

# The Ballcourts of the Maya City of Nakum, Northeast Peten, Guatemala ${ }^{1}$ 

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## Introduction

Nakum is a major Maya site located in the northeast Peten region on the Middle Holmul river (Figure 1). Apparently the city functioned as an important trade center. The kingdom of Nakum was characterized by its long cultural trajectory starting from the Middle Preclassic period (800 $B C$ ) and continuing until the Terminal Classic ( AD 950). The entire city before its collapse experienced a pronounced political and economic florescence marked by intense construction programs in practically all the groups of the monumental epicenter and its residential periphery. The epicenter of the city of Nakum included three ballcourts closely related to a causeway and temples (Figure 2). The ballcourts were built in different time periods and were used periodically for ceremonial, recreational, and political purposes. In this contribution, the particular contexts and characteristics related to each one of them will be described and interpreted.

Ballcourt 1 has two game areas. Spatially it is directly connected to the Southern Terminal of the Perigny Causeway. In the case of Ballcourt 2, it is attached to the southern side of Temple C, located in the western sector of the Astronomical Commemoration Complex (E-Group) located in
the very center of the city (Figure 3). Following an established pattern, Ballcourt 3, the largest in the city, is directly connected to the northern terminal of the Perigny Causeway, attached to the southern side of Temple X near the Merwin Group (Figure 4). Ballcourts 1 and 2 functionally share a connection with pyramid Temple C, which represents the point from which the path of the sun was periodically observed during solstices and equinoxes as part of the celebrations at E-Group complexes. The close relationship between ballcourts and E-Groups links them to rites connected with the cult of the sun, implying a solar association with fundamental aspects of Maya cosmovision, religion, creation myths, underworld view, and fertility rites, with significant political implications, as well as the delimitation of sacred space.

## Ballcourt 1

For a long time it was thought that Nakum had only one ballcourt, located next to the southern terminal of the Perigny Causeway and currently known as Ballcourt 1. Recent investigations carried

[^0]out by the DECORSIAP/IDAEH project have determined that this ballcourt was associated with a second court located between the east platform and the wall that delimits the Perigny Causeway (Figures 5 and 6).

Archaeological excavations carried out on the east wall of platform 7 resulted in the definition of a sloped shape characteristic of ballcourt frontal walls. Also, in the excavations on the west side of the same structure the existence of another sloped rebound wall was verified, although with a different angle of inclination. This still showed traces of stucco (Figure 7).

Suspecting that Ballcourt 1 has two playing courts, excavations were carried out in relation to the causeway wall, finding evidence of a sloped shape integrated into a small bench of .40 m height by .45 m width. It was possible to determine that the second court's sloped wall was integrated into the causeway and had two constructive periods: one that corresponds to the Late Classic and another to the Terminal Classic (Figures 6, 7).

According to the evidence found in Ballcourt 1 , the width of the court was 4 m for the east court and 4 m for the west. The average heights of the rebound slopes are estimated at .90 m for the west court, with an inclination angle that averaged between $22^{\circ}$ and $25^{\circ}$. The height of slopes for the east court averaged .50 m with an inclination angle of $22^{\circ}$. The average length of the double ballcourt was 19 m . No markers were found in the courts. The structure of the east side was of greater height and probably had an enclosure in the upper part. Access from the ballcourt to the Perigny Causeway and Temple C was through a stairway that had five steps $(.32 \mathrm{~m}$ riser and .70 m tread) (Figure 6).

The visibility of game play was excellent from the causeway and Temple C, as well as from the adjacent platforms to the north and south (Figures 6, 8). According to the ballcourt typology elaborated by Talladoire (1981), Ballcourt 1 would correspond to Category 1 (open). However, it is very important to update this typology taking into consideration evidence of recent investigations. For instance, we should make a special category for the case of double courts as in the present example of Nakum, and triple courts, as in the well known case of the ballcourt located in the Seven Temples plaza of Tikal.

Taking into consideration the conformation of Ballcourt 1 of Nakum, it could be considered that the east side court was symbolically associated with the rising sun, while the court on the west might be related to the setting sun. This would be in accord with the possibility that the teams of
players may have been identified with the rising and the setting sun, taking into account previous interpretations (Krickeberg 1966; Fox 1991) where reference is made to the fact that the teams were representative of light and darkness. Due to the average small-to-medium size predominating in most of the ballcourts identified in the Peten, it is likely that the standard variant of the ballgame did not need more than three players per team.

