6 m from the stone floor of the South Plaza. This magnificent façade also blocked the view to the interior environment, where Structure L7-8 and its hieroglyphic staircase dominated the north

side of the patio. The southern entrance of L7-9 also provided an excellent spot to view all the southern portion of the Cancuen peninsula and its associated ports and entrances.

6. Access: The main access to the South Patio is the monumental staircase that leads to Structure L7-9, and from here, to the rest of the acropolis. The hieroglyphic staircase in Structure L7-8 also served as the main access from the South Patio to the Central Patio, and ultimately, to the throne room in the North Patio. The excavations in the different buildings in the South Patio suggest that it was originally enclosed by a platform with some small staircases in front of each building (during Episode Four). At the floor level of this platform, there was a direct access to the Southwest Patio and the other areas of the West Section. However, there is not enough information to affirm that there was a direct access from the eastern side of the basal platform to the Southeast Corridor, Structure L7-17 or the Southeast Patio. At least, no eastern staircase was found in the South Patio that would suggest any access to these eastern areas. The excavations in the South Patio did confirm that during Episode Five of the acropolis, all western accesses located north and south of Structure K7-36 were closed by adding new walls made with soft limestone blocks.
7. Proxemics: The large dimensions of the South Patio set the proper stage for activities that fall into the category of public distance between the actors located in the buildings and the ones standing in the open area. The epigraphic record in the Hieroglyphic Staircase provides some clues of the kind of activities carried out in this patio, which suggests a multifunctional nature. The presence of benches and small

staircases in some rooms also indicates that a personal distance characterized the activities inside the buildings.

8. Privacy: The different spatial contexts in the South Patio are not characterized by a high degree of privacy, because most rooms in L7-9 faced the open South Plaza. Hence, besides the fact that this enclosed space was surrounded by large buildings, the nature of the activities carried out in the South Patio was semi-public. During Episode Five, most interior lateral accesses in L7-9 reduced the communication between rooms, but that did not necessarily increase the privacy of their activities.
9. Territoriality and boundaries: Having a peripheral location, the South Patio had an important role linking private and public arenas. In the same way that structures L7-5 and L7-8 served as passages to interior patios, Structure L7-9 was a true gateway to the separate world of the royal court and its associated features. For that reason, it is difficult to place this building as public or private. In fact, it was both; a sort of transition space where non-elite groups could have felt that they had access to restricted contexts, but at the same time they were physically separated. In some way, the nobility at Cancuen used these types of buildings to play with the notions of identity and group affiliation, and at the same time, keeping physical and social barriers.
10. Archaeological context: Given that Structure L7-9 was partially dismantled and all its rooms filled, no traces of activity areas have been found, making it difficult to infer its function. Although some ceramics and lithics were found near the northern basal platform, they seem to correspond to the last occupation, probably when the palace was abandoned. The only artifact that could be related with the types of activities

carried out in its 18 chambers is an earflare polisher found in the top layer of the fill in Room 6. However, the nature of the deposit is secondary, meaning that it cannot be used as evidence of jade polishing activities carried out in that particular room or building.

A better indicator of the function of the South Patio is the epigraphic data contained in the Hieroglyphic Staircase. The partially known text of the staircase suggests that this area was used for receiving important visitors, such as Dos Pilas Ruler 4; and rituals like fire ceremonies. It is also possible that these events did not necessarily take place in this particular area, but in other part of the palace or the site.

The architectural data recorded in L7-9 is more solid, because it clearly shows that it was a building not designed for residential purposes. Its original layout (Episode Four) is mostly an open hall with various lateral accesses and a wide central corridor. It is only after the modifications of Episode Five that the building presents a series of single and double chambers separated by walls, some of them with small and narrow benches. The orientation of these rooms indicates that they were meant to receive visitors directly from the South Plaza, not from the interior patio.

11. Modifications: Structure L7-9 has evidence of five different phases, represented by additions in the exterior façade walls, floors, blocked doorways, benches, and interior staircases. In functional terms, these modifications enlarged the circulation area of the basal platform and cancelled the original layout that communicated almost all rooms. As a result, this building was converted to a multiple roomed long structure or “long house” that served as a main entrance of a palatial compound, like the ones found in contemporary sites like Nakum and San Clemente.

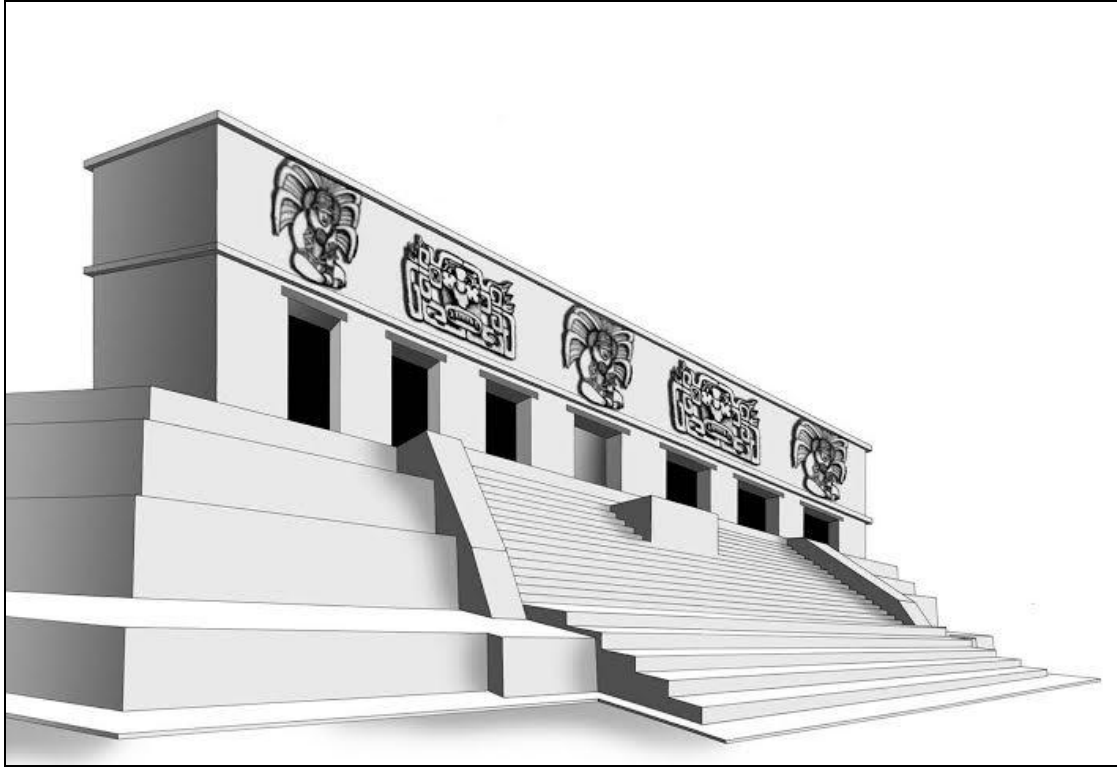


Figure 12.3 Hypothetical reconstruction of Structure L7-9 Southern Façade
(Drawing by L. Luin, VCAP)

12. Referential function: The South Patio was part of the south-north path that characterized the Central Section of the royal palace. Structure L7-9 originally played the main function of “filtering” the access to the interior South Patio from the exterior South Plaza. Besides blocking the visual access to the interior patio, it was an “open hall” where diverse ritual and sociopolitical activities could have taken place, some of them related to the stone masonry pool or cistern located near the base of the staircase. During Episode Five of the acropolis, this building was modified in order to perform a different function, now directed to attend visitors in new small throne rooms, probably involving lesser or secondary elites. The inclusion of many human portraits in its decoration also suggests that a growing nobility could have claimed more individual spaces in these buildings.

13. Allusory function: Structure L7-9 is characterized by its multiple rooms and doorways. Instead of following the traditional interpretation of domestic palaces, its design as an open hall makes it a true “passage palace”, “gateway palace”, or “long house” that was used for processions, councils, tribute presentations, and other ritual and administrative activities involving a relative high number of participants.
14. Territorial function: As other “passage palaces” that define the physical boundaries of the acropolis, L7-9 is located in an intermediate position that separates public, semi-public and private areas. It is not possible to affirm or deny the participation of non-elite groups in these types of buildings, but the direct accesses from the South Plaza seem to support the idea. The location of human portraits as part of L7-9 decoration (which could have included the ruler himself), communicated the relationship between power and sacred authority, which resided only within the royal court. This message thus defined who had the rights to cross the social and physical boundary represented by L7-9 and other passage buildings.
15. Aesthetic function: Structure L7-9 is definitely the one with the most elaborated decoration in the acropolis and the entire site. Its function as an entrance to the royal palace goes well with that, because its southern façade was meant to impress local and foreign visitors. The use of elements related with themes like water and the ballgame served also to transmit the symbolic meaning of a monumental construction like the royal palace.

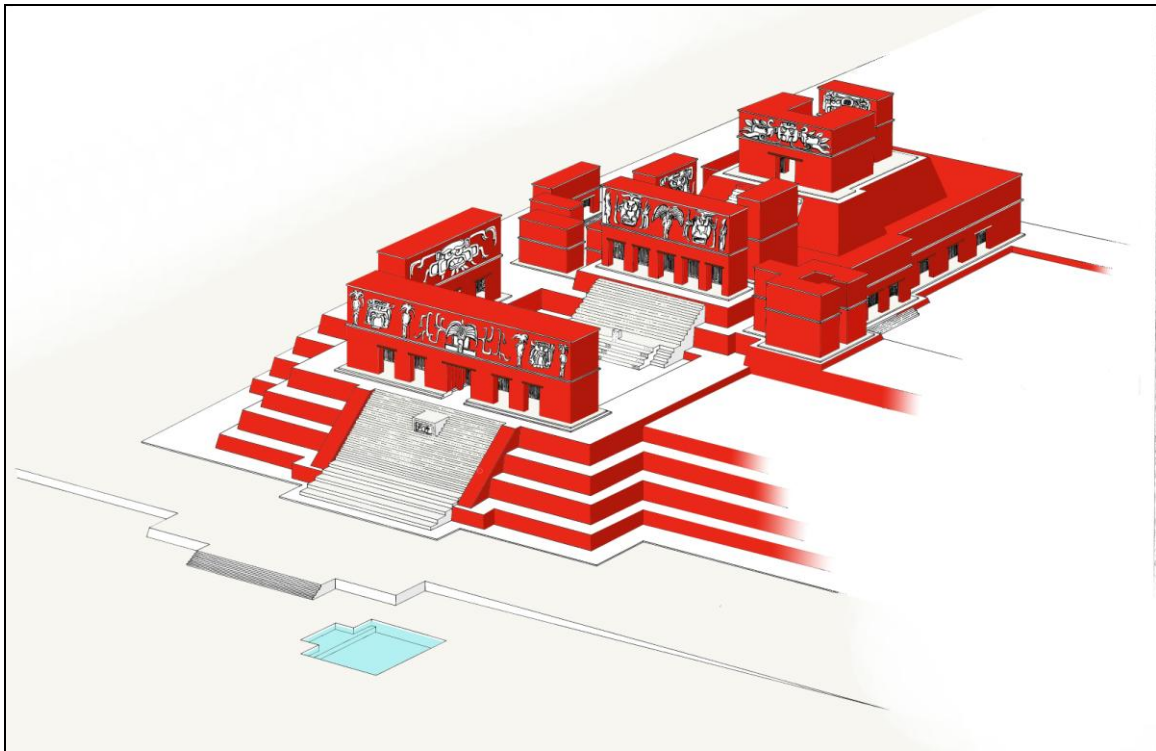


Figure 12.4 Hypothetical reconstruction of the royal palace southern façade
(Drawing by L. Luin, VCAP)

12.2.4 Lower North Patio

1. Permanence: This area was highly modified, meaning that its function varied through time. Nevertheless, its main function was always to link the North Plaza with the acropolis.
2. Scale: Originally it could have included a small patio south of Structure L7-14/L7-15 (200 m²), but during the Episode Five, it became a large open platform that covered L7-14 (600 m²) and served as a middle point between the North Patio and the North Plaza.
3. Centrality: Its location on the northern edge of the Central Section gives it a peripheral position, aligned with the main ballcourt of the site.

