

Preliminary Report on the Discovery of *Talud-tablero* Architecture, Green Obsidian Artifacts and a Cylindrical Tripod Vessel at the Maya Site of Nakum, Petén, Guatemala¹

The Site of Nakum and History of Research

Nakum is located in the Department of Petén in northeastern Guatemala (Central America) on the northern bank of Río Holmul, 25 km east of Tikal and 11 km north of Lake Yaxha (Fig. 1). The location of the site probably results from the need for direct access to water source and to the river itself, supposedly navigable in the Pre-Classic and Classic periods. It definitely facilitated long distance trade, stimulated by the localization between powerful Tikal in the west and the resourceful Caribbean coast in the east.

The first researcher who is said to have discovered the site was Count Maurice de Perigny², moving from Belize into the jungle at that time. When the Count reached the site in 1905, he gave names to its major structures, photographed the site and published several articles afterwards. His expedition and the following one in the years 1909-1910 resulted in a sketched plan of the southern part of the site (Perigny 1910) and further publications (Perigny 1911). In that same year, the eighth expedition from the Peabody Museum reached Nakum as well. The expedition was led by Alfred M. Tozzer, who, together with Raymond E. Merwin, drew the plans of the major structures and the plan of the city with the localization of the discovered stelae. They also made a series of photographs, cutting down a number of trees in the structures and around them for a more precise picture (Tozzer 1913). After that, Nakum became of interest for the Carnegie Institution of Washington. Several expeditions from the Institution reached the site in the years 1915, 1921, 1922, 1923 and 1924. Their discoveries were collected by Sylvanus G. Morley, leader of the first expedition in 1915 (Morley 1938). After the researches, the site was forgotten for many years. It was only in the 1970's that investigations run by Nicholas M. Hellmuth were carried out again at that site. In 1973 he introduced corrections to Tozzer and Merwin's plans and presented them with new descriptions in an unpublished report of Instituto de Antropología e Historia in Guatemala (IDAEH) (Hellmuth 1975; 1992). In the 1980's, and in 1989 in particular, several intervention teams were forwarded to Nakum from the Institute in order to preserve the structures threatened with erosion and destruction. In 1994 the excavation and renovation of Structures A and V commenced, followed by Structures N, E, F, 26, 60, 61 and others. The excavation of chultuns and test pit excavations began on the whole site (Quintana, Wurster 2002). In 1999, the documentation of graffiti preserved on the walls of many structures was initiated as well, together with the excavations

¹ During new investigations carried out in 2006 by the Institute of Archaeology, Jagiellonian University (Nakum Archaeological Project), more information has been obtained on Teotihuacan contacts in Nakum. The new data will be published in the following volumes of "Recherches Archeologiques".

² Tozzer points out that the site had been discovered earlier by local *chicleros* in 1898 (Tozzer 1913), though Perigny's discovery was the first to draw attention of the researchers and the scientific world to that site.

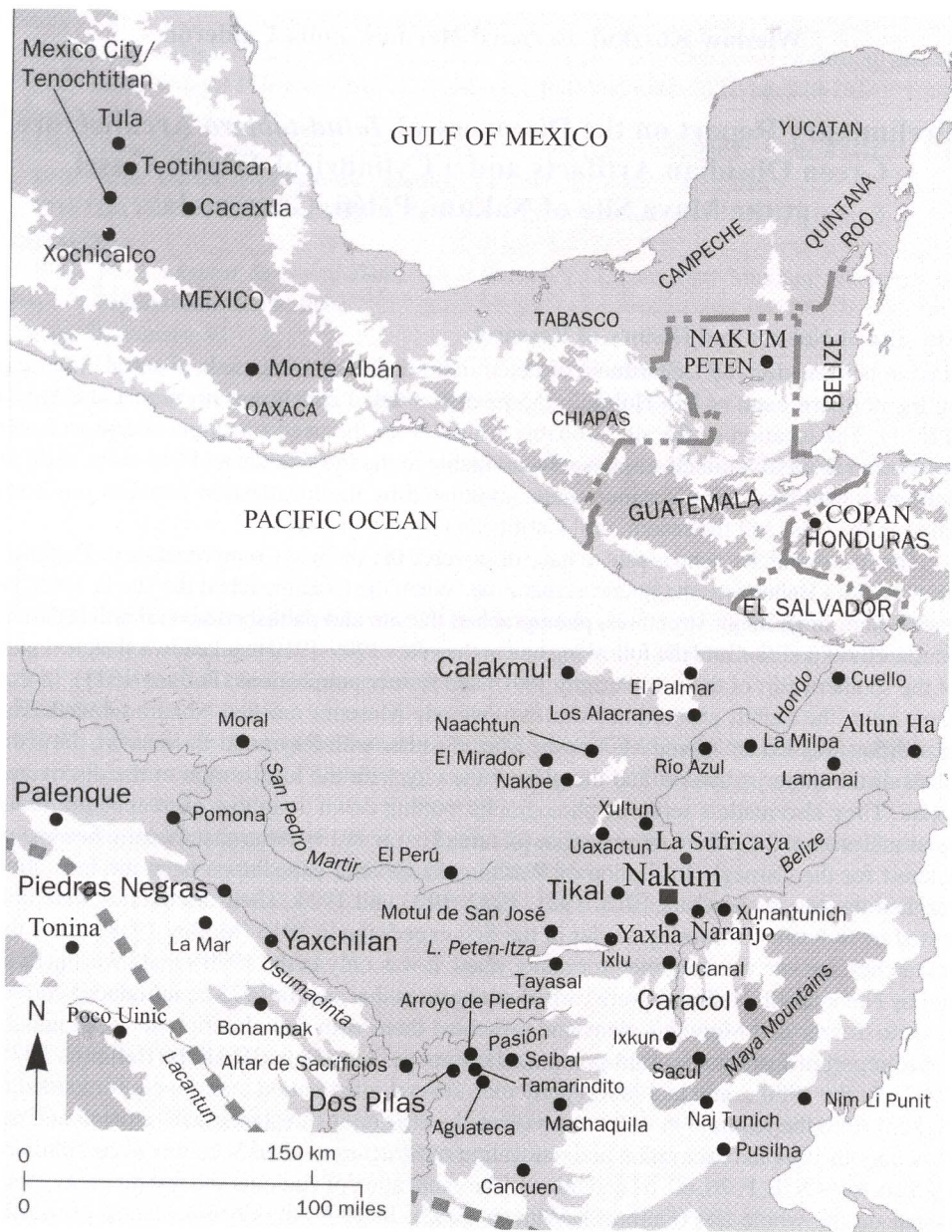


Fig. 1. Map of Mesoamerica (top) and part of the Maya area (bottom) with selected sites (after Martin and Grube 2000; corrected by the authors).