Ballcourt 1 was built after Ballcourt 2, which is the earliest in Nakum. The origins of Ballcourt 1 are dated to the Late Classic period; subsequently it was remodeled in the Terminal Classic, as seen in the following additions: (a) the construction of a new wall of the Perigny Causeway; (b) the addition of a small banqueta in the posterior sector of Structure 8 (west); and (c) the construction of an enclosure on top of Platform 7 (east) (Figure 7).

It is possible that stairways were located on the sides of the structures, similar to what is seen in the ballcourts of Tikal and Yaxha.

## Ballcourt 2

This is considered the oldest of the three ballcourts of Nakum. It is integrated with Structures 11 (east) and 54 (west) (Figure 9). The ballcourt is located in the southwest area of the E-Group, precisely to the south of pyramid Temple C. It is known that for the ancient Maya, both cardinal points are symbolically associated with the underworld and death (Figure 3). The south side of Ballcourt 2 faces a circular building (Structure 12), built in the Terminal Classic period; this was built up of three superimposed platforms (Figure 10). Recent research indicates that Ballcourt 2 was built over a small reservoir, a feature that could be related to the aquatic concept of Xibalba. The reservoir was totally filled during the Preclassic period, being finally sealed with a stucco floor (Figure 11). During the Late Classic, the rain runoff collected on the playground of Ballcourts 1 and 2 was directed to the South Acropolis (Royal Palace) reservoir, which could have functioned as a facility for the storage of sacred waters (see Figure 3). The highest point of visibility for game activity was from the South Acropolis, also known as the Royal Palace, and from the terraces of Temple C (Figures 3, 12). No markers were found during the excavation process.

Close to the moment of abandonment of Nakum during the Terminal Classic period, Ballcourt 2 was already in relative disuse, if we take into consideration that the structure of the west side was dismantled for the most part. This
is very significant due to the fact that reports on important structures demolished by the ancient Maya virtually exclude ballcourts.

## The Preclassic Version of Ballcourt 2

The first version of Ballcourt 2 dates back to the Late Preclassic period, as identified in the architecture of Structure 11 (east), and the first floor of the court (Figure 13). In the final part of the Preclassic, the Maya, after constructing the eastern structure, placed a votive offering inside the fill, prior to sealing the upper floor of the platform. The offering consisted of two deep Sierra Red-type bowls with straight diverging walls, placed lip to lip (Figures 13 and 14). The shape of the vessels is reminiscent of an Early Classic style; however, the paste and slip are clearly Preclassic. Inside the vessels was found a human skull corresponding to a young adult male (Figures 15 and 16). The architecture related to the Preclassic period consisted of the first stucco floor (lower) of the court, the floor corresponding to the upper platform, and a stairway located at the back of the structure (Figure 13). Additional evidence gathered in relation to Ballcourt 2 indicates that by the end of Nakum's occupation at least the eastern structure was in the process of being dismantled, for which reason the Preclassic stairway was exposed and reused for a short time during the Terminal Classic period (Figures 17 and 18). The stairway measured 13.70 m long; it was composed of nine steps (. 42 riser by .86 tread). The upper step was found damaged in its northern end.

Near Structure 54 (west) of Ballcourt 2 a second stucco floor was identified at only 7 mm above the limestone, which chronologically corresponds to a transition between the Terminal Preclassic and the Early Classic period. On the other hand, this floor remains at .75 m of the ninth floor, which is at the top of the court. The difference in this proportion could indicate the height of the sloped rebound wall of the western platform during Preclassic times (Figures 13 and 19).

Pyramid Temple C must have been crucial to the sacrificial rituals related to the ballgame since the Preclassic period. During the excavations carried out around the plinth of the temple, it was possible to collect abundant ceramic material, so it is assumed that a Preclassic substructure may exist inside the building (Figures 3 and 10).

## The Early Classic Version of Ballcourt 2

Relating to Structure 54 (west) it was possible to find remains of probable remodeling of Ballcourt

2 in the Early Classic period specifically associated with stratigraphic fill and also over corresponding floor 1 (Figures 13 and 19).

## The Late Classic Version of Ballcourt 2

Much of the Late Classic and Terminal Classic architecture related to Structure 54 (west) was dismantled at the end of the occupation of Nakum, although evidence of the sloped rebound wall (1.12 m in height and $44^{\circ}$ inclination) remained. Other structural features were also known: the northern limit of Structure 54 was defined only at 2 m south of Temple C. The structure shows a rectangular base ( $19 \times 15.65 \times 2.60 \mathrm{~m}$ in height), although it was originally higher than found. The northern façade only conserves one course of stone. The eastern façade still has the sloped wall firmly standing over floor 3 . It connects with the fill of a small terrace (approximately .36 m height) with a landing of 1.20 in width, which sustains another terrace of similar proportions (Figures 13, 18, 19). There are many stones of different dimensions corresponding to the nuclear area of the structure. The southern façade only conserves one to two courses of stones, ending at 1.65 m from the north side of Building 12. The west façade of Structure 54 conserves a sloped wall of approximately 1.10 m height and $75^{\circ}$ inclination. It is standing over a drainage floor which descends in an east-west direction, toward the royal palace reservoir.