4. Uniqueness: The layout of Structure L7-14/L7-15 has no parallel in the site, because it is a long u-shaped building with a double row of rooms. However, it is somewhat analogous with the compounds formed by structures L7-1/L7-5 and structures L7-20/L7-21, but the size of the rooms and vault construction are different.
5. Visibility: The Lower North Patio was only visible from the North Plaza, because it was part the northern façade of the acropolis. The staircase and basal platform of the North Patio, which were located above the Lower North Patio, were also highly visible from the North Plaza. The row of rooms of Structure L7-14, the Northwest Patio, and the bench located in Structure L7-14-Sub-1 had an excellent view of the ballcourt and other buildings of the North Plaza. Its eastern side, named Structure L7-15 had a view of the entire Northeast Patio.
6. Access: The only known access to Structure L7-14 was the staircase that leads to the North Plaza, although a direct access to the North Patio could have existed south of L7-14, where L7-14-Sub-1 was also located. However, more excavations are needed to rule out the possibility of access staircases that connected this area with the Northwest Patio and the Northeast Patio. During Episode Five, the Lower North Patio was accessed through the main staircase that connected the North Patio and the North Plaza.
7. Proxemics: The original small dimensions of the patio that could have existed south of Structure L7-14 fall into the category of personal distance, meaning that its access was very restricted. But taking into consideration the large dimensions of the North Plaza and its associated ball court, the space in front of L7-14 falls into the category of public distance. For that reason, the function of the rooms in L7-14 is not well

understood, because they are related to a wide public space but at the same time they do not lead to an important interior area, as in the case of L7-9 and the South Patio.

8. Privacy: The general internal layout of L7-14/L7-15 suggests that the second row of rooms were highly private, while the first row was visible from the exterior. It is important to note that no rooms of the second row have been exposed yet, and the presence of an interior patio is still speculative. In any case, the burial of L7-14/L7-15 rooms during the Episode Five created an open space with low privacy, given that L7-14-Sub-1 could have been built for watching public spectacles.
9. Territoriality and boundaries: The location of the Lower North Patio is very limited in relation to the open patios of the royal palace, making it more related with the North Plaza than the rest of the acropolis. However, at the same time, its u-shaped layout linked the west and east sections through an indirect route that resembles the “labyrinth” of Yaxchilan. For those reasons, Structure L7-14/L7-15 can be defined as another type of “passage palace”, but probably not as a “gateway”, because the flow of persons was much less than other boundary buildings like L7-9. Only more excavations will reveal the existence of these proposed accesses, because the existence of doorways linking the eastern rooms is still hypothetical.
10. Archaeological context: The excavations in the Lower North Patio revealed a very complex architectural sequence in the area south of Structure L7-14. But these excavations did not reveal a substantial artifact assemblage that could allow a functional interpretation. In addition, the rooms of L7-14 were intentionally filled, erasing any evidence of activities. As a result, it is impossible now to assign any specific function to those rooms. The excavations in this area also exposed a possible

bench in Structure L7-14-Sub-1, located on top of the platform that buried Structure L7-14, suggesting its use as a public stage or to witness the activities carried out in the North Plaza and the Palace Ballcourt.

11. Modifications: The limited excavations in Structure L7-14 have not revealed minor modifications; instead, they exposed the intentional fill that covered them in order to convert the Lower North Patio into a single platform that linked the North Plaza with the North Patio.
12. Referential function: The fact that Structure L7-14/L7-15 is not directly associated with the most important areas of the palace suggests some kind of secondary function. One hypothesis is that they could have functioned as temporary residence for visitors. Another interpretation relies on the lack of formal buildings near or around the Palace Ballcourt, suggesting that Structure L7-14 could have had a ritual function associated with the ballgame, providing private spaces for ballplayers or storage facilities for the associated paraphernalia.
13. Allusory function: The layout of Structure L7-14 consists of a double row of rooms distributed in a u-shaped building that is easily accessed from the North Plaza. Although this building form has been traditionally associated with elite residences, it is difficult to confirm that function with the limited archaeological contexts available and the lack of a formal patio. As it was suggested above, it is more likely that they were not permanent, but temporary residences for important visitors.
14. Territorial function: As a type of “passage palace”, L7-14 controlled any access to the royal throne room from the North Plaza. As an additional function, it could have also served as an indirect route to the Northwest and Northeast patios. However, during

Episode Five, this passage was eliminated and a new staircase directly linked the North Patio and the North Plaza, reflecting a change in the degree of access control.

15. Aesthetic function: Although there is no evidence of any form of decoration in this area, it is important to note that the corbelled vaults of the rooms show a very fine architectural style. In any case, the lack of aesthetic elements indicates that Structure L7-14 had a more practical than symbolic function.

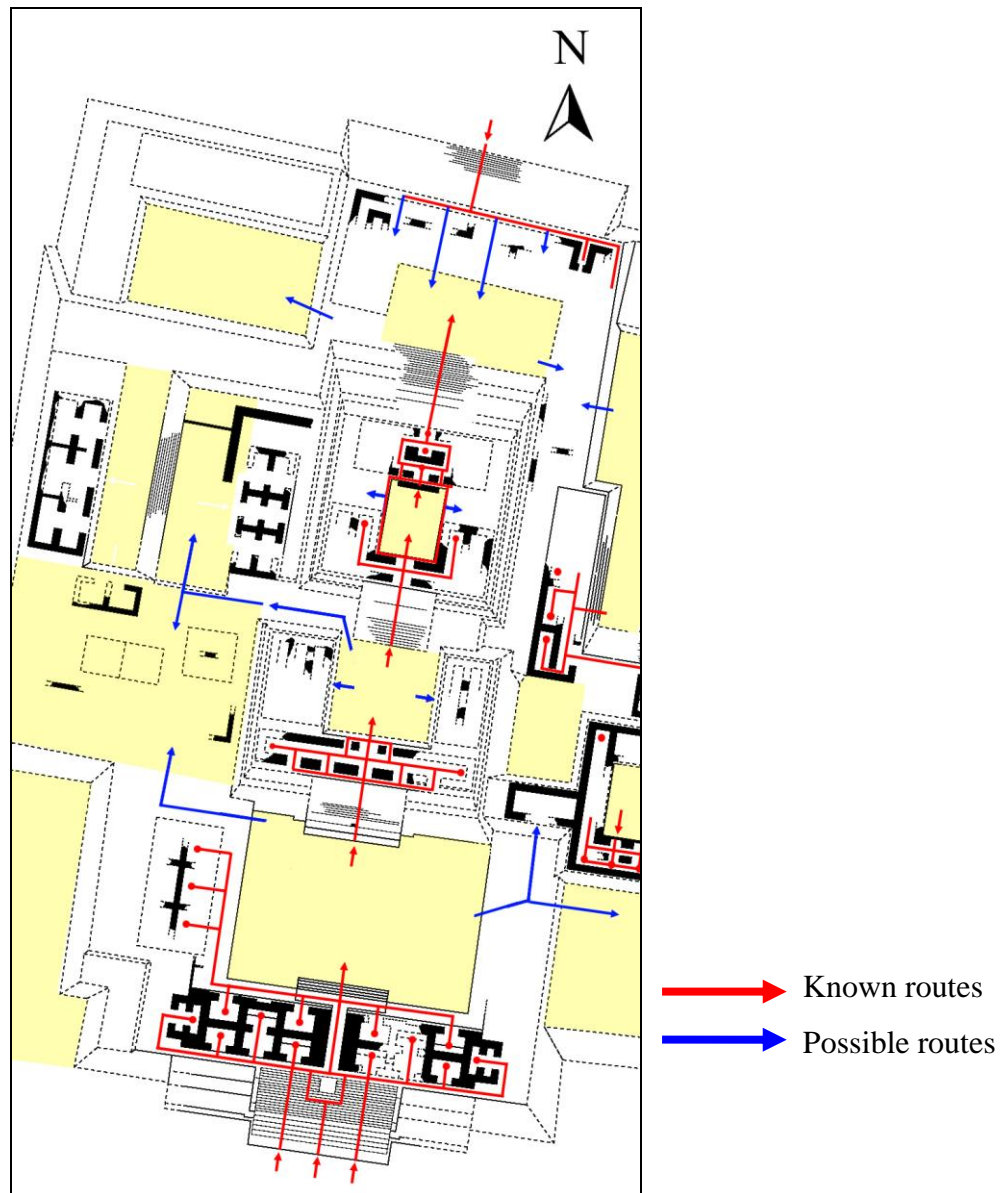


Figure 12.5 Access analysis of the central section, royal palace of Cancun
(Map by T. Barrientos)

12.3 Spatial-Functional Analysis of the East Section

The East Section of the palace is probably the latest, given that no early structures have been found in the deepest excavation levels. Instead of growing vertically, like the Central Section, the East Section grew horizontally, adding open spaces and buildings towards the East Plaza, when the acropolis became a monumental construction. Its three main areas will be analyzed as separate functional spaces:

12.3.1 Northeast Patio

1. Permanence: The Northeast Patio does not have an earlier version, indicating that its function is directly associated with the reign of *Taj Chan Ahk*, probably during Episode Four. Nevertheless, the presence of Structure L7-17 sub-1 in the Southeast Corridor indicates that this area could have been an important space shortly before his accession, during Episode Three.
2. Scale: With 1000 m², this is the second largest patio of the acropolis. Unlike the South Patio, it has a rectangular shape with its long sides in the north-south axis, facing Structure L7-22 in the south end. The presence of L7-22 as a possible throne room suggests an audience up to 250 people, but more likely to have a maximum of 150 people distributed in the open area of the patio, an open space at the northeast corner of the basal platform, and the multiple rooms of perimeter structures L7-15, L7-16, L7-23, and L7-24.
3. Centrality: Even when this patio is adjacent to the Central Section, it was originally a peripheral space; but with the later addition of the Main Plaza, it became more isolated and private, probably as a secondary stage for royal activities.

4. Uniqueness: The layout of this area is consistent with other Lowland Maya palaces (Tikal, Nakum, etc.), where a small structure with a bench faces a patio surrounded by room galleries; but it is the only one of its kind in Cancuen.
5. Visibility: It is important to consider that the throne room (L7-22) dominates this area, but it is not as high as L7-1. Hence, it was not visible from the exterior, giving it a highly private nature, where ritual or political activities were observed from the patio area or from the rooms of the surrounding buildings. These buildings also blocked any visibility from L7-22 to the north or the east and west sides. Structure L7-23 was very visible from the North Plaza, meaning that this building was used to watch ballgame rituals and other ceremonies performed there.
6. Access: The Northeast Patio is adjacent to the Lower North, North and Central patios of the Central Section, but no direct access with them has been found yet. The only indirect accesses were the rooms of Structure L7-15 (Lower North Patio) and a staircase that could have descended from Structure L7-7 to the Southeast Corridor. In addition, no direct route from the West Section to this area can be defined. In fact, it seems that the main access was from the east, through Structure L7-24.
7. Proxemics: The dimensions of the patio fall into the category of public distance, meaning that it was an important place of gatherings. However, its longitudinal design creates a different spatial environment from the South Patio, which has a wider layout that allows more interaction by the participants. On the other hand, the plan of the Northeast Patio limits the amount of participants close to the main character located in Structure L7-22, reflecting a more stratified arrangement.

8. Privacy: The scale of the Northeast Patio indicates that it was suitable for semi-public activities, but the lack of direct accesses gives it a very private nature. This would mean that the activities that took part in this area gathered only the people that resided permanent or temporally within the acropolis itself, or it received a portion of the large audiences that occupied the Main Plaza to the east.
9. Territoriality and boundaries: The presence of a throne room (L7-22) in this area suggests that the king itself could have participated in rituals or political oriented presentations of a private character, but somehow different than those performed in the North Patio. With the data available it is not possible to explain the difference in activities carried out in these two semi-public spaces, but the nature of their accessibility allows the identification of the Northeast Patio as an exclusive territory, separated from the rest of the acropolis by the presence of multi-roomed buildings.
10. Archaeological context: The only excavations carried out in this area were limited to Structure L7-22, where few artifacts have been found. However, the discovery of a wide bench in its southern chamber confirmed its function as a throne room, where the ceremonies and rituals were presided over by the king or another high authority. No excavations have been carried out in any of the rooms of structures L7-15 or L7-16, making it difficult to infer their function.
11. Modifications: Apart from some changes in the interior floor and bench of Structure L7-22, very few substantial modifications have been identified in the buildings that surround this patio, indicating that its function had no change since its original design. However, the modifications in the Main Plaza could have affected the degree of access from the east side.