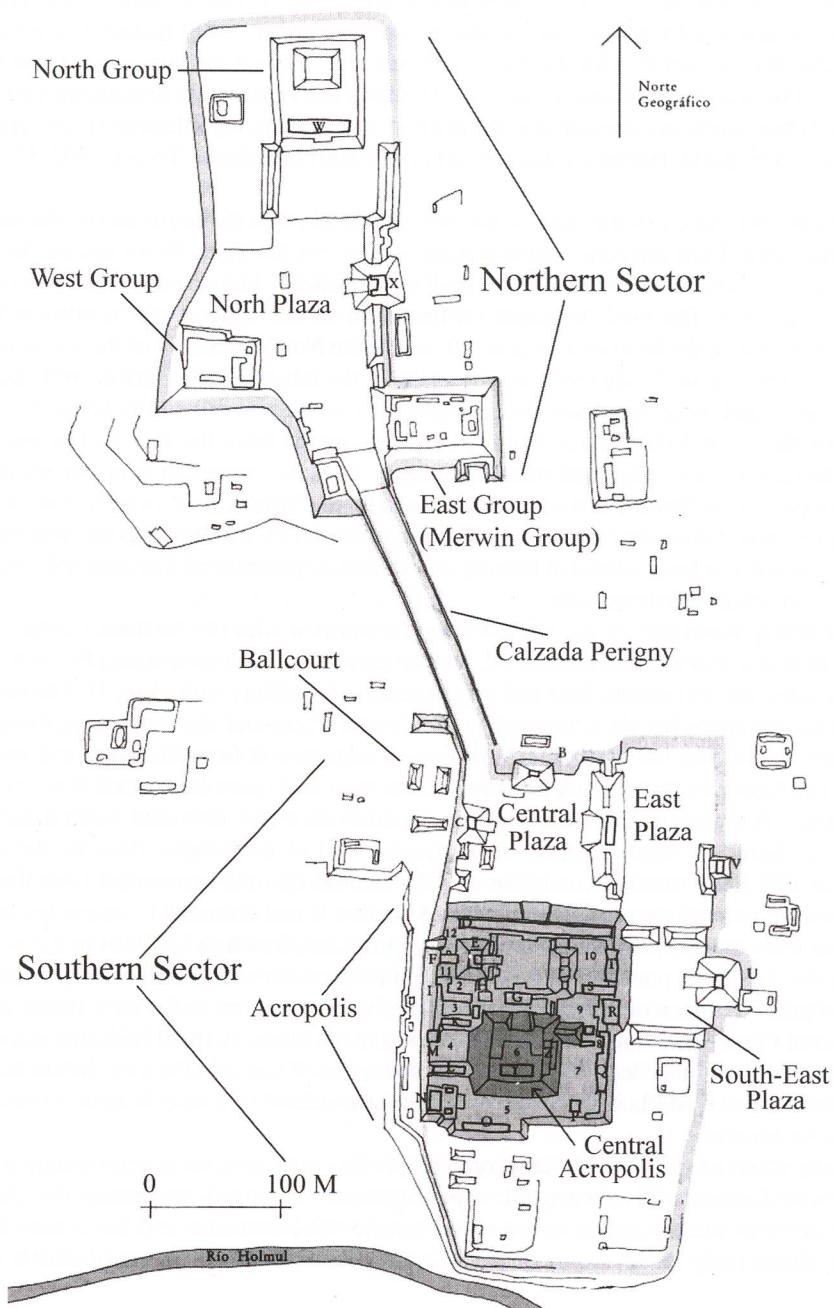


Fig. 2. Plan of Nakum (after Quintana and Wurster 2002; corrected by the authors).

of the direct surroundings of the center of the site (Hermes, Olko, Żrałka 2002; Hermes, Calderón, Olko, Żrałka 2002). Also, a new map of the central part of Nakum was published (Quintana, Wurster 2002) with the names of some architectural complexes modified by the authors³. The Nakum excavations by IDAEH within the Proyecto Triángulo are still under way, and their results are presented to the institution in annual unpublished reports (Hermes, Calderón 1999, 2000; Hermes, Calderón, Anavisca 2001; Calderón, Toraya 2002; Calderón 2003).

Nakum's structures in the core of the site are stretched to the north and to the south at a distance of ca. 1 km and consist of two basic sectors: the Northern Sector and the Southern Sector (Fig. 2). The Southern Sector was built on a small hill, high to ca. 10 meters above the level of the river. The land decreases further north to rise again to the northwest of the Southern Sector in the form of a second hill, where the Northern Sector of the site was built. The hills were definitely selected for settlement by the inhabitants of Nakum and gradually hosted more and more structures, which were also built around the hills (cf. Fig. 2). The Northern Sector includes a huge North Plaza, surrounded from the east by low platforms and Structure X, with long platforms adjoining it from the north and from the south. The northern part of the North Plaza is partly enclosed by the North Group (a large four-building complex). From the southwest side the Plaza is enclosed by the West Group, and the East Group⁴, which is a huge platform hosting 14 structures, possibly of a residential character, adjoins it from the southeast side.

The southeastern part of the North Plaza is connected with the northwest corner of the Southern Sector and with the Central Plaza by an elevated causeway, Calzada Perigny, which is approximately 250 meters long and approximately 30 meters wide (Fig. 3). The northern part of the Southern Sector is formed by the Central Plaza and the East Plaza, divided by Structure A and four lateral structures (nos. 1-4) adjoining it from the south and from the north. The facade of Structure A is located to the west and faces the Central Plaza. The top of Structure A hosts a temple with two amazing concrete arches or corbel-vaulted doorways on the northern and southern sides of the frontal wall of the temple, flanking the central entrance with a flat wooden lintel (Fig. 4). The Central Plaza is surrounded from the north and from the west by two temple pyramids (Structure B and Structure C, respectively), and adjoined from the south by a very long palace structure (Structure D), built in the northern part of the Acropolis platform. It has a residential character and architecturally belongs to the Acropolis. Thirteen out of the sixteen stelae found in Nakum so far were discovered on the Central Plaza, including two inscribed ones, and ten altars. A small ballcourt adjoins the northwest corner of the Central Plaza and the south end of Calzada Perigny (Structure 7 and Structure 8). The East Plaza is located on the eastern side of Structure A and enclosed from the east by Structure V.

To the south of the Central Plaza, on a relatively small area, were built multiple structures, located around twelve courtyards or patio groups – therefore it was named the “Acropolis”. It involves mainly palace structures of a residential character and has a very limited access, increasingly harder as we proceed south, where the structures are gradually higher

³ Here we use the names of particular parts of the site according to the nomenclature applied by Quintana and Wurster in this publication (Quintana, Wurster 2002).

