

CHULTUNS IN THE SURROUNDING AREAS OF THE YAXHA LAGOON, PETEN

*Zoila Calderón
Bernard Hermes*

Keywords: Maya Archaeology, Guatemala, Petén, Yaxha, Topoxte, *chultuns*, Preclassic, Early Classic, Late Classic, Terminal Classic, Postclassic, functional aspects

This work compiles the information recovered during the research program of *chultuns* in the surrounding areas of the Yaxha Lagoon, Petén, conducted by IDAEH's Triangle Sub-Project.

The excavations and explorings conducted by the project's staff have given way to the discovery of 60 *chultuns* in the area:

- 14 are located in the Topoxte islet
- Two in the Paxte islet
- Five in the Cante islet
- 27 in Yaxha
- Seven in Kuch, a small site located 3700 m southwards of IDAEH's camp at Yaxha, along the path that leads to the road Flores Melchor de Mencos.
- One in a transect located north of Topoxte
- Four on the northeast bank of the lagoon (transects 2 and 3)

A total of 52 *chultuns* were tested, and seven were not investigated at Yaxha, as neither was another one from a transect located to the north of Topoxte. For the purpose of presenting the information, a format has been designed which includes the entire relevant data corresponding to each *chultun* examined. With the purpose of illustrating the concepts used, an illustration with the overall shape used to denominate each one of the components of the *chultun* is now being shown (Figure 1).

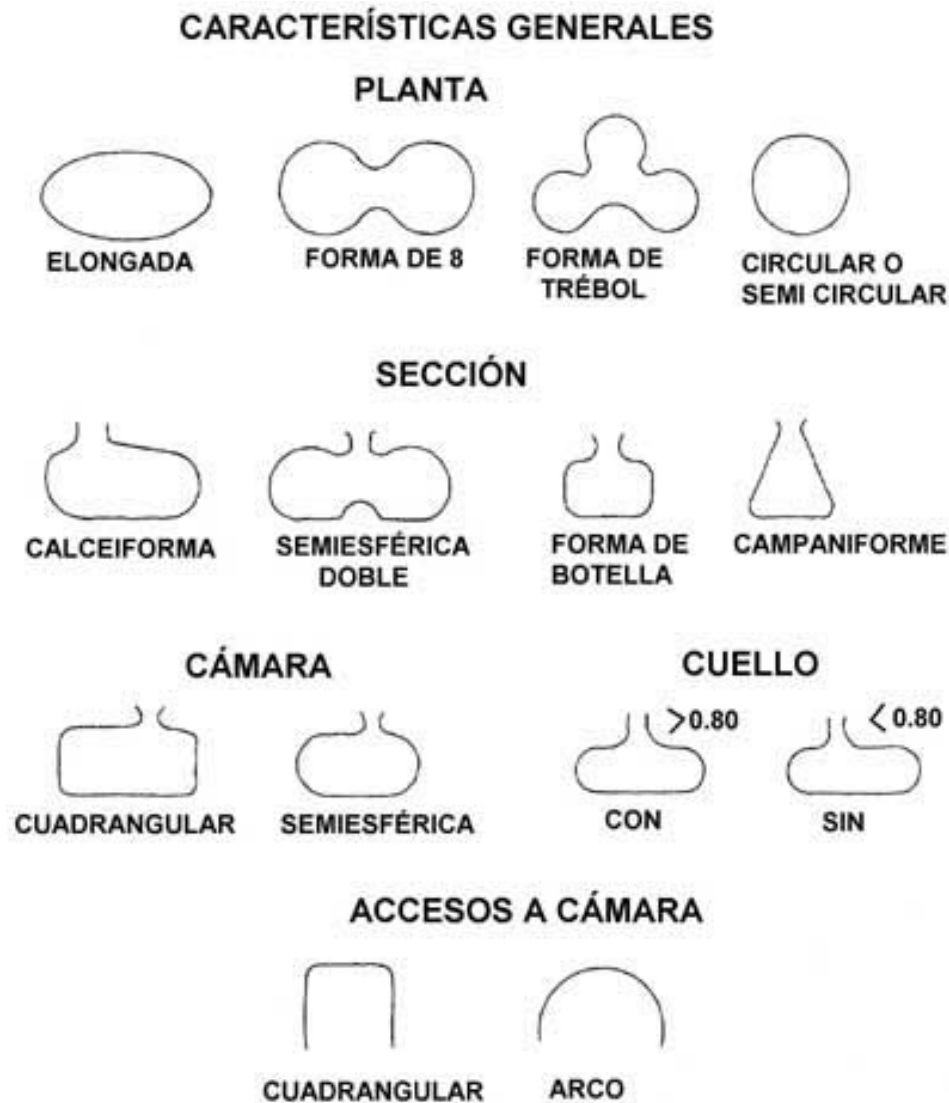


Figure 1. Chultuns, general characteristics.

The decision was made to generically use the name of *chultun*, notwithstanding we share Zapata's view (1989:23) when he says that "... a *chultun* is a cistern carved in the rock intended to store rain water, and the term comes from the contraction of *chulub* (rain water) and *tun* (carved stone)..."; the use of this name for cavities serving a purpose different than that of storing water, and mainly rain water, is incorrect.

TOPOXTE

This is the isle where the major ceremonial center is located (Figure 2), it features nearly 100 buildings and it is organized in three distinct areas: two elevated areas with concentric platforms that modify the original topography of the island (some portions of it show refills of up to 5 m), and a lower area with secondary buildings. The elevated

areas have large buildings with columns resembling the open hall type, temples with stepped platforms, stairways with beams crested with capstones, etc.

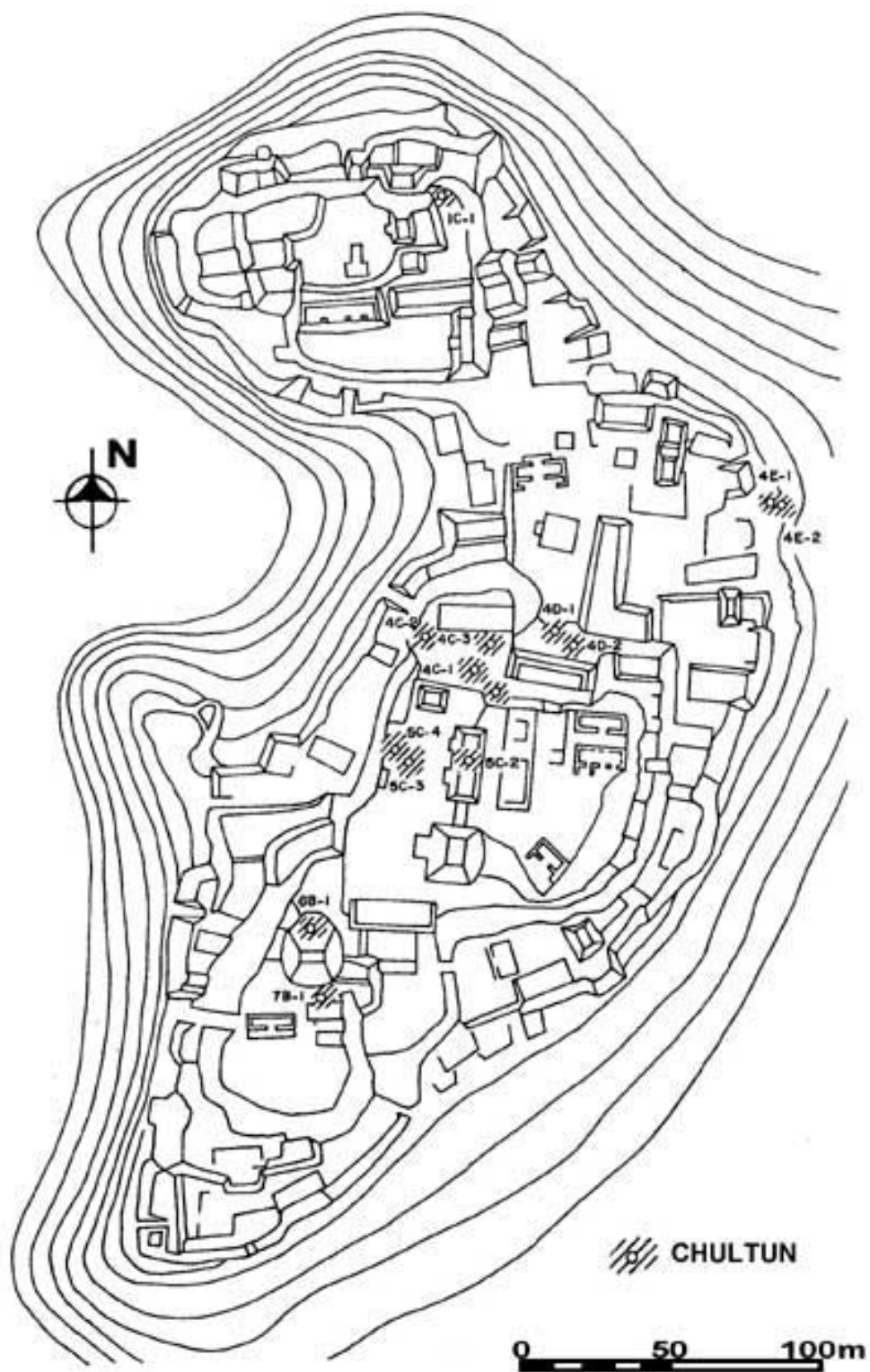


Figure 2. Plan view of Topoxte

The island measures approximately 450 m in the north-south direction x 400 m in the east-west direction, its outline forms a curve that is opened to the west, and that's how a bay was formed in the middle area. On the east side, a plain area of land enters into the lake to form a point or small peninsula. An irregular, rectangular main plaza is located at the center, and it is there where the major buildings of the site are found.