12. Referential function: The spatial relationships between the Northeast Patio and the rest of the acropolis rules out its function as a space where non-elite participants could have attended, like the South Patio or the Main Plaza. In fact, the presence of at least 20 vaulted rooms suggests that this area was residential, but the location of a throne room in its southern end also indicates that it was a stage for ritual and political activity. It is likely then that these residences were temporary, meant to house important visitors, and the patio area could have been a private audience area where they interacted with the king and its royal court. Given the presence of a throne room, another hypothesis is that some rooms in Structure L7-16 could have been used to store paraphernalia, food and other items used in ceremonies. Structure L7-24 clearly functioned as a passage palace, because what is known of its internal layout suggests that it was an open hall similar to L7-9 and L7-8, but of smaller dimensions.
13. Allusory function: The arrangement of a throne room and multi-roomed long buildings around a patio is very common in the Maya Lowlands. For that reason, it is a pattern that can be defined as multifunctional, where the lack of artifact assemblages makes difficult any specific interpretation. For the Northeast Patio, it is very likely that some of these buildings were residential, but this interpretation will remain speculative until architectural features like benches or middens are found.
14. Territorial function: The relative isolation of the Northeast Patio from the exterior boundaries of the acropolis indicates that it was a space with particular functions. This created a very well defined territory that was not connected to the Central and West sections of the palace. For this reason, it is one of the areas that can be defined

as royal territory, although it was probably not as permanent as the North and West patios.

15. Aesthetic function: No substantial architectural decorations have been identified in the buildings of the Northeast Patio, indicating that this area did not play any role as public symbolic display, as it has been observed in the South, Central or North patios. Therefore, these differences between the central and lateral sections of the royal palace may have been indicative of their functions, because the presence or absence of monumental stucco sculpture could reflect the nature of the audience which is meant to be impressed, and the type of stage suited for performing particular activities. In this case, the lack of monumental stucco sculpture would rule out a public function related to non-elite audiences.

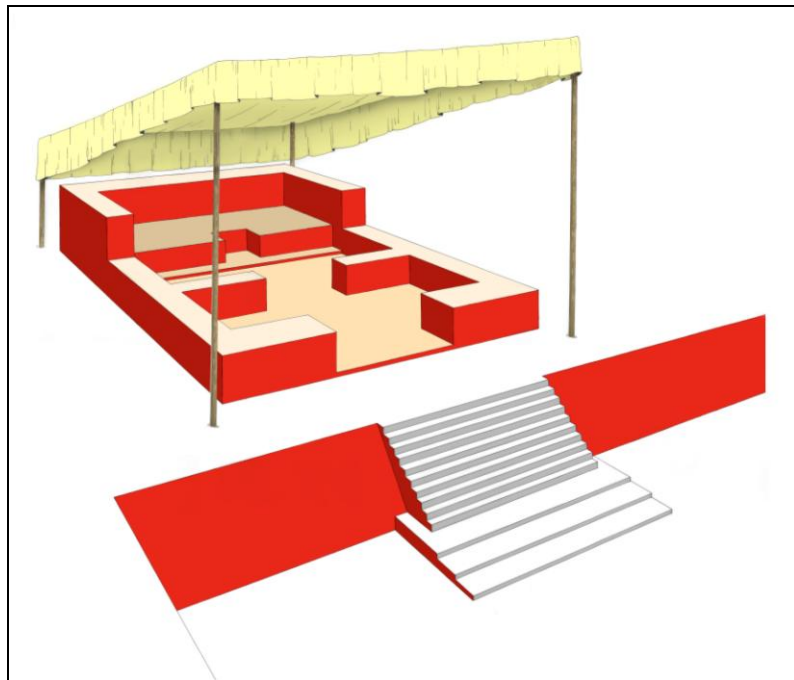


Figure 12.6 Hypothetical reconstruction of Structure L7-22
(Drawing by L. Luin, VCAP)

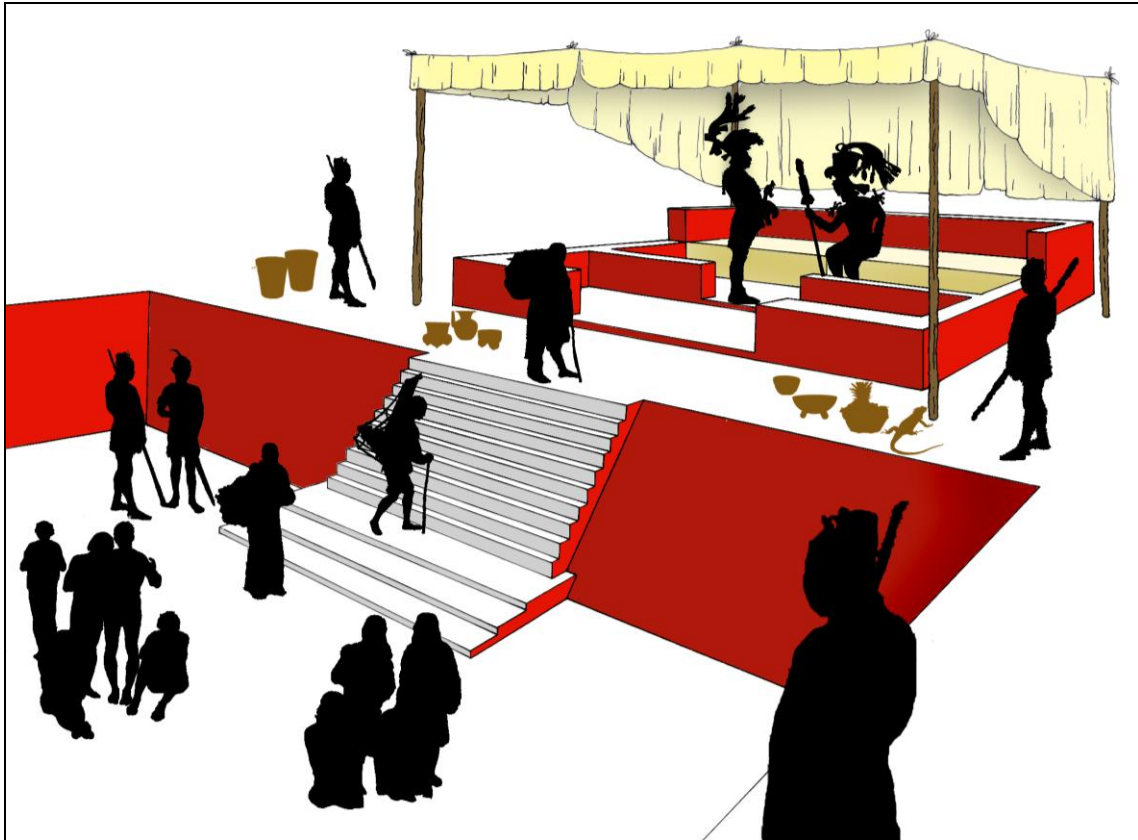


Figure 12.7 Hypothetical reconstruction of Structure L7-22 as a royal throne
(Drawing by L. Luin, VCAP)

12.3.2 East Patio/Southeast Corridor/ Southeast Patio

1. Permanence: This is the only area of the East Section that has provided evidence of early buildings and ritual activity. It consists of a substructure (L7-17-Sub-1) that could date to Episode Three, corresponding to the first decade of *Taj Chan Ahk* reign. However, in the earlier levels an elite female burial with no offerings was found, as well as some deposits of utilitarian ceramics, including a cache of a complete El Zapotal vessel.
2. Scale: These areas are relatively small, especially the East Patio, which measures around 100 m², and the Southeast Corridor, with an approximate area of 150 m². The

Southeast Patio consists of an elevated and open platform that covers around 700 m². The first two ones were not designed to hold more than 20 people together, while the Southeast Patio could have been used by a large group, although its location does not suggest that it was used for congregate people.

3. Centrality: The location of the East Patio is central, because it constitutes the “core” area of the whole East Section, and it is surrounded by the other three patios. At the same time, it is peripheral in relation to the Central Section, which suggests a secondary role within the royal palace. The Southeast Corridor plays an intermediary role, because it communicated various important areas of the Central and East sections of the acropolis. As for the spatial location of the Southeast Patio, it is peripheral, because it constitutes part of the southern end of the palatial compound.
4. Uniqueness: The similarities between the East and North patios suggest that these could have been almost identical in form, but not necessarily in function. As enclosed small patios, both were very private, but their location in relation to other buildings and patios may indicate that these two areas were used for different purposes and persons.
5. Visibility: The Southeast Corridor was not visible from outside the acropolis, but the exterior buildings of the East Patio created a prominent feature viewed from the south. Its interior patio was totally enclosed, creating one of the most private spaces of the palace. Also, the view from Structure L7-21 dominates the entire Northeast Patio, though it is not clear if it had some relationship with Structure L7-22.
6. Access: Besides the visual restriction, the privacy of the East Patio was enforced by a restricted access, located in its eastern side. Recent excavation confirmed that no

staircase existed in its south side, meaning that it was accessed only from the Main Plaza. The excavations in L7-22 also confirmed that there was not direct access between the throne room and the East Patio compound. For the Southeast Corridor, no accesses have been identified, but it is possible that a staircase communicated with Structure L7-7, and it is not clear if Structure L7-17 blocked any access to the South Patio. However, it is possible that L7-17 was part of a late modification. Finally, the Southeast Patio does not show any evidence of staircases descending to the South Patio or the corridor east of Structure L7-26, which leads to the Main Plaza. For that reason, its function is still difficult to understand, though a residential use seems the best hypothesis.

7. Proxemics: The space available in the East Patio and Southeast Corridor falls into the category of personal distance, meaning that the few people that interacted there, were part of the royal family, the royal court, or very close political allies.
8. Privacy: The physical and visual barriers in the East Patio created a very private environment that was proper for activities of a reduced group that could be the royal family or an important section of the royal court. The same applies to the Southeast Corridor, which was not as closed as the East Patio, but still very private.
9. Territoriality and boundaries: The East Patio constituted a separated territory from the surrounding areas of the Central and East Sections of the acropolis. Although it is not clear if it was occupied and/or used by the royal family, its physical barriers reinforced the position of the royal court as a separated entity.
10. Archaeological context: The excavation in these areas recovered evidence of early ritual activities, in the form of a burial and a cached vessel. However, most ceramics

recovered in the later occupation levels in the Southeast Corridor were of domestic types, indicating non-ritual activities. For that reason, it is likely that the East Patio had a residential activity, as well as the Northeast Patio. In any case that evidence does not rule out the use of those spaces for ritual and administrative activities, if a multifunctional approach is considered.

11. Modifications: The East Patio suffered some modifications in its accesses, indicating that its original function may have changed from the fourth to the fifth episodes, as it has been documented in other buildings of the acropolis. The addition of a bench in the main access and the blocking of some doorways reflect a pattern of increasing the access control and reducing the visibility from the patio area. It is also important to note that the burial and leveling of Structure L7-17-Sub-1 during Episode Four reflects the significant spatial and functional changes in the eastern zone of the acropolis.
12. Referential function: The layout of the East Patio suggests that it had a similar function with the North Patio, but its location outside the Central Section defines it as a parallel space for private activities that could have included the royal family and the closest members of the royal court. In addition, the proximity of Structure L7-22 also suggests that the function of this space could have been related to the presentation ceremonies that took part in the Northeast Patio.
13. Allusory function: The interpretation of enclosed compounds like the East Patio has been associated with residential activities. In this case, some of the archaeological evidence found in the Southeast Corridor supports a residential function. Nevertheless, the spatial arrangement of this compound in relation to its surrounding

built environment indicate that other types of activities could have been performed in its interior and exterior areas.

14. Territorial function: The existence of different presentation and residential areas in the royal palace reflects the bureaucratic complexity of Cancuen during *Taj Chan Ahk* rule. The interpretation of the East Patio and its associated throne room as parallel scenarios for rituals and presentations clearly reflects the need for different types of stages. However, with the data available now, it is not possible to affirm if there was an elite group that had its own separate space in the acropolis, or if the king used all these areas depending on the type of public he addressed. In the latter case, the East Patio becomes another good candidate for *Taj Chan Ahk*'s royal residence.