⁴ The Merwin Group, according to the nomenclature introduced by Hellmuth (1992).

and referred to as the Central Acropolis. It comprises a huge platform with Patio 6 on top, surrounded by five structures, with the highest, Structure Y, enclosing the southern part of the Central Acropolis. This was probably the residence of the royal family in Nakum. South-East Plaza adjoins the Acropolis from the northeast side, enclosed with a number of structures on each side, i.e. Structures 34 and 35 to the north, the enormous Structure U to the east, with stela U still remaining in front of its stairs and the long Structure 33 to the south. There are also a few small residential groups and structures located to the south and south-east of the Acropolis and South-East Plaza, east of Calzada Perigny, and north and east of the Northern Sector. The area was modified to the west of Acropolis by constructing an artificial water reservoir, which was supposedly used to facilitate access to water and river, and which also might have functioned as a pier for boats.

Construction Sequence of the Site

The oldest traces of human existence in the area of the Nakum site are dated to the Middle Preclassic period, 800-300 B.C. They are represented by the discoveries of Pre-Mamon ceramics in the pits of the North Plaza, the Central Plaza, the East Group and north of the North Group. However, the earliest evidence of construction activities discovered so far is dated back to the end of the period (ca. 500/450-300 B.C.) and comes from multiple parts of the site⁵. The original version of the East Group platform was built in the north, long for approximately 25-30 m at each side and ca. 2.25 m in height. On the west side, the platform had a stairway rounded in horizontal view. Yet more evidence of construction activity was found in the northern part of Calzada Perigny. It was also during that period that the original floor in Patio 1 was built, as well as the original version of Central Acropolis, consisting of a large platform, long for ca. 20 meters each side and topped with three structures arranged in the triadic pattern. The facades of the structures were decorated with stucco masks. Additionally, in front of the Central Acropolis, in the southern part of Patio 1, there was a long structure G Sub-1 (ca. 40 m in length and ca. 2.2 m in height) with a 15 m wide stairway to the north.

The most vivid construction activity in the following period, i.e. the Late Preclassic, was observed at its dawn as well as at its dusk. The remodeling of the south side of the western facade of the East Group and the remodeling of at least the lower platform of Central Acropolis are dated to the initial stage of the period. The first construction in the northern part of Patio 1, under the current Structure D (Fig. 5), was built at that time as well (Structure D Sub-1, ca. 5 m in length N-S and ca. 1.6 m in height), followed by D Sub-2 (ca. 6.3 m in length N-S and ca. 1.6 m in height). The structure built in the center of Patio 1 also comes from the first part of the Late Preclassic period and is connected to another structure in the east, oriented N-S and joining D Sub-2.

The architectural work from the end of Late Preclassic (the Protoclassic period) completely changed the appearance of the northern part of Acropolis. The level of Patio 1 was raised by app. 3 meters and covered the structures which had been built there earlier (G Sub-1, D Sub-1 and 2 as well as the structures in between). A huge, three-terrace platform was

⁵ Specification of the recent discoveries in Nakum, as well as the construction history of the site, can be found in other publications and unpublished reports (e.g. Hermes 2002; Hermes, Calderón 1999; 2000; 2002; Hermes, Calderón, Anavisca 2001; Calderón, Toraya 2002; Calderón 2003).

constructed, over 100 m long, E-W, and elevated to ca. 5.3 m above the Central Plaza, with a wide stairway from the Plaza to the platform. A new structure was erected in the northern part of the platform (D Sub-3), modified afterwards (D Sub-3a), and yet another one, D Sub-4. Supposedly a new structure was built at least on the western side of the platform at that time as well (Calderón 2003).

Construction activity in the Early Classic period is also split into two construction stages. At the current stage of research, it has been observed only in the area of Patio 1. New structures were built at that time on the western and northern sides of the Patio, and perhaps on its eastern side as well. The structure on the western side (E Sub-1) was probably 2.25 m high, and it most certainly consisted in three terraces with sloping *talud* walls. Only two of the terraces have been preserved, and the third was destroyed at the height of ca. 1.7 m. The structure had a stairway in the center of the facade facing Patio 1, approximately 6.5 m in length. Structure D Sub-5 on the northern side dates to that period as well. Only a few steps and a fragment of the wall of the structure have been discovered.

So far, the architecture from the second part of the Early Classic period has been discovered only in the area of Patio 1 and is represented by four platforms built in *talud-tablero* style, which we touched upon at a number of points in some of the tunnels. Limited research in that area revealed that the platforms surround Patio 1 (cf. Fig. 6) from four sides, and meet at their internal corners to completely enclose the patio in between. They probably entirely covered the structures constructed there in the first stage of the Early Classic period. The platforms (E Sub-2, D Sub-6, 14/15 Sub-1 and G Sub-2) are described in greater detail in the following parts of the article.

The Late Classic period (ca. A.D. 600-850) is characteristic of a considerable increase in construction activity split into a number of successive construction stages. It is also interesting that the activity can be observed from the very dawn of the period, when political crisis and a hiatus in the erection of inscribed monuments is evident in many sites in the Central Maya Lowlands. The platforms E Sub-2 and D Sub-6, built in *talud-tablero* style around Patio 1, were at that time partly covered with new structures (E Sub-3 and D-1 respectively). However, their *talud-tablero* facades remained uncovered, and thus still observable in that period. These are the first instances of vaulted buildings in Nakum, and so is Structure X constructed then in the northern part of the city, erected possibly on *talud-tablero* style platform similar to the analogous platforms in the area of Patio 1. Original versions of the platform supporting the subsequent Structure N (N Sub-1, N Sub-2 and N Sub-3) were also constructed in the southern part of Acropolis. The structures on the western and eastern part of Patio 1 (E Sub-4 and D-2) were extended later as well. The first phase of the Central Plaza and Structure A Sub-2 might have been built in the final stage of the first half of the Late Classic, probably together with the original versions of Structures B and C. Moreover, a new Acropolis platform was constructed at that time, consisting of three terraces in the form of sloping *talud* and elevated to the height of ca. 8.1 m above the Central Plaza. Additionally, another version and remodeling of Structure E (E Sub-5 and E Sub-5a) were constructed, as well as the initial levels of Structure N. Nakum was further developed in the second half of Late Classic, with both new structures built and new versions of old structures constructed at that time. The structures dated to that time include Calzada Perigny and the original version of the ballcourt. As the excavations in that area in 2004 revealed, Structure U and South-East Plaza probably date to that time as well. Structure D was extended on the area of Acropolis, and new versions of Structures E and G were erected together with additional

new structures, such as Structure R, T and F, second level of Structure N and a new remodeling of the base of Acropolis.

