

TEN YEARS OF ARCHAEOLOGICAL INVESTIGATIONS AT THE HOLMUL RIVER BASIN IN THE NORTHEASTERN REGION OF PETEN

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Since 1994, the Peten Archaeological Site Protection Project (PROSIAPETEN) undertaken by the Institute of Anthropology and History of Guatemala (IDAEH) and co-funded by the German government, have supported investigation focused on the settlement patterns of northeastern Petén. Ten years of intensive field works have made it possible to spot 286 sites not previously reported and to compare four wide sub-regions related to the territorial and cultural areas that once existed between the ancient Maya polities of Tikal, Nakum, Yaxha and Naranjo. The geographical feature shared by these polities was the Holmul river basin (Figure 1), which extends along 120 km from the mountain range, north of Lake Macanche where it is originated, to the Guatemalan border with Belize, where the river is known as Rio Bravo and flows to the Caribbean Sea.

FIRST PHASE

It was accomplished between 1994 and 1996, and involved a sample survey plan that was conducted using four long-distance transects that extended along 61 km, with which the major urban centers of Tikal, Nakum, Yaxha and Naranjo (Figure 1) were connected. During this phase, a total of 181 sites were documented and a type rank of settlements that responded to each one's particular environment, among which there were mountain ranges, plains, *bajos*, and sectors of the Holmul river basin (Fialko 1996, 1997), was created.

The proceedings for settlement documentation implied the creation of a database based on SIG methodology; the reading of geographical coordinates has also been useful for demarcating micro-environments and different vegetation zones. One of the most important results derived from the first phase of this research was the discovery of the particular connection that existed between the Holmul river basin and the extended *bajos* known as Santa Fe and La Justa, located within the periphery of Tikal and Yaxha, respectively. This geographical trait is highly significant for the comprehension of the ancient Maya settlements related to the swamps and their corresponding strategies of adaptation (Lanza 1995; Culbert *et al.* 1997; Gidwitz 2002).

The systematic mapping of each site implied taking measurements of all structural features, including buildings, chultuns, and quarries, as well as defining the volume of refill of the patio. Settlement ranks were assessed according to the volumetric analysis of the above features, and they were summarized in the following four basic traits:

- Major urban center, comprising several Acropolis groups with one or two level palaces, pyramidal temples, Ballgame patios and causeways that connected the different ritual and residential elite complexes, with the inclusion of palaces and shrines. The capital city needed to be surrounded by several secondary urban centers within a radius of approximately 5 to 7 km.
- Minor urban center, which may include one Acropolis group, one Group E type Assemblage, a Ballgame patio and sculptures.
- Sub-urban center, which may be integrated by a palace and several Plaza Plan 2 groups (Becker 2001) or either quadrangles.
- Rural centers, characterized for including scattered residential structures with no indication of shrines or palaces.
- In addition to the traits mentioned above, and occasionally, there were several scattered mounds placed on elevated grounds or within the river basin, probably the remains of some camp, agricultural structure, or shrine.

The regional survey has paid particular attention to the chronological definition of each one of the sites through the excavation of test pits, stratigraphic pits, the collection of surface materials and the documentation of architecture exposed in looting trenches and tunnels. It has been estimated that 80% of the structures in each one of the sites have been affected by illegal excavations. The buildings exhibiting architecture with ornamental features are receiving priority attention to lessen the decaying process using the scarce available resources, through the aggregation of covers, bracings, and the refill of trenches.

SECOND PHASE

The investigations conducted in the Holmul River basin in 1997-1999 were focused on gaining knowledge about the evolutonal process of some minor urban centers located within a radio of 5 to 8 km from the major Maya capital cities of Tikal, Yaxha, Nakum and Naranjo.

- In the northern periphery of Yaxha, the urban centers of Poza Maya, La Pochitoca and Tintalito (Fialko 1998) were examined, while in the southern periphery the urban centers of La Naya, Holtun, Ixtinto and La Blanca were documented (Fialko 1999).
- Investigation of the urban centers located in the eastern periphery of Tikal was centered in Corozal, Uolantun, Chalpate and Naranjito; in the southern

periphery, in the centers of Socotzal and El Zapote (Fialko 2000), and in the northern periphery, in the site of Jahuia (Fialko 2001).

- The investigations conducted in the northern periphery of Nakum were focused on the site of El Tigre; at west, on Laberinto, and in the southern periphery, on the centers of Cara Fea and Xateros (Culbert *et al.* 1997).
- In the western periphery of Naranjo, we examined the site of La Tractorada, and in the northern periphery, the site of Kanajau (Fialko 2002).

THIRD PHASE

Research was conducted between 1999 and 2004, focused on the systematic survey of the Holmul river basin and its associated *bajos*, as of the place where it begins, north of Lake Macanche, to the bordering area of Guatemala and Belize, where it is known as Río Bravo.

The development of the third phase was greatly benefited by the participation of T. Patrick Culbert (University of Arizona) and Thomas Sever (Center for Climatological and Hydrological Studies, NASA). One of the most relevant developments was the identification of the settlements present in the *bajos*, whose location was later predetermined through satellite images (Sever *et al.* 2000). The system of settlements related to these depressions includes centers of different ranks located in islands and peninsulas, and the origin of some of them may be traced back to the Middle Preclassic period (500-800 BC).

It is important to consider that the rank of the settlements posited for the Holmul river basin is representative of the socio-political processes expressed in Maya settlements typical of the northeastern region of Petén. They may be adapted to other hierarchies, such as the one formulated for the southeastern region of Petén (Laporte and Mejía 2000), or others corresponding to different regions within the Maya Lowlands. The definition of settlement rank is the first necessary step to accomplish a coherent formulation regarding the levels of territorial organization of the Maya polities; such definition will make it possible to envision the political mechanisms adopted for the achievement of social cohesion, identity, and territorial demarcation.

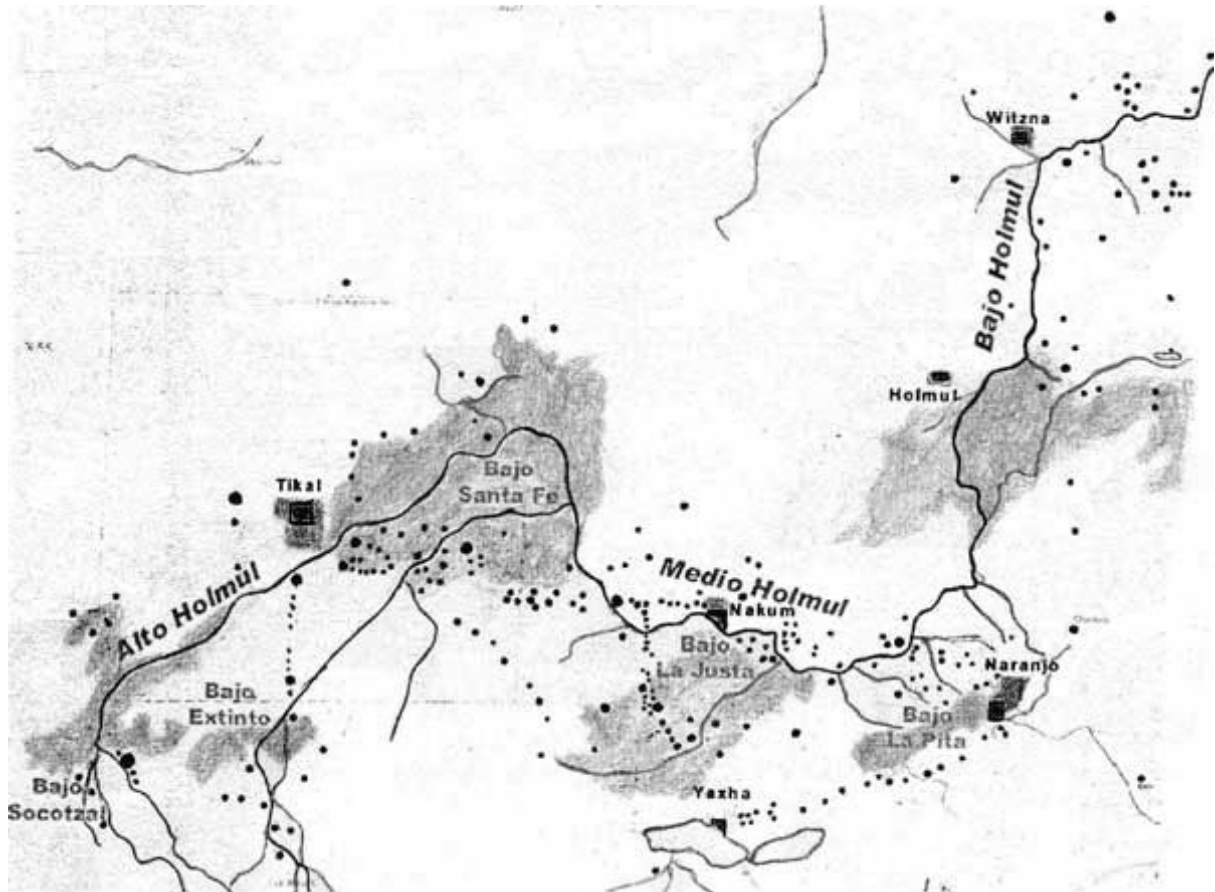


Figure 1. The Holmul river basin.