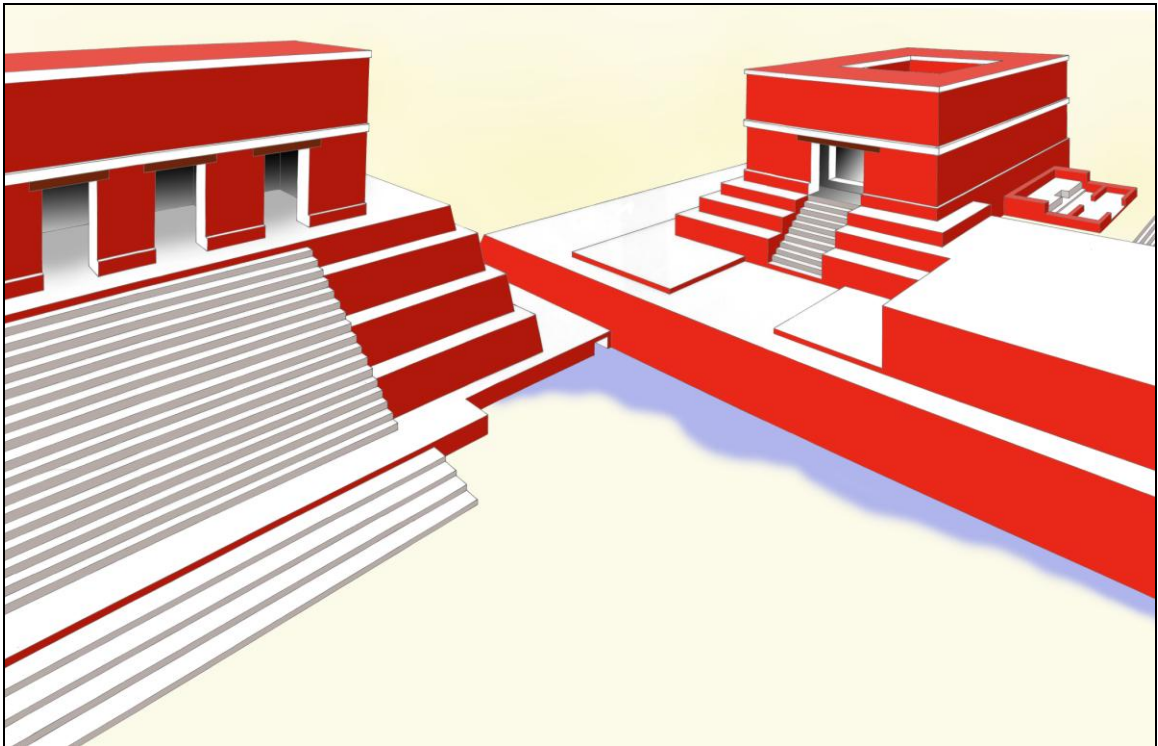


Figure 12.8 Hypothetical reconstruction of Structure L7-21 and Structure L7-26, Main Plaza
(Drawing by L. Luin, VCAP)

15. Aesthetic function: Unlike the North Patio, there is no evidence that the East Patio had decorated exterior facades. This point is important, because the presence or absence of symbolic decoration made an important difference for pre-Columbian Maya architecture. Even when these two compounds share a similar architectural layout, the North Patio was conceived as part of a more sacred space, as it was reflected by its centrality and sculptural decoration. On the other hand, the East Patio was either a secondary area for the king, or a space assigned for activities involving lesser members of the royal court.

12.3.3 Main Plaza

1. Permanence: This area is probably the latest addition in the acropolis history, given that no early buildings have been found yet, and its perimeter structures were built outside the basal platforms of the Northeast and Southeast patios. For that reason, it is possible that this patio was once part of the East Plaza, which was larger before the construction of structure L7-25, L7-26, and L7-27. In any case, this plaza also seems to have been the main focus of activity in the acropolis during the short reign of *K'an Ma'ax*.
2. Scale: The Main Plaza is the largest open space within the royal palace, covering an approximate area of 4,000 m². This could have congregated up to 1,000 persons, but given that it is a closed space, a more conservative estimate would be 250 individuals as an average capacity for semi-public activities, plus the rooms and halls of the surrounding buildings.

3. Centrality: This patio is clearly peripheral, because it constitutes the eastern limit of the entire acropolis. Its location is directly related to the East Plaza, and the Northeast Patio, given that it did not have any direct access to the Central Section.
4. Uniqueness: The layout of this patio is very common for the Lowland Maya palaces, given that it is a quadrangular closed patio, delimited by “range” structures. For that reason, its interpretation cannot be very specific. However, it is the only open area with monuments, giving it a ritual nature.
5. Visibility: The size of the structures that enclose this patio blocked any visibility from the exterior, with the exception of the southeast corner, but in general, it was an open space designed for more private activities, as opposed to the adjacent East Plaza. The height of buildings like L7-25 and L7-26 also created a good spot to view the rest of the royal palace and the entire site. The top of Structure L7-27 constitutes the second highest spot in the acropolis, but that platform was built during Episode Six. The only evidence of Structure L7-27-Sub-1 indicates that it could date to the reign of *Taj Chan Ahk*, corresponding to a long building with multiple rooms, similar to L7-9 or L7-24, but without a raised platform.
6. Access: The excavations carried out in the Main Plaza have uncovered a large staircase in Structure L7-27, being the only known access until now. This gives L7-27 a function of “passage” or “gateway”, and it is possible that its previous version, dated to the fourth or fifth episode, had the same use. In fact, this structure was one of the two main accesses to the acropolis, although it did not lead directly to the Central Section. Structure L7-24 had the function to connect the Main Plaza with the rest of the East Section.

7. Proxemics: The size of the patio falls into the category of public distance, suggesting that the activities performed in the Main Plaza could have been similar to the ones in the open plazas to the north and east.
8. Privacy: Despite the large dimensions of the Main Plaza, its degree of privacy is high, considering its physical and visual barriers. However it is possible that it was the result of a later modification, and it was more open in previous construction phases, or even part of the East Plaza.
9. Territoriality and boundaries: The layout and location of the Main Plaza created an open but restricted space, with few connections with the exterior and the rest of the palace. It is not clear if this area was reserved for non-royal members of the court or if it was another area where the king addressed large but still selected audiences.
10. Archaeological context: The excavations in Structure L7-27 uncovered two important burials, including an informal cist containing the remains of *K'an Ma'ax* and other important individual, probably his wife. In addition, the presence of an altar/stela in the center of the patio, and a concentration of ceramic materials found in front of Structure L7-26, suggests a ritual function. For that reason, it is possible that the plaza and its surrounding buildings were used by *K'an Ma'ax* for feasts and other semi-public ceremonies.
11. Modifications: The original layout of the Main Plaza is not well understood, because Structure L7-27 covered a previous stone masonry building that could date to *Taj Chan Ahk's* reign. In any case, three successive construction stages have been identified in the plaza floor and two of the three main buildings, indicating that the

whole compound was modified at the same time, probably not changing its main function until very late.

12. Referential function: The location of the Main Plaza next to the East Plaza gives it a semi-public nature, associated with rituals and political activities that involved erecting plain and carved stelae and altars. Also, the enclosed nature of the Main Plaza suggests that a separate group participated in parallel or secondary activities that complemented the main ceremonies performed in the East Plaza, where Structure L7-27 played an important role connecting these two scenarios. Still, the relation between the Main Plaza and the Northeast Patio is hard to understand, but in any case, the function of Structure L7-24 as an “open hall” was very important linking these two areas.

It is important to note that Group L6 is located near the southeast corner of the Main Plaza. Given that a large kitchen was found in that residential group, food was prepared there to be consumed in banquets offered in the royal palace, thus suggesting that the Main Plaza could have been a place where feasts were offered to considerable large groups of people of the royal court and probably non-royal elites too.

13. Allusory function: The existence of quadrangular arrangements of buildings has been documented in most sites of the Maya Lowlands, making it difficult to interpret them without good archaeological evidence. The traditional interpretations range from residences to administrative purposes, but in the case of the Main Plaza, it is difficult to support a residential function. Even when two burials were placed on top of

Structure L7-27, this seems to be a late event that did not relate with the original function of the patio.

14. Territorial function: The Main Plaza was an appropriate place for large gatherings that brought together different levels of the social hierarchy at Cancuen during the reign of *Taj Chan Ahk*. The growing “middle” class of local and foreign non-royal elites at Cancuen, probably due to the increasing trade of raw materials and craft production, made it necessary to build a space where they could have been included as a privileged sector. Feasting was one of the key activities that reinforced the concept of sociopolitical affiliation, something that was becoming complex and unstable at the end of the eighth century. There is good evidence for food production south of the Main Plaza (Group L6), and some ceramic deposits found in front of Structure L7-26 supports the interpretation of a semi-public ceremonial space.
15. Aesthetic function: No evidence of sculptural decorations has been found in the main buildings of the Main Plaza. However, a plaster glyph was found in Structure L7-24 east staircase, indicating that the access to the main areas of the royal palace could have had some symbolic elements, similar to what Structure L7-9 meant for visitors coming from the south. The presence of a hieroglyphic inscription in that building gives the Main Plaza another function as a “gateway” or “lobby” to the most restricted spaces of the palace.

12.4 Spatial-Functional Analysis of the Western Section

The West Section of the palace is the less investigated archaeologically, but a careful spatial inspection will reveal some patterns that help to interpret its function,

especially because it has the proper conditions of a royal residence. Its three main areas will be analyzed as separate functional spaces.

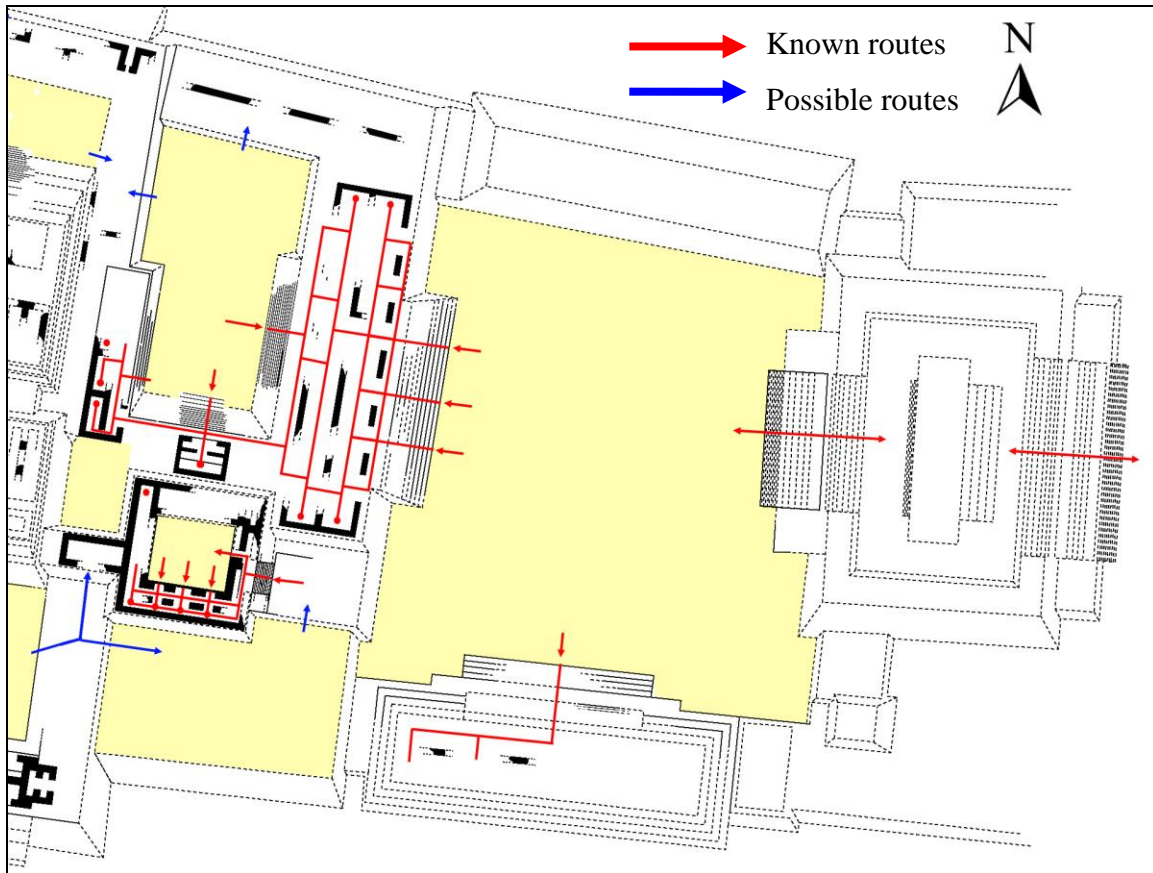


Figure 12.9 Access analysis of the east section, royal palace of Cancuen (Map by T. Barrientos)

12.4.1 Northwest Patio:

1. Permanence: The northwestern corner of the acropolis has provided evidence dated to the First Episode, indicating that it was occupied since the site foundation, probably as a residential area. However, it does not show any significant constructions until the Fourth Episode.