Another period of the functioning of Nakum, i.e. Terminal Classic, is very interesting, because, as opposed to many sites in the Central and Southern Maya Lowlands, the city was still developing resplendently. This is evident by a series of new structures and considerable amounts of pottery sherds from that time. Settlements in the northern part of the city seem inconsiderable. Some traces of construction activities were found in the East Group, and probably the small structures in the southern part of the Central Plaza were constructed at that time as well. The North Group was supposedly abandoned at that time, and the southern part of the city was most active then, especially Acropolis. Temple U also seems to have been abandoned at that time. The base of Acropolis was remodeled along with most of the major structures erected in the preceding period [Structures A, D, E (Fig. 7), F, R, T and N], and new structures, such as H, 24, 26, 27, L, O, P, Q, S, Y and Z, were also built around twelve patio groups, which formed Acropolis in its final version.

The site collapsed ca. A.D. 950. In the following period, which was Early Postclassic, new structures were not constructed, and traces of human existence are minute. They are limited to single pottery sherds, a few offerings and burials as well as some graffiti inscribed on the walls of several structures on the site.

Teotihuacán-related Finds from Nakum

During the investigations carried out in 2000 on the western side of Patio 1 (Operación V⁶), we discovered the already mentioned Structure E Sub-2 dated to the second half of the Early Classic period (analogous to phase Tzakol 3 from Uaxactún). The structure was erected in *talud-tablero* style, known especially from Teotihuacán, a great city in the Valley of Mexico. The northern part of the eastern facade of the platform and the stairs and northeastern corner in particular, were examined in greater detail. The section represents a *talud-tablero* style platform, with its 0.46 m-high *talud*, and 1.54 m-high *tablero* including moldings (upper and lower molding of *tablero* is 0.20 wide). Stairs to the upper part of platform E Sub-2 (second stairs in Suboperación 12) were discovered in the tunnel leading into the stairs in the central part of the eastern facade of Structure E (Suboperación 12) facing Patio 1. The discovered stairs are partially damaged, composed of four steps, though originally there were probably five steps. The steps in average are 0.36 m high and 0.31 m wide. The stairs are 6.4 m long and lead to the upper part of the platform, rising at an angle of 60° and joining a low pedestal on the top of the platform, 0.20 m in height (cf. Fig. 8). A northern retaining wall of the stairway was also discovered in Suboperación 2, though partially damaged as well. It cannot be discerned whether the stairs had balustrades⁷ and *remates* on top. The northern part of the eastern facade, between the stairs and the partially damaged northeast-

⁶ Proyecto Triángulo applies the method of splitting the works in particular parts of a site into operations (Operaciones), labeled with Roman numerals. Each operation, covering an architectural group or a structure, is further divided into suboperations (Suboperaciones), meaning particular test pits, tunnels, etc. and labeled with Arabic numerals. A suboperation (Suboperación) is in turn divided into smaller layers or parts (Lotes) corresponding with particular layers, architectural modifications observed in the course of works, soil color, etc. These Lotes are labeled with Arabic numerals as well.

⁷ Although we have not found any convincing evidence that the stairs had balustrades, we suppose that the balustrades were there, and this assumption was included in the reconstruction (cf. Fig. 8).

ern corner, is 18.4 m long. The research in the northwest of Patio 1 revealed that the north-eastern corner of Structure E Sub-2 adjoined the southwestern corner of Structure D Sub-6 located in the north of the patio (which is referred to in the latter part of the article), and thus completely enclosed the patio on that side. An upper molding of *tablero* frame was found in the southern part of the eastern facade, which is 0.30 m wide at that point (Suboperación 36). It can be determined from this information and measurements that the eastern facade of the platform was once more than 40 m long and had 6.4 m long stairs in the center (Fig. 8). The only evidence of construction activities on its top dated back to that period is a floor underneath the current Patio 2, where Offering 11 was buried (Operación V, Suboperación 20). If indeed there were any structures there, they were probably either destroyed afterwards, or constructed from perishable materials, and thus have not lasted.

One year later similar platforms were also discovered during the excavations under Structure D (Operación XIV) on the northern side of Patio 1 and under Structures 14 and 15 on the eastern side of the Patio (Operación XXIV). As far as Structure D is concerned, this is the sixth structure in the sequence of this construction (D Sub-6), and the first one so far on the eastern side of Patio 1 (14/15 Sub-1), although in the latter case there definitely are earlier structures located below. Similarly to E Sub-2, both structures are dated to the second half of Early Classic. As to Structure D Sub-6, basically we know its southern facade, built in *talud-tablero* style as well. *Talud* is 0.40 m high, and *tablero* is 1.60 m high with the projecting upper and lower molding of *tablero* frame (0.22 m and 0.24 m in width). Stairs from Patio 1 to the platform have also been found (Suboperación 24), but only two lower steps have remained (ca. 0.40 m high and 0.63 m wide). The other steps were later destroyed.

The western facade of Structure 14/15 Sub-1 is very well preserved. It was also reached at one point in 2001 (Figures 9, 10 and 11). Total height of *talud-tablero* is 1.96 m, including 0.44 m of *talud* and 1.52 m of *tablero* (the given height of *tablero* includes the projecting moldings, lower molding 0.20 m wide, and upper molding 0.22 m wide). The lower molding projects further than the upper one, and it was built of large blocks of cut stone, while the upper molding was composed of two or three layers of thinner stones (cf. Fig. 11).

The localization of the platforms made us assume that the structures formed a kind of patio surrounded by platforms erected in *talud-tablero* style. This was confirmed in 2003, when a similar structure was discovered on the southern side of Patio 1 as well (Structure G Sub-2, Operación XVI). The lower part of the facade is in good condition, but the upper part of *tablero* is destroyed. *Talud* is 0.30 m high at that point and lower *tablero* molding was also documented, 0.24 m in width. Part of the structure above that level was destroyed by succeeding builders, but we assume by analogy to the neighboring platforms that it was alike, enclosing Patio 1 from the south. As a result, the size and shape of the patio between the platforms could be determined as well. It was a square-like patio with the sides ca. 46-49 m in length created between four platforms which all the corners were probably joined together, entirely enclosing the patio. It was thus quite big and could accommodate many people. The fact that the corners of the patio meet is suggested by the outcome of the research in the area of its northwestern corner, although further research in the remaining corners must be undertaken to eventually determine the shape and structure of Patio 1 at that time⁸.

⁸ The hypothesis was confirmed in 2006 during the excavations carried out by the Nakum Archaeological Project: the corners of Structure D Sub-6 and 14/15 Sub-1 merge, entirely enclosing Patio 1 from this side. More information will be published in the following volumes of "Recherches Archeologiques".