THE HOLMUL RIVER BASIN

With the purpose of presenting a more efficient description of the Holmul river basin, we have divided it into three major regions: Upper, Middle and Lower river basin. Due to the geomorphological characteristics of northeastern Peten, some sectors of the hydrological system of the basin are partially subterranean, characterized by a sophisticated system of deep cavities (locally denominated drains), that are connected with the subsoil or natural rock; important settlements of the different regions comprised within the Holmul basin are clearly associated with those traits, as well as with terraces and small riverbeds similar to channels.

There is a correlation between the small, middle sized and large pools that are formed in the confluence sectors of streams that flow into the Holmul River and the location of Preclassic settlements. The pools of confluence contain water all year round; therefore, nowadays one frequently finds *chiclero*, *xatero* and hunter camps in the surrounding areas. The possibility exists that some pools with channels in the extremes may show indications of ancient Maya reservoirs, an issue that deserves substantial study. An additional relevant water trait found in the Holmul basin has to do with the seasonal waterholes formed as a result of overflows appearing during the floods period, in the rainy season (Fialko 2001).

The Holmul River may be considered to be a dying river, as several sectors of its slopes show severe sedimentation; largely, this is a consequence of the rural tracks, locally called *truckpass* or *trocopás*, opened by timber dealers in an arbitrary and improvised manner which has resulted in the complete modification of the river bed, thus causing annual floods which are gradually transforming portions of the affected areas into seasonal swamps.

We shall now refer to some relevant aspects observed in some of the archaeological sites that are considered to be prototypical of the geographic, political and cultural systems of the Holmul river basin.

UPPER HOLMUL RIVER BASIN

The Upper Holmul originates in three brooks that flow from the top of the sierras, located north of Lake Macanche (Figure 1). The two major springs indistinctly known by the name of Arroyo Negro, penetrate into the *bajos* of Socotzal and Ixtinto located south of the Tikal Park, where they emerge to finally become a part of the great *bajo* Santa Fe, situated east of the ruins of Tikal. The Upper Holmul landscape, at the south of the Park, is characterized by topographic features of plains and hillocks, presently deforested and eroded as a consequence of constant use by *milpa* workers and cattle breeders.

The Maya polity of Tikal was the one that predominated in the Upper Holmul region, and the territorial control exerted over the south included the urban centers of Navajuenal (predominant in the region of the *bajo* Ixtinto), Socotzal (in the *bajo* region with the same name), and El Zapote, in the northern *sierras* of Macanche.

Both the geographical location of El Zapote –close to a conical hill that resembles a volcano- and its association with the streams that are the origin of the Holmul River, support the notion that this was a center where ritual ceremonies related to cosmivision and dynastic power used to take place. The archaeological site has been severely looted (Figure 2), and fragments of the stolen sculptures remain scattered around the plazas. El Zapote is well known for its Early Classic stelae depicting rulers that wear special ceremonial attires and whose hieroglyphic texts make reference to the close connections maintained with Tikal (Schele *et al.* 1992). Some of the ceramic materials recovered point to the presence of visitors, at some point during the Terminal Classic period.

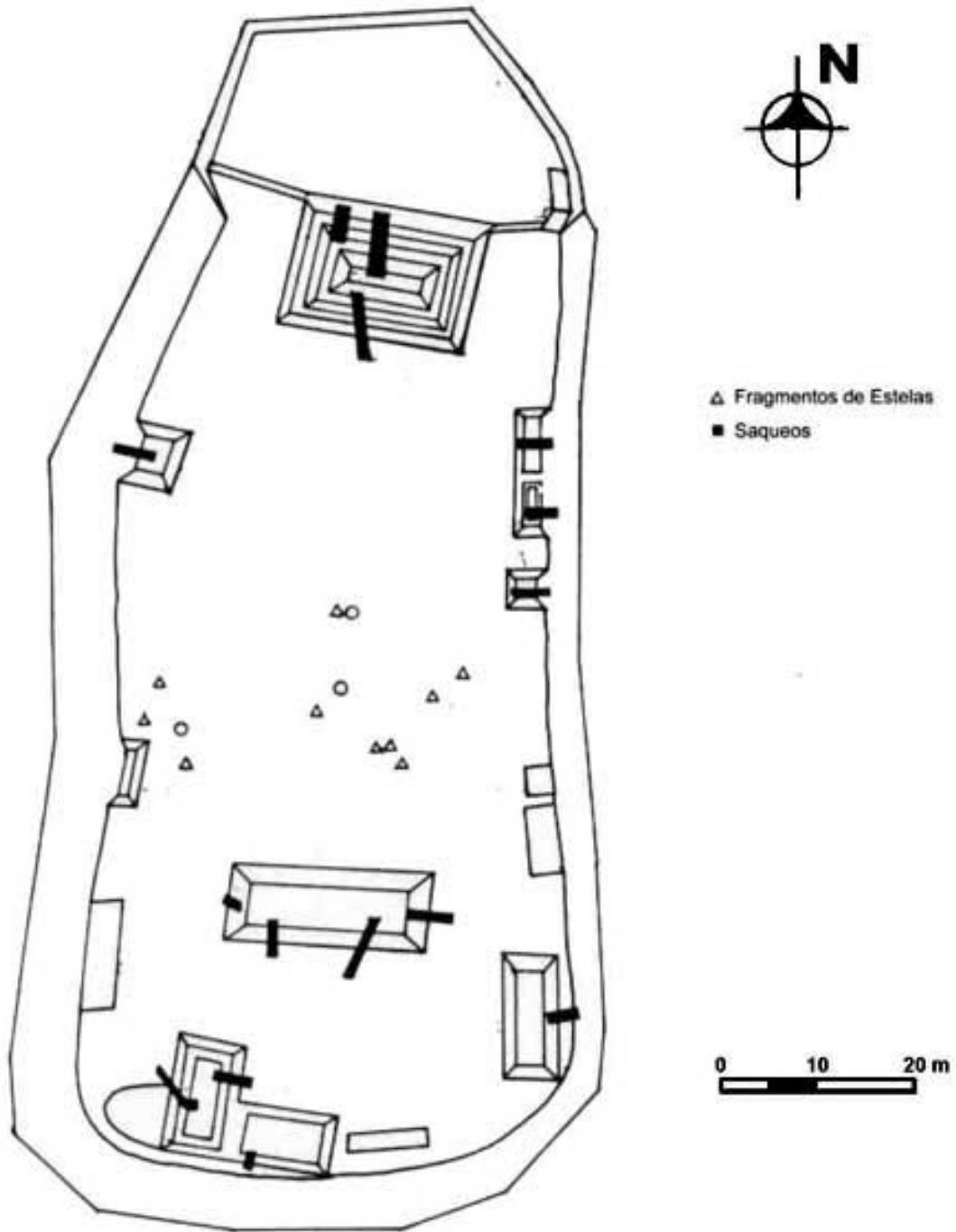


Figure 2. El Zapote

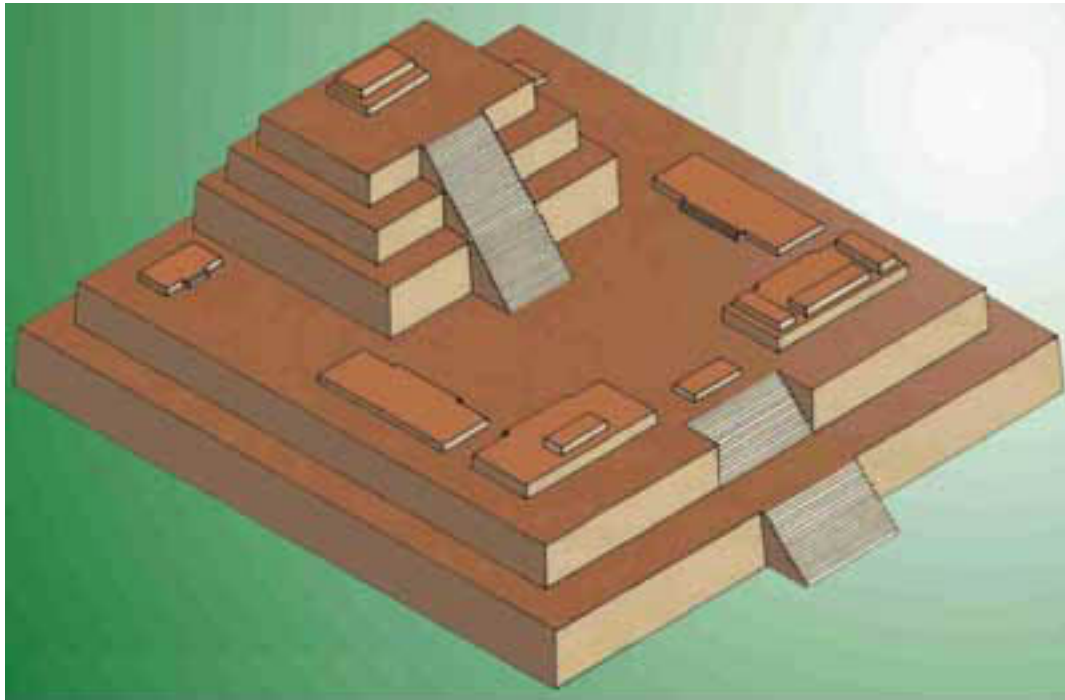


Figure 3. El Socotzal, Acropolis

The site of Socotzal, located 11 km southwest of Tikal, saw its origins in the Middle Preclassic period, having developed a Triadic Acropolis complex as well as several other groups that include palaces (Figure 3). Socotzal features as well a possible Preclassic truncated pyramid, with dimensions very similar to those of pyramid 5C-51 of the Lost World in Tikal. Most of the archaeological sites located within the *bajos* area of Ixtinto and Socotzal are of a rural character; all of them originated in the Late Classic period, and saw a moderate Terminal Classic occupation. From the area where the Holmul River intersects the *bajo* Socotzal, there is an extraordinary view of the major pyramidal temples of Tikal.