2. Scale: The Northwest Patio is medium-sized compared with the rest of the palace. Its total area (160 m²) and the presence of one single building suggest that it was designed to gather small amounts of people.
3. Centrality: This is a peripheral area, and its spatial location suggests that it played secondary roles associated with the West and Lower North patios.
4. Uniqueness: Its layout is very simple, having a single structure in the north side. For that reason, no specific function can be attributed, but it is likely that it was residential.
5. Visibility: It is very visible from the north and west sides of the palace, but the rest of the acropolis blocks any view from the other sides. Structure L7-10 has a similar visibility than L7-14, meaning that it was probably used as a balcony to watch ballgame rituals and other ceremonies performed in the North Plaza.
6. Access: Given that no excavations have been carried out in this patio, its access is still unknown. However no staircase from the West Patio has been identified, suggesting that it was accessed from the west side of Structure L7-14 or by a direct stairway from the North Plaza. If it was accessed from the east, then it could have served as a private patio for the occupants of Structure L7-14.
7. Proxemics: The enclosed nature of this patio and its dimensions falls into the category of social distance, which would be proper for a residential purpose.
8. Privacy: The absence of many accesses to this patio makes it relatively private, though it does not have tall buildings like the North and East patios. This would support a residential function.

9. Territoriality and boundaries: This patio seems to represent an attached private area to either the Lower North or the West patio, meaning that it was used as a residence by a close relative to the king, or by other members of the royal court, such as artists or even servants, given that Structure L7-10 architecture was of inferior quality than the rest of the royal palace.
10. Archaeological context: The only excavation in this patio revealed an early occupation, represented by a very low clay platform associated with a midden and where Burial 12 was placed. This suggests that this area could have been a residential compound attached to the early acropolis, and it is possible that it retained its original function when Structure L7-10 was built. Future excavations in this area may find middens or other artifact assemblages that could prove or not its residential function.
11. Modifications: This patio was built during Episode Four and it probably was not modified afterwards, but this will have to be confirmed by excavations.
12. Referential function: This patio is surrounded by other areas that could have been residential; suggesting that it had a similar function, but its lower height and architectural quality indicates that it was used by persons of a lower sociopolitical level than its adjacent patios.
13. Allusory function: The simplicity of this patio makes it very similar to other building arrangements, which have been interpreted as residences, being the most likely case for the Northwest Patio.
14. Territorial function: The evidence indicates that the Northwest Patio was an area reserved for a non-royal group or family, but with enough social status to be included within the acropolis boundaries.

15. Aesthetic function: No evidence of decoration or symbolic aspects has been found here.

12.4.2 West Patio:

1. Permanence: This patio existed since the first episode of the acropolis, where a low clay platform was located very close to the early North Patio. The masonry structures were added during the episodes Four and Five as part of the monumental constructions dedicated by *Taj Chan Ahk*.
2. Scale: The West Patio has a small open area in front of Structure L7-12, as part of an elevated platform. Structure K7-33, located in the west end, does not have a considerable open area, because its staircase descends very close to the base of L7-12 platform staircase, giving no room for a formal patio. For that reason, it is suggested that Structure K7-33 was built as a late addition during the Fifth Episode.
3. Centrality: The West Patio has both a peripheral and central location, because it is part of the western edge of the acropolis but at the same time it is attached to the North Patio, which is the core of the entire compound. This could have had a symbolic value that is important for interpreting its function.
4. Uniqueness: The layout of Structure L7-12 and its raised platform is a very common construction found in other Lowland Maya sites. Its internal layout with six chambers seems to be identical than Structure K7-33, but in a minor scale.
5. Visibility: The West Patio has a visual orientation directly to the west and northwest sides of the site, given that it was not visible from the north, south or east sides of the acropolis. This orientation indicates that the activities that took place here did not

have a direct visual connection with the rest of the royal palace. In addition, it is interesting that the high level of Structure L7-12 platform created a “balcony” with a good view to the North Plaza, where some members of the royal family could have watched the ballgame rituals and other ceremonies from a very private area.

6. Access: The accesses to the West Patio are very clear, one staircase to the west, a possible narrow passage to the Central Patio, and a direct access from the south, where the Southwest Patio serves as a passage to the South Patio. However, the excavations in the western edge of the acropolis basal platform indicates that no direct access existed between the West Patio and the west side of the North Patio, although it could have been removed at some point. It is important to note that modifications made during Episode Five blocked the southern access and reduced the access from the west.
7. Proxemics: The reduced space associated with Structure K7-33 falls into the category of personal distance, while the patio in front of K7-12 is social distance. However, the fact that it is a relative small size area suggests that it was a restricted area where few people interacted.
8. Privacy: The West Patio was located away from the visual range of areas where large crowds gathered, and some buildings created physical barriers that created a high degree of privacy for the open patio associated with 7L7-12. The fact that Structure K7-33 faced east and did not have a western entrance, gives it even more privacy than Structure L7-12.
9. Territoriality and boundaries: The location of the West Patio is clearly aside the Central Section, but indirect open accesses communicate these two areas, indicating

that these were shared by the same actors. It is quite possible then, that the West Patio was used by the royal family as a residence.

10. Archaeological context: The excavations in the West Patio have defined the internal layout of the two main buildings, each one having six rooms. However, the excavations have been superficial and no benches or other domestic related architectural features have been found. For that reason the inference of a residential function is still hypothetical. In addition, no artifact deposits have been found in this area, although an early ceramic cache was located as part of the dedicatory ceremonies previous to the platform construction. Also, an early midden proves that at least in the first version, this area had activities involving domestic ceramics.
11. Modifications: Various minor and large modifications have been identified in the West Patio, but none of these seem to have changed its function. First, it is probable that L7-12 and its elevated platform was the original plan in this area, meaning that K7-33 was added afterwards, maybe as part of Episode Five. Later on, during Episode Six, some low walls were added surrounding L7-12, and the interior rooms of K7-33 were filled in order to build an elevated platform that would have covered it.
12. Referential function: The spatial arrangement of structures L7-12 and K7-33 suggests that these two were not built at the same time. However, they are similar in size and layout, suggesting that they were residences. As it has been observed in other parts of the acropolis, is possible that the royal court grew rapidly during *Taj Chan Ahk's* reign, even his own family, making it necessary to enlarge their private residential area.

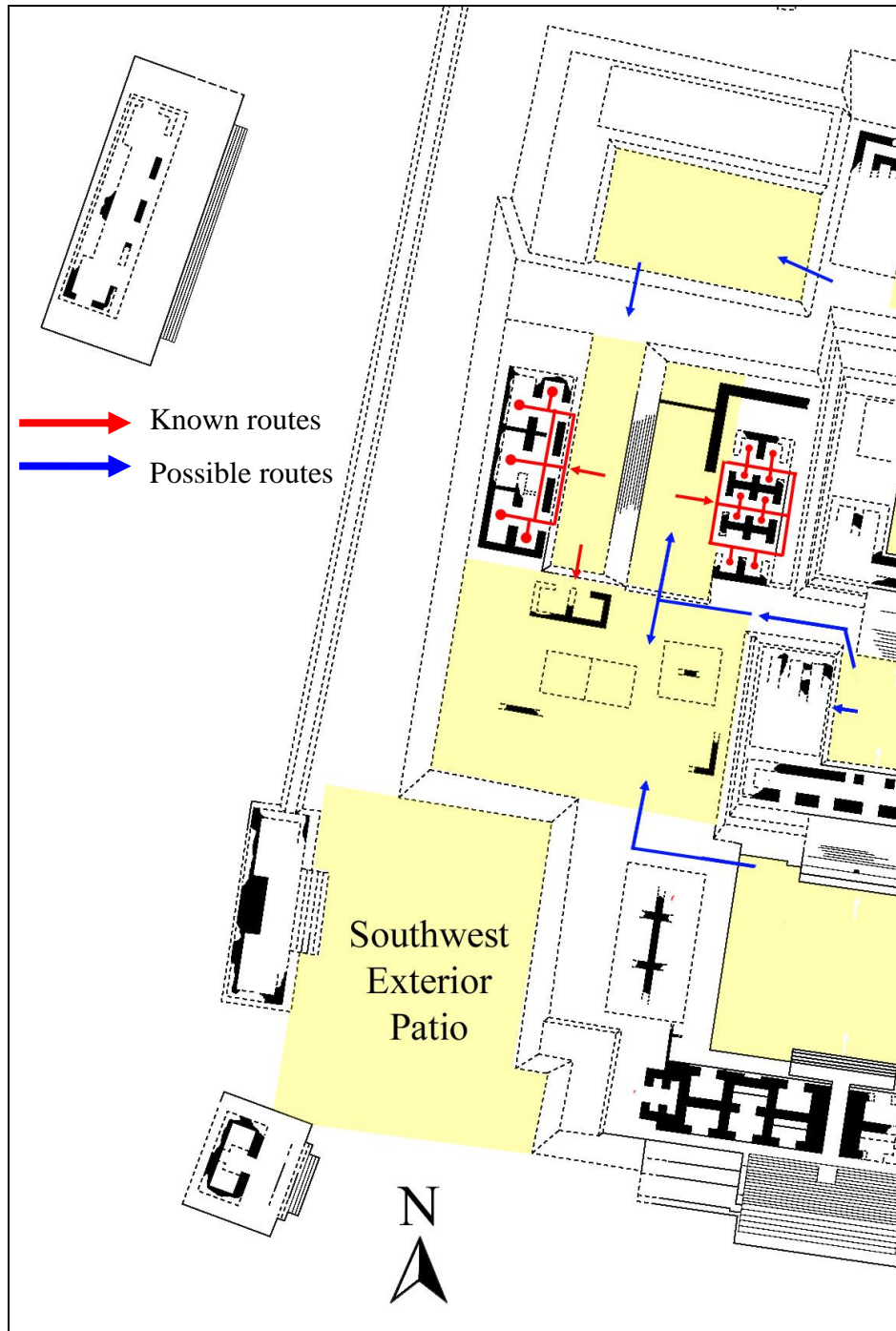
13. Allusory function: The layout of structures L7-12 and K7-33 is similar to other elite residences found in many Lowland Maya sites, suggesting a similar function. However, no direct archaeological evidence of domestic activities has been found yet, given that the rooms of K7-33 were intentionally filled and Structure L7-12 interior rooms have not been excavated.
14. Territorial function: The West Patio functioned as royal territory. Given the size and quality of structures L7-12 and K7-33, this area is the best candidate for the royal residence of *Taj Chan Ahk* and his immediate relatives. Although it is a private area, it has indirect communication with the Central and South Patios, where the king and his family could have joined the rest of the royal court for attending visitors or ceremonies involving different strata of the site's nobility.
15. Aesthetic function: Some evidence of sculptural motifs have been found, though in much small scale compared with other public areas.

12.4.3 Southwest Patio

1. Permanence: No chronological data are available for this area, but it is probable that it was built until the Fourth Episode of the acropolis.
2. Scale: It constitutes a large area without any defined patio, similar to the Southeast Patio, but containing three small structures with one or two chambers, similar to Structure L7-22.
3. Centrality: It is a peripheral area that is spatially associated with the West Patio and the western edges of the Central and South patios.

4. Uniqueness: The location of structures K7-34, K7-35 and L7-13 is the only portion of the royal palace that is not arranged as an enclosed patio.
5. Visibility: This area was visible only from the west side of the site and it seems that all three buildings face north, meaning that they were designed to be part of the West Patio, with no reference to the exterior areas of the acropolis.
6. Access: This area was accessed from the West and South Patios, though a small corridor could have connected with the Central Patio. It is not clear if there was an external south staircase that descended to the small court in front of Structure K7-1.
7. Proxemics: The distribution of small open spaces between the three buildings suggests that it falls into the category of personal distance, while the southern side seems to be more of a social distance, maybe an area designed as a walking area directed towards the South Patio.
8. Privacy: The lack of an enclosed arrangement makes this area not as private as the West Patio. However, its three buildings face north, making the north side of the patio much more private than the south side.
9. Territoriality and boundaries: This area seems to be directly associated with the West Patio, something that question its definition as a separate space. However, none of its three buildings have been investigated and all interpretations are very speculative. In any case, this patio served as a physical boundary that separated the royal residence in its south side. In fact a small wall was added south of Structure L7-13 as a late modification, which closed its access from the South Patio.
10. Archaeological context: No excavations have been carried out in this area. However, some superficial cleaning suggests that these buildings had one or two chambers.

