

THE ORGANIZATION OF SPACE IN A CLASSIC MAYA CITY: THE CENTRAL PLAZAS AT MACHAQUILA, PETÉN

Andrés Ciudad
María Josefa Iglesias
Jesús Adánez
Jorge E. Chocón

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The program carried out by a team of archaeologist from the Universidad Complutense de Madrid and the Atlas Arqueológico de Guatemala in the ancient Maya city of Machaquila (Figure 1), has as its main objective comprehending the internal political structure of this Classic capital as well as learning about its territorial organization and the political relationships with other neighboring entities, to define its significance in the geopolitical sphere of the Late and Terminal Classic kingdoms from the southern Maya lowlands.

In the framework of this overall perspective, works conducted so far have been oriented towards unraveling the relationships of chronology and evolution in the urban center as well as the connection of local elite or non-elite groups with the focal points of power. There is also an interest for gaining knowledge about the function of the monumental groups of architecture at the site, and for establishing the existing relationship between them and the most important domestic groups, based on contextual affinities, the analysis of material culture, and other archaeological, iconographical and epigraphic documents.

With such objectives in mind, two field seasons were completed at Machaquila; there, and through different test excavations carried out in the structures that integrate the central groups and their relationship with the plazas that form the arrangement, it was possible to go deep into the history of the construction at the site. Objectives were multiple:

- On one side, we attempted to gain knowledge on the architectural characteristics of the urban center through the external analysis of buildings and major spaces, detecting the modifications they were subjected to.
- On the other, to establish a more refined chronology, defining the moments of occupation and use and the re-adaptation of spaces throughout their useful life.
- A third goal consisted in correlating the events established through the archaeological excavation with the historic reconstruction provided by epigraphic and iconographic documents.



Figure 1. Localization of Machaquila within the Maya area.

EXCAVATIONS AT MACHAQUILA DURING THE 2002 AND 2003 SEASONS

The program of activities was designed with the purpose of exposing the largest possible number of superficial architectural traits, though with the minimum possible removal of rubble. Together with the opening of stratigraphic pits in the conjunction of structures and plazas –as well as the examination of the existing looting trenches-, this approach of a predominantly horizontal character has made it possible to provide a wider view of Machaquila’s architecture along its final phases.

The buildings and spaces intervened are a part of Plazas A, C, F, and of the westernmost patio of Plaza G –from now on, Group G-1 (Figure 2)-, while research in Plazas G and E are still pending.

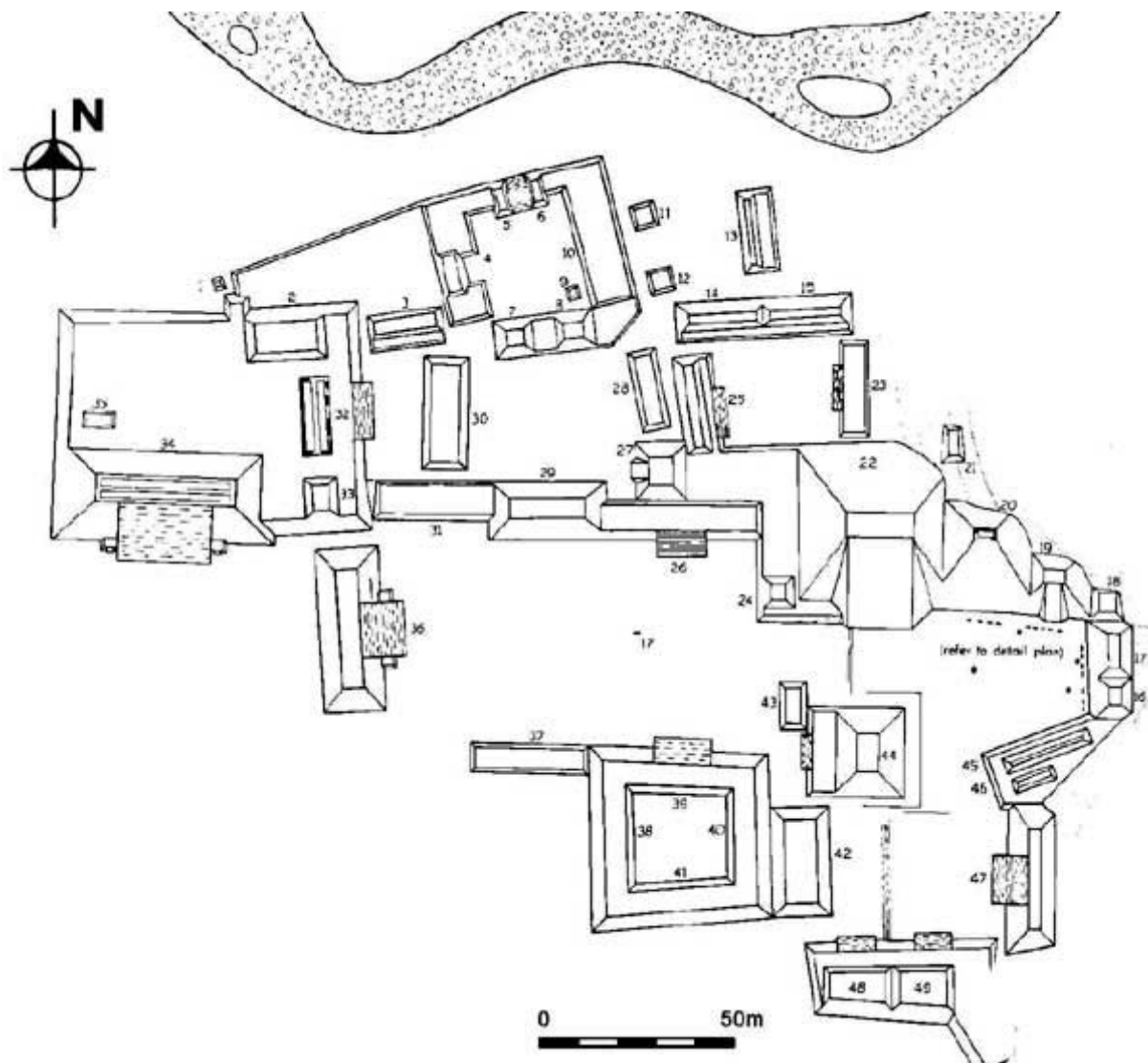


Figure 2. Plan of the central zone, Machaquila (after Graham 1967: Fig. 33).