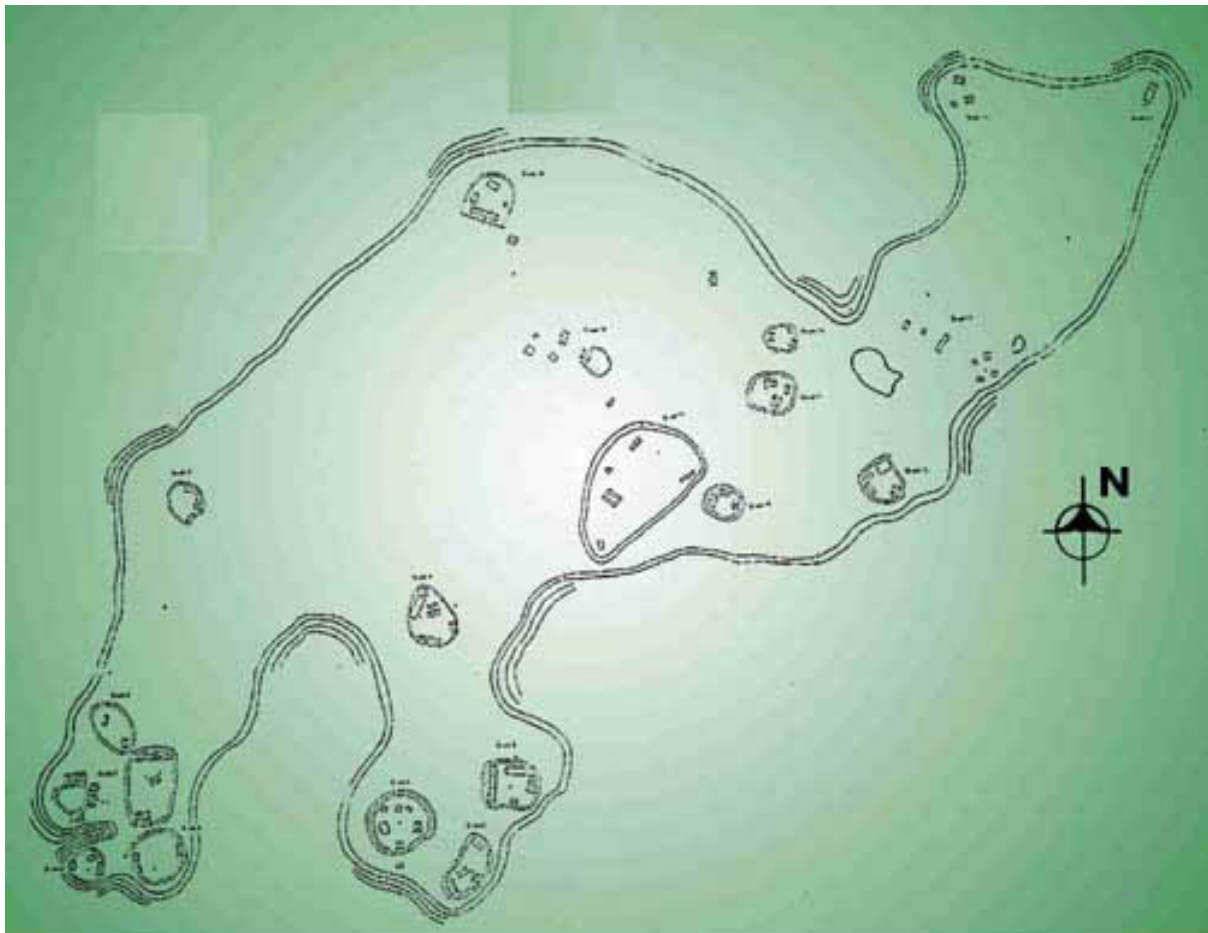


Figure 4. Isla Jahuia.

In the northernmost region of the Upper Holmul basin and in association with the *bajo* Santa Fe are the urban centers of Uolantun, El Corozal, Chalpate, El Encanto, La Flor, Tres Cabezas, and Isla Jahuia (Figure 4). These cities had a Preclassic and Early Classic occupation and have evidence of stelas, both carved and plain. Other important settlements are the suburban centers of Santa Fe, La Balanza, Isla Canguro and Isla Los Pinos. Except for the sites located in the islands, the remaining ones are associated to the junction areas of the Holmul River with its tributaries, or either to the river with the *bajo*, where there are large reservoirs or pools that usually contain water all year round.

The Preclassic settlements of the Upper Holmul region are distributed in distances that range from 5 to 7 km. All the urban centers located in the confluence areas of the tributaries, with a Preclassic occupation, show as well a Terminal Classic occupation. This fact might be explained because water was easily accessible.

At the Terminal Classic sites of the Upper Holmul river basin, the presence of a micaceous ware distinctive of that period and represented throughout the basin was identified for the first time.

The site of Isla Los Pinos is located very close to the northeastern corner of the Tikal Park, and closely associated with a pine tree forest estimated to include over one thousand specimens, perhaps a reminiscence of some pine grove that probably existed in ancient times. To support such an assumption there is a Preclassic

sample of pine pollen found by T. Patrick Culbert at the *bajo* La Justa, close to one of the Holmul River tributaries, north of Yaxha (Culbert *et al.* 1997).

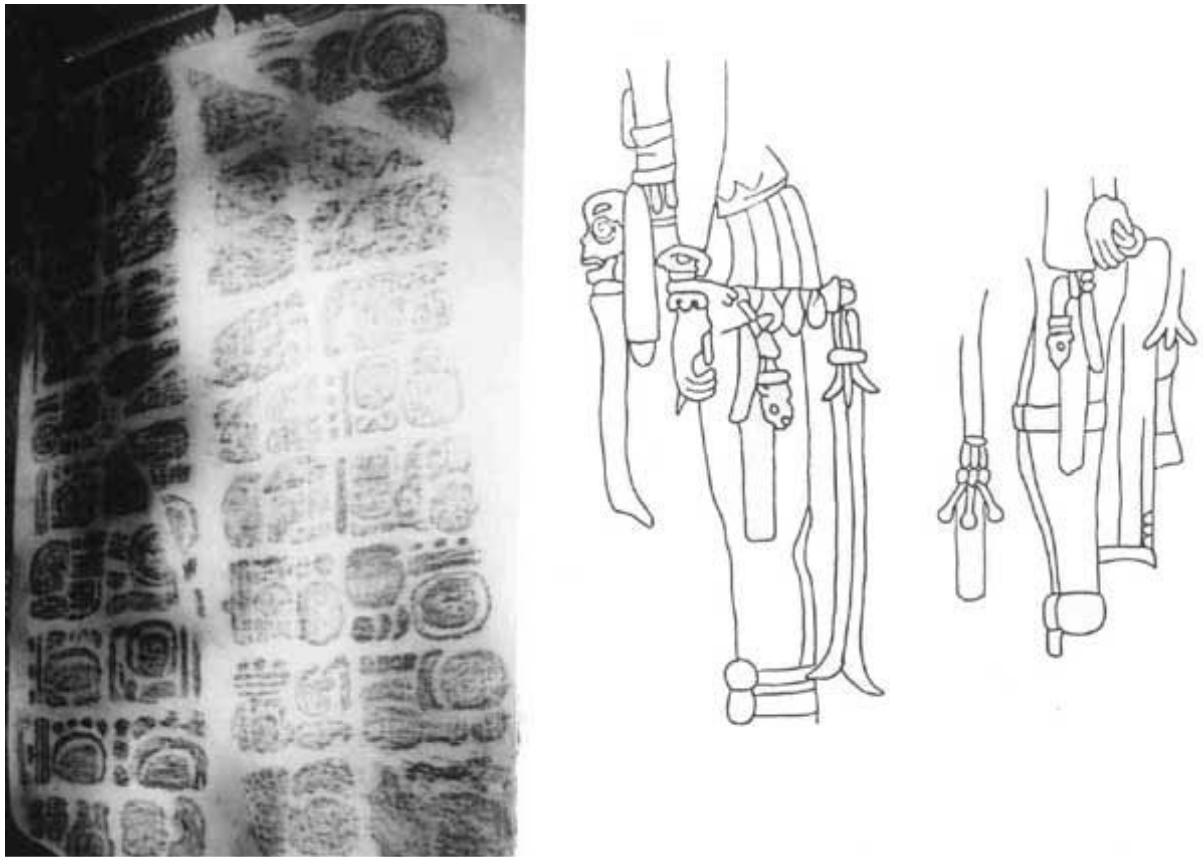


Figure 5. Tres Cabezas, Stela 1.