Furthermore, in 2002 and 2003 the excavations of the center of Patio 1 were commenced (Operación XXIX) to check whether an altar had ever been built there, similar for example to Structure Sub-48 from Group 6C-XVI from Tikal (Laporte 1989), to the altars known from Tetitla (Widmer 1987), Atetelco (Séjourné 1966) or to those found in the Plaza of The Superposed Altars in Teotihuacán (Castro 1992). First, the course of the lines of facades of *talud-tablero* platforms surrounding Patio 1 was determined on the basis of available information. Next, a square was plotted in the center of the patio with a side 6 m in length. The square was divided into 36 1x1m squares numbered in the direction from east to west and from north to south. Each square was labeled as Suboperación. In the first phase of excavations, squares 1, 3, 6, 13, 18, 32, 34 and 36 were examined by setting up test pits. Squares 19, 25, 24, 37 were examined in the second phase, and the excavation was extended afterwards by adding new pits. The excavation resulted in an interesting discovery of the already mentioned structure dated to the beginning of Late Preclassic, but the remains of a possible altar from the second half of Early Classic were not found on the area of the excavations. However, due to the discovery of the Preclassic structure, the excavations focused on its closer examination. As a result, the central part of the plotted Early Classic Patio 1, 4x4 m in size, has remained unexamined to this day. We are planning to proceed with new excavations of that spot to eventually resolve the problem. Nonetheless, it may be difficult to determine the existence of such an altar-structure, as it could never have been built, or it could have been deconstructed completely or constructed in a different part of the patio. For example, Structure Sub-48 from Group 6C-XVI in Tikal was not built in the center of the plaza, but on the line of the stairs of Structure 26 (cf. Laporte 1989, 66, Fig. 18).

The discovery of the four structures is very interesting, as they are the only structures erected in Nakum in the second half of Early Classic known to us. It is significant that they were built in *talud-tablero* style, which was unfamiliar to the Maya. The style originated in Mexican Highlands and spread widely on the land of the Maya. It is also important and interesting that eight blades and one projectile point, all made of green obsidian and dated to the second half of Early Classic (Fig. 12), were found in the fill of Structure G Sub-2, built in *talud-tablero* style in the southeastern part of Patio 1 (cf. Fig. 6). Mineralogical analysis has not been carried out yet, but the color of the discovered obsidian undoubtedly points to its Mexican origin (possibly Pachuca). It can be concluded that not only ideas from Mexican Highlands penetrated Petén and Nakum, but also people, who must have brought obsidian with them.

A third discovery from that period is worth mentioning as well, as it adds to the image of the second half of Early Classic in Nakum and seems to be linked with Teotihuacán culture. The discovery was Offering 11 (Operación V, Suboperación 20), found next to the southwest corner of Structure E (cf. Fig. 6) within the flooring of Patio 2 and probably located in a structure, which was later destroyed in the Late Classic period. The offering was intruded by vertically breaking floor no. 2 and penetrating into the southern wall of the cut, so as to make a cavity (Fig. 13). Two vessels were placed in the cavity: a cylindrical tripod vessel with cylindrical supports (base diameter 29.5 cm, total height 13.5 cm) and a basal-flange tripod bowl decorated black on red (base diameter 19 cm, total height 8.3 cm). It is interesting that this bowl, typical for Maya in shape and style (type Caldero Ante Policromo), was found upside down inside the vertically located cylindrical tripod vessel (type Balanza Negro), similar in style to Teotihuacán vessels (cf. Fig. 14).

At the dawn of Late Classic, new structures were constructed on platforms E Sub-2 and D Sub-3. These were Structures E Sub-3 and D-1. The best known Structure E Sub-3 was

built in the central part of platform E Sub-2 and on its western side, partially covering the center of its western side (Fig. 15). The base of the new structure consisted of two terraces and it supported a structure with two chambers, where the remains of black painting were found on the walls. The first chamber had one central entrance, and the other had two entrances located in both ends of the wall dividing the chambers. The stairs from Patio 1 to platform E Sub-2 were also widened at that time to ca. 22 m, and further stairs were constructed from the top of the platform to Structure E Sub-3, though a major part of platform E Sub-2 and *talud-tablero* style facade would still remain visible. It was entirely covered later in the first half of the Late Classic by the constructors of Structure E Sub-4 or E Sub-5.

Teotihuacán-related Findings in Northeastern Petén

The discoveries related to Teotihuacán culture to the east of Tikal, in the area of northeastern Petén, are not limited to Nakum. The famous Stela 11 (Fig. 16) was discovered long ago near Nakum, at the site of Yaxha⁹ in the south. It represents a figure whose dress, and headdress in particular, is related directly to similar representations known from Teotihuacán. The figure is presented frontwards. Nearly half of the effigy is covered with a tasseled headdress, profusely decorated with feathers on the sides and on top. In its left hand the figure holds a rectangular shield, decorated on the outside with a character¹⁰. In its raised right hand it wields a spear – such movement adds dynamics and a bit of aggression to the scene. Rectangular shields, despite their occasional occurrence in Teotihuacán itself, always appear outside its borders in the context of this culture, e.g. on Stela 31 from Tikal or on the stelae in Piedras Negras in Late Classic Period (Hellmuth 1993, 13-14; Stone 1989, e.g. Figures 5, 7, 14). The face of the figure is barely visible, as it is covered with large goggles around the eyes and a mouth plaque with one tooth and two fangs, which are distinctive features of Teotihuacán Storm God, also called Tlaloc (Pasztor 1974, 7-14, Figures 3 and 11). However, the eyes of the figure are clearly noticeable, which suggests that the representation features a human figure, not a god. Below the fangs, there is a double necklace of round beads. The torso is covered with a dress consisting of three identical elements located next to each other, with rectangular hem and five rings inside. Going further down, the dress includes a three-part skirt reaching almost as far as the knees. The knees and ankles are decorated as well, and so are the feet, ornamented with small bunches of feather. Additionally, to the left of the figure there are four falling feathers or tails – this cannot be clarified, and neither can it be confirmed whether the feathers fall from the headdress or from the waist. The tasseled headdress is very much like some headdresses from Techinantitla at Teotihuacán (Millon 1988), and the upper part of the scene is almost identical in character with the representation known from Stela 32 from Tikal. This may suggest its dating to the same period, i.e. approximately to the reign of Yax Nuun Ayiin I in Tikal [A.D. 379-404(?)].

⁹ It should be emphasized that apart from some pottery, no other evidence of activity in Yaxha, dated back to Tzakol 3 phase, has been discovered so far. Furthermore, an interesting thing is the intense construction activity at that time in Poza Maya, a medium size site located between Yaxha and Nakum.

¹⁰ Researchers interpret the character in a variety of ways: either as two interweaved elements, as seen on the drawing of half of the stela by I. Graham, or as one mark, curved at one end, as seen by N. Hellmuth (from Hellmuth 1993, 11-14). Wiesław Koszkuł also thoroughly examined the mark on the original artifact in Yaxha, Guatemala, and he prefers the latter interpretation. The surface is seriously eroded and it is difficult to claim with confidence, but a rubber cast of the stela also seems to point to the second interpretation.