Plaza A constitutes a monumental group arranged around pyramidal buildings that include Structures 16 to 22, the basic function of which seems to have been the religious and ritual centralization of the population both in Machaquila and the subsidiary localities; very likely, it operated as well as a funerary space for the leading groups of the settlement, and may not have excluded the residential function, like much probably was the case of Structure 45. The presence, association and arrangement of stelae and altar groups in relation with each pyramid building between Structures 16 and 20, favor this presumed funerary specialization; besides, the remains of a small quadrifoliated enclosure right at the plaza center may likewise suggest such a character (Graham 1967: Fig. 42). Unfortunately, all stelae described at the end of the 1960's have been taken away from the archaeological city (Graham 1967), most of them as a consequence of lootings, and the site only shows spikes

and plain fragments of stelae, resulting of the cuts practiced on these monuments to plunder the portions with iconographic and epigraphic carvings.

Plaza C is the largest public space in the city, and its basic function seems to have been that of elite residence and administration. It includes Structures 24, 43, 44, 38, 39, 40, 41, 37, 36, 31, 29 and 26, and is defined by Stela 17, placed at its center. Except for Structures 24 and 44, which close the assemblage at east and may have represented an opening to a religious, ritual and funerary space represented by Plaza A, all these buildings have apparently fulfilled that function, while some of them may have served as distribution platforms.

Group G-1 is also of a residential character, though more private –because of its size and accesses- than that of Plaza C (Figure 2). It has been its intermediate location between Plazas C, G, and E, and its more pronounced elevation in respect to the two first ones what defined the intervention there, focused on the stairway that climbs to Structure 32, and on Structures 3, 30, and 31. As indicated below, the excavation revealed that the group achieved its present configuration after a major architectural modification.

Plaza F, with a total of seven buildings included (Figure 2), completes the relation of the groups examined. These previous data granted special notoriety to Structure 4, in which context a number of ashlar stones carved with hieroglyphic texts and iconographic representations were found, associated with the main façade; this confers a special character to this building, which may have been inhabited by an elite family in charge of ruling the city. This helped us to make the decision of excavating an area that though undoubtedly was a private space, happened to be particularly interesting from the point of view of political and social organization.

MONUMENTAL ARCHITECTURE AND CHRONOLOGY AT MACHAQUILA

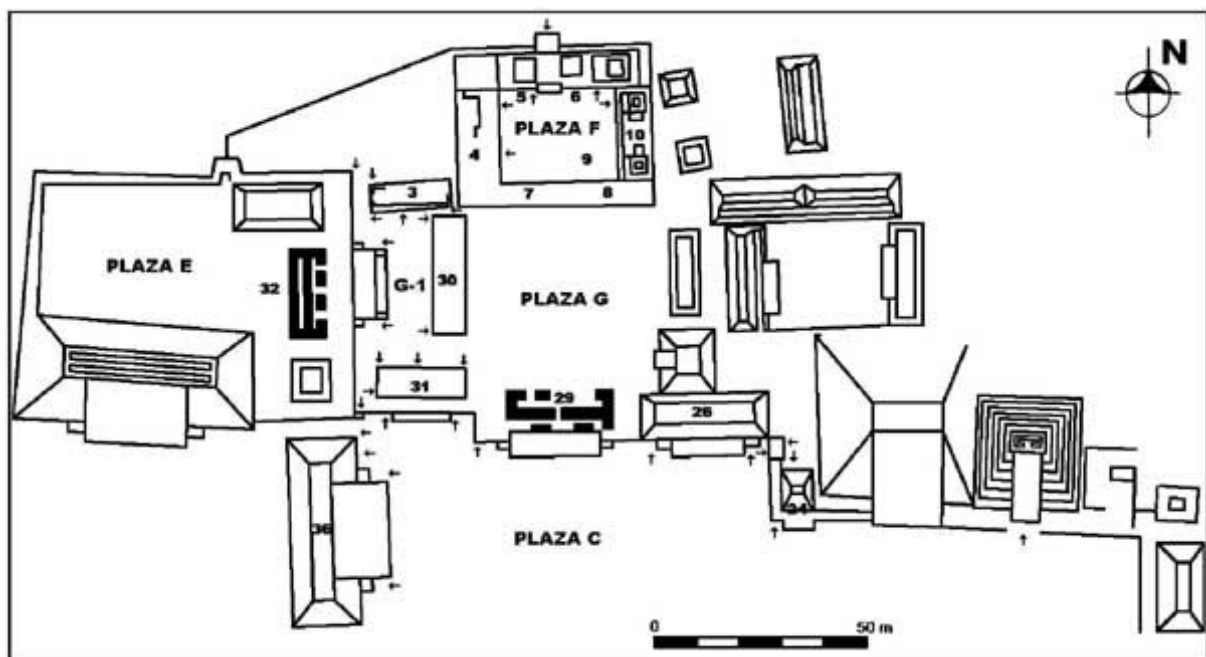


Figure 3. Central zone of Machaquila, showing the sub-operations conducted there.