Evidence of Preclassic occupation was found both in Isla Los Pinos and Isla Jahuia. The latter site includes several plazas with palaces and shrines, mostly plundered (Figure 4). Inside the tunnels left by looters, there are significant examples of Early Classic architecture.

Most of the minor urban centers associated with the Holmul basin at the *bajo* Santa Fe include Early Classic sculptures, expressing a political-dynastical system of integration that was fully developed at that time in the Tikal area. In the site of Tres Cabezas, adjacent to a looting trench, three major fragments of an Early Classic stela carved on its four sides were found, together with a fragment of its corresponding altar (Figure 5). According to the preliminary reading graciously accomplished by Simon Martin, the stela was dedicated in 514 AD, and makes reference to an anniversary of the birthday of a noble woman from Tikal (personal communication 2001).

In the vicinities of El Encanto, satellite images have revealed very straight linear traits connected with the Holmul River: the reconnaissance and stratigraphic pits conducted in this sector have confirmed the presence of seasonal water flows, though evidence of ancient draining channels associated to them could not be confirmed.

MIDDLE HOLMUL BASIN

The Middle Holmul region begins at the confluence of the large springs on the eastern border of the *bajo* Santa Fe; it extends towards east, passes next to Nakum, and ends at the north of Naranjo, precisely there where the river changes its direction towards north (Figure 1). From the eastern border of the *bajo* Santa Fe, the river flow turns more abundant and violent during the rainy season, producing large deposits of water in the oxbow areas, which sometimes exceed an extension of 1 km. The Holmul pools in the middle basin are true sanctuaries of nature, and should with no delay be declared national patrimony for their adequate protection. Recently, extensive environmental destruction has taken place in the area caused by the activities of intruder farmers.

The polity of Nakum was the politically predominating entity at the middle Holmul basin, since the Middle Preclassic to the Terminal Classic periods, although its intrinsic territory seems not to have exceeded a 7 km radius. The settlements located at the western periphery of Nakum vary between a sub-urban and a rural rank, except for the site of Laberinto, its frontier center at west, located just by the river. Of the sub-urban centers, five are located in scarped areas and are definitely of a defensive nature. They correspond to the Late Classic span, and show an important Terminal Classic occupation, when Nakum experienced its great political boom. Among the defensive centers, four were aligned towards west (El Carmen, Fortaleza, Dos Estelas and Sin Aliento), while only one of them was found at the north periphery (El Tigre); even though they do not include Acropolis groups or Ballgame patios, they at least featured one pyramidal temple and vaulted palaces of a regular size. No defensive centers were found in relation with the southern and eastern borders of Nakum.

It would seem that the southern periphery of Nakum was demarcated by the Yaxha stream, a tributary to the Holmul River, which divides the *bajo* La Justa in two. The sites located at the north of the stream may have been a part of Nakum's territoriality, with the outstanding sub-urban centers of Cara Fea and Xateros. At some point, the territorial boundaries of Yaxha may have been associated to the southern banks of the Yaxha stream, close to which there were three important secondary urban centers, Poza Maya, La Pochitoca and El Bajón, originated in the Middle Preclassic period and with a significant Early Classic occupation.

Both at the beginning of the Yaxha stream and in the area where it flows into the Holmul River, there are two centers with a Middle Preclassic occupation: the first (El Bajón) may have corresponded to Yaxha, and the second (Yaxhol) to the time frame of Nakum. The pattern of distribution and location of the Preclassic settlements that corresponded to the middle Holmul basin connected with the *bajo* La Justa, tends to be very similar to the one previously observed in regard to the upper basin and the *bajo* Santa Fe. Both cases are fit for documenting the forms of social adaptation and organization typical of the *bajo* communities.

In the Late Classic period, Poza Maya may have been a frontier center originally ascribed to Yaxha. The fact that most of its palaces had been entirely covered (a couple of them show evidence of having been burnt) to be later transformed into

ceremonial platforms, seems to indicate that they were probably attacked by Nakum, the dominant center of the middle Holmul basin, and their urban function was subsequently changed; this was also the case with La Pochitoca. The struggle between Nakum and Yaxha for the territory around the *bajo* La Justa, obviously implied the appropriation of additional natural resources and growing fields.

The rural occupation associated with the east of Nakum extends around 6 km, and runs parallel to one of the Holmul tributaries known as Paso La Pita, associated with the *bajo* of the same name. In our view, the settlements located in the surroundings of the *bajo* La Pita already corresponded to the territories of the Naranjo polity. Naranjo's northern periphery is characterized by the large number of centers of sub-urban and rural rank present all along the tributary streams. Again, we were able to observe the pattern previously observed in the upper basin, which refers to Preclassic sites located in areas of fluvial confluence. Several urban centers associated to the periphery of Naranjo within a radius which seems to exceed 9 km, include Acropolis groups with sculptures and plaza groups in the form of quadrangles. The western and northern areas of Naranjo feature the urban centers of Xilonche, Pitalito and Kanajau.

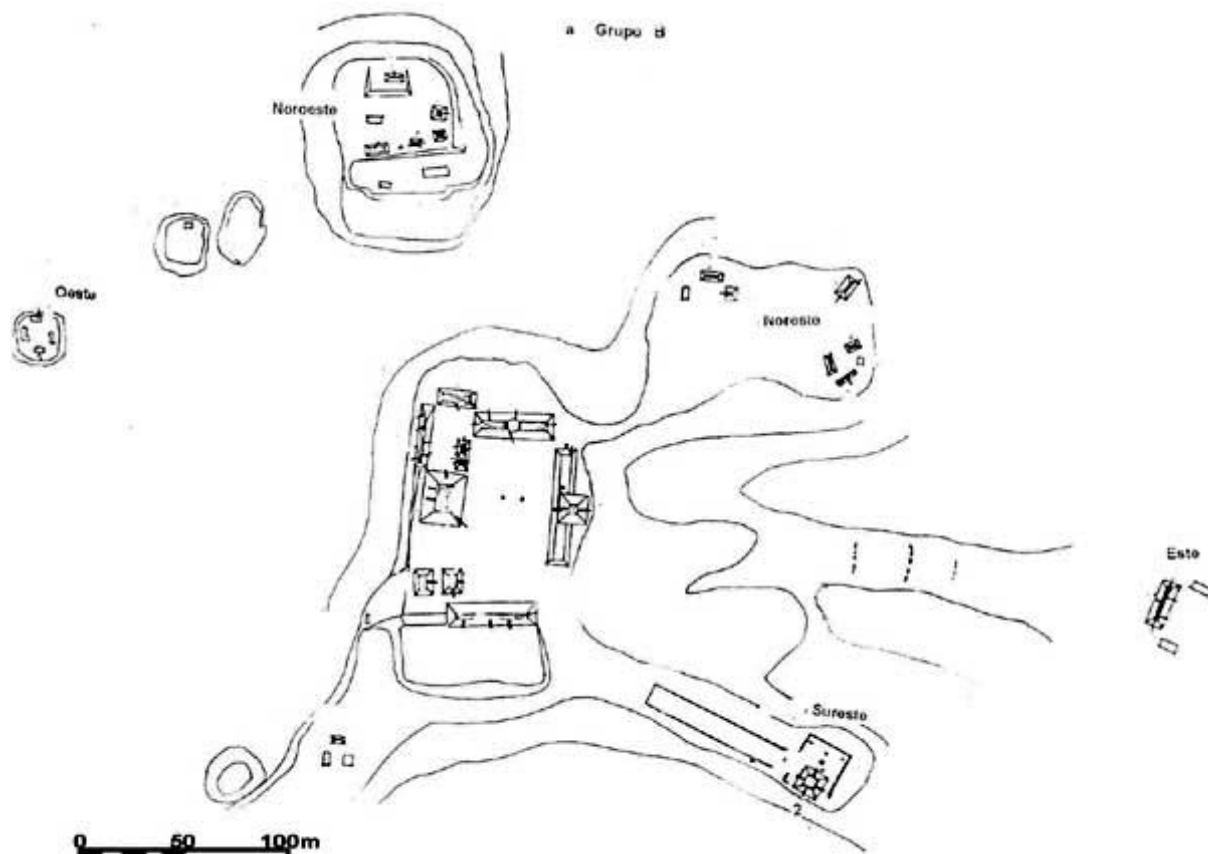


Figure 6. Kanajau.