11. Modifications: A small division wall was added probably as part of Episode Six, blocking the south access, but probably not affecting its original function.



12.10 Access analysis of the west section, royal palace of Cancun
(Map by T. Barrientos)

12. Referential function: The location of structures K7-34, K7-35 and L7-13 south of the West Patio suggest that these buildings had complementary functions, such as private shrines, thrones, storage rooms, or even residences.
13. Allusory function: Single or double chambered structures are very common in Lowland Maya sites, suggesting that they could have been individual residences or spaces for storage.
14. Territorial function: The Southwest Patio could have been part of the royal residence territory, serving complementary functions such as storage, temporal space for servants, private area for royal domestic ritual and ceremonies, or even residence or a small presentation area.
15. Aesthetic function: No evidence of decoration or symbolic aspects has been found.

12.5 Spatial-Functional Analysis of the Royal Palace

All the previous analyses reflect the complex planning of the royal palace during Episode Four, when ruler *Taj Chan Ahk* invested a large amount of material resources and labor force in order to create a material representation of his political plan and inherent power ideology. Subsequent modifications show how the architecture managed to reflect internal sociopolitical changes.

In terms of scale, the royal palace compound of Episode Four became an unprecedented architectural monument for the site and the entire Pasión River region. It included 12 internal patios that make a total area of 8,710 m², with a capacity of gathering up to 650 people at once (Figure 12.11). However, it is unlikely that all palace areas were used simultaneously, given their different nature. A more conservative

estimate suggests ritual events having a maximum of 250 attendants in the Main Plaza, 160 attendants in the Central Path (North, Central, and North patios), and 120 attendants in the Northeast/East patios.

Of all open spaces, the Main Plaza is definitely the largest, followed by the Northeast Patio and the South Patio. These closed plazas are surrounded by large range buildings, such as L7-9 and L7-26. However, the Northeast Patio does not have such large passage palaces, indicating that it did not have concentrated large audiences. The remaining patios are much smaller, with less than 150 m², where the North Patio stands as the smallest, covering only 64 m². The scale of buildings correlates very well with the size of their associated patios and the privacy, proxemic, and visual conditions (Figures 12.12, 12.13, 12.14).

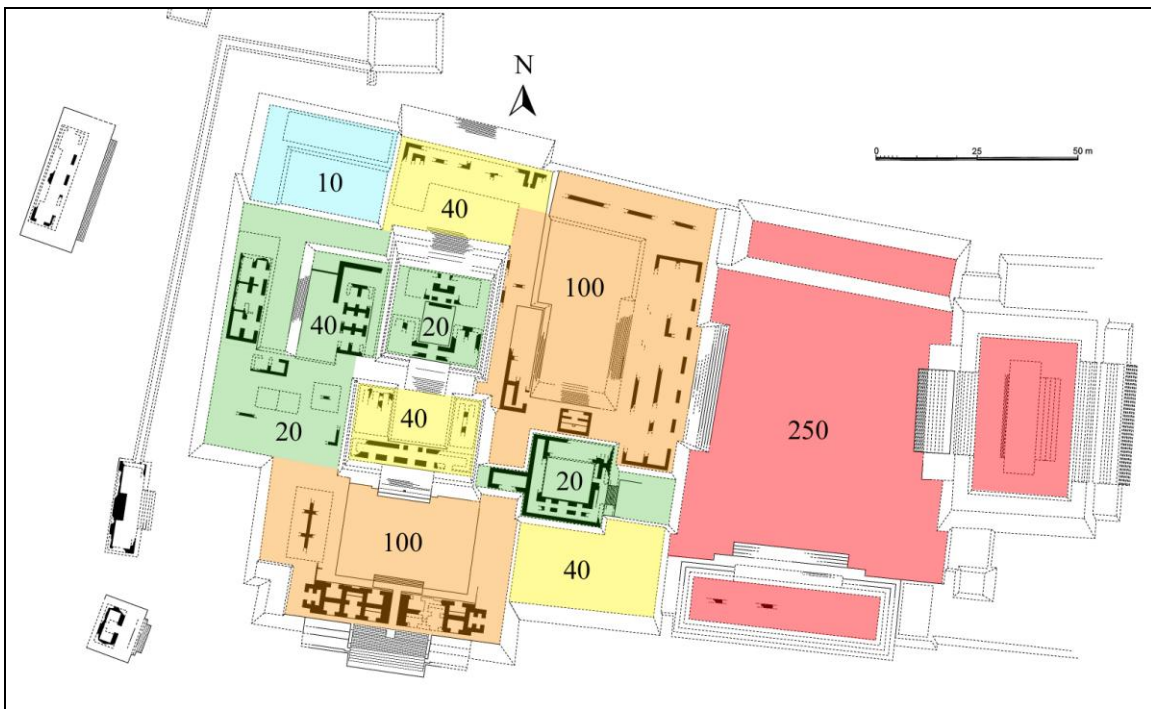


Figure 12.11 Map of the royal palace showing calculated capacity of persons for each patio (Map by T. Barrientos)

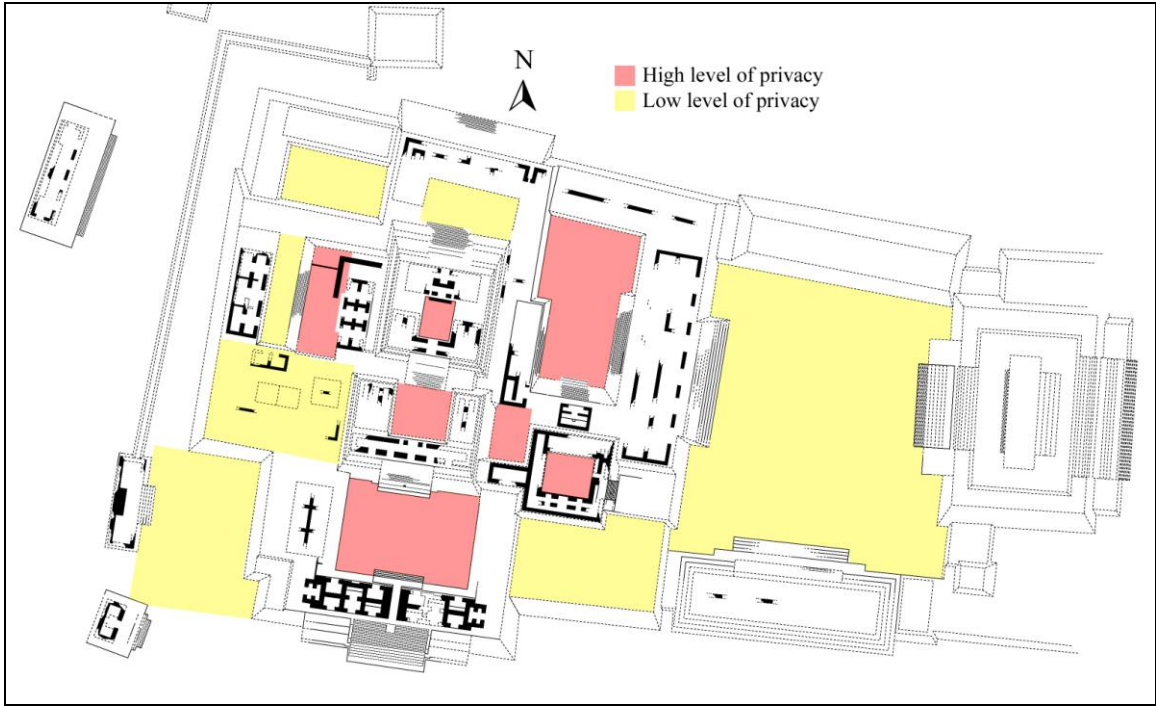


Figure 12.12 Map of the royal palace showing degree of privacy of each patio
(Map by T. Barrientos)

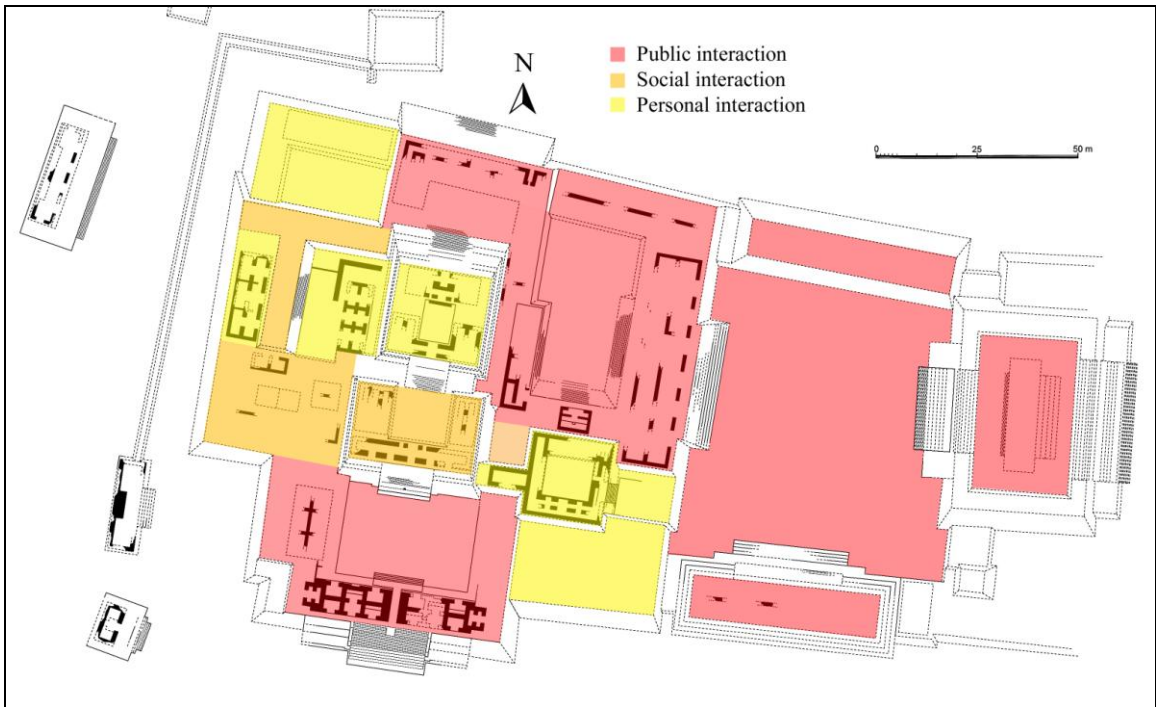


Figure 12.13 Map of the royal palace showing proxemic analysis of each patio
(Map by T. Barrientos)

For that reason, it is argued that only small scale private compounds were used as permanent residences, such as the case of the West, East and Northwest patios (Figure 12.14). Despite the similar scale of the North Patio, its centrality, vertical location, and restricted access makes it unlikely to be a permanent residence. The long rows of private rooms of structures L7-14, L7-15 and L7-16 seem to correspond to temporary residences for important visitors or storage areas. This would then suggest that 30 to 50 persons (average of 40) resided permanently in the West and East sections, plus 20 or 30 additional personnel (military guards and sacristan/priest officers) that could have also stayed overnight in some of the ritual and residential areas. If a maximum of 40 temporary residents could have been accommodated in areas designed for that purpose, then a total of 90 to 120 people (average of 105 people) inhabited the palatial complex at the same time.



Figure 12.14 Map of the royal palace showing areas used for permanent and temporary residence (Map by T. Barrientos)

The analysis of access, privacy, proxemics and visibility confirms the initial spatial interpretations of the Central Section. The sequential design of the South, Central and North patios constitutes a path initiating in the southern staircase of Structure L7-9 and ending at the throne room in L7-1. The aesthetic, epigraphic and spatial elements found in this route make it a statement of the power structure and ideology characteristic of Late Classic Lowland Maya rulers such as *Taj Chan Ahk*. Based on the spatial and symbolic analysis, this route can be interpreted as reserved for important foreign visitors and local nobles of the higher status at the site (Figure 12.15).



Figure 12.15 Map of the royal palace showing the central route (Map by T. Barrientos)

While the South Patio served to perform private ceremonies with entire retinues, the upper areas were accessible only to the main actors. Also, the north end of this route is also connected to a public stage located outside the north side of Structure L7-1, where the ruler could have addressed a large audience, combined with ballgame rituals of a more public character than those performed in the more restricted East Ballcourt. The lack of formal lateral accesses also suggests that the ceremonies performed in the Central and North patios were not associated with the East Section, although it is possible that it had a restricted access to the royal residence area in the West Section (Figure 12.16).