The archaeological study carried out (Figure 3), though incomplete, makes it possible to advance a number of interesting conclusions, which will, in turn, be of help to orientate future investigations at the site. The general thesis they are pointing to, supports a major architectural transformation, placed, tentatively, around the end of the VIII century AD or the beginning of the IX century AD, in the final phases of the Late Classic, when Machaquila achieved a new appearance. There are several elements which, interrelated, would favor this thesis: the construction of the so-called Quadrangle, the sealing of the vaulted palaces in Structures 36 and 29 associable to the remodeling and construction of stairways decorated with cubes as of Plaza C, and finally, the elevation and closing of Group G-1, with respect to Plaza G. Still, there is not information enough to venture whether the remaining public spaces were also affected: for the time being, it would seem that Plaza F was not, while in the case of Plaza A, indications exist that, if confirmed, would imply they indeed were.

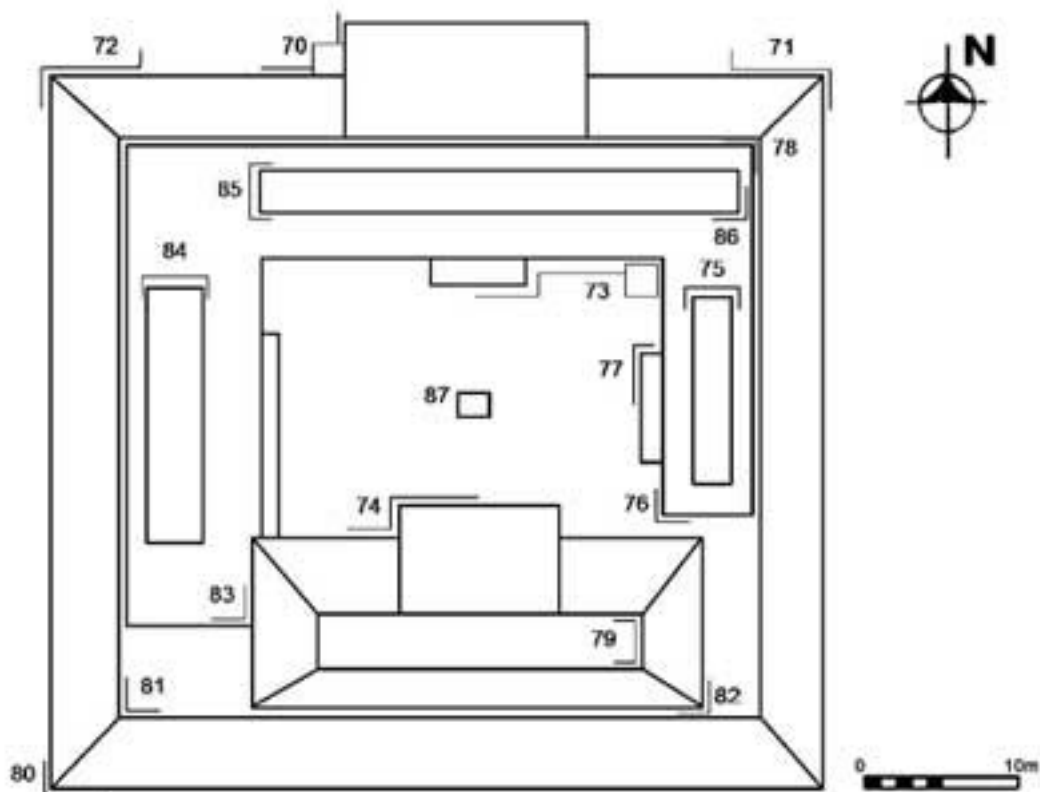


Figure 4. Plan of the Quadrangle showing the sub-operations conducted there.

The Quadrangle (Structures 38 to 41: Figure 4), is an elite residential assemblage built on a rectangular foundation that gave way to an inner private plaza, elevated with respect to Plaza C; access to this assemblage was gained by means of a wide stairway placed on the north side and oriented towards the great plaza. Four structures crown this foundation and close the inner space; they are rectangular in shape and have finely cut stone foundations on which, presumably, walls of a perishable character were built, which rested on a low bench. These buildings show slight differences in size and accessibility, depending on whether or not they include stairways with a greater or lesser number of steps, being Structure 41 the most important one. The materials found in the excavations suggest a chronology dating

to the end of the Late Classic and the Terminal Classic periods. A plain, central altar placed at the center of the inner patio, suggests the carrying out of private rituals by the family group that occupied the assemblage (Ciudad *et al.* 2002).

Constructions similar to this Quadrangle are scarce in the southern Maya lowlands; at least because of its approximately quadrangular ground plan, it would better recall those that are common in the central and northern Yucatan Peninsula, although one with similar characteristics has been defined at El Chal (Morales 1995:32). No doubt, the Quadrangle of Machaquila did not achieve the complexity of the one built at El Chal (Figure 5), because it had no vaulted forms and sculpted decoration associated with architecture, though it may be suggestive of the presence of an architectural type of its own for the end of the Late Classic period in the region, which has been included among the traits connected with the penetration in the area of stylistic influences from the Yucatan Peninsula (Laporte and Mejía 2002a); we shall elaborate on this idea later on.