The quadrangle format first appeared in the large city of Naranjo around the end of the Classic period, and became frequent in the Terminal Classic span, just as it happened in other sites of Petén. The quadrangle format at the periphery of Naranjo tends to replace the Plaza Plan 2, so important in Tikal, Nakum and Yaxha and their corresponding peripheral areas, which seems to have been representative of a

nuclear family organization. Throughout all of the Holmul River basin, the Terminal Classic occupation predominated in most of the quadrangle sectors. This phenomenon was as well documented in the eastern periphery of Tikal, close to the site of Uolantun.

Located around 7 km north of Naranjo, Kanajau is the peripheral urban center that gathers the largest number of Preclassic sculptures. As usual in practically all the archaeological sites of Peten, it has been severely looted (Figure 6). In front of the East Platform of the Group E type Assemblage, there is indication that at least two stelas were looted; inside the tunnel that crossed the axis of the platform there was evidence of several sub-structures, and the lowest one seems to date to the Mamom horizon.

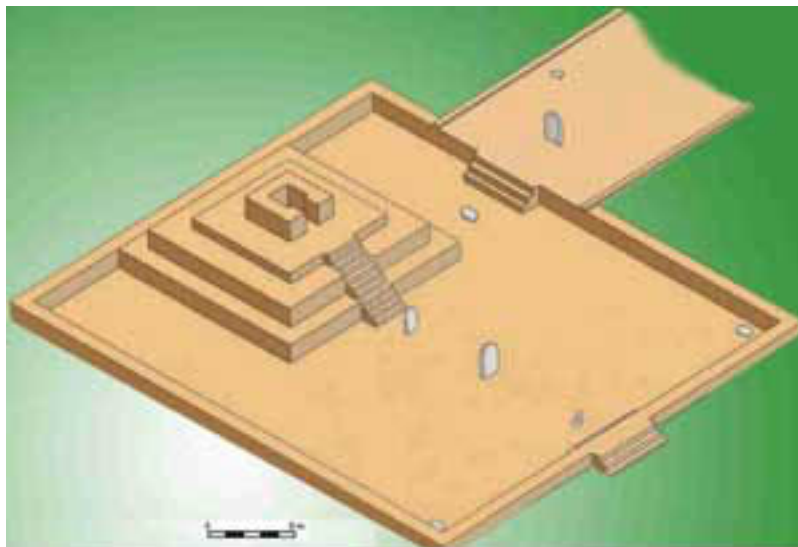


Figure 7. Kanajau, sculptures.

The southeast group of Kanajau consists of a sunken plaza integrated to the central area by means of a causeway (Figure). The north-south and east-west axis of the plaza have been outlined with several sculptures. In front of the north façade of the temple there were two aligned stelas, with looting trenches at the sides: the first consisted of a plain fragment found at the foot of the stairway, while the second stela was at the center of the plaza, in two fragments, and showing a standing lord with a headdress that depicted a serpent head with a bifid tongue (Figure 8). A few meters north of the Kanajau stela, two fragments of a seated zoomorphic alligator were identified (Figure 9a). According to the symmetrical design commemorating the east-west axis of the plaza, the corners show the deteriorated remains of two semi-circular altars. Likewise, close to the foot of the stairway that communicated the causeway with the sunken patio, there was an altar or throne with round supports (Figure 9b). Additional fragmented stelas were present close to the end of the causeway. The form, meaning, chronology and organization of the sculptures, show remarkable parallels with others reported in Izapa, Chiapas (Norman 1973).



Figure 8. Kanajau Stela 1.

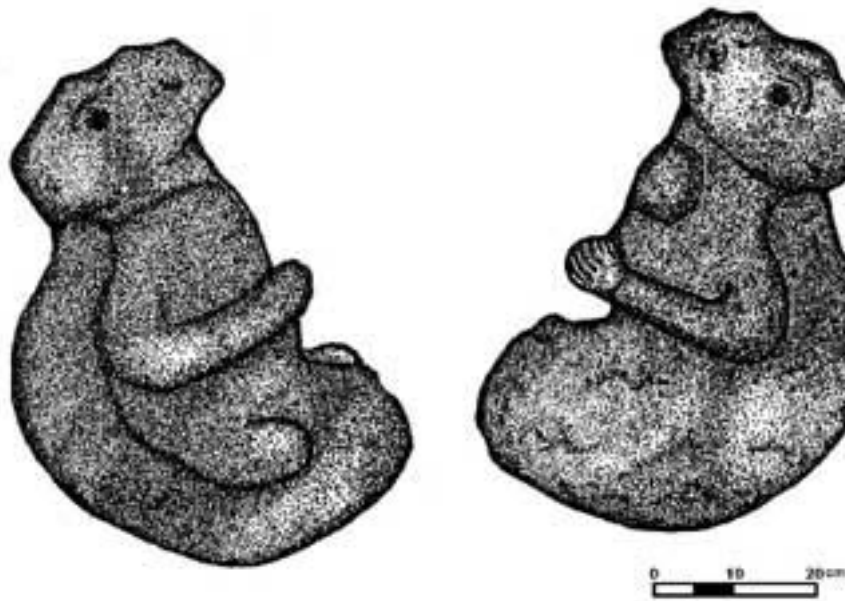


Figure 9a. Kanajau, zoomorph.

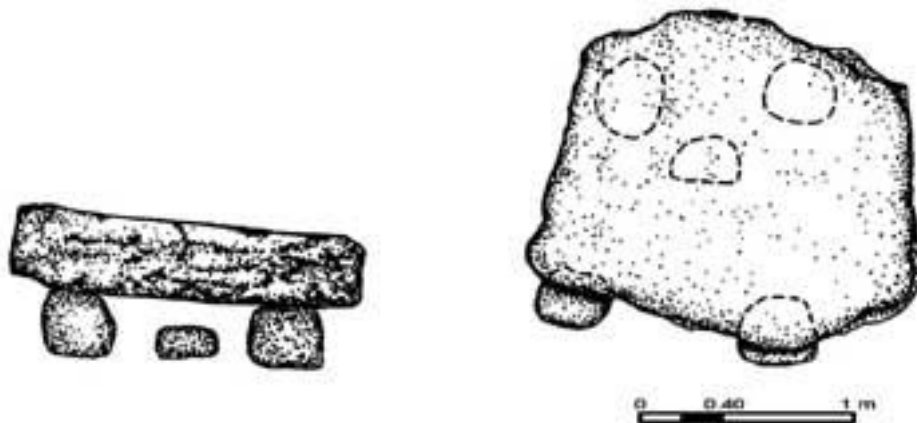


Figure 9b. Kanajau, altar with supports.

THE LOWER HOLMUL BASIN

The region of the lower Holmul basin begins at the north of the archaeological site of Naranjo, precisely there where the river changes its course towards the north and ends in the Guatemala-Belize border, where it is known as Río Bravo (Figure 1). The topography of the region is characterized by hillocks and plains integrated to swampy areas.

The reconnaissance process was specifically focused on the east margin of the basin, and on a number of sectors comprised in the contiguity area between Guatemala and Belize; in this sense, the cooperation received from the timber concessions in charge of managing the region was much appreciated.

The swampy environment, known as the *bajo* El Jobal, which predominates in the basin area between Naranjo and the archaeological site of Holmul, is characterized

by the scarcity of prominent islands and peninsulas, a fact that inhibited the proliferation of significant urban centers between both cities. Except for the sector where the site of El Pilar, corresponding to Guatemalan territory, is located, the few settlements identified mostly correspond to scattered rural groups not yet formally documented, being the site of El Jobal, with a Preclassic occupation, one such site.

Evidence of “rural” settlements continues to the southern swampy region of the Yaloch lagoon, associated to one of the Holmul River branches. As to the moderate hills found north of the Yaloch lagoon, there are manifestations of several minor urban and sub-urban centers integrated to rural settlements, at an average distance of 5 km. There is no standard or uniformity in the settlement pattern in regard to the urbanized space, the construction volumes and the development of architectural art, which has led us to consider that some of the centers may have represented polities that served different functions within the system or political conglomerate of which they were a part. Some examples of this situation are the sites of Mirador, Yaloch, Chintok, Chanchich, El Tambo and Witzna; the two latter ones already correspond to the water divide region of the Holmul and the Ixcanrio basins.

At a distance of 0.5 km. northwest of the Yaloch lagoon and on top of a small hill lies the sub-urban settlement of Mirador Yaloch; notwithstanding the site originated in the Middle Preclassic period, it never developed an Acropolis or Group E type Assemblage. At the main plaza we had the opportunity to identify a heavily eroded stela and several unconnected fragments of a probable zoomorphic figure. It is indeed peculiar that no major urban center developed around the Yaloch lagoon. The political dependency of the “rural” centers in the area may have been connected with El Pilar or El Perú, both located at an average distance of 8 km from Yaloch.