Figure 12.16 Map of the royal palace showing areas defined with high degree of centrality, suggesting spaces designated for activities related with the king and the royal court (Map by T. Barrientos)

The East Section was designed to conduct secondary rituals that could have or not involved the participation of the king and its entire royal court. In the Northeast Patio, a “secondary” throne room in Structure L7-22 seems to be directly associated with the East Patio to the south, which could have been a royal or high-elite residence. In any case, the presence of multiple chamber buildings in the west side of the patio suggests the presence of important actors. Also, given the relative large size of the patio, it is possible that it was an area reserved for private feasts, while the adjacent Main Plaza could have been used for larger events that could have involved food and drink, as it is suggested by the presence of a large kitchen in Group L6, located southeast of Structure L7-26.

The West Section has different spatial characteristics, making it the most suitable area for private permanent residences. Other confirmed royal residences in Tikal, Aguateca and Copan show a high degree of privacy, and unlike large presentation areas such as the Caracol Caana or Calakmul Structure II, the residences in Tikal, Aguateca and Copan consist of medium sized patio compounds attached to larger acropolis or plazas. For this reason, structures K7-33 and L7-12 are the best candidates for the royal residence of *Taj Chan Ahk* and its immediate family, and the archaeological evidence suggests that L7-12 was built first, and K7-33 was added later. Despite the strong spatial evidence, no archaeological evidence in the form of benches or middens can confirm this interpretation, so future excavations will be important. Nevertheless, earlier levels of occupation do show evidence of residential activity, including one burial. Also, other possible residential buildings surround the West Patio: Structure K7-2, located directly in front of K7-33; the perishable L7-11 in the Northwest Patio; the small structures of the Southwest patio; and Structure K7-1. It is important to note that the addition of low walls

only in the West Section could also suggest that its main purpose was to defend or separate the royal residence. Within this scenario, structures K7-1 and K7-2 may be interpreted as part of the royal residence compound, even though they are located outside the Acropolis main platform.

Special attention is required to interpret the different peripheral sectors of the acropolis, because they constitute areas or buildings that lack strong archaeological contexts and are difficult to interpret according to traditional functional standards for Maya palaces (Figure 12.17).



Figure 12.17 Map of the royal palace showing peripheral buildings that functioned as passages, or gateways (Map by T. Barrientos)

Structure L7-9 is one the best known buildings of the royal palace compound, and corresponds to the “passage”, “gateway”, “open hall” or “long house” category. Its initial layout was clearly designed to conduct visitors through a central corridor or to lateral open rooms, as an antechamber to the South Patio, where important ceremonies were

performed by the king and his visitors. However, the modifications of Episode Five closed all lateral accesses and created multiple single rooms, some with benches and small interior staircases, like small thrones. This pattern was probably replicated in buildings like L7-26, something that will be confirmed only with excavation. In any case, what is more interesting is that these rooms did not face the interior space, but the external façade and staircase. This thus suggests that these rooms were created to attend visitors that did not access the South Patio. The best available explanation is that these spaces were created to attend local visitors, probable non-elite, for activities such as tribute collection. This scenario also implies that these spaces were used by non-royal elites that also did not have their own private space in the interior areas of the acropolis, thus serving as intermediaries between non-elite actors and the royal court (Figure 12.18).

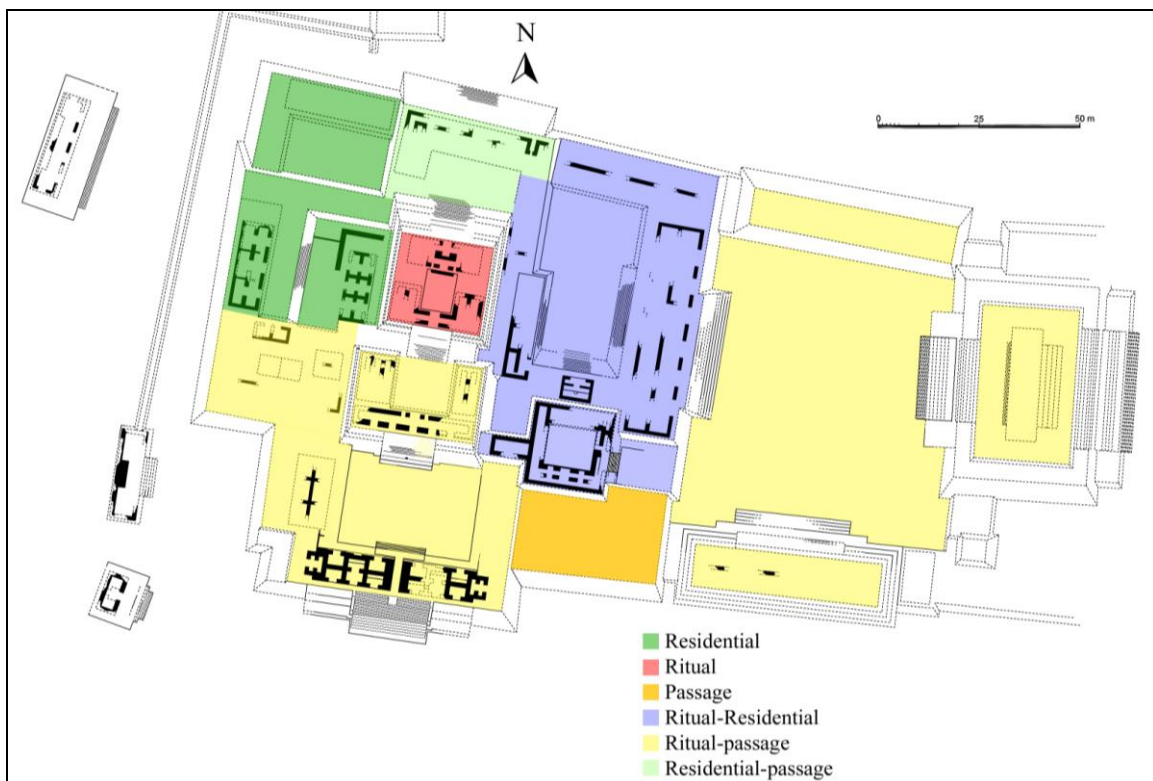


Figure 12.18 Map of the royal palace showing the possible functions of each patio (Map by T. Barrientos)

The creation of these new spaces during Episode Five would then reflect a pattern of a growing non-royal elite group, possibly coming from other regions, as it has been reflected by the distribution of the different ceramic traditions present in Cancuen at this moment. This growing secondary nobility soon claimed its own territory in the royal palace, which ultimately transformed some of the peripheral buildings, especially in the southern edge and the areas surrounding the Main Plaza.

The north periphery of the acropolis seems to have had a different orientation than the south side, given its direct association with ballgame rituals. For that reason, Structure L7-14 shows a different function than L7-9, being more private initially and later buried to enlarge the stage created by the pyramidal south façade of L7-1 during Episode Five.

The east periphery during the fourth and five episodes is still poorly understood, but the modifications carried out during Episode Six clearly indicate a direct association with the East Plaza, especially Structure M7-1 and its attached Ballcourt. The presence of six plain stelae at this side suggests that this connection with the East Plaza was part of the original design during Episode Four.

To sum up, the detailed spatial and functional analysis of the royal palace interior patios and their associated buildings confirm the general interpretation of the entire acropolis as a multifunctional space, with all its components arranged in a hierarchical design. Its intricate layout with clear distinctions in size, access, decoration, and visibility indicate that it was a building complex planned to cope with a particular sociopolitical structure, but at the same time, its constant modifications indicate that it was also adapting to the social changes coming from within the society as well as external

pressures. Hence, the royal palace was an agent of change itself, where architecture played an important role in staging social practice within the royal court and its interaction with foreign and local non-royal elite groups that claimed social and political participation through their access to the different areas of the palace, according to their status.

CHAPTER XIII

FINAL DISCUSSION AND CONCLUSIONS

After a thorough revision of structural-spatial theory, comparative data relevant to Maya palaces, and the result of investigations in the palatial complex of Cancuen, it is now possible to focus on the main goal of this dissertation: the relationship between architecture and social structure. This is the basis for finding a correlation between the built environment of the royal court at Cancuen and the goals and intentions of its political leaders, as a general indicator of the social complexity and power strategies in the Maya Lowlands during the second half of the eighth century C.E.

Therefore, the challenge has been to discern the non-evident social structures that were present in Cancuen during the reign of *Taj Chan Ahk*, based on his architectural program centered on the royal palace. Those social structures include the means, ends, norms, principles and conditions created by *Taj Chan Ahk* and his royal court; and how they related to the social practice of the secondary elites and the rest of the population. Structural approaches applied to the interpretation of ancient Greek palaces have proven how the contextual and structural study of architecture can modify previous perceptions of the broad sociopolitical systems of these ancient societies. As for the eighth century Lowland Maya centers like Cancuen, the systematic and detailed diachronic and synchronic study of its palatial architecture has evidenced important patterns in the internal and external sociopolitical strategies that also reflect broad processes that have been identified in other contemporary centers.

For understanding the implications derived from the different analyses carried out in the royal palace of Cancuen, it is important to review and integrate the specific theoretical, chronological, and functional interpretations presented in the previous chapters:

13.1. The royal palace of Cancuen: A socio-spatial structure of power

In structural terms, the palace was a true institution in Classic Maya cities, both in the material as in the social sense. It was replicated in all important centers, but each one shows individual variations that corresponded to specific local needs. Just like Minoan palaces, Maya palaces were contextual variants of the same architectonic organization that was part of a particular sociopolitical structure (*K'uhul Ajaw*, “divine lord” rulership), whose main characteristic is a hierarchical spatial pattern that separates royal and private areas from the non-royal and public ones. However, each individual palace was built using different materials, styles, and dimensions, avoiding the fixed spatial patterns that were developed by other past complex societies.

Therefore, the royal palace of Cancuen can be defined as a social institution that did not function as a coercive system that restricted or constrained the elite and non-elite action entirely, but one that enacted a more reciprocal social structure based on the hierarchical interaction at different levels. It was an institution based on cognitive orientations, shared values, abstract principles, and cultural norms legitimated by a relatively stable and enduring state ideology that was common to all Maya centers of the Classic period. That ideology was based on a cosmological vision and symbolic system that determined how people perceived the world.

The sociopolitical structure that existed in Cancuen was centered on the ruler, the *K'uhul Ajaw*. It also enabled, organized and coordinated the development of an *officialized social practice* between the higher levels of the society, which validated their social status and roles throughout its continuous reproduction or regeneration.

In a materialist perspective, these social relations had to be ordered by the presence of spaces and buildings. Within this framework, the royal palace of Cancuen was the physical reproduction of the social and political structure; a manifestation of the social system that is hidden behind physical objects. It is what Bourdieu defined as a *sociocultural field*; a dynamic social space that expressed the particular social structures that work behind them. In Giddens terms, it was a *social locale*; the spatial context where material circumstances shape the opportunities of interaction and behavior.

The royal palace of Cancuen was thus a *structuration space* that has to be understood within a hierarchical approach to social structures, where high level structures (elite protocol) were the ones that played an important role in the palace, and the ones that shaped the social order. Given that its scale and elaboration exceeded the everyday practice, the royal palace reflected the values held by elites, expressed in collective meanings understood by the population. In other words, the palace was a material expression of the ideology that constructed representation of social control, where the *K'uhul Ajaw* was a macro-actor, given his high degree of political agency. For that reason, the palace was studied in relation to the rulers that were responsible for its construction and modifications, as well as the political actors that made use of the built environments.

A simple morphological analysis was not enough for finding functional interpretations for such a complex palace compound, given the high variability found in all Classic Maya palaces and other architectural expressions in general. Instead, a more contextual approach was necessary to find the motives behind its design, trying to understand the structured distribution of architectural features and the network of relationships between rooms, patios and other functional zones that correspond to the same construction episode. This contextual analysis also includes inferring additional meanings that are not directly visible, making it necessary to measure and recreate the conditions of elite social practice, such as rituals, ceremonies, and processions.

Spatially, the royal palace positioned the ruler and its court as central, elevated, restricted, private, separate, and circumscribed, but at the same time accessible through visible public performance stages and gateway halls that gave the notion of access and proximity, bridging the ruler with his subordinates. All its internal components were articulated to create true performance spaces designed to hold small and large audiences, whether in closed courtyards or open plazas. According to the theatrical approach, a community needs constant physical gatherings in order to stay integrated. For Cancuen and other Classic Maya centers, these were highly ritualized spectacles.