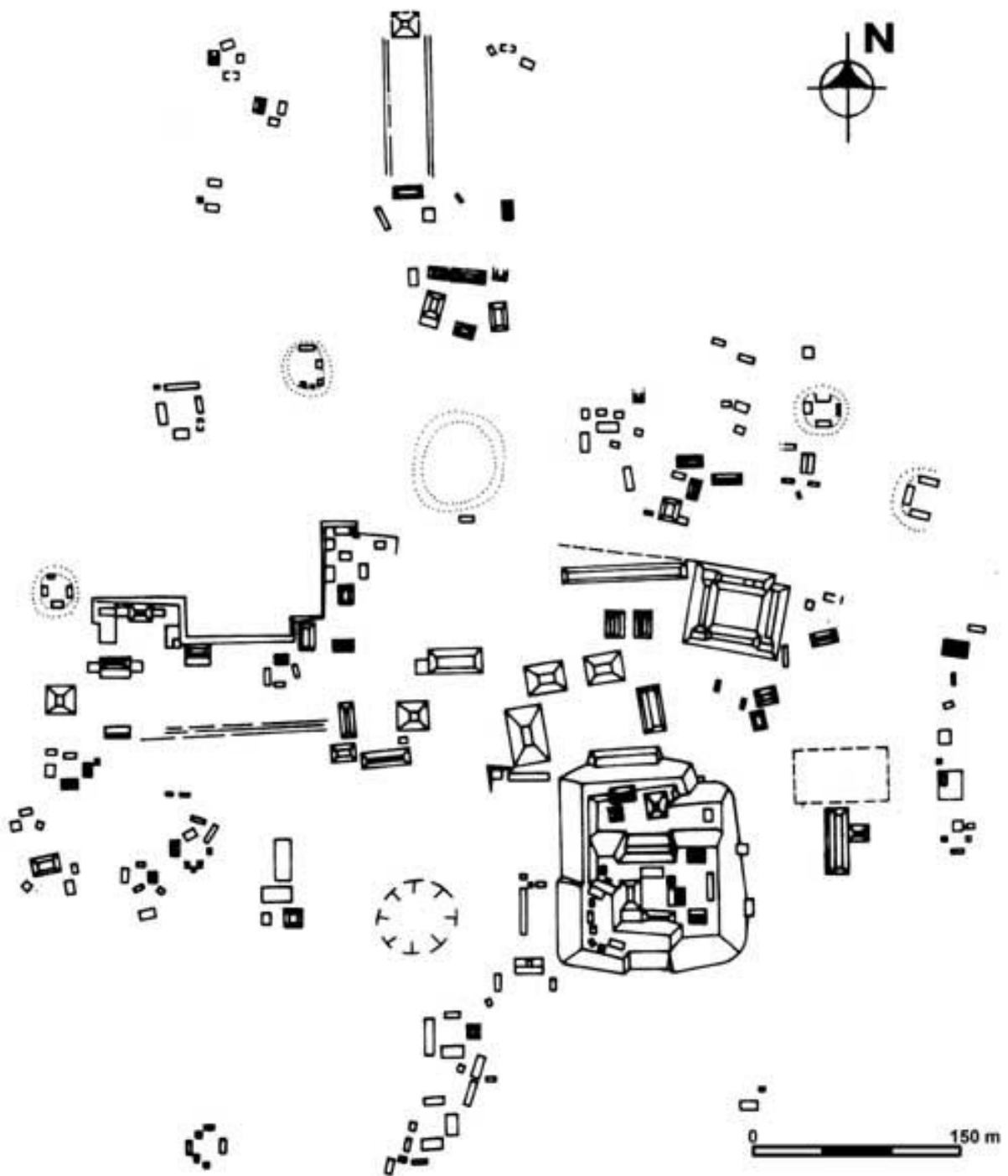


Figure 5. Quadrangle of El Chal (Morales 1995: Fig. 4).

It was at Plaza C, in the southeast sector of which the Quadrangle is integrated, where two construction events were clearly detected. The first one was defined by the presence of two buildings located under the upper surface of Structures 36 and 29, precisely the non-ritual constructions with the largest volumes found in this wide space. Although interventions in these buildings were limited to clearing the lootings opened in the past, this has sufficed to corroborate that they were both built on large refills composed of limestone and dirt, sealed with a thick floor made of packed gravel covered with a thick layer of smoothed lime, and in the case of the palace

hidden under Structure 29, decorated with stucco remains. The respective floors, with a thickness of 0.14 and 0.17 m, supported finely cut limestone walls covered with stucco. Finally, it would be possible to infer the presence of vaults in both structures, due to the thickness of the walls and the width of the rooms. These characteristics suggest an architectural type typical of the Late Classic in the southern lowlands, namely, the vaulted palaces.

In regard to the configuration of the ground plans, there is less information available concerning the palace of Structure 36; the destruction caused by the huge looting that has affected most of its west side makes it impossible for us to say something final, but the overall arrangement suggests there was an access on its east side, from Plaza C. The palace of Structure 29 has been severely looted as well, though clearly it consisted of two rows of rooms, some oriented towards Plaza C, and the others towards Plaza G (Figure 6). So far, we have been unable to define the access to this structure, but probably the most important one may have looked towards Plaza C, where two doors are present, and the presence of a third one is presumed; as of these doors, we may risk to say that there were three rooms overlooking Plaza C, and probably that many others overlooking Plaza G. An interesting decorative trait in this Classic building is its southeast corner, which is not rectangular and presents an inflexion that juts out in the shape of an L. The archaeological exploration conducted could not ascertain the correspondence of this decorative detail in the other three sides of the building, not even in the southwest side, which is entirely destroyed.