Approximately 10 km at the north of Yaloch, near the adjacency area and on a plain ground is the minor urban center of Chintok, organized in several groups that include quadrangles and vaulted palaces, one of which was a two-story structure. Inside some recent looting tunnels observed in a number of palaces, there are manifestations of Early Classic architecture. By the end of the Late Classic period, several palaces were transformed into ceremonial platforms. On top of one of them, two small, plain stelae were found, probably set by visitors after the place was abandoned late in the Terminal Classic period. As documented in other sites of the Holmul basin, the Chintok quadrangles refer to a Terminal Classic occupation present in almost all sectors of its entire surface.

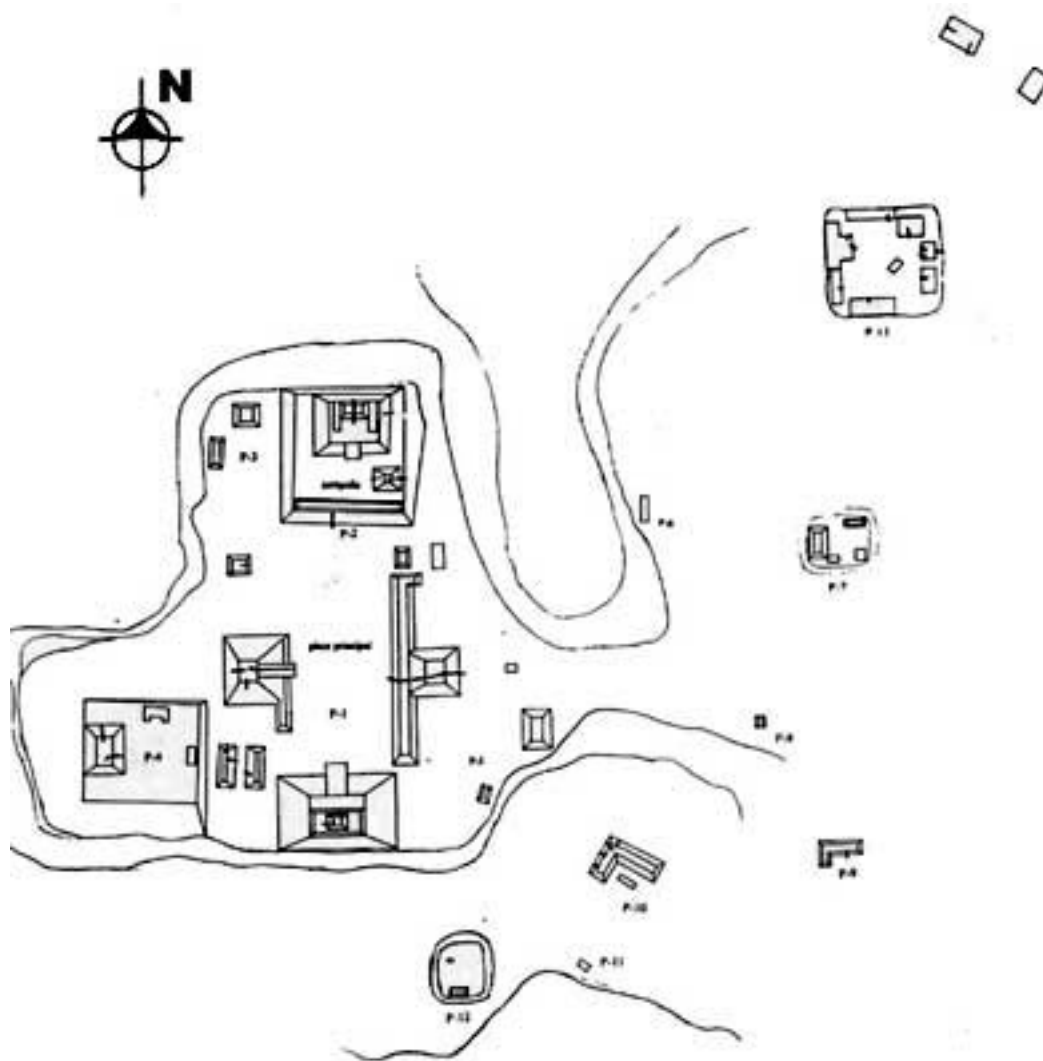


Figure 10. Chanchich II.

Close to one of the oxbows of the lower Holmul lies Chanchich II, a full urban center, which means it included two Acropolis groups, a Group E type Assemblage, a Ballgame patio, and nuclear residential groups (Figure 10). Looting has been extensive. The three bodies of the longitudinal platform of the Group E type Assemblage were crossed by tunnels that exposed several Preclassic and Early Classic sub-structures. The tunnel in the second body of the west façade exposed part of the stairway and south mask of the Late Preclassic building. The mask corresponded to the effigy of a zoo-anthropomorphic deity with a big arched nose and with an entity inside the mouth. Also, part of the headdress and ear flares could be easily observed (Figures 11 and 12a). The mask was not liberated due to the major problem posed by its conservation and adequate protection. The refills that covered the mask were very fragile, and were made of small, loose stones with no masonry mortar. Prior to covering it once again, the modeled stucco of the mask was consolidated and fixed, and props were placed around the tunnel to prevent sudden collapse.

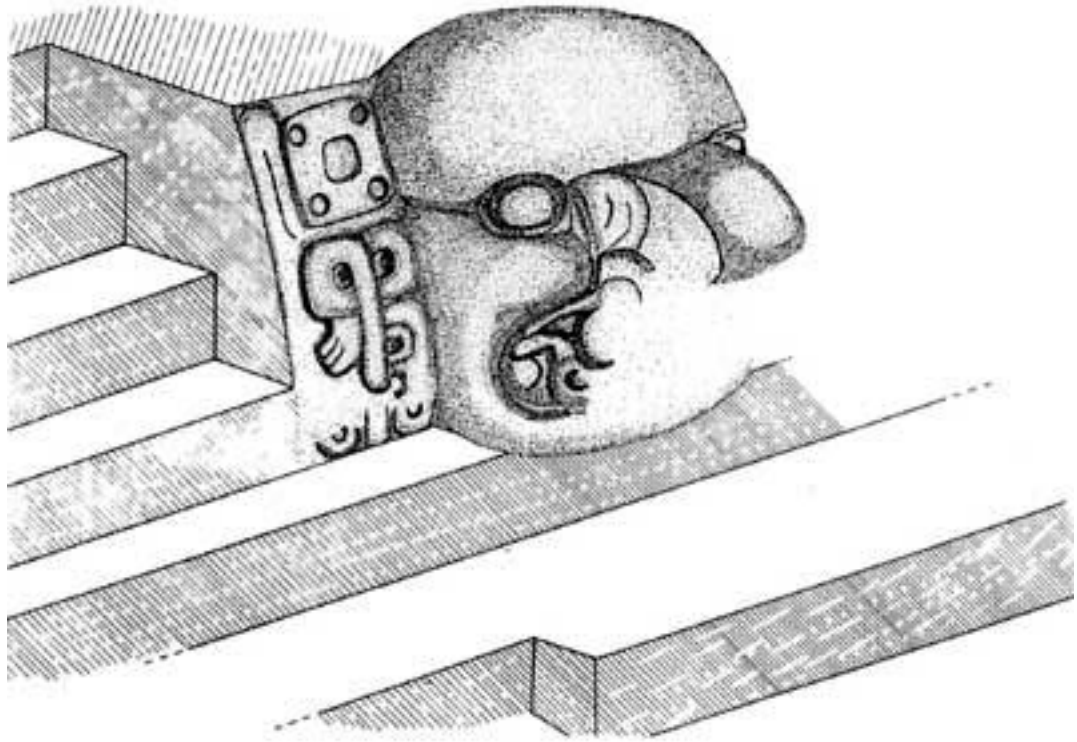


Figure 11. Chanchich II, mask.