In conclusion, the royal palace of Cancuen instituted reality and officialized facts and relations, structuring collective behavior in the sense that the activities and modes of interaction within that physical space produced and reproduced social structures across time and space. In its final shape, it was the main arena for a protocol of routinized practices carried out and recognized by the members of the royal court, secondary elites, and indirectly, the rest of the society. It created and sustained the patterns of power

relations at the site, because the nature of these relations determined who had access to power resources. These practices and patterns took the shape of public, semi-public, and private rituals and ceremonies that prescribed the roles, behavior and interaction of internal and external political actors. The structures of power, privilege and inequality were created, enacted and recreated within the palace, regulating membership to the elite and royal groups. In that sense, the palace can be defined as an institution that functioned as storage container of power, which was part of a larger political system that was common to all Late Classic Maya cities.

13.2. Dynamic development of socio-spatial structures at Cancuen

The interpretation of the ideological system and sociopolitical structure represented by the royal palace of Cancuen is an important contribution for understanding the development of a state ideology during the Late Classic period in the Maya Lowlands. While most of the visible architecture of the palace reflects the situation of Cancuen during the reign of *Taj Chan Ahk* between 757 and 799 C.E., it was also the product of a short but exemplary political evolution since the foundation of the site in the mid seventh century. For that reason, a diachronic chronological approach to the palatial architecture at Cancuen complements the synchronic spatial and functional conclusions, in order to understand the role of the royal palace as the material expression of the sociopolitical changes that occurred in Cancuen and the Maya Lowlands between 650 and 800 C.E.

Consequently, the architectural changes in the royal palace of Cancuen constitute the best material evidence of the internal and external processes that made *Taj Chan Ahk*

the most powerful ruler of the Pasión River for a 40 year period. Given that the changes in size, function, and organization of architecture reflect changes in the nature of social power, the chronology of the royal palace shows how *Taj Chan Ahk* transformed a modest sized portage settlement into an innovative political center that was engaged in political and economic relations with the Northern Maya Highlands, the Usumacinta region and other distant areas of Mesoamerica. Evidence coming from the residential zones of the site indicates that *Taj Chan Ahk's* strategy was largely based through the incorporation of highland populations and sub-royal elites within an economic regime that took advantage of a strategic geographical position, in order to produce and distribute large quantities of raw materials, tools, and exotic goods to the rest of the Maya Lowlands.

The epigraphic and archaeological evidence indicates that Cancuen was founded as part of the expansion of the *K'aanal* kingdom under the direction of ruler *Yuknoom Ch'en*, around 650 C.E. During this time, the first version of the acropolis consisted of various low clay platforms that supported perishable superstructures. This clearly reflects the arrival of non-local elites of Lowland origins that had to interact with the surrounding highland populations. It is important to note that during the seventh century, most Lowland Maya sites were not characterized by having complex and monumental palatial compounds, suggesting that they were still reserved for residential purposes and some degree of administrative and ceremonial functions. A high degree of centralization can be inferred, revolving around the figure of the *K'uhul Ajaw*. In Cancuen, this pattern indicates that the first acropolis version could have been used as the royal residence for the first rulers, such as *K'iib' Ajaw*, who were vassals of the *K'aanal* kingdom. The

architectural pattern includes the existence of a basal platform indicating physical separation, but with no visual restriction from the rest of the small settlement that surrounded it.

The next change in the acropolis correlates with the decline of the *K'aanal* hegemony and the rise of Dos Pilas as the site that controlled Cancuen. Although the central structure of the royal palace was substantially enlarged, it seems that the sociopolitical structure of the site did not suffer any relevant changes from the previous episode. However, the architectural plan of Dos Pilas does reflect the beginning of the rise of independent secondary centers and the fall of hegemonic states, which happened when Calakmul, capital of *K'aanal*, and its allies were defeated between 695 and 744 C.E. The strategic importance of Cancuen was not reflected in its own architecture, but in the architecture of Dos Pilas, where the queen “Lady GI-K'awiił” (native from Cancuen) had her own residential palace, built with the best quality stone masonry and carved hieroglyphic texts.

The rise of Cancuen in 761 C.E. as the new powerful center of the Pasión River region correlates with the accession of ruler *Taj Chan Ahk* three years before. In addition, the palace built by *Taj Chan Ahk* around 767 C.E. clearly evidences the execution of a master plan that constitutes the majority of the visible architecture today. Although the palatial complex was constantly modified during the next 30 years, most of these alterations did not mean substantial material additions compared with the massive constructions dated to the beginning of *Taj Chan Ahk*'s reign.

The monumental royal palace of *Taj Chan Ahk* became an important instrument of a new sociopolitical structure, expressed with physical and visual restriction, and a

strong notion of separateness. However, at the same time, it was necessary to interact with a variety of social groups, ranging from visiting kings and allies, members of the royal court, local secondary elites, and the rest of the population. For that reason, the palace contained different sizes of open spaces (patios) and many types of individual buildings (permanent and temporary residences, throne rooms, gateway halls, etc.), some of them richly decorated with elaborate stucco sculptures. Both the architecture and its decoration were executed with the aid of foreign artists that were brought from Palenque or other sites of the Usumacinta zone.

The synchronic analysis of all its components indicate that it was a true multifunctional built environment, designed to stage the complex social practices of the royal court and its relation with the rest of the society. Unlike traditional and previous morphological and functional interpretations, most areas of the palace do not evidence a permanent residential use. Instead, the arrangement of buildings, accesses, and other socio-spatial variables indicate that many interior chambers were not suitable for habitation, but for conducting and holding processions, ceremonies and other private and semi-public activities that engaged between 100 and 250 persons at once. In addition, it is unlikely that more than 65 people lived permanently inside the palace, including the royal court members, and other ritual specialists and guards. The archaeological evidence indicates that this palatial complex was not used for funerary practices or ancestor worship, which constitutes a pattern found in almost any Maya palace of this time.

The most important aspect of the royal palace design is the fact that all buildings were arranged in a hierarchical organization rested on the proximity to the royal residence, throne rooms, and other spaces where there was interaction with the king. This

was particularly important for medium sized sites like Cancuen, where the contact with the ruler was probably more common than other larger centers.

13.3. *Architecture and Political Order in the Maya Lowlands: 780-800 C.E.*

Thanks to the micro-chronology based on architectural seriation, a series of minor modifications in the royal palace of Cancuen have been identified after 780 C.E., showing an increased need for access restriction, and private spaces in the outer rim or perimeter of the acropolis. While this pattern has been observed in other contemporary centers, no explanation has been proposed yet. For that reason, the processes identified in Cancuen suggest that this architectural pattern reflects an important structural change in the sociopolitical nature of Maya sites during the last decades of the 8th century C.E. The presence of monumental palatial complexes and long multi-roomed halls or audiences correlates with the decline of centralized authority and the increase of regional rivalry and conflicts, which is expressed by the proliferation of carved monuments portraying war captives and non-royal elite individuals with titles like *Sajal* or *Aj K'uhun*, as it is the case for Cancuen Panel 3.

Hence, the pattern in Cancuen and other contemporary centers is segmentation, where the many audiences, halls, and reception rooms were probably used for tribute collection and other activities involving the growing non-royal elites (Figure 13.1). The fact that the long gateway buildings are the ones with evidence of this late and periodic remodeling, while the interior, private, and smaller structures don't, clearly suggests that this spatial pattern does not relate to the core of the royal court. Instead, the pattern suggests a changing structural relationship between the royal court, secondary elites and

the rest of the population, which was produced and reproduced in these exterior buildings. At the same time, the architectural evidence indicates that royal residences moved to more private, restricted, and defended spaces.

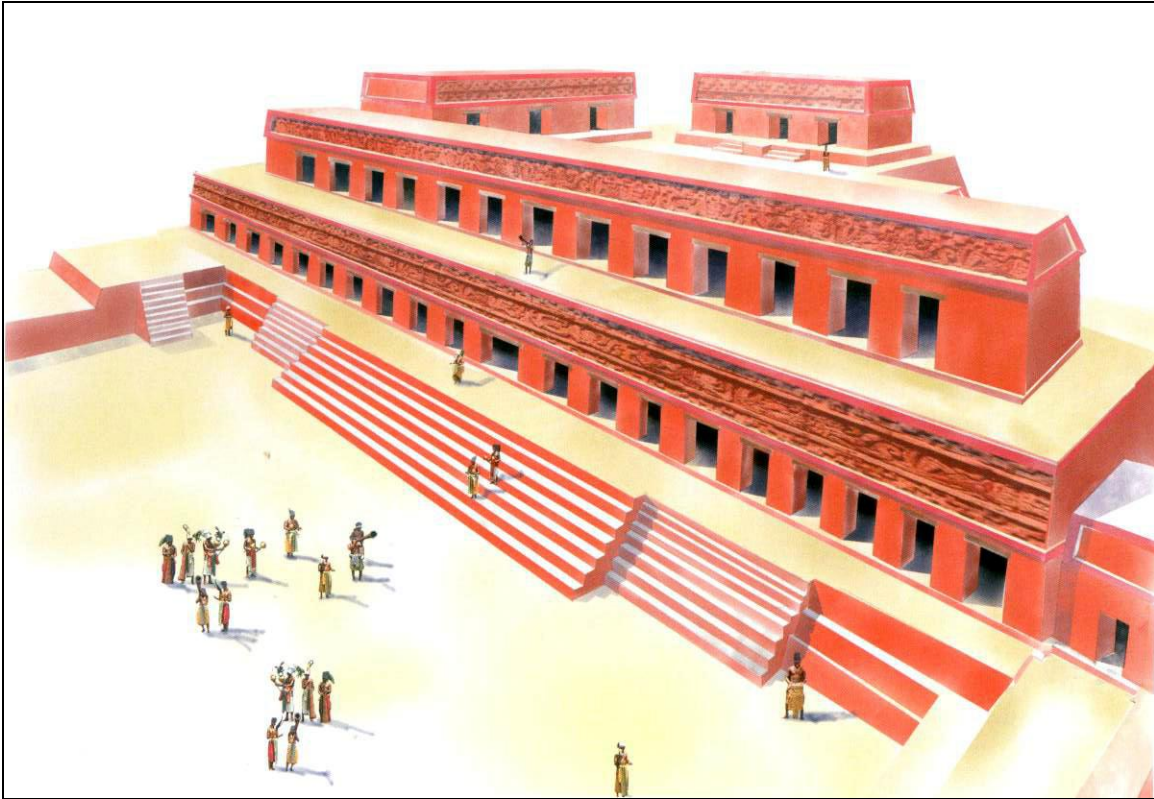


Figure 13.1 Hypothetical reconstruction of Building III, San Clemente
(Drawing by Breitner González and Telma Tobar, from Quintana 2013:206)

The appearance of jade, chert, and obsidian artifacts as part of caches and funerary offerings, correlated with the proliferation of workshop areas occupied with populations coming from different regions, suggest that these structural changes are associated with a rising merchant economy. In fact, the presence of a semi-public ceremonial area in the palace (Main Plaza) could have held feasts that integrated the emergent sub-royal or merchant groups at the site, but always in a peripheral context separated from the royal and central territory.

Unfortunately, this sociopolitical process at Cancuen was truncated with the assassination of the entire royal court in 800 C.E. and the subsequent abandonment of the site. The short-lived prosperity of Cancuen ended as the new ruler *K'aan M'aax* acceded to the throne after his father's death the year before. Although the direct causes are still unknown, it seems clear that it was the result of the overall competition with other neighboring kingdoms to the north (Machaquila and Ceibal) and south (Raxruha and Chinaja). Nevertheless, the segmentation of Lowland Maya centers and the changes in the merchant economies did continue in other sites with monumental palace complexes that survived during the ninth century or the ones that flourished in the northern lowlands of the Yucatan Peninsula, such as Uxmal, Ek Balam, Dzibilchaltun, Edzna, and ultimately, Chichen Itza. It also seems that the final result of the process was the development of the *multepal* political system during the Early Postclassic period.

As the final concluding remark, it is important to recognize that the major event in the architectural history at Cancuen constitutes the construction of its monumental palace in 767 C.E., under *Taj Chan Ahk* regime. At the same time, it is the moment when a new political and economic order was institutionalized. Nevertheless, this episode belongs to the long development of Maya palaces that can be traced many centuries before and after, as well as to other Maya sites. For that reason, it is clear that the institution of royal courts and their palaces did not represent a rigid system, but an active and dynamic structure that changed overtime until the end of Maya civilization.

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