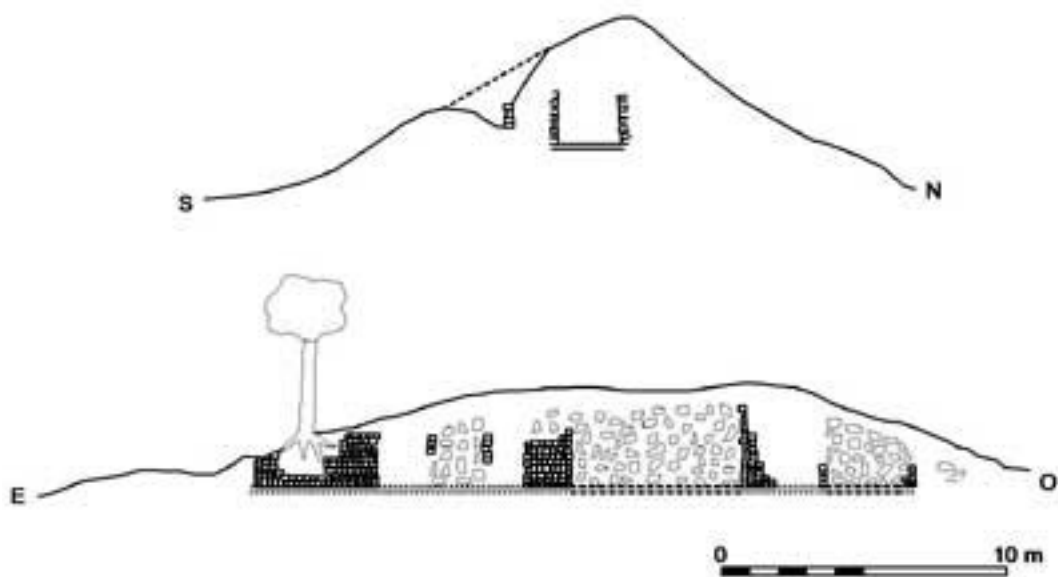


Figure 6. Profiles of Structure 29.

These two palaces, assignable to the Late Classic period, underwent drastic modifications around the end of this stage, advancing, perhaps, modes that would later define the Terminal Classic period; this remodeling involved their covering with a refill of packed stones lined as well with a covering of fine cut stones, some of which needed stabilizing wedges. The new surfaces probably supported perishable constructions, as no signs of superimposed stone buildings were found. In order to gain access to them, it was necessary to raise or remodel the old stairways that led

to the palaces, which were decorated with architectural cubes, double ones in the case of Structure 36 (Figure 7). Access to Structure 29 has not been identified for now, but a similar feature was also detected in Structure 26, although in this case it was simpler, including just one architectural cube at each side of the stairway, perhaps for being a building with a poorer social relevance; thus, the presumed presence of cubes at the base of Structure 26 remains to be confirmed.

It should be noted that this type of decoration using cubes placed in the conjunction of foundations and stairways, is subsequent to the construction of the platforms and of the original buildings, and therefore, characteristic in Machaquila of the remodeling phase already described; on one side, because they are placed against the walls rather than imbricated with them, and on the other, because they are always associated with the version of the stairways that provide access to the superimposed building. The cubes consist of an accumulation of stone and compacted dirt covered in the manner of a formwork with fine cut stones, with shapes and sizes very similar to those composing the walls of buildings; in Structure 36, in addition, the base of each one of them shows a stone course that works as a flange. This form of architectural décor is not frequent in the region, but its presence has been detected in the main access stairway to the South Acropolis in San Luis Pueblito (Valdizón 1995: Fig. 9), and in Ixkun. In El Chal, where it is also present, it is consistent with the first stage of construction of Structure 4 of the Quadrangle (Morales 1995:32), a moment that the associated ceramic materials have dated to the Late-Terminal Classic period.

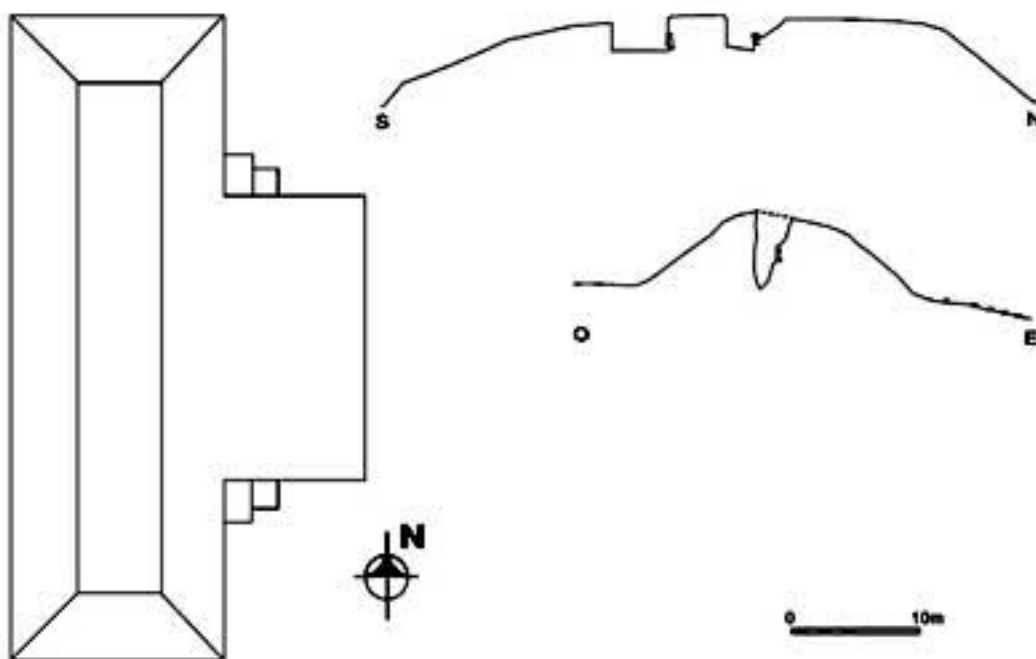


Figure 7. Plan and profiles of Structure 36.

Works accomplished at Plaza C have allowed for the detection of other architectural features that were not reflected in the plan drawn by Graham (1967). In the first place, there is the stairway that provides access to Structure 31, the foundation of which supported a platform composed of two stone courses rectangular in shape,

with a similar manufacture and composition of those excavated at the Quadrangle (Ciudad *et al.* 2002). The analysis of this stairway has revealed that this was an outset stairway to the platform accessed, which seems to suggest some modification in the access of this small building, indicative of the greater relevance of its south side, the one that overlooks Plaza C, during the final stages of the site.