PAXTE

It is the smallest of the three islands forming the settlement (Figure 3a), it is located 100 m west of the Topoxte island; its extension is of approximately 3 hectares, and shows a topography with a regularly high slope. The settlement consists of 68 buildings, mostly small and low platforms built with uncarved limestone. Only two groups present major buildings of the type known as open halls and halls with columns typical of the Postclassic period; in addition, there are two temples and four shrines. The buildings located within the major groups present a north-south orientation and alignment, while the remaining buildings were distributed by adjusting them to the topography of the ground in three concentric zones around the main group.

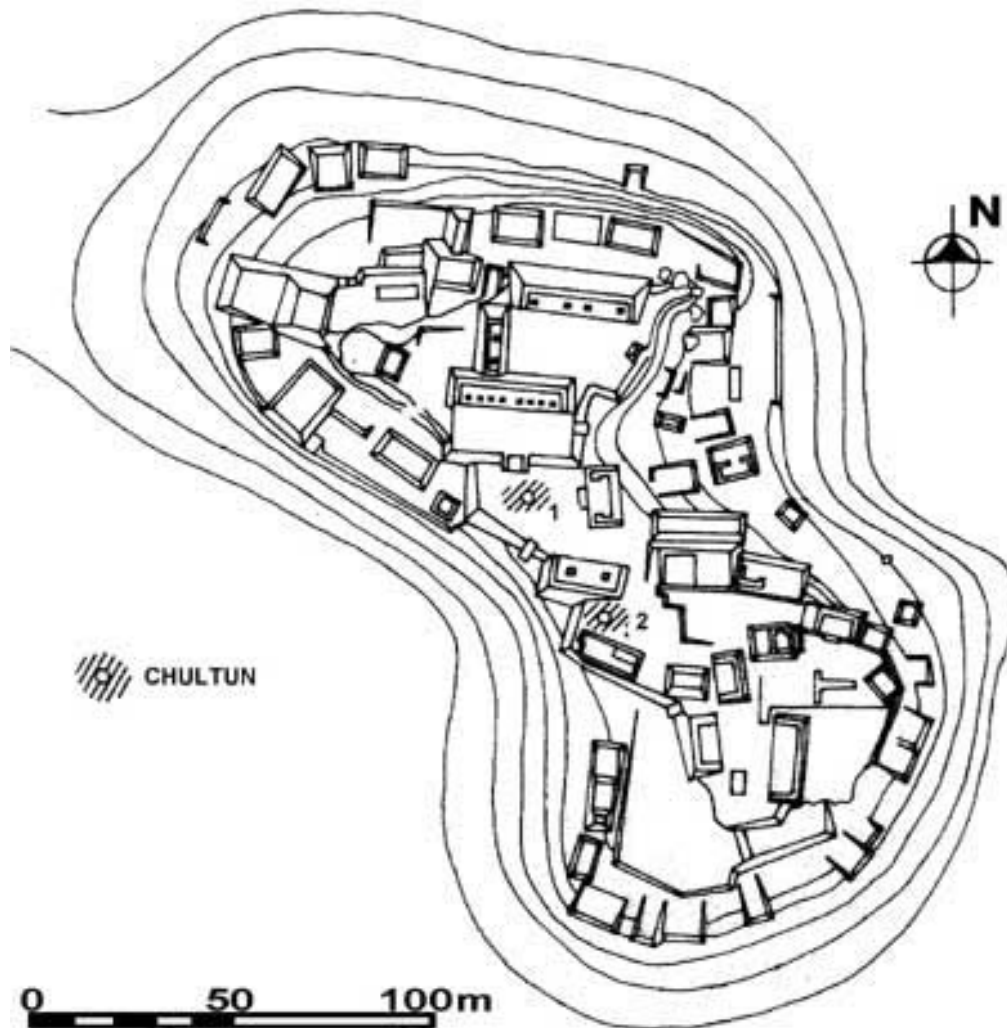


Figure 3a. Plan view of Paxte: location of the *chultuns*.

CANTE

It is located west of the islands of Topoxte and Paxte (Figure 3b). When the water level of the Yaxha Lagoon is low, it becomes connected with Paxte through its east side by a strip of land; it covers an approximate surface of 6.5 hectares, and shows a scarped topography to the east, with a gentle slope towards the west. To this day, the mapping of 142 buildings has been completed, and the only ones that form a well defined plaza are those of the main group, which include two carved stelae that date to the Late Classic period. All the other buildings were characterized by the fact that their spatial location was adjusted to the available space and the slope of the ground; they are mostly low, middle sized platforms with a rectangular plan and with a probable residential function.

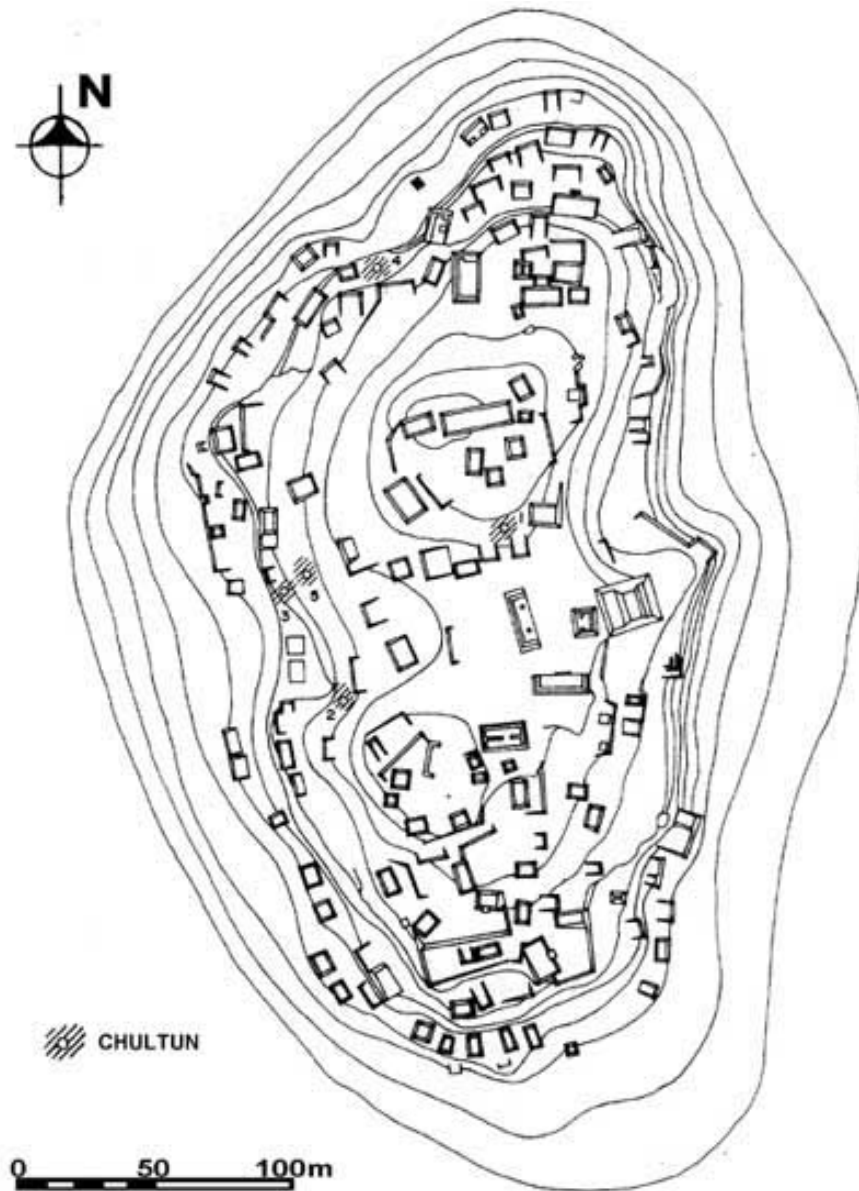


Figure 3b. Plan view of Cante: location of the *chultuns*.

INVESTIGATED *CHULTUNS*

MIDDLE PRECLASSIC PERIOD

None of the tested *chultuns* have yielded materials corresponding to this period, but one of them has reported the finding of ceramic dating to the Yancotil complex in island number four of Topoxte (Rice 1979: 23-24), which was given the name of Jacalte in the works conducted by the Triangle Sub-Project.

PROTOCLASSIC PERIOD

There are seven *chultuns* at Topoxte (4C-2, 4C-3, 5C-2, 5C-3 5C-4, 6B-1, 7B-1; Figures 4a, b and c) and one at Cante that date to this time span, both through the archaeological material recovered at the inside (7B-1 and 7B-2 at Cante) or through stratigraphy, as the remaining three *chultuns* were found empty. There is a clear preference for always building more than one single chamber. Regarding *Chultun* 7B-1, it may be said that it is not a real *chultun* in the full sense of the word, but rather a network of underground chambers.