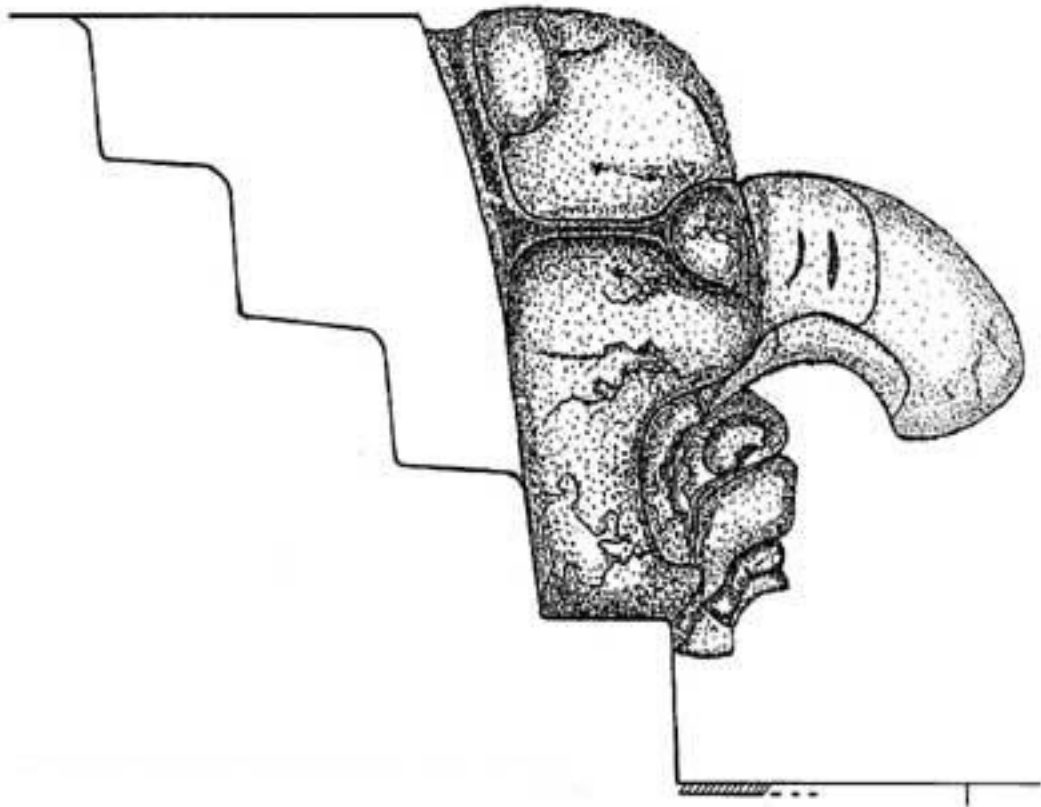


Figure 12a. Chanchich II, mask.

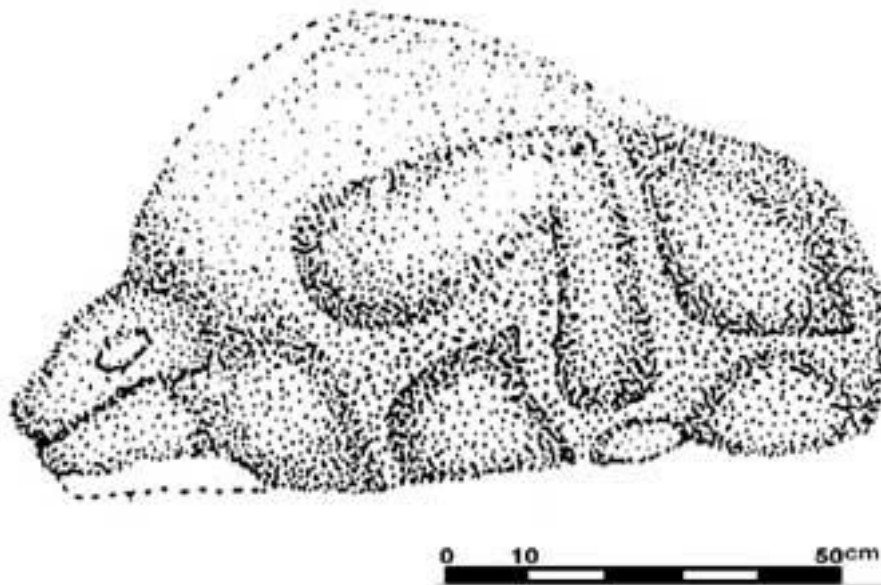


Figure 12b. El Tambo, zoomorphic figure.

In one of the residential groups of Chanchich II, two sculptures of coarse pot-bellied sculptures were found (Figure 13a), reminiscent of other Preclassic versions found at the sites of La Tractorada and El Jobal, both within the Holmul basin region related to the polity of Naranjo. An additional similar sculpture was recovered at a site located in the *bajo* Santa Fe, within the Tikal periphery (Figure 13b).

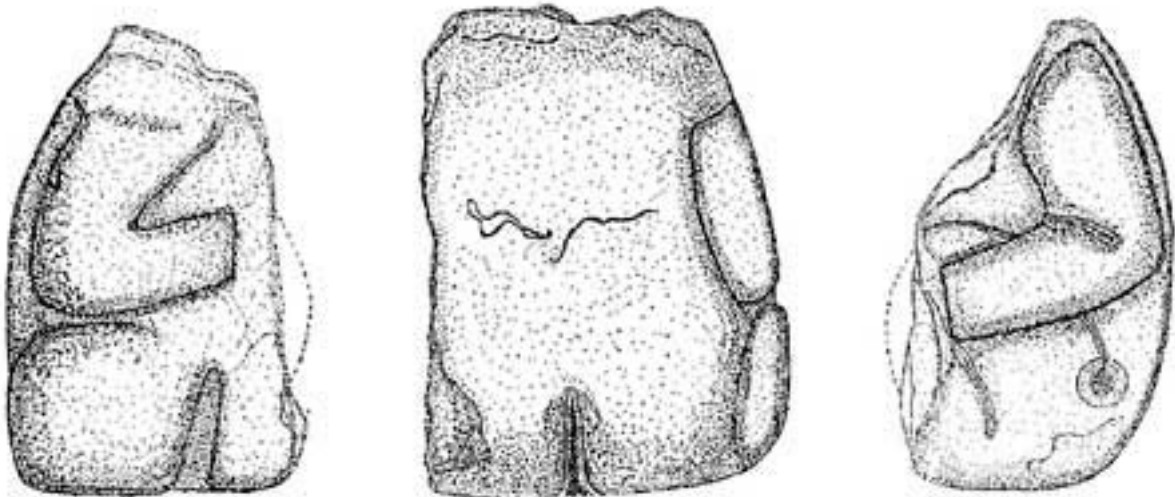


Figure 13a. Chanchich II, anthropomorphic figure.

Other Preclassic sculptural references from the northern region of the lower Holmul basin were associated to the site of El Tambo, where two possibly plain stelae and a zoomorphic toad (Figure 12b) were found in front of a looting trench from the East Platform of the Group E type Assemblage. The settlement may have had a primarily ritual function, as it was restricted to just a couple of plazas.

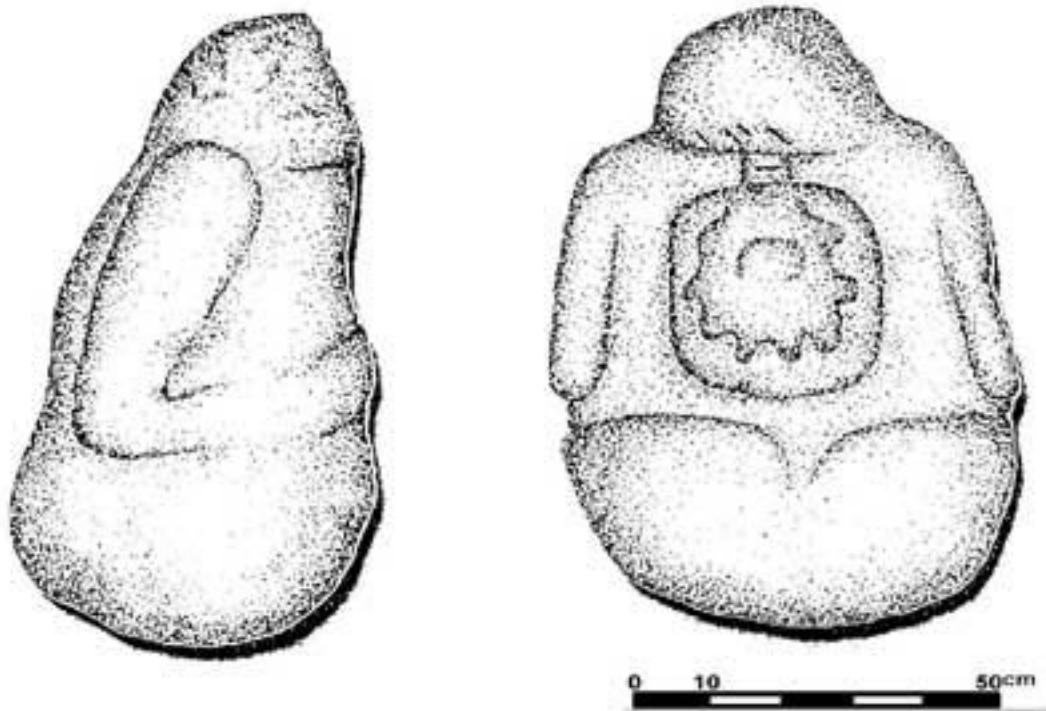


Figure 13b. Tikal, anthropomorphic figure.

The area of the water divide of the Holmul and the Ixcanrio basins includes the site of Witzna, the largest urban center in the region (Figure 14). The architectural assemblages consisted of an Acropolis integrated to a temple, several palaces (two of them with two levels), and one Ballgame patio. The main plaza was communicated through a causeway to the Group of the Sculptures, located at the west end of the city, along which there were several palaces of large dimensions. The epicenter was surrounded by a number of nuclear residential groups. At the Group of the Sculptures, three stelae, two of which were plain, were still in place, completely trapped by large roots; the third stela had carvings, but only one fragment abandoned by the looters has survived. In addition, remains were also found of two apparently plain altars, which may have accompanied the stelae.

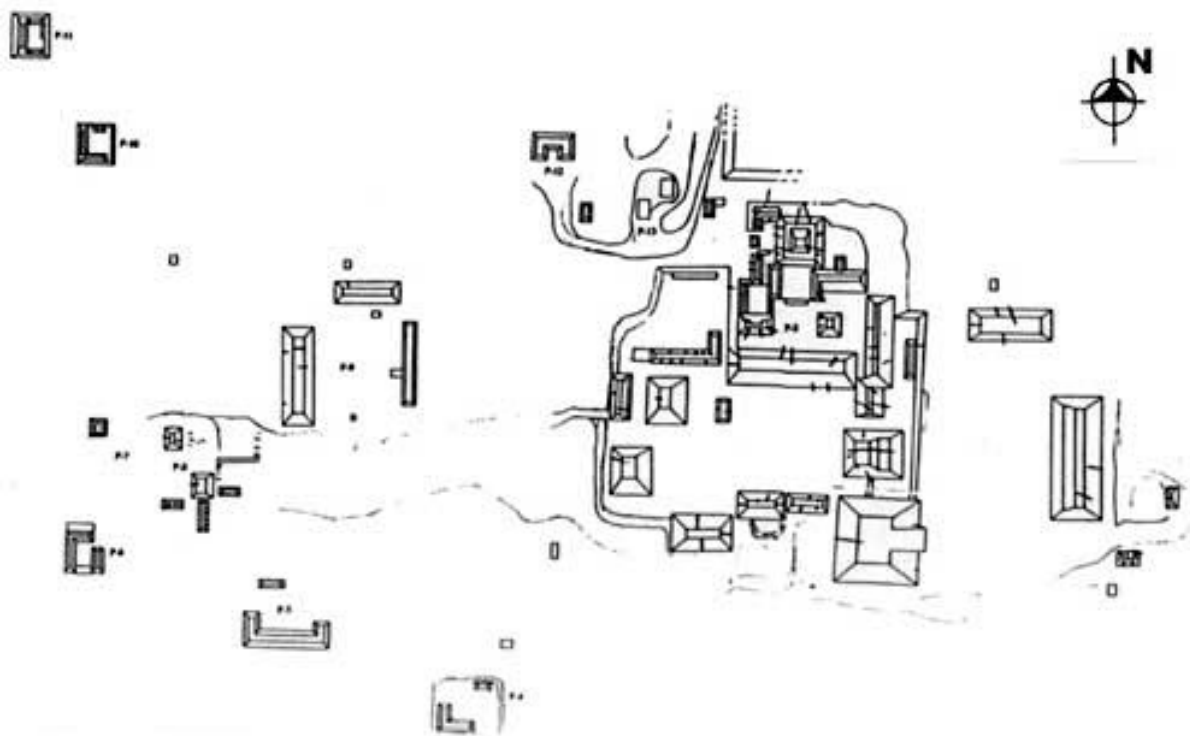


Figure 14. Witzna.

The main palace of the Witzna Acropolis had a quadrangle format and it appears heavily plundered by almost one dozen tunnels and trenches which have exposed at least three Late Classic and one Early Classic construction stages. The building, considered to be the royal palace, had vaulted spaces organized in double bays which still show a salmon-colored, granular stucco facing. On the south end of the west façade, the looters destroyed the inner stairway that climbed to the second level. As to the east façade, in its Late Classic version, one of the spaces featured a wide plinth decorated with a mat design, suggesting that this might have been the residence of a ruler.

FINAL CONSIDERATIONS

With this reconnaissance along the three regions of the Holmul river basin, we were able to learn more, in a very general manner, about the variety and the complexity of a number of settlements with a continued occupation of 15 or 16 centuries.

The political geography related to the Holmul river shows evidence of settlements that featured a sculptural tradition since the Preclassic period. Probably, the ancient polities detected in several settlements had achieved a more complex level of social organization than originally thought, and their interrelations at a regional level may have implied an incipient confederation, sustained by a common geographical trait that gave them a particular identity, as suggested by the ceramic styles and the construction systems.

We are still working on the data processing phase related to the inventory of the components of each one of the sites, which –needless to say- includes those of a sub-urban and rural rank.

Even though the ceramic studies suggest a relative homology regarding the types and forms of vessels, the first steps are being taken towards learning more about the traits of paste compositions that will clarify whether most materials came from one particular source, or either, whether several such sources were under the control of some particular entity.

Step by step, during our 120 km long reconnaissance, we have created a compendium of Maya settlements organized by cultural periods, which when the time comes will be ready to be compared within a trans-regional sphere, to achieve a multidimensional view of the territorial composition of the Maya polities and the extent of their political power at an inter-regional level.

REFERENCES

Becker, Marshall J.

- 2001 Plaza Plans at Tikal. In *Tikal Dynasties, Foreigners & Affairs of State* (Jeremy A. Sabloff, ed.), pp. 253-280. School of American Research Advanced Seminar Series, School of American Research Press, Santa Fe.

Culbert, T. Patrick, Vilma Fialko, Liwy Grazioso, Brian McKee and Kulie Kunen

- 1997 Investigaciones arqueológicas en el bajo La Justa, Petén. In *X Simposio de Investigaciones Arqueológicas en Guatemala* (J.P. Laporte and H. Escobedo, eds.), pp. 367-371. Museo Nacional de Arqueología.

Fialko, Vilma

- 1996 Sangre, sudor y lágrimas: Monografía de los sitios arqueológicos descubiertos, mapeados y muestreados en los espacios intersitios ubicados entre los centros urbanos Mayas de Tikal y Nakum. Reporte 3, manuscript in the PROSIAPETEN-PRONAT Archives, Instituto de Antropología e Historia, Guatemala.
- 1997 Arqueología regional de intersitios entre los centros urbanos de Yaxha y Nahum. In *Beitrag Zur Allgemeinen un Vergleichenden Archaologie*, Band 17, pp. 311-324, Bonn.
- 1998 Sangre, sudor y lágrimas: Investigaciones arqueológicas en los centros urbanos menores ubicados en el bajo La Justa: Aguada Maya, La Pochitoca, Cara Fea y Tintalito. Reporte 9, Manuscript in the PROSIAPETEN-PRONAT archives. Instituto de Antropología e Historia, Guatemala.
- 2000 Sangre, sudor y lágrimas: Investigaciones arqueológicas en los centros urbanos menores ubicados en la periferia este de Tikal (Uolantun, El

Corozal, Chalpató). Reporte 11, Manuscript in the PROSIAPETEN-PRONAT archives. Instituto de Antropología e Historia, Guatemala.

2001 Investigaciones arqueológicas en el bajo Santa Fe y la cuenca alta del río Holmul; región noreste del Parque Nacional Tikal y periferia oeste de Nahum, Parte 2. Manuscript in the PROSIAPETEN-PRONAT archives. Instituto de Antropología e Historia, Guatemala.

2002 Investigaciones arqueológicas en la cuenca media del río Holmul entre Nakum y Naranjo. Manuscript in the PROSIAPETEN-PRONAT archives. Instituto de Antropología e Historia, Guatemala.

Gidwitz, Tom

2002 Pioneers of the Bajo. *Archaeology* 55 (1): 28-35.

Lanza, Felipe

1995 Informe de clasificación de bosques y bajos entre Yaxha y Nakum. Manuscript in the PROSIAPETEN-PRONAT archives, Instituto de Antropología e Historia, Guatemala.

Laporte, Juan Pedro, and Héctor E. Mejía (eds.)

1999 Registro de sitios arqueológicos del Sureste de Petén, Reporte 14. Atlas Arqueológico de Guatemala, Ministerio de Cultura y Deportes, Guatemala.

Norman, V. Gareth

1973 *Izapa Sculpture. Part 1: Album*. Papers of the New York Archaeological Foundation 30. Brigham Young University, Provo.

Schele, Linda, Federico Fahsen and Nikolai Grube

1992 El Zapote and the Dynasty of Tikal. In *Texas Notes on Precolumbian Art, Writing and Culture*, No. 34. Center for the History and Art of Ancient American Culture. Art Department, University of Texas, Austin.

Sever, Thomas, T. Patrick Culbert, Vilma Fialko and Daniel Irwin

2000 Remote Sensing Investigation of the Ancient Maya Landscape. Paper, 65 Annual Meeting, Society for American Archaeology, Philadelphia.

Figure 1 The Holmul river basin

Figure 2 El Zapote

Figure 3 El Socotzal, Acropolis

Figure 4 Isla Jahuia

Figure 5 Tres Cabezas, Stela 1

- Figure 6 Kanajau
- Figure 7 Kanajau, sculptures
- Figure 8 Kanajau, Stela 1
- Figure 9a Kanajau, zoomorphic figure
- Figure 9b Kanajau, altar with supports
- Figure 10 Chanchich II
- Figure 11 Chanchich II, mask
- Figure 12a Chanchich II, mask
- Figure 12b El Tambo, zoomorphic figure
- Figure 13a Chanchich II, anthropomorphic figure
- Figure 13b Tikal, anthropomorphic figure
- Figure 14 Witzna