An additional modification in regard to the plan drawn by Graham (1967) has to do with the easternmost sector of Plaza C, and was the finding of a stairway that provided access to one L-shaped platform, which was raised 1.20 above the plaza level. The absence of buildings oriented towards this small space, comes to support its exclusive function as a distributor towards other buildings and plazas, mainly Plaza H. Likewise, we were able to make progress in defining the appearance of Structure 24 (Figure 8), oriented south, by finding its access stairway on this side; this orientation somehow breaks the structure of the assemblage of Plaza C, towards which the accesses of the remaining buildings are orientated, though it is obvious that Structures 24 and 44 were clearly connected with the religious and ritual sphere of Plaza A.

The materials recovered with the excavations in Plaza C are poor, due perhaps to its public nature, which probably allowed for the continued affluence of people after the fall of the city. This may also respond to the extensive character of the work accomplished, but in any case, the more intensive interventions carried out in the Quadrangle and the pits opened throughout the entire sector have neither provided much cultural material.

Group G-1 (Figure 2) forms a patio or sub-plaza over-elevated with respect to Plazas G and C. Works accomplished in this group support also the presence of two construction stages, tentatively assigned to the Late Classic and Terminal Classic periods (Ciudad *et al.* 2003).

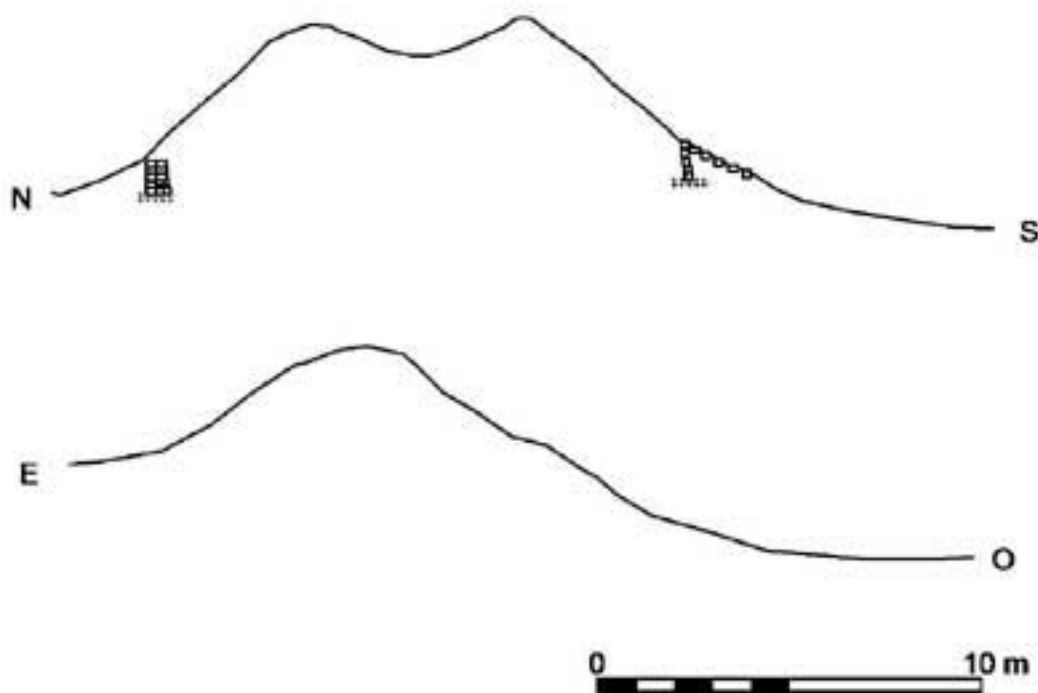


Figure 8. Profiles of Structure 24.

In their determination, works conducted in the access stairway to Plaza E were significant; the stairway draws on its surface a rectangle of 17 x 5 m, descending a height of 0.80 m as of its junction with the side wall of that plaza to the leveling surface of the groups, while remains of the floor were also found. Below this level, the tiers descend additional 1.50 m, framed by the corresponding beams, and decorated –in the union of the stairway with the wall- with cubes, until it reached a previous leveling; this second sector which adds to the ground plan of the former one a rectangle with measures of 17 x 1.75 m, was sealed with a layer of large stones that covered, as we were able to corroborate through a stratigraphic pit at the foot of Structure 30, the entire extension of the group (Figures 9 and 10). Structure 10 was in fact erected after the remodeling, while Structure 31, and not fully confirmed for now, Structure 3, correspond to an earlier stage. This is, altogether, an expansion of Plaza E, and particularly of Structure 32, accessed through the stairway that stole from Plaza G its western end and hid the cubes and beams associated with the original tiers.

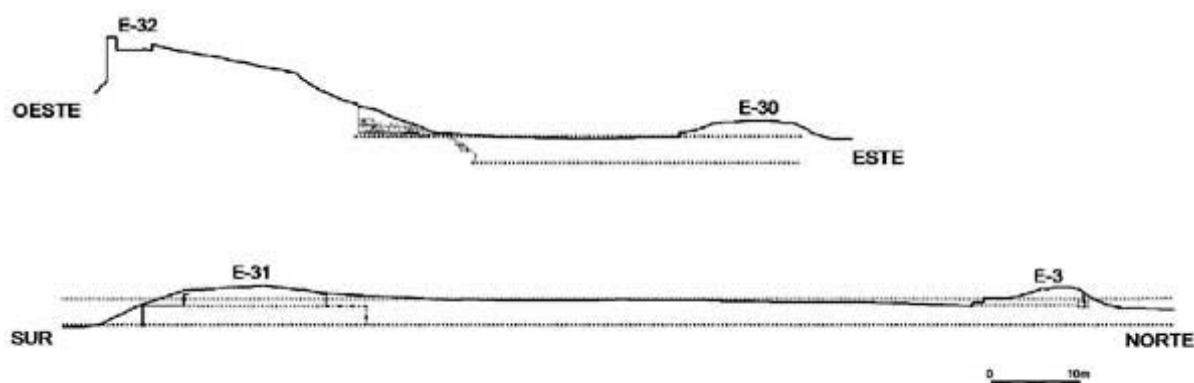


Figure 9. Profiles of Group G-1.