Numerous links to Teotihuacán culture have also been discovered recently at a small site of La Sufricaya, located next to the ancient city of Holmul, several kilometers to the north-east of Nakum (Estrada Belli 2001; 2002a; 2002b; 2003a; 2003b; 2003c). The center of the site consists of a central platform surrounded by small temples and various architectural groups, mainly of a residential character. A mural was found in Group I on the northern wall of Room 1 in Structure 1, which had been broken by looters. The major part of the mural is divided into small square fields of ca. 0.20 m at a side. The insides of 25 of the squares on the right side of the mural present recurring images of small sitting figures (one figure per field) with rounded headdresses ornamented with feathers, each of them holding three darts in the front (Fig. 17). The grid-like character of the mural¹¹ and the specific details of dress and weapons emphasize the link with Teotihuacán culture. The details include, in particular, rounded headgear, head and back of waist ornamented with feathers, goggle-shaped ornaments on headdress, ornaments on knees and ankles as well as holding three darts. The three darts in one hand are often presented not only in Teotihuacán (Miller 1973, Figures 341-343), but also in the context of Teotihuacán culture in the Maya area, for instance on the vessel discovered in Problematical Deposit 50 in Tikal (Greene and Moholy-Nagy 1966; Schele and Freidel 1990, Fig. 4:26). A masonry bench was also discovered near the murals during the works on Structure 1. It could have been used as a throne. Concluding from the above, Estrada Belli considers the structure to be a royal palace, and the murals to represent the ceremony of accession to the throne presided by Teotihuacán warriors (2003a). Furthermore, a fragment of the cylindrical tripod vessel was found on the floor in Room 1 where the murals were discovered, ornamented in its lower part with cacao grain (similar to type Urita Gouged Incised from Tikal), which also enables the dating of the murals back to the Early Classic period. Numerous ceramics of Tzakol 3 types were found during the excavation works, together with a piece of green Pachuca obsidian blade (Estrada Belli 2002b). Another green obsidian blade was found near Group I, on the ballcourt (after Estrada Belli 2002a). What is even more interesting, a date and a name had been inscribed on Stela 6 discovered in several pieces south of Structure 1. The date was possibly Long Count 8.17.?.9.9 coefficient, and the name was probably Siyah K'ak', an individual who played a major role in the events of 378 in Tikal (Grube 2003). It is also interesting how the figure was presented on Stela 1, as it holds something in its right hand, a gesture resembling the scene from Stela 31 from Tikal. The date inscribed on Stela 5 was 8.19.6.8.5 8 Chicchan 3 Xul, which referred to 6 August 422 (after Estrada Belli 2001). The vast number of Early Classic monuments is very significant, and the discoveries presented above not only suggest that the La Sufricaya site is strongly linked to Tikal and Teotihuacán, but also that it possibly represents a visit of a group of Teotihuacanos to La Sufricaya, maybe even under the command of the mighty Siyah K'ak'.

¹¹ Dividing a mural into separated fields of the same size is also known from Teotihuacán, though there the most commonly encountered divisions are made into diamonds, such as on Atetelco murals (cf. Miller 1973, fig. 335, 337). E. Wagner has suggested recently that the division of the La Sufricaya mural into square fields shows that it was based on Codex pages, possibly Maya or from Teotihuacán (2004). Although there has not been found any evidence of the existence of codices in Teotihuacán itself, they probably did exist, and so the above interpretation may be correct.

Summary and Conclusions

The developing research on the Maya culture as well as new archeological excavations reveal further discoveries which may be linked to the influence of Teotihuacán culture and its spread in the Early Classic period. During the research at Nakum within Proyecto Triángulo in the years 2000-2003, we also made the already mentioned significant discoveries: four *talud-tablero* style platforms, seven fragments of blades and one projectile point made of green obsidian, and the Offering with a tripod cylindrical vessel inside. All these discoveries are dated to the second half of the Early Classic period (Tzakol 3), and the first and the second discoveries in particular seem to be obviously linked to the influence of Teotihuacán culture. The four platforms discovered, which we touched upon at a number of spots in some of the tunnels, had been built around the centrally-located Patio 1. The exact length and width of the platforms are not known, although based on the examination of Structure E Sub-2, which was subject to the most thorough study, we can deduce that its eastern facade was ca. 43.5-45.5 m long. It had 6.4 m long stairs in the center, composed probably of five steps leading to the top. Due to their partial destruction, we failed to conclude whether the stairs had balustrades and *remates*. The platforms were ca. 2 m high and did not differ considerably in their ratio of *talud* to *tablero* as well as in height. For instance, the platform of Structure E Sub-2 was 2 m high, including 0.46 m of the height of *talud* and 1.54 m of the height of *tablero*. As far as Structure 14/15 Sub-1 is concerned, platform height was 1.96 m, including 0.44 of the height of *talud* and 1.52 of the height of *tablero*.

According to the calculations, the ratio of *talud* to *tablero* in Structure 14/15 Sub-1 is 1:3.45, and in Structure E Sub-2 – 1:3.35. The ratio is very high, similar to the most popular occurrences found in Teotihuacán. An equally high ratio in the Maya area is attributed only to Structure Sub-57 in Group 6C-XVI from Tikal (1:4.7) (Laporte 1989) and Hunal structure from Copan (1:2.7) (Sharer 2003a, 159). The ratio of *talud* to *tablero* does not seem to be of great relevance, although it is a common opinion in the literature on *talud-tablero* architecture that Teotihuacán had fixed rules regarding the ratio of *talud* to *tablero* and that *tablero* was relatively much higher than *talud*. According to a number of authors, the ratio was to range from 1:3 to 1:5 (Laporte 1985), although these seem to be overstatements, as other authors declare the range from 1:1.6 to 1:2.5 (Cowgill 2003). A relatively high ratio of *talud* to *tablero* in Teotihuacán is obvious, but the recent research has shown that, for example, the ratio in the Western Plaza Group is 1:1.3, i.e. below the commonly accepted standards. Furthermore, new floors had been added several times, covering *talud* and increasing the ratio. As G. L. Cowgill has accurately pointed out, architects had not been remodeling *tablero* to balance the ratio, which was obviously approached there without any rigor (Cowgill 2003).

Structures supported by the platforms have not yet been discovered, and neither was the structure in the center of Patio 1, which could have been used as an altar. Nonetheless, it was established that the *talud-tablero* style facade of the platforms had remained visible still in the first part of the Late Classic period, despite the new structures constructed on tops of the platforms and partially around them (cf. Fig. 15). Eight blades and one projectile point made of green obsidian were also found in the southeastern part of Patio 1, and Offering 11 was discovered near the southwestern corner of Structure E, where in one of the two vessels there was a tripod cylindrical vessel.

The discoveries seem to suggest contacts with representatives of Teotihuacán culture, probably made via Tikal located a few dozen kilometers west of Nakum. Although the ar-



Fig. 3. View of Calzada Perigny (photo by W. Koszkuł).



Fig. 4. Structure A, Nakum (photo by W. Koszkuł).

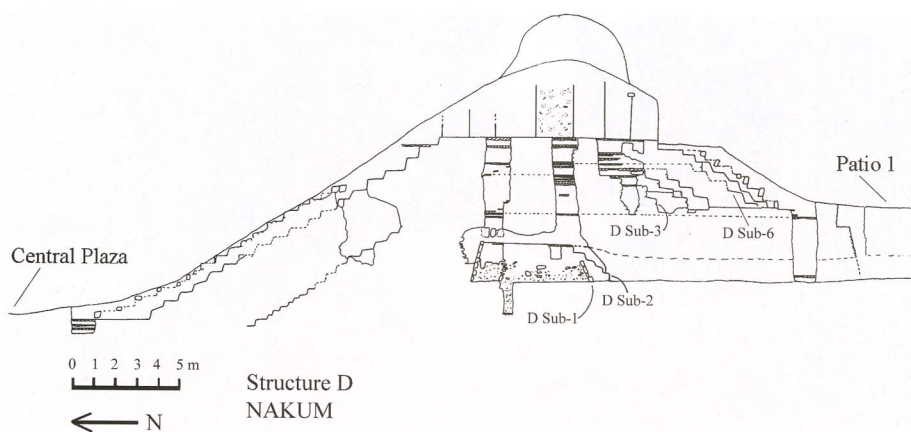


Fig. 5. Construction sequence of Structure D, Nakum (Proyecto Triángulo, IDAEH).

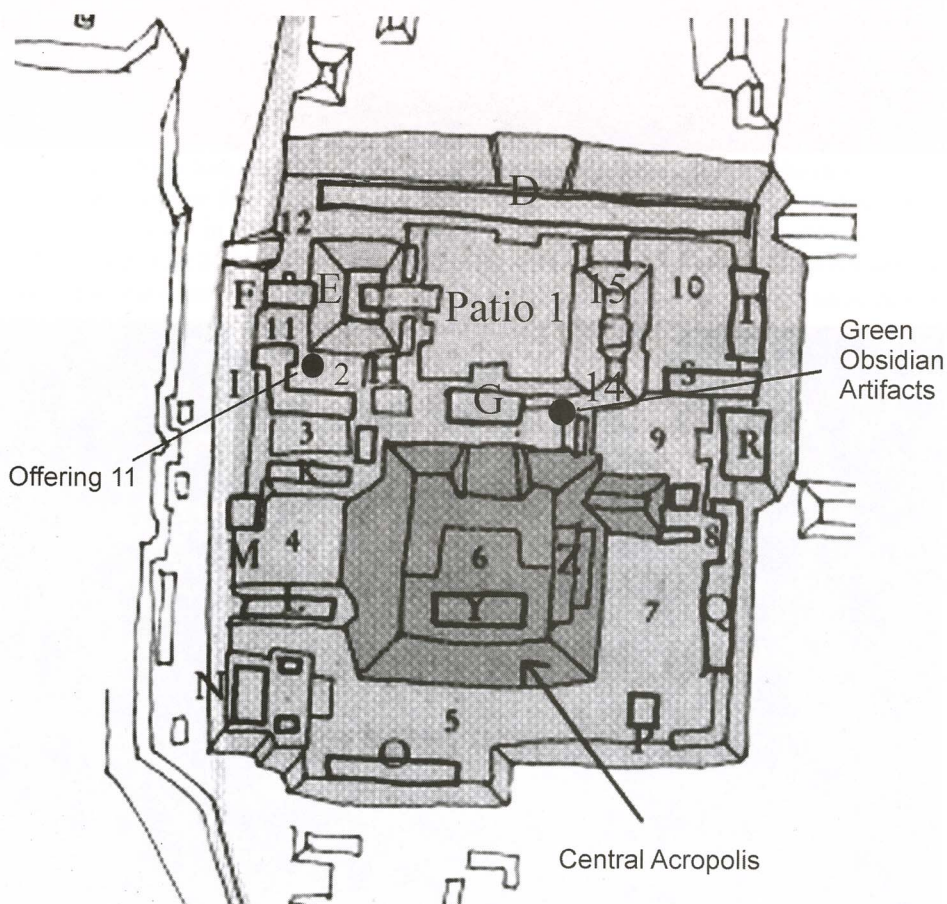


Fig. 6. Plan of Acropolis with the discoveries of green obsidian artifacts and Offering 11, Nakum (after Quintana and Wurster 2002; corrected by the authors).



Fig. 7. Structure E, Nakum (photo by W. Koszkul).

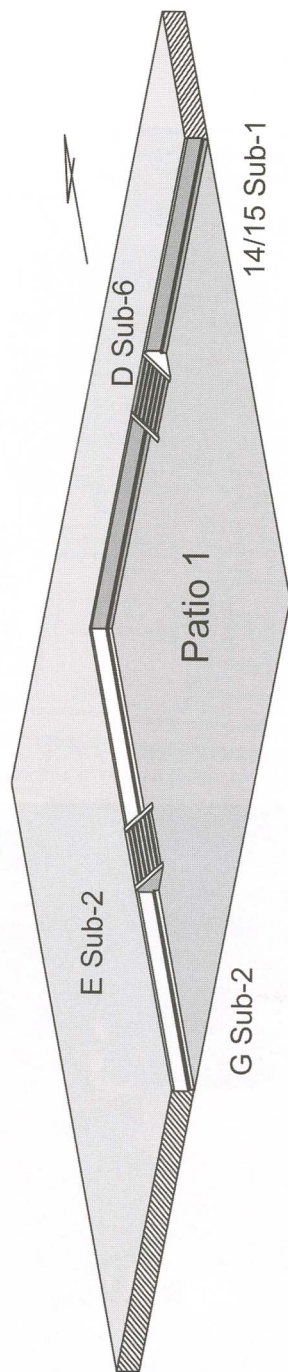


Fig. 8. Reconstruction of Patio 1 in Tzakol 3 phase, Nakum (drawing by A. Witkowska).



Fig. 9. Patio 1 with the facade of Structure 14/15 Sub-1 under the stairs in the back (photo by W. Koszkul).



Fig. 10. The facade of Structure 14/15 Sub-1 (photo by W. Koszkul).

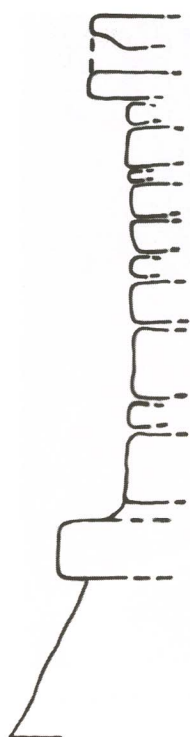


Fig. 11. *Talud-tablero* profile of Structure 14/15 Sub-1 (drawing by W. Koszkul).

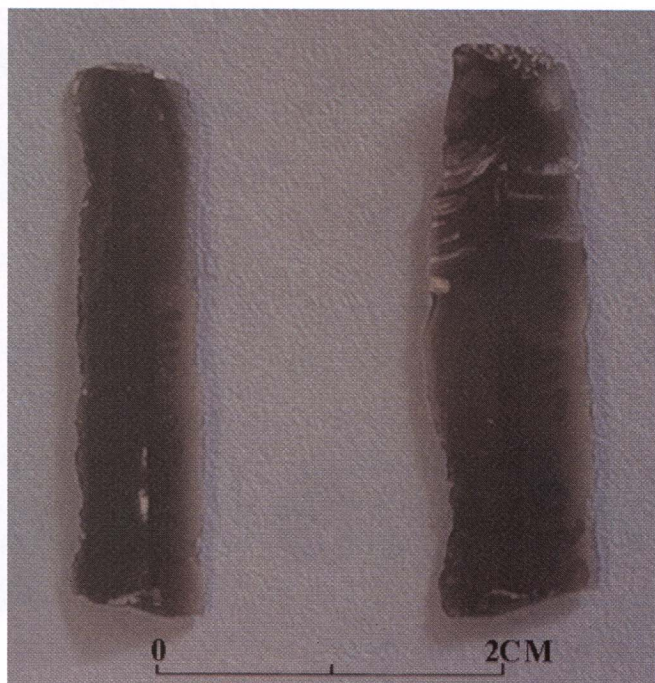
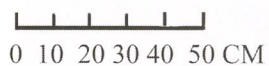


Fig. 12. Green obsidian blades, Nakum (photo by W. Koszkul).

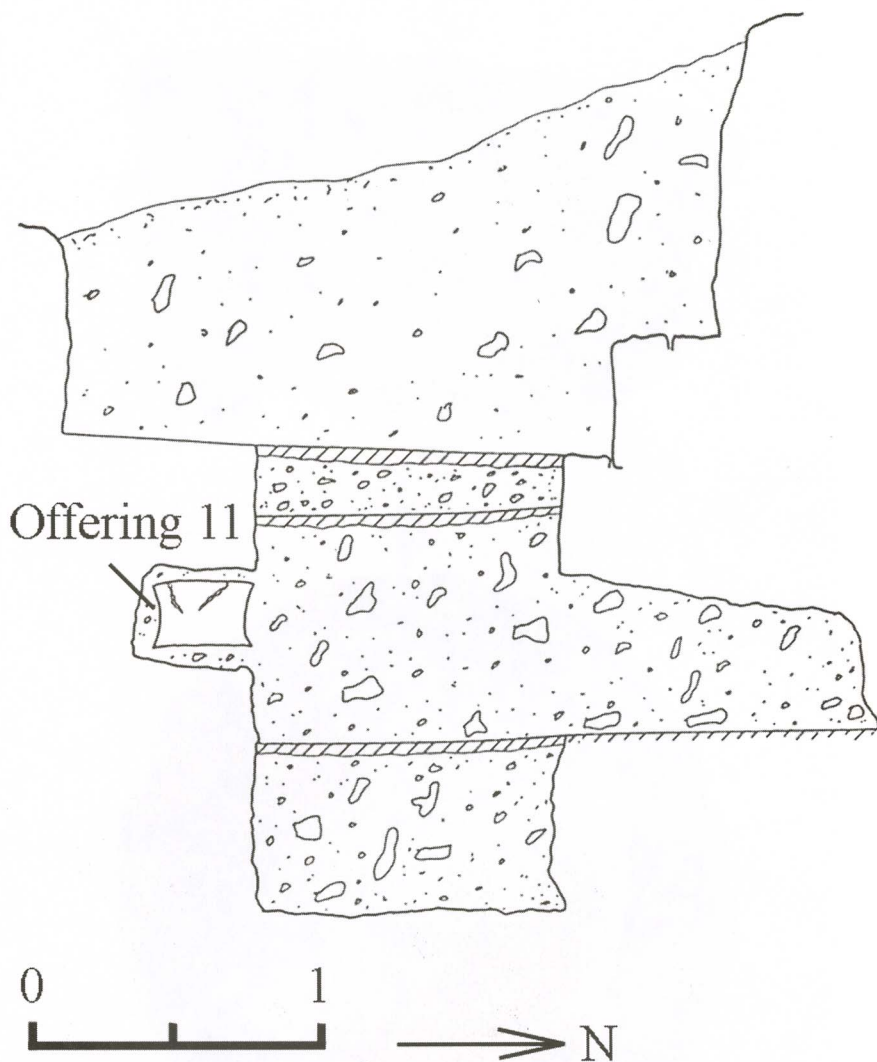


Fig. 13. Localization of Offering 11, Nakum (Proyecto Triángulo, IDAEH).



Fig. 14. Photos of the vessels in Offering 11, Nakum (photo by W. Koszkul).

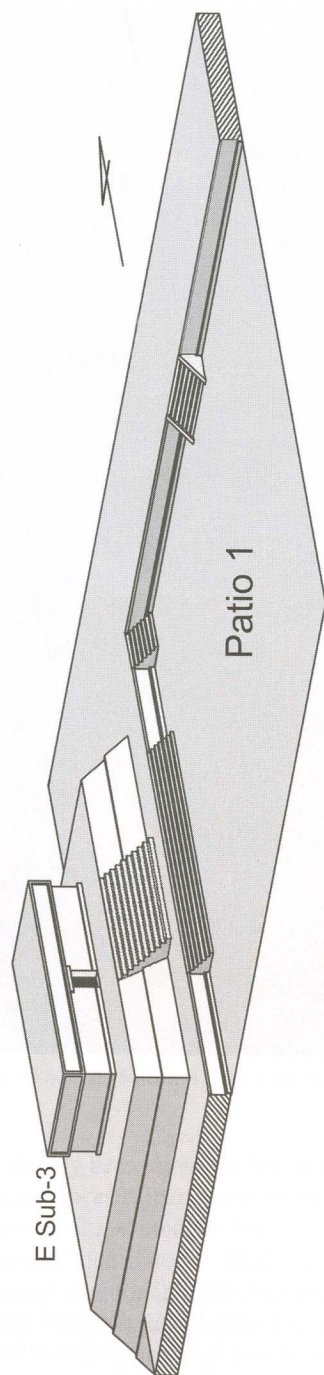


Fig. 15. Reconstruction of Structure E Sub-3, Late Classic, Nakum (drawing by A. Witkowska).



Fig. 16. Stela 11 from Yaxha (photo by W. Koszku).