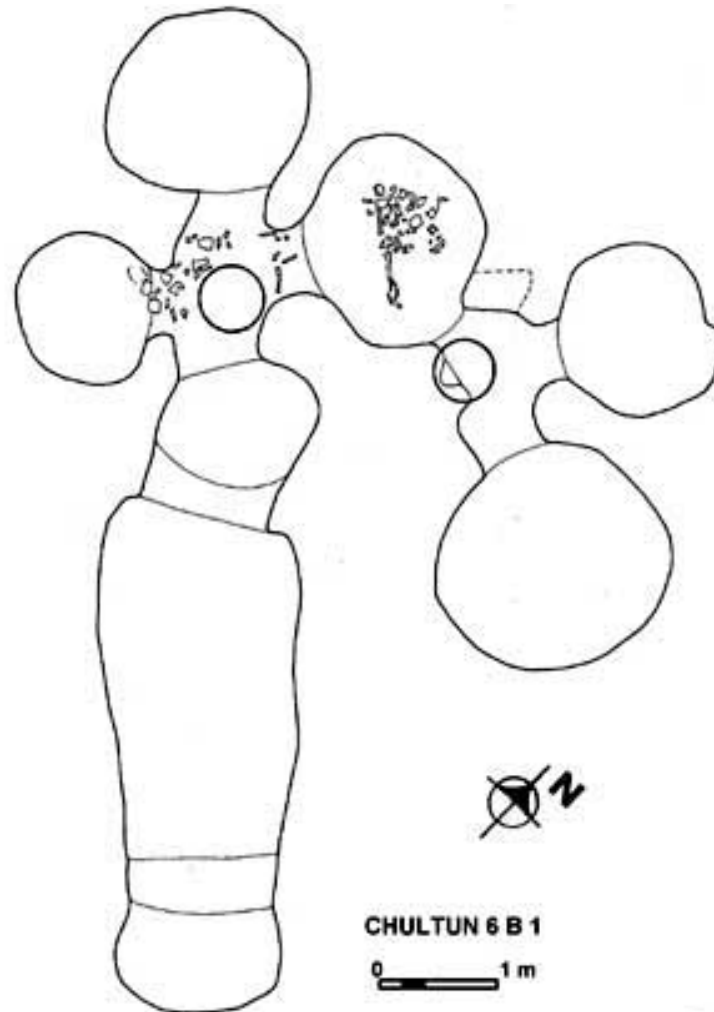


Figure 4. a) *Chultun* 6B-1.

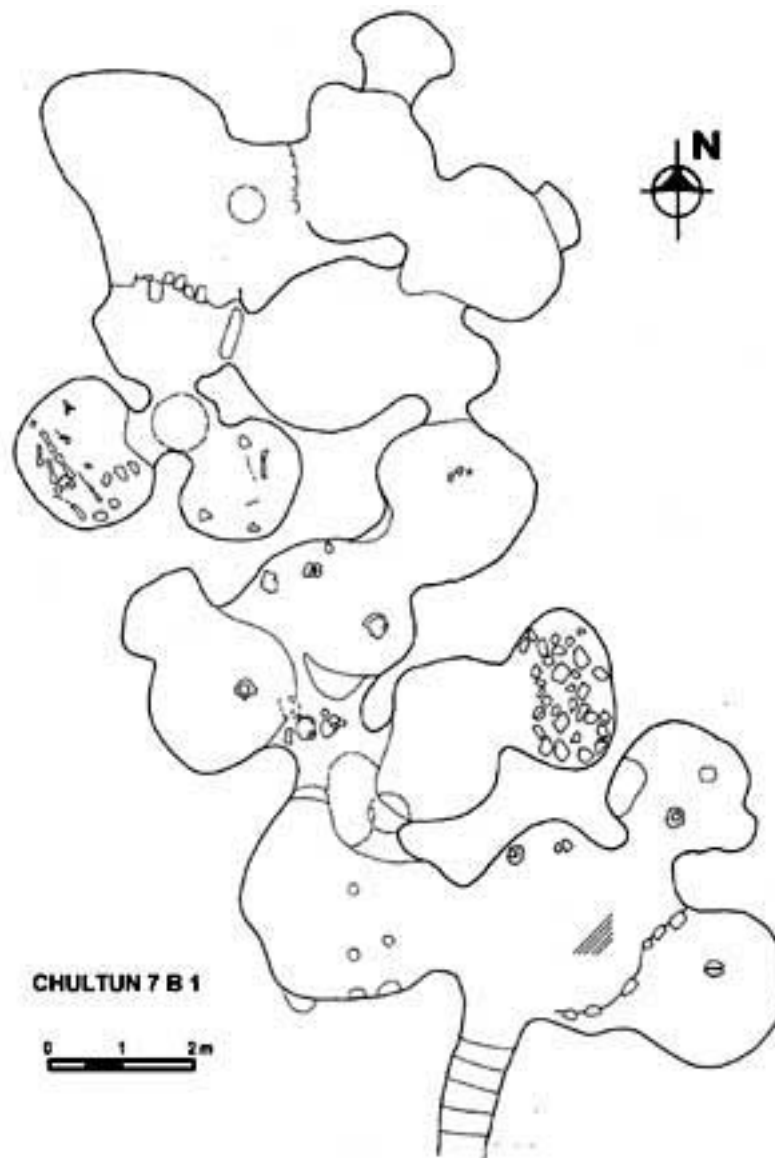


Figure 4. b) *Chultun* 7B-1.

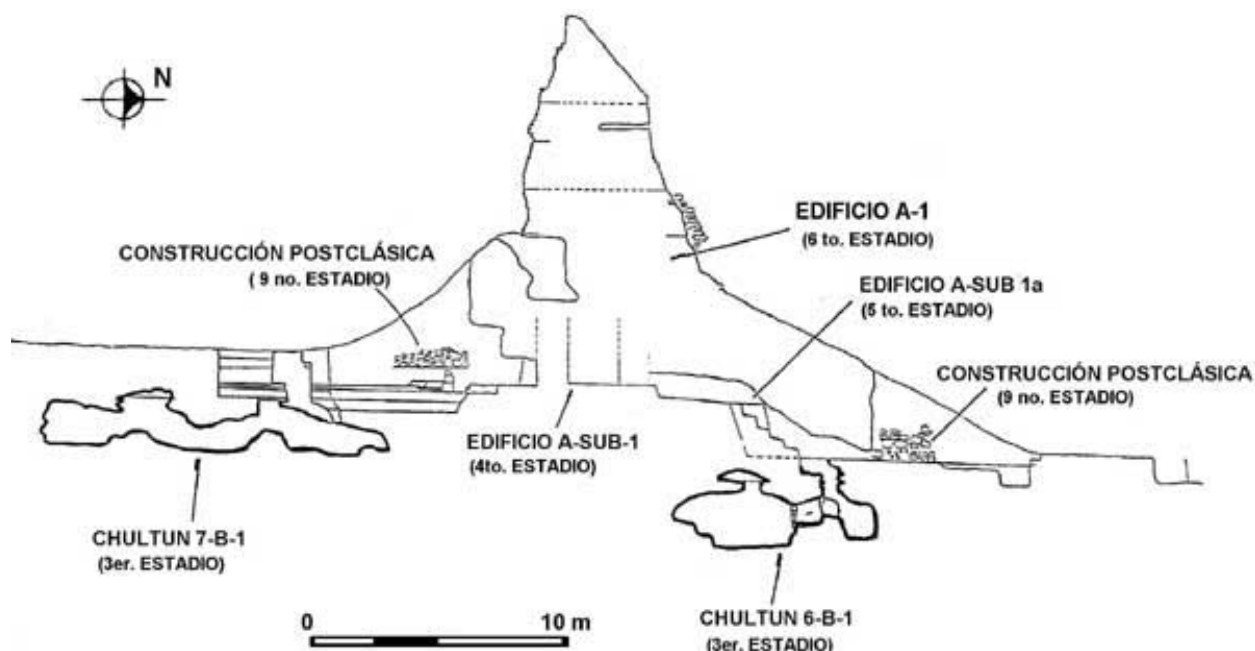


Figure 4. c) North-South section of Building A in Topoxte, showing *chultuns* 7B-1 and 6B-4.

In Topoxte, three *chultuns* are located in the northern portion of the main plaza (5C-2, 5C-3, 5C-4), while the network of chambers was located in the south, though outside of the area (7B-1); in any case, it is possible that if the plan view of the site during that time span was known, it could be observed that all of them were related to the central area of the site.

Functionally, it would be hardly feasible to consider the storage of usable remains or materials. In two cases there was evidence of high temperatures associated with the walls of these chambers (with no soot, collapse of roof and walls), and this could rather be related to bath houses. The evidence shows specialized features such as the hole in the ground present at *Chultun* 5C-4, or the stones in chamber 10 of *Chultun* 7B-1.

The ritual function of *Chultun* 7B-1 poses no doubts, mainly due to all the evidence left there at the time of its closure, carried out, according to evidence recovered through the excavation process, from chamber 6 (placement of Burial 19), to the main access located in chamber 11. Possibly, this network of underground chambers served as a cave function within the site.

LATE CLASSIC PERIOD

Eight *chultuns* show material evidence of activity dating to this period (4C-1, 4D-1, 4D-2, 4E-1, 5C-1 at Topoxte; 1 and 2 at Paxte). Out of these, only *Chultun* 5C-1 presents two mouths. No preference has been observed regarding the number of chambers, though there are always one or two (never three), and the situation is the same with the plan

view and the section, features that are somehow conditioned by the number of chambers.

It is feasible to assume that their primary function was variable; *Chultuns* 4E-1 and 4E-2 at Topoxte (Figures 5a and b) might have been water wells or locus for the preparation of construction mixes. The others, taking into account the size of the inner space, suggest that they might have served like locales for a certain type of meeting with a limited or restricted access. Offerings and burials were found in *Chultuns* 5C-1, at Topoxte, in number 2 at Paxte, and in numbers 3 and 5 at Cante (Figure 5b). It is significant that the evidence of the Late Classic period occupation in Topoxte was 90 % originated by the *chultuns*, which concentrate in the central-north section of the island where the remaining 10% comes from.

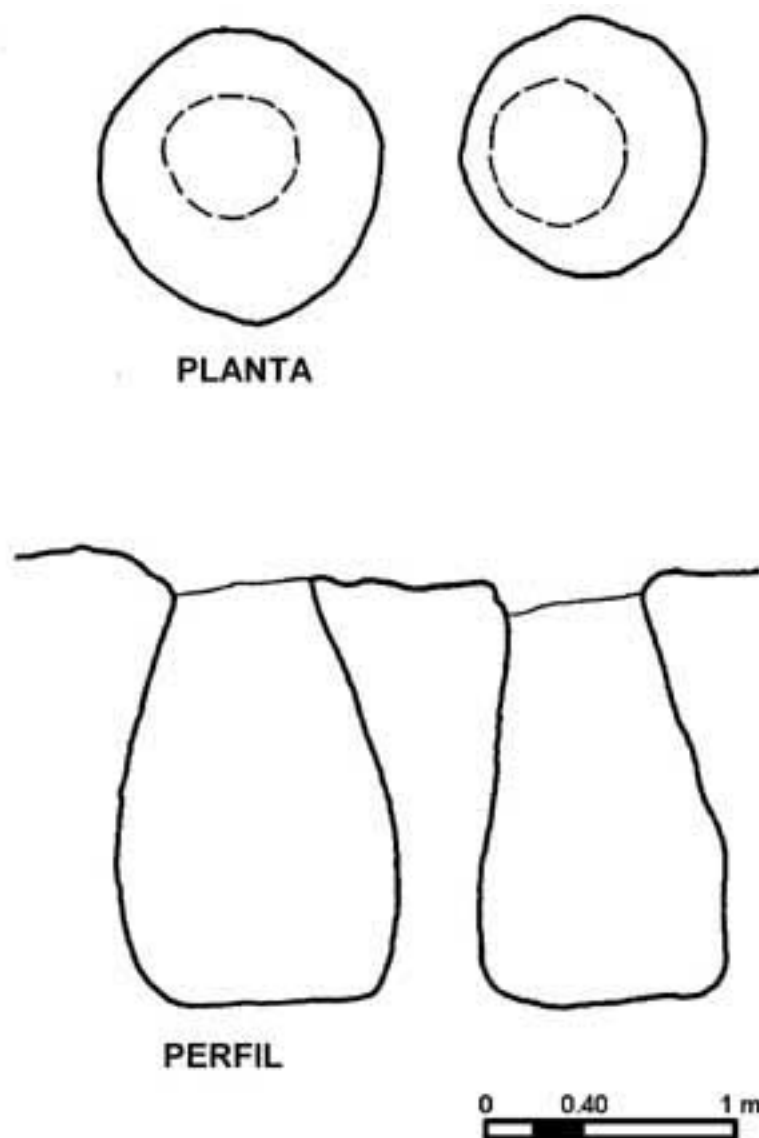


Figure 5.a) *Chultuns* 4E-1 and 4E-2 in Topoxte.

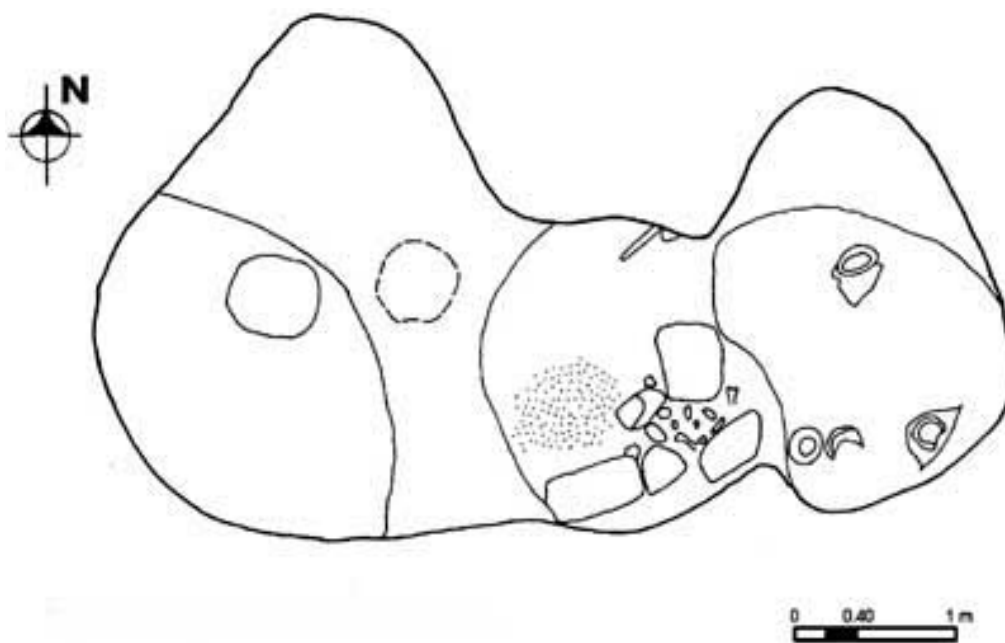


Figure 5.b) *Chultun 3* in Cante

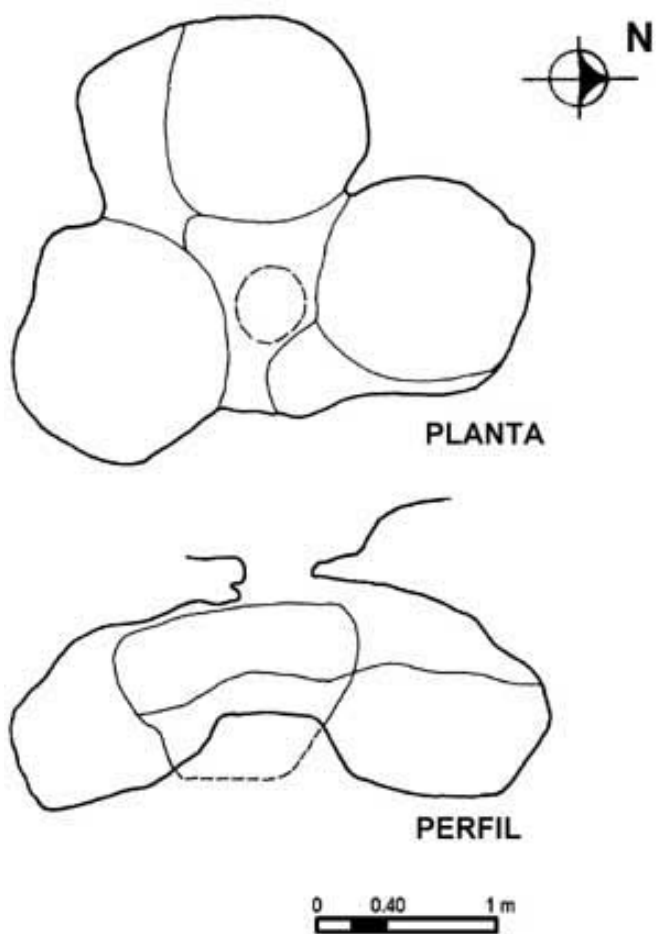


Figure 5.c) *Chultun 5* in Cante

TERMINAL CLASSIC PERIOD

Only *Chultun* 3 in Cante shows activity unmistakably dated to this time span, including the deposit of offerings. It is important to note that Topoxte shows no significant evidence of any kind of activity for this period.

POSTCLASSIC PERIOD

Materials from this time span were exclusively found in *Chultuns* 1C-1 at Topoxte, and 4 and 5 at Cante. There is not much to say about *Chultun* 1C-1, mutilated since prehispanic times, because the area where it was located was used as a quarry (it may have been built and used before the Postclassic period). Concerning the *chultuns* at Cante, the presence of offerings inside *Chultun* 5 leads to assume a ritual function for it; regarding *Chultun* 4, its shape and association with a cave would seem to indicate it may have worked as an access, although the paucity of the archaeological material recovered does not allow for a proper approach to its function.

INVESTIGATION TO THE NORTHWEST OF THE LAGOON

With the purpose of gaining knowledge about the settlement and the prehispanic activities that took place at the bank of the Yaxha Lagoon, nearby the islands of Topoxte, Cante, and Paxte, a reconnaissance and mapping was conducted at the northwest, west and southwest sides of the lagoon, by means of transects that departed from the bank of the lagoon to head inland.

In total, 15 transects were opened (Operation XX), of which numbers 2 and 3 in the northwest bank of the lagoon (in front of Topoxte), showed the presence of *chultuns*. In transect 2, *Chultun* 1 was found, associated with the stake 0 + 225. Transect 3, at the site of Los Cortados B, revealed the presence of *Chultuns* 2 and 3, while *Chultun* 4 was found southwest of the site of Los Cortados C (Figure 6a). The chronologic data for the test pits at the sites of Los Cortados B and C were established to the Late Classic period (Figure 6b; Lou 1997).