In relation to Structure 11 (east), the following structural elements were documented. First, a sloped rebound wall $\left(1.26 \mathrm{~m}\right.$ in height with $28^{\circ}$ inclination) that joins with a first vertical terrace of .80 m in height. Secondly, in the northern sector, two stepped terraces of 2.25 m each were identified. Third, between the Late and Terminal Classic, six additional remodeling floors were added to the court, which gradually reduced the height of the sloped wall. The width of the court in the Classic period is estimated at 4.20 m , which after having modifications through the addition of four floors finally was reduced to only 3.40 m . by the Terminal Classic. The final dimension of Structure 11 was $20.30 \times 17.40 \mathrm{~m}$ (Figure 19).

In the southern sector of Ballcourt 2, there are the remains of a building, (identified as Structure 12-sub), which apparently corresponded to an enclosure with three doors (Figure 18). It is likely that its function was to house the ballplayers, and perhaps some purification rites were performed within. In the Courtyard 9 of the Royal Palace compound of Nakum there is a vaulted temascal (sweat room), which apparently was more related to the ruler and his nuclear family than to the ballplayers.

## The Terminal Classic Version of the Ballcourt 2

In the Terminal Classic period there was an important remodeling in relation to Ballcourt 2, which consisted of integrating it to the south facade of Temple C by adding walls, both with respect to Structure 11 and Structure 54 (Figures 3, 11). In relation to Structure 11 it was possible to discern a side wall of the second terrace decorated with a molding and remains of a balaustrade of the demolished stairway. In this cultural period two court stucco floors were built.

As for the southern sector of the Ballcourt 2, the structure with the three doors was remodeled with a semicircular building that had a diameter of 16 m and a height of 7 m (Figures 3, 18). Interestingly, evidence was documented of a slopped rebounding wall in the north façade, which could indicate that it was used as part of the ballgame; it could be considered that in this sector some other modality of the game could be practiced. In Mayan iconography, there are representations of structures related to ballcourts that appear to be circular. The Terminal Classic version of Ballcourt 2 of Nakum may have had an access stairway related to the back of the structure on the east side, similar to what happened in the Preclassic version. Comparatively, it is known that the ballcourts of the Ixtonton and Cancuen sites had access stairways in the back of the structures, although related to the one on the west side (Roldán 2001; Torres et al 2004, 2007).

## Ballcourt 3

Ballcourt 3 of Nakum is located in the northern sector of the monumental epicenter, closely associated with the Merwin Group and the North Plaza, which functioned as the northern terminus of the Perigny Causeway (Figure 2). Ballcourt 3 is next to the south side of Temple $X$ (in a manner similar to the case of Ballcourt 2 and Temple C). It is the largest of the three Nakum ballcourts, reaching a maximum length of 60 m with an approximate court width of 4 m , making it one of the longest ballcourts known in the northeastern Peten during the Late Classic period (Figure 20). The west side of Ballcourt 3 is occupied by Structure 106, the longest platform, which connects to pyramid Temple X, while the east side is occupied by Structure 108; both structures run parallel in a north-south direction (Figure 21).

Structure 106 measures approximately 60 m north-south by 18 m east-west by approximately

4 m in height; some traces of a stairway appear on the back side. In relation to the front façade, a bench of 2 m wide by .35 m in height extends 33 m . There are three sloped walls with heights of 1.40 m for the lower, and 1.15 m for the second and third walls, none of them showing fine-edged stone; however, there is evidence of thin stones which originally were covered with a stucco layer (Figure 22). Structure 106 indicates a remodeling in the southeast corner where two blocks close the ballcourt next to a platform (107) that connects Building 106 with the base of the Merwin Group.

Structure 108 ( 37 m north-south by 20 m eastwest by 3.40 m in average height) is a platform organized on three terraces with sloped walls; it has a stone course at the base which was documented along 5.20 m to its end, in the northwest corner of the building. On the upper part of the terraces a type of thin little slabs is evident, combined with unworked stones. Also at the top of the structure, there is a stepped bench measuring 1.90 m in height and approximately 20 m in length (Figure 22). A remodeling could be observed on the west façade of the structure at 7.30 m south of the northwest corner, on the two landings of the first two terraces with sloped walls (Figure 24), consisting of the addition of a wall ( 3.30 m east-west by .12 m in width and .50 to .76 m in height), also built with stones without edging.