The ceramic material recovered in the excavations place these two architectural events in the Late Classic, although it could be ventured that the latest one was define during the Terminal Classic period. Its abundance and a not too remarkable degree of fragmentation in the upper level allows for presuming that the south and north junctions of the stairway were used as dumpsters during the final phases of the occupation.



Figure 10. Volumetric reconstruction of the stairway, Group G-1: a) version corresponding to upper floor; b) complete version.

The other interventions in Group G-1 have revealed the southeast and northeast corners of the lower sub-platform of Plaza E. The first one is marked by an ashlar stone placed at the same level than the surface of Plaza C, and on a plinth that extends towards east to function as a base for Structure 31; its profile suggest the possible presence of stepped sub-platforms climbing to Plaza E from south to north. Likewise, the north corner rests on a plinth that extends towards east, the end of which remains to be established.

Plaza F (Figure 2) does not seem to have undergone significant modifications involving superimposition of structures or decorative changes; in fact, it was built progressively during the Late Classic period. Like we said, this was a private enclosure, closed by four platforms, elevated –artificially, perhaps- with respect to the adjacent plazas, and including seven buildings, of which Structures 4, 5, 6, 9 and 10 were perishable, while Structures 7 and 8 involved the use of masonry (Figure 3). The excavation, centered on the structures located at the north, east, and west

sides, was combined with the opening of several pits designed to continue with the stratigraphy of both the selected buildings and the general foundation where the plaza is seated; the excavation revealed that the west platform was the first one built, given that its base extends to the north end of the site on one side, and crosses the one that supports Structures 7 and 8 on the South Platform, on the other. On top of that base, originally completed with a second level and probably with an upper bench, is Structure 4, probably the most relevant socially, in view of the cut ashlar stones that decorated the surface of the façades.

The intervention practiced in 2003 brought to light several carved ashlar associated with the central zone of the building's façade, some rectangular in shape, some with their face bulging outwards and with partially paneled designs. No doubt, they complement those described by Graham (1967), and the one mentioned by Grube (1989: Fig. 2), as they are consistent with them in shape and arrangement. The definite organization of the ashlar could not be ascertained, but it is initially believed, as of the combination of the different panels, that they were meant to decorate the façade and to tell about the historic characters who occupied the building. They include references to the Emblem Glyph of the city, title clauses referred to nobles with relevant positions within the political structure, and their corresponding titles of rank. This information, together with the explicit reference made to the name of a Machaquila ruler, *K'UH-174-su-AJAW-wa*, preliminary transliterated as *#-TI'-CHAHK-ki*, suggests that Plaza F was a royal palace complex (Lacadena, in Ciudad *et al.* 2003; Iglesias and Lacadena 2003; Lacadena and Iglesias 2004; see Lacadena and Iglesias, this volume).

The finding of a large amount of stones of different sizes with a bulging face and uncut, in the outer context of this main façade, was significant. Unfortunately, none of the stones were found *in situ*, making it difficult to establish the position and design they may have formed, or the relationship with the other carved ones. No doubt, they were combined with the carved panels to create a scalloped design, which most probably was distributed across the entire main façade of the building. There are no known analogies of this decoration system in the region, though it has been reported that one structure in the Mopan Causeway presented a similar decor (Laporte *et al.* 2001). This type of decoration using stone mosaic is more typical of central and northern Yucatan than of southern Petén, but even though it is not known for sure whether this area was included in the transformations occurred at the end of the VIII century in Machaquila, this façade constitutes one additional fact to be considered among the possible northern influences suffered by the city at that time.

In the uppermost section of the structure and very close to the surface an offering was found, consisting of a red-slipped vessel with a globular body corresponding to the Pantano Impressed ceramic type, in association with the remains of a pyrite mirror manufactured with a thin slab of sandstone, to which up to 17 fragments of pyrite sheets were adhered in the past (1 mm thick), mostly with pentagonal forms.

As to the North and East Platforms, they contained foundation remains of the different perishable structures, around some of which there were clusters of ceramic and lithic materials of daily use; therefore, and in a preliminary manner, they may be assigned to a conventional domestic function. The exploration conducted in the northernmost one has made it possible to detect a wide stairway with nine or ten

steps that exits the plaza and communicates with the river. The excavation conducted in the East Platform revealed connections with the North and South Platforms, and detected two plain structures with benches placed on the edges of that architectural space. In the southernmost context of Structure 10, three carved ashlar stones were found, which maintain some sort of formal relationship with those found in Structure 4, and which have an effect on the true function of this Plaza F assemblage.

Structures 7 and 8 of the South Platform may be assigned a different functionality, as they were entirely built with masonry and had vaults. Their small size makes it impossible to think of them as palaces, though in any case they stress the elitist nature of the plaza; despite this, they have not been explored so far.

The excavations conducted at Plaza A, to complete the current report on the assemblages found at the urban center, have unfolded at a slower pace than desired due to the presence of huge collapses that have left the buildings more than 4 m away from the rubble, which in low areas at times exceeds a depth of 5 m. However, the exploration conducted resulted in the recovery of remains of architectural sculptures, probably unfolded as mosaics. The fragments are so small that it is hardly possible to figure out the representation they are composing, but some significant parts refer to stone masks formed as of small assembled pieces, maybe with a configuration similar to those found at the Mopan Causeway and at San Luis Pueblito (Laporte *et al.* 1997). There are no chronologic markers for this trait, but given that it has been presumed to be typical of the Terminal Classic period (Laporte and Mejía 2002a:68), it could be hypothesized that this space was being occupied at that time, as well as others within the city.

THE HISTORICAL CONTEXT OF ARCHITECTURE IN MACHAQUILA

The evidences described support the occurrence of a major architectural transformation in the southernmost monumental sector of Machaquila, with the probable replacement of plaza floors and its preparation for a new architectural development; thus, this not only obeyed to maintenance reasons, but also, to concept-related modifications (Group G-1), or to the superimposition of buildings with new and larger foundations and structures. Tentatively, this change has been placed around the end of the VIII century or the beginning of the IX, giving Machaquila a new look. Significantly, this modification did not involve moving the monuments, as the groups of stelae and altars were found in Plaza A, probably its major ideological and funerary focal point, while only Stela 17 was found in Plaza C. This brings forward some nuances at the time of interpreting the new political emphasis given to these spaces, as they suggest some degree or a will for continuity; a similar continuity could result from the cultural materials rescued: the ceramic associated to the plazas and buildings explored is affiliated to the Tepeu sphere, more precisely, to Tepeu 2 and 3, with ceramic materials representing the regional complexes of Rio Poxte and Tanjoc. In any case, it is too soon to venture the type and relevance of the events that made such transformation advisable; for the time being, we have been unable to ascertain, with some accuracy, the relationships Machaquila maintained with other surrounding centers, while the possible corroboration of a possible correspondence between the residential groups of the site is still pending. However,

the possibility indeed exists to place it within the broader context of the Late Classic/Terminal Classic transition in the region.

The investigation conducted is still insufficient to identify the political, social, economical or cultural causes underlying the archaeological processes referred to above; efforts should focus on differentiating those that obey to local or regional phenomena of an eminent political character, from those that represent broader historical processes –migrations, foreign influences, or a shift in ideology.

The regional analysis (Laporte *et al.* 2004) suggests that in this territory, power was relegated to just a few centers around the end of the Late Classic period, such as Ceibal, Cancuen, San Luis Pueblito, or Machaquila, among others, while the remaining sites decayed, if not plainly disappeared. Thus, the question would be the following: do the changes observed in Machaquila constitute a local or a regional phenomenon, or are they a reflection of wider and more complex processes?

The epigraphic analysis of the texts recovered in Cancuen and Machaquila has allowed us to connect the transformations mentioned above with regional political events, such as the revitalization of Machaquila's royal dynasty in the person of King *Ochk'in Kalo'mte'*, who gained access to power on 9.18.9.15.10 (AD 800), following an undefined period of ruling in Machaquila of *Tajal Chan Ahk*, king of Cancuen, who in two different monuments and moments –in the Panel of the Two Hundred Glyphs (9.18.5.0.0., AD 795), and in the recently discovered Panel of Cancuen (9.18.8.6.14, AD 799, Fahsen 2004)- proclaimed himself king of Machaquila (Lacadena and Iglesias 2004). Should this be so, his dynastic descendants, Rulers E, *Siyaj K'in Chaahk III*, and F, *Juntz'ahk Tok'*, who sponsored several monuments between AD 615 and 641, were probably as well protagonists in the change of urban appearance in the city.

But this explanation, based on epigraphic readings, does not satisfy the interpretation of the change detected through the regional analysis referred to. In past years, Laporte and Mejía (2002a, b) have come to the conclusion that some zones in southeastern Petén suffered a dramatic transformation that affected several architectural, sculptural, artifactual, funerary, political and cultural traits between the IX and XI centuries AD, which conferred a different style to the cultural process in the region and was defined by three events that identified the Terminal Classic period. The first was initiated around AD 800, with the introduction of an architectural sculpture based on very well assembled limestone mosaics. In the second, one that identifies in full the Terminal Classic period and part of the IX century, the expansion of the central plazas of Ucanal and the aggregate of plazas in the ritual area played a leading part, jointly with the erection of plain and carved monuments, the remodeling and expansion of structures, and the construction of additional residential groups. During the third moment, which extended from the end of the IX century to the XI century, the Group E-type Assemblages lost importance while the Acropolis and the buildings with a circular ground plan and hemicycles gained in significance; these traits pre-announced those with deeper open-works, typical of the Postclassic in the southern Maya lowlands of Guatemala and Belize, with increasingly more noticeable influences from central and northern Yucatan, a process likely related with the intrusion of the Mopan ethnic group (Laporte and Mejía 2002a:66).

The currently ongoing investigations in the area conducted by different projects, are contributing new insights on the historic and cultural development of such an interesting and complex area, at an internal level and in regard to their regional relationships. No doubt, future seasons will be crucial for the clarification of the events that took place there, in the frame of the populational dynamics that unfolded throughout the fascinating IX century.

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- Figure 1 Localization of Machaquila within the Maya area
- Figure 2 Plan of the central zone, Machaquila (after Graham 1967: Fig. 33).
- Figure 3 Central zone, Machaquila, with the sub-operations conducted there.
- Figure 4 Plan of the Quadrangle, with the sub-operations conducted there.
- Figure 5 Quadrangle of El Chal (Morales 1995: Fig. 4)
- Figure 6 Profiles of Structure 29
- Figure 7 Plan and profiles of Structure 36
- Figure 8 Profiles of Structure 24
- Figure 9 Profiles of Group G-1
- Figure 10 Volumetric restitution of the stairway, Group G-1: a) version corresponding to upper floor; b) complete version.