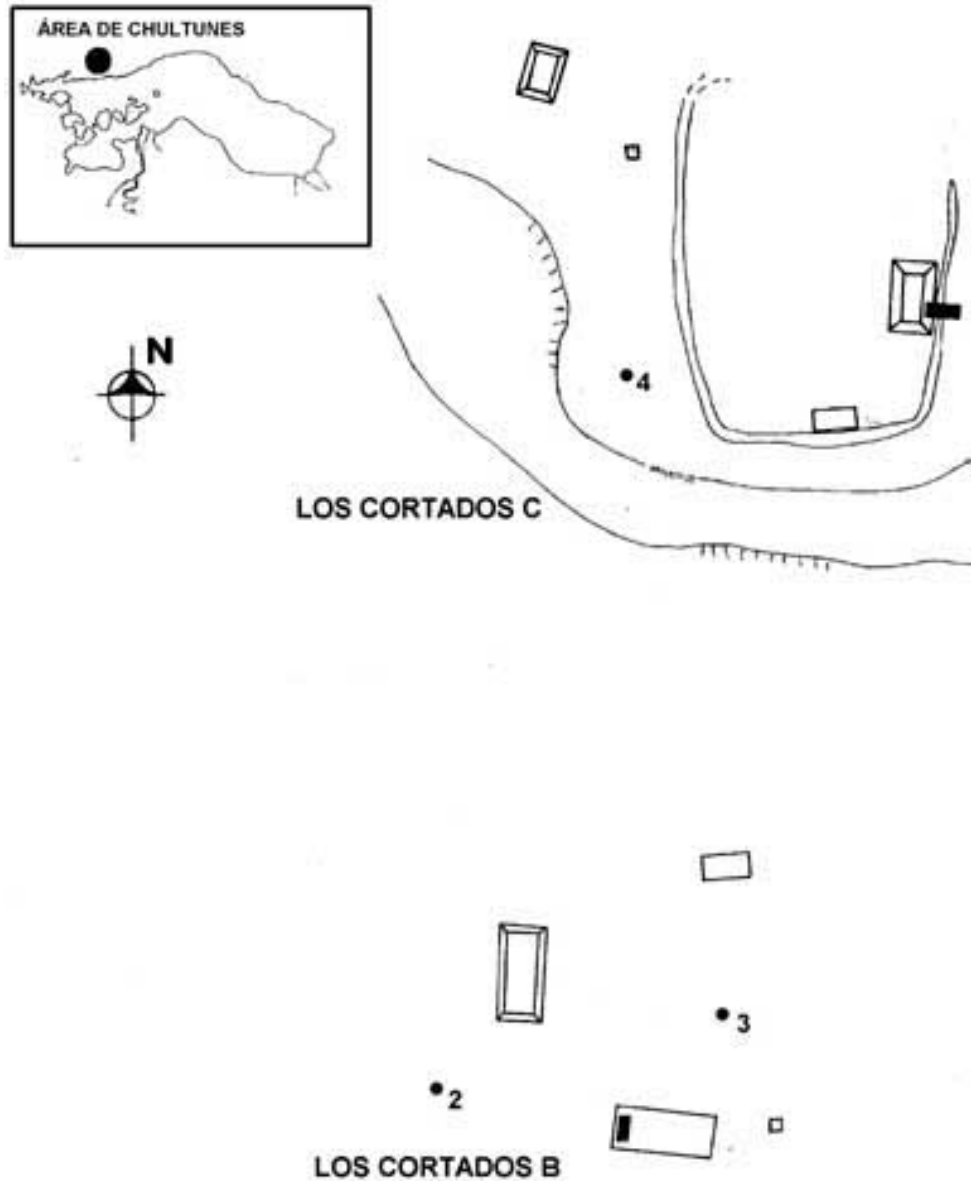


Figure 6. a) Location of transects in front of Topoxte;
b) Location of the *chultuns* in Los Cortados B and C.

Among the *chultuns* present along transects 2 and 3 in the northwest bank of the Yaxha Lagoon, one of them was isolated and with no visible constructions. *Chultun* 2 and 3 were found at the site of Los Cortados B, and consisted of three low platforms with an open plaza to the east. *Chultun* 4 was associated with the site of Los Cortados C, which includes two buildings, one to the east and the other one to the south; the one to the east seems to be a shrine and the one to the south a low platform (0.15 m high; Figure 6b). Two of the *chultuns* feature a plan view in the shape of an eight, one of them has a shape that resembles a clover, and the other one is circular. Three show a calceiform shape and one has a bell-shaped section, three have two chambers, and the remaining one just one.

LATE CLASSIC

All four *chultuns* show evidence of activity dated to the Late Preclassic period. All of them yielded scarce ceramic material. Considering their typical form and useful inner space, *Chultun* 1 may have served the purpose of celebrating meetings with limited access, and then *Chultun* 4 (Figure 6c), may have had some ritual function, due to the presence of offerings. *Chultun* 3 may have served the function of a storage place to keep different materials. *Chultun* 2, similar to *chultuns* 4E-1 and 4E-2 at Topoxte, due to its section and plan view, may have served as water well or as a place for preparing different construction mixes.

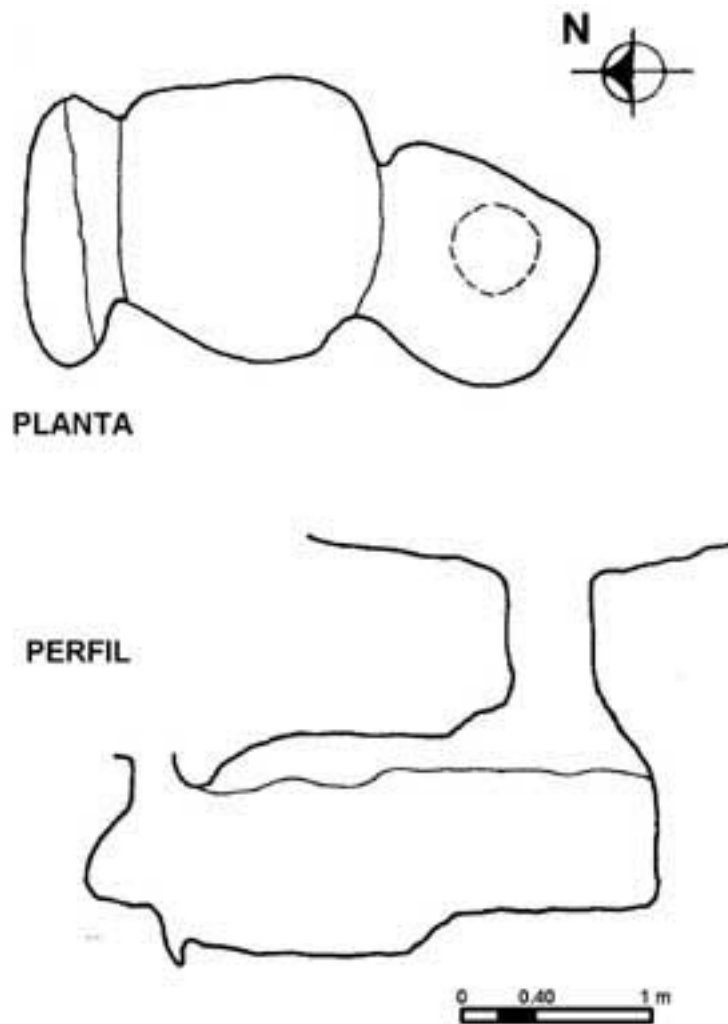


Figure 6. c) *Chultun* 4 in transect 3.

POSTCLASSIC PERIOD

In turn, *Chultuns* 1 and 4 present evidence of use during the Postclassic period, as material corresponding to that time span was recovered. *Chultun* 4 yielded two vessels, one pot, and one plate of the Pozo group, a purely utilitarian ceramic, suggesting a function related to some kind of domestic ritual associated with the dwellers of the site of Los Cortados C.

INVESTIGATION AT YAXHA

The ceremonial center of Yaxha is located at the northern bank of the lagoon with the same name, at an average height of 250 m above sea level; it extends over the hill that runs parallel to the lagoon's banks, approximately across a distance of 3 km, and includes a number of plazas and patios conditioned through a descending leveling and terracing that follow an east-to-west direction.

The site involves over 500 buildings, and is characterized by large building complexes, such as the Twin Pyramids Complex (single one known outside the Tikal area), two Ballgames, several Acropolis, one Group E type Complex, temples, palaces, and several causeways, one of which descends 50 m to the banks of the lagoon; to this date it includes 40 reported stelas (Figure 7). The occupational sequence is extended and continued, beginning by the Middle Preclassic period and ending by the Postclassic period.

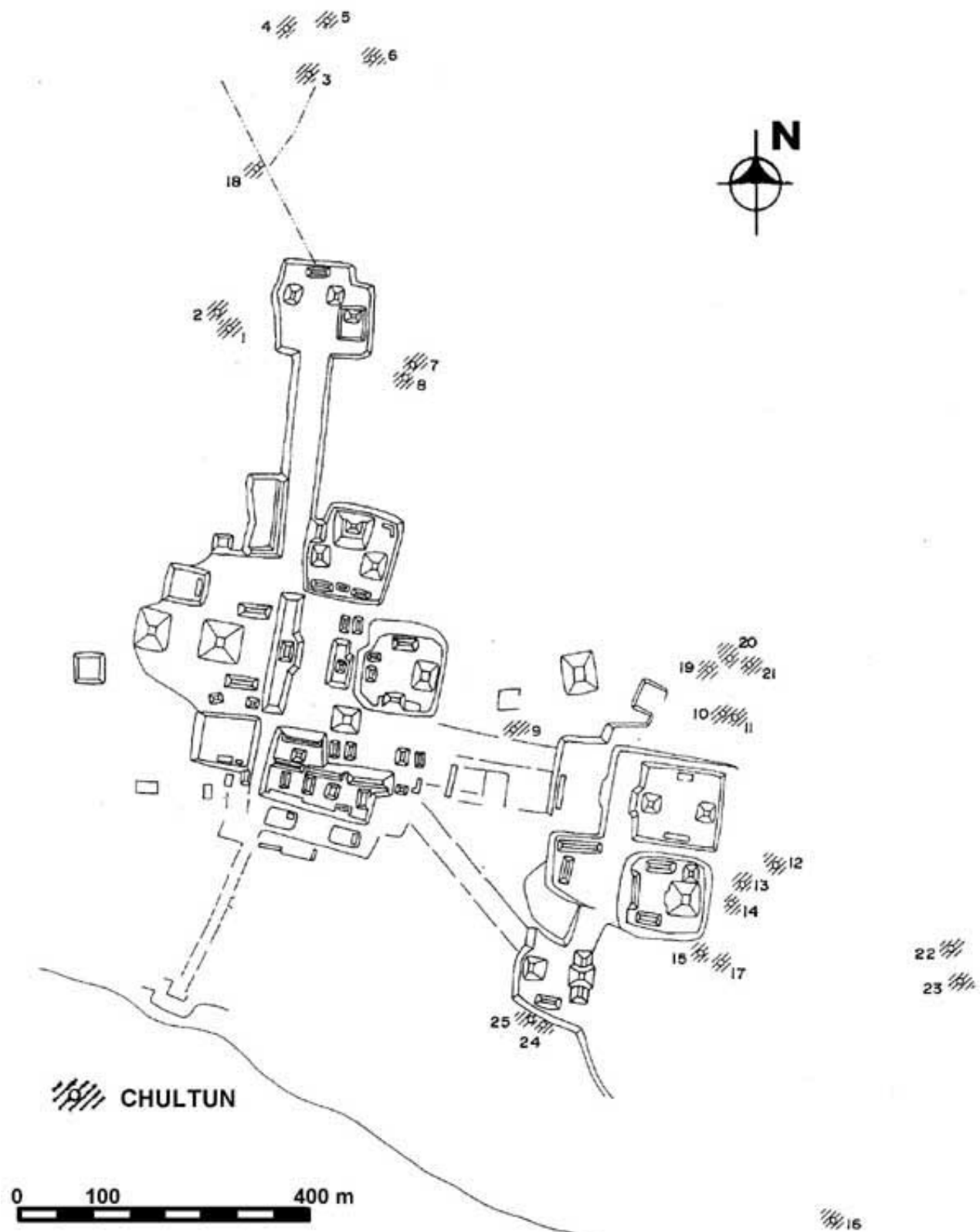


Figure 7. Plan view of Yaxha and location of the *chultuns*.

CHULTUNS INVESTIGATED

One single *chultun* was found within the major ceremonial area in Plaza C, inside a test pit (Sub-operation 103, Operation III). The others skirt the ceremonial area, and *chultuns* are commonly found in pairs or groups, sometimes associated with low platforms, as is the case with *Chultuns* 2, 7, 12; others, like *Chultuns* 16, 17 and 27, seem to have no visible associated construction.

MIDDLE PRECLASSIC PERIOD

Only *Chultun* 10 dates to this time span, with a circular plan and a calceiform section; it was probably used to conduct private gatherings or rituals (Figure 8b).

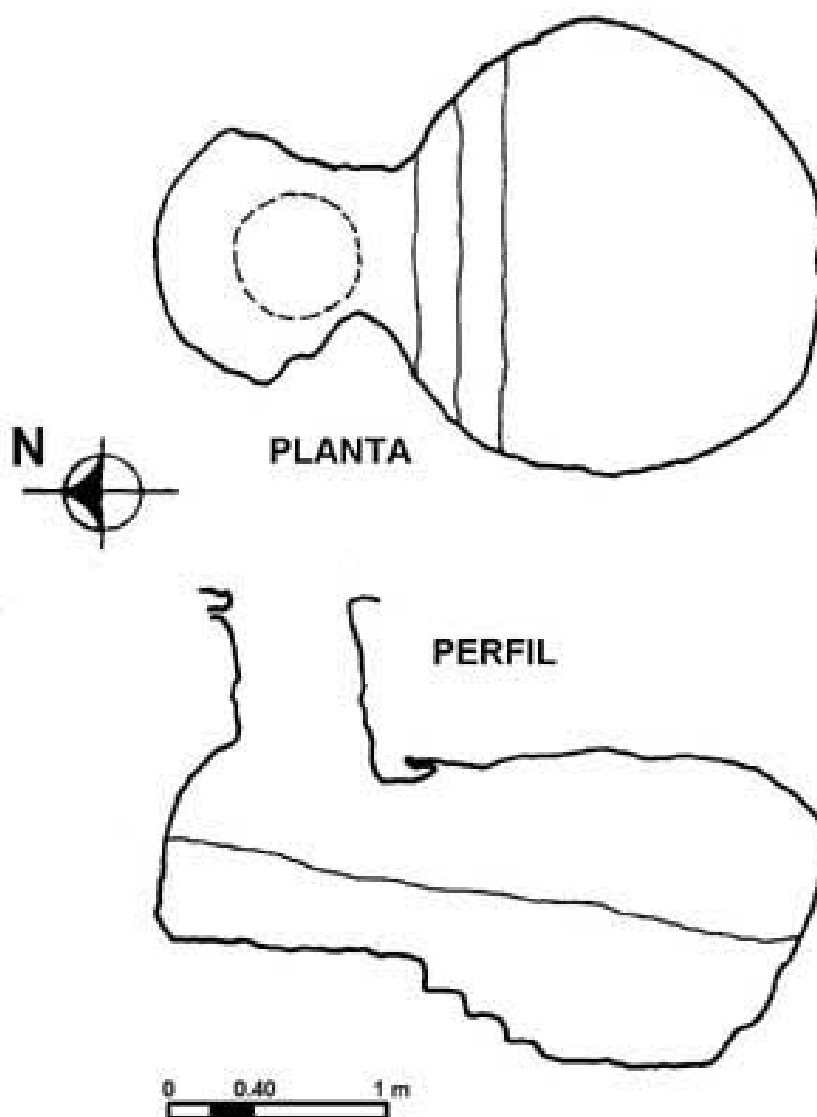


Figure 8. b) *Chultun* 10.

LATE PRECLASSIC PERIOD

Seven *chultuns* had evidence of activity dated to that time span (2, 7, 9, 13, 18, 26, and 27). Plans in the shape of an eight and a double semi-spherical section predominate: six have plans in the shape of an eight and one is irregular; three present a double semi-spherical section, three are calceiform and one is irregular. All *chultuns* presenting activity at this time might have been used to conduct some type of private civic or ceremonial activity, based on the fine carving works observed in *Chultuns* 2, 9 and 26, and the offerings present in *Chultuns* 7 and 13. Human remains lacking any anatomical relationship were deposited inside *Chultun* 18 (Figures 8a and c).

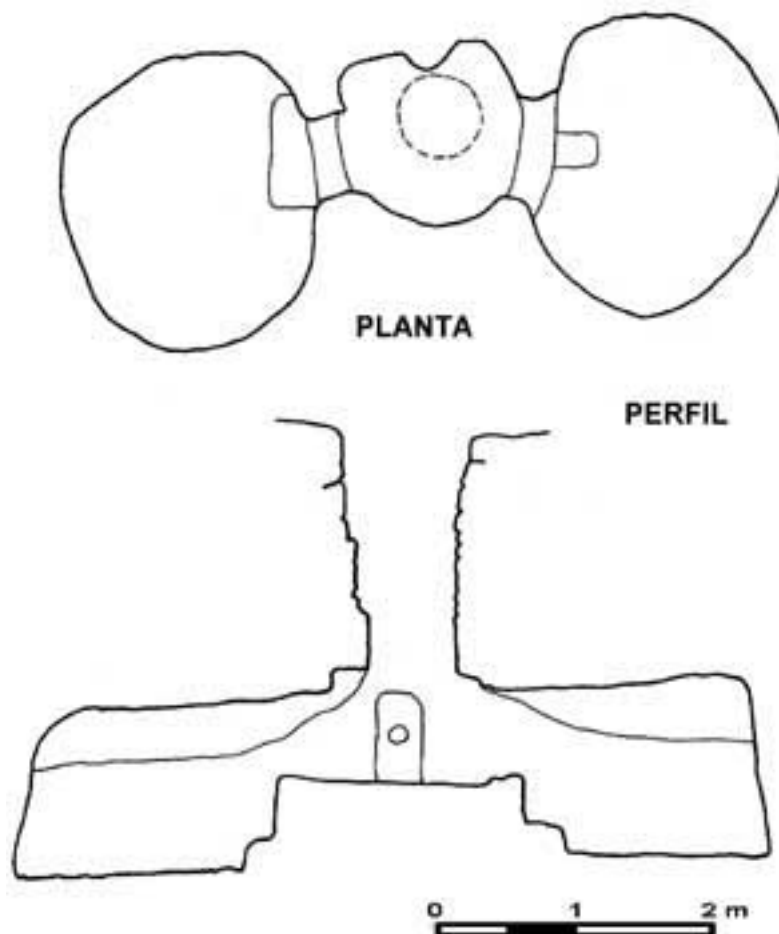


Figure 8. a) *Chultun* 2



Figure 8. c) *Chultun 2*, ideal reconstruction

Bullard (1960) reports a *chultun* excavated in the patio of a small and probably ceremonial structure at Yaxha, which he refers to as *Chultun E-1* (Figure 5a), with three chambers and a plan in the shape of an irregular clover; he dates the construction to this time span and assumes that use continued until the Classic period.

PROTOCLASIC OR EARLY CLASSIC PERIOD

Chultun 8 comes to its closure at a quite later date around the end of the Preclassic or the beginning of the Early Classic periods; it features a plan in the shape of an eight and double semi-spherical section, with a function assumed to be of the ritual type, taking into consideration the evidence of Offering 7 and Burial 3, deposited at the time of its closure (Figure 9a). *Chultuns 24* and *25* presented evidence of Classic period activity, and the poor and eroded ceramic has only allowed us to establish its use in the Classic period in a very general manner; they feature an irregular semi-circular plan, number *24* with a bell-shaped section, and number *25* with a calceiform section.

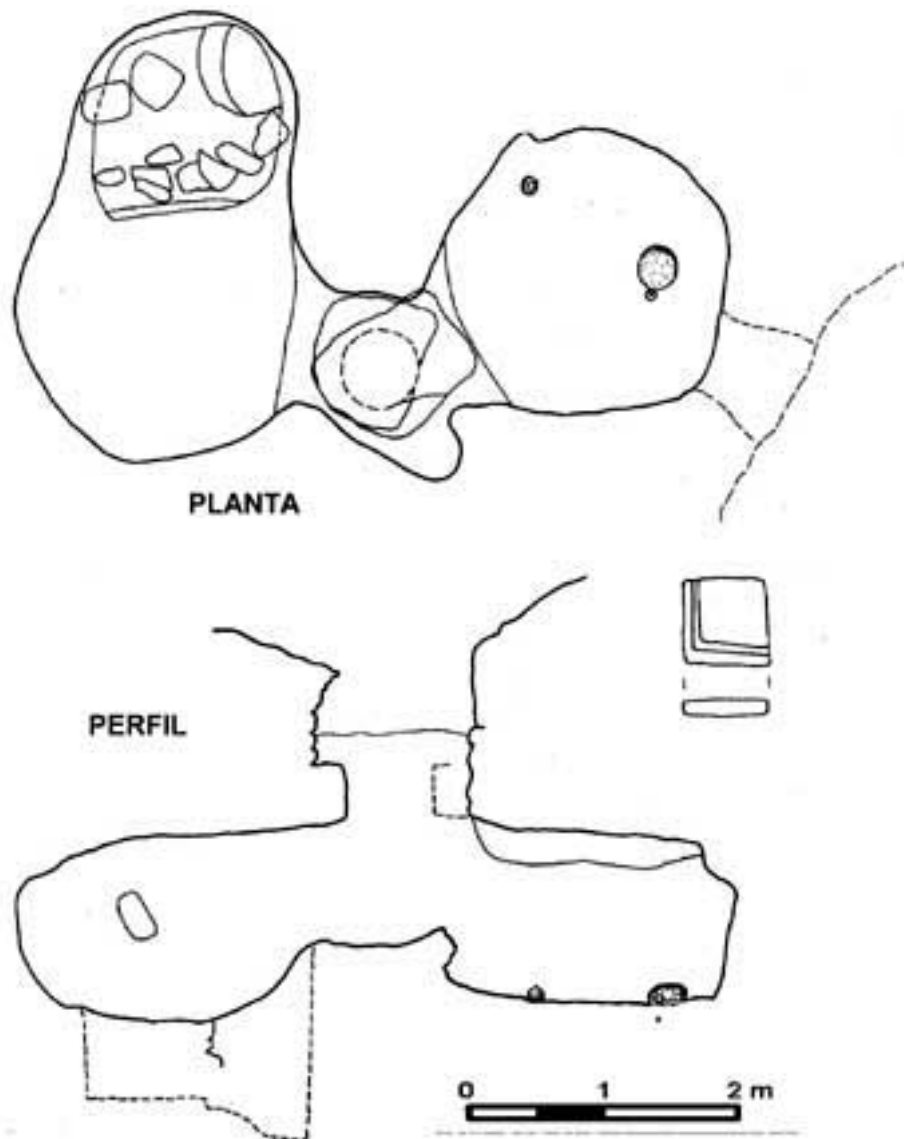


Figure 9. a) *Chultun* 8.

LATE CLASSIC PERIOD

Five *chultuns* presented evidence of activity in this time span (3, 4, 5, 6 and 15), and they all have yielded scarce archaeological material, although their function may be generalized as storage places for different materials. Irregular plans predominate, as well as the calceiform section; of these *chultuns*, three have an irregular plan, one of them in the shape of an eight, the other one being circular; four have a calceiform section and one, a triple, semi-spherical one. *Chultun* 12 presents clear evidence of use during the Late Classic and the Postclassic periods, as materials of both time spans

were found in every excavated lot; the function might have been that of a garbage pit (Figure 9b).

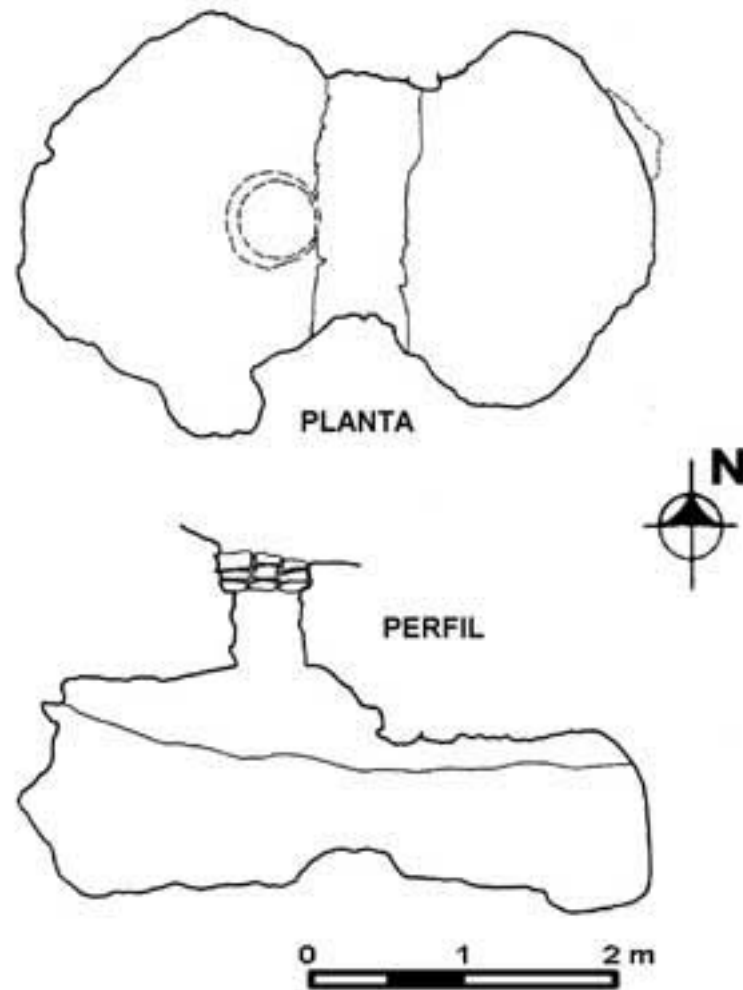


Figure 9. b) *Chultun* 12.

POSTCLASSIC PERIOD

Chultuns 14 and 17 date to this period, they both have plans in the shape of an eight, *Chultun* 17 presents a calceiform section and 14, a double semi-spherical one, while they both may have had a storage function and, at a certain point, 17 may have served like a garbage pit.

INVESTIGATIONS CONDUCTED IN KUCH

Kuch is a small site located 3 km southeast of Yaxha's ceremonial center, 500 m south of the Sacnab Lagoon; the tallest building is 2 m high, while the remaining constructions

consist of low platforms (Figure 9d). Initially, doubts existed in regard to the identification of the site where works were being conducted, as Kuch, Manax and Perdido were located very close to one another; thus, identification was possible by comparing the tracking coordinates available in the archive of the Department of Prehispanic Monuments (UTM 465861) with the coordinates taken in November, 1995, by personnel of the Triangle Sub-Project (UTM 456860). During the construction works of the road that leads from Flores-Melchor de Mencos to Yaxha, a portion of a platform that supported the tallest building of the group was destroyed, and *Chultuns* 5 and 7 were also mutilated.

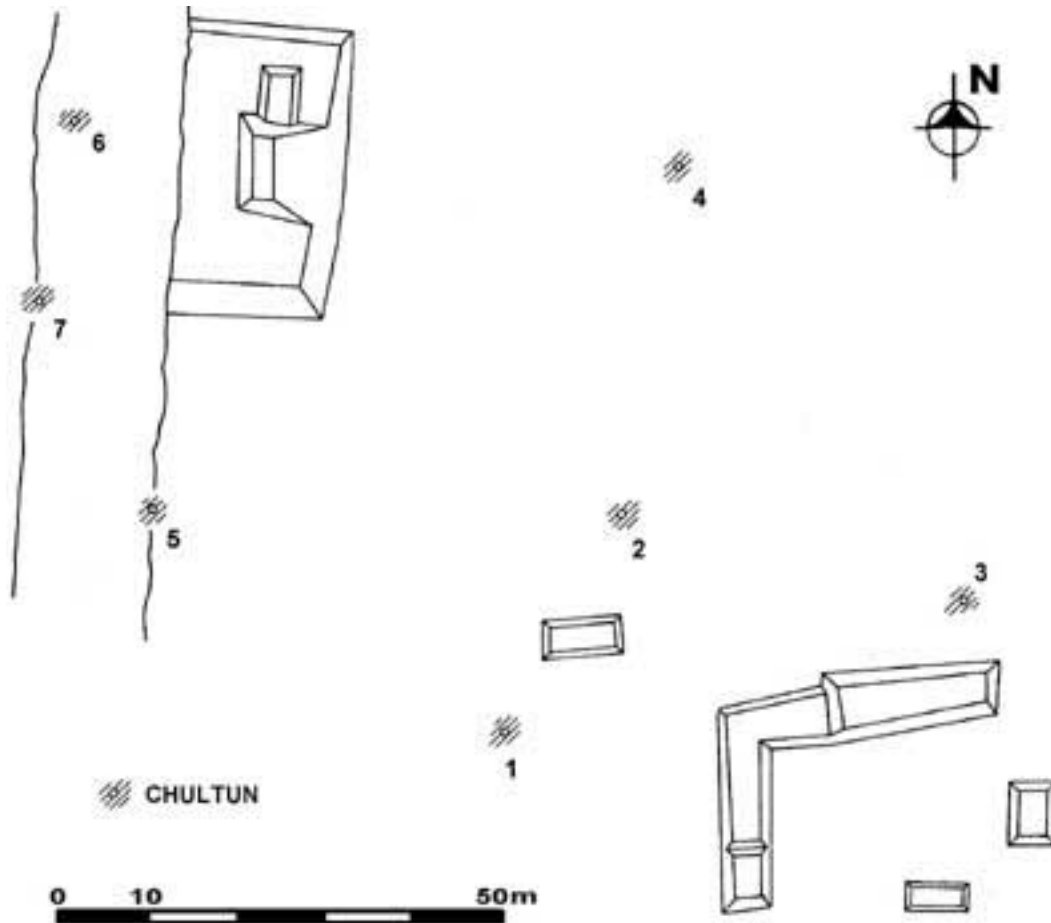


Figure 9. d) Plan view of Kuch and location of *chultuns*.

CHULTUNS INVESTIGATED

Of the *chultuns* located in Kuch, four were associated with low platforms (1, 2, 3, and 4), *Chultun* 5 was partially destroyed at the east profile of the road; *Chultun* 6 on the road, and *Chultun* 7 on the west profile of the road were destroyed as well. Two of them had a plan in the shape of a clover, two in the shape of an eight, one was irregular, and the

remaining one had an irregular, circular shape; three had a calceiform section, three were double semi-spherical, and that of the remaining one was unknown.

LATE PRECLASSIC PERIOD

Chultun 6 shows evidence of activity throughout this time span. Since no materials were recovered from *Chultun* 7, its chronological location is uncertain, though it may be assumed that it was used during the Late Preclassic period.

POSTCLASSIC PERIOD

The use of *Chultuns* 1, 2, 3, 4, and 5 took place during the Postclassic period. Their location within the group, as well as the characteristics of shape, suggest they served storage functions, with the exception of *Chultun* 1 (Figure 9c); which given the fine carving works observed and the inner rectangular accesses, may have been used to celebrate ritual gatherings or activities.

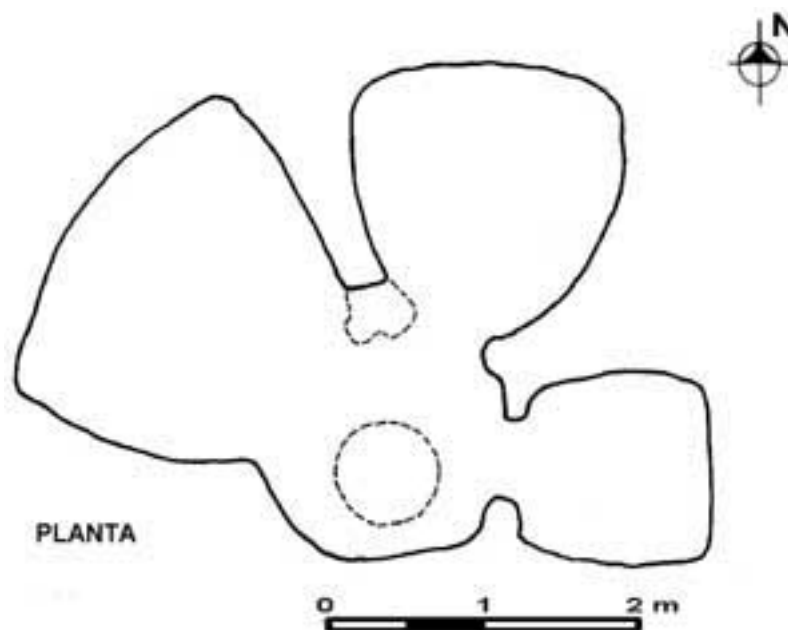


Figure 9. c) *Chultun* 1 in Duch.

FINAL COMMENTS

Within the area where work was conducted it was common to observe that *chultuns* came in pairs and were associated with low platforms of a possible residential function. Apparently, the trend of the inhabitants that lived there prior to the Classic period

showed a remarkable preference for the use of underground cavities of two or more chambers, for an assumedly civic and ritual use.

In the surrounding areas of the Yaxha Lagoon, *chultuns* were not primarily used as water wells. The only examples that could be assigned a storage function for non-solid materials without secondary containers were *Chultuns* 4E-1 and 4E-2 in Topoxte, and *Chultun* 2 in transect 3, which may have served for construction works (for example, the elaboration and storage of binding mixes).

The abundance of lithic and ceramic artifacts with a clear utilitarian function, and the nearly total absence of censers within the ceramic sample, may be indicating that the function of the *chultuns* could have been more of a domestic (warehouse, silo, storage place, etc.) than a ritual nature.

It is possible that by the Classic period, *chultuns* of the clover plan type (three chambers) were no longer used or built. Most of the *chultuns* with two or three chambers display the floor of the common area – usually under the access - at a higher level than the floor of the chambers.

Evidence derived from the research accomplished clearly shows that the cavities opened in the lime rock served different purposes, thus making it difficult to generalize one name for all of them, taking their function as a basic attribute.

REFERENCES

Bullard, William

1960 Maya Settlement Pattern in Northeastern Petén, Guatemala. *American Antiquity*, 25 (3).

Hellmuth, Nicholas

1993 A Report for IDAEH on Research Accomplished at the Maya Ruins of Yaxha, Peten, Guatemala. Foundation for Latin American Anthropological Research, Florida.

Hermes, Bernard

1991 Propuesta para la clasificación de artefactos cerámicos en contexto arqueológico. *Mayab* 7: 5-9. Sociedad Española de Estudios Mayas.

Lou, Brenda

1997 Informe final de trabajo de campo, un compendio. Los trabajos arqueológicos en el lado oeste de la laguna. Informe entregado al Instituto de Antropología e Historia de Guatemala.

Rice, Don

1976 Middle Preclassic Maya Settlement in the Central Maya Lowlands. *Journal of Field Archaeology* 3: 425-445.

Rice, Prudence M.

1986 The Peten Postclassic: Perspectives from the Central Peten Lakes. In *Late Lowland Maya Civilization: Classic to Postclassic* (J. Sabloff and E.W. Andrews, ed.), pp. 251-300). University of New Mexico Press, Albuquerque.

Willey, Gordon R., T. Patrick Culbert and Richard E.W. Adams

1967 Maya Lowland Ceramics: A Report from the 1965 Guatemala City Conference. *American Antiquity* 32 (3): 289-315.

Zapata, Renée

1989 *Los Chultunes: Sistemas de captación y almacenamiento de agua pluvial*. Colección Científica 182, INAH. México.

Figure 1 *Chultuns*, general characteristics

Figure 2 Plan view of Topoxte

Figure 3a Plan view of Paxte: localization of the *chultuns*

Figure 3b Plan view of Cante: localization of the *chultuns*

Figure 4a a) *Chultun* 6B-1

Figure 4b b) *Chultun* 7B-1

Figure 4c c) North-south section of Building A in Topoxte, showing *Chultuns* 7B-1 and 6B-4

Figure 5a a) *Chultun* 4E-1 and 4E-2 in Topoxte

Figure 5b b) *Chultun* 3 in Cante

Figure 5c c) *Chultun* 5 in Cante

Figure 6 a) Location of transects in front of Topoxte. b) Location of the *Chultuns* in Los Cortados B and C

Figure 6c c) *Chultun* 4, transect 3

- Figure 7 Plan view of Yaxha and location of the *chultuns*
- Figure 8a a) *Chultun 2*
- Figure 8b b) *Chultun 10*
- Figure 8c c) *Chultun 2*, ideal reconstruction
- Figure 9a a) *Chultun 8*
- Figure 9b b) *Chultun 12*
- Figure 9c *Chultun 1* in Duch
- Figure 9d Plan view of Kuch and location of the *chultuns*