There does not seem to have been any enclosure on top of Structures 106 and 108 (Figure 23). It is clear that the visibility of the game was best from the terraces of Temple $X$ and the structures located on the north side of the Merwin Group.

In order to locate the presence of possible ballcourt markers, sampling pits were excavated in the playing court at the north and south ends as well as in the center, with negative results (Figure 23). It is probable that the markers were carved in wood, or if they were of stone they were removed at the time of the abandonment of Nakum. A coated floor sealed the ballcourt, which was .22 m above the limestone rock.

## Final Considerations

The three ballcourts of Nakum are associated with the direction of the underworld by being correspondingly located at the south of the Perigny Causeway (Ballcourt 1), south of Temple C (Ballcourt 2), and south of Temple X (Ballcourt 3). Ballcourt 2, located to the southwest of the E-Group complex, could be associated with the symbolism
of the annual movement of the sun, from east to west and from north to south. With Ballcourt 2 an underworld association could be considered taking into account the fact that underneath the court there previously existed a Preclassic reservoir which was filled in to build the ballcourt. The rain runoff water that fell on the surface of the court was collected symbolically as pristine water in the reservoir of the South Acropolis, also considered to be the Royal Palace.

Aparently several types of ballgame were practiced in Nakum during the Late and Terminal Classic: one double court with simultaneous games (Ballcourt 1), another involving an additional circular building (Ballcourt 3), and a third standard type with a single court. On several painted vessels ballgame scenes can be seen where the structure looks circular, as was the case with Building 12 of Nakum.

Ballcourt 1 functioned as a southern terminal of the Perigny Causeway, with its counterpart Ballcourt 3 associated with the northern terminal of the causeway. Probably the ballgames related to causeway terminals could have had a symbolic meaning divergent from those corresponding to E-Group compounds.

The reason for the presence of three ballcourts in Nakum may be related to their cyclic use during the seasons of the year, commemorating the position of the sun in its annual transit from north to south (solstices and equinoxes), in such a way that Ballcourt 3 (north) would be associated with the summer solstice (June), Ballcourt 1 (central) with the spring/fall equinoxes (March/ September), and Ballcourt 2 (south) with the winter solstice (December).

Ballcourt 2 in the southern sector of the city, the one related to the E-Group, is the oldest in Nakum, with antecedents in the Preclassic period, while it continued to be in use during the Early Classic and Late Classic periods. Later, Ballcourts 1 and 3 (central and northern sectors of the city), the ones related to causeway terminals, were built during the Late Classic and Terminal Classic periods. It is interesting that the decision to dismantle Ballcourt 2 during Terminal Classic times involved the first and oldest of the ballcourts, the one related to ritual activities associated with the E-Group complex. We might wonder if this decision in Nakum was connected with the fact that in the Terminal Classic the E-Group of Tikal was practically eliminated and its ballcourt was remodeled, converting it into a triple ballcourt, this time centered on the Plaza of the Seven Temples.

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Figure 1. Location of Nakum and the Middle Holmul river.


Figure 2. Location of the three ballcourts of Nakum.


Figure 3. The E-Group of Nakum and Ballcourts 1 and 2.


Figure 4. Ballcourt 3 and Temple $X$.


Figure 5. Ballcourt 1 and its two courtyards.


Figure 6. Ballcourt 1 and the Perigny causeway.


Figure 7. A section of the courtyards of Ballcourt 1.


Figure 8. A detailed view of Ballcourt 1.


Figure 9. Ballcourt 2, view from the south.


Figure 10. The E-Group, Ballcourt 2, and the circular structure.


Figure 11. Excavations at Ballcourt 2, view from the south.


Figure 12. The Royal Palace as the highest point of observation.


Figure 13. A section of Ballcourt 2.


Figure 14. An offering in the Eastern Platform.


Figure 15. A skull inside the dish.


Figure 16. Upper view of dish and skull.


Figure 17. Preclassic stairway on the Eastern Platform of Ballcourt 2.


Figure 18. Plan of Ballcourt 2.


Figure 19. Section and plan of Ballcourt 2.


Figure 20. Location of Ballcourt 3, near Temple X


Figure 21. Ballcourt 3, view from the south.


Figure 22. A section of Ballcourt 3.


Figure 23. Excavations at Ballcourt 3.


[^0]:    ${ }^{1}$ The original version of this article was published as Calderón et al. 2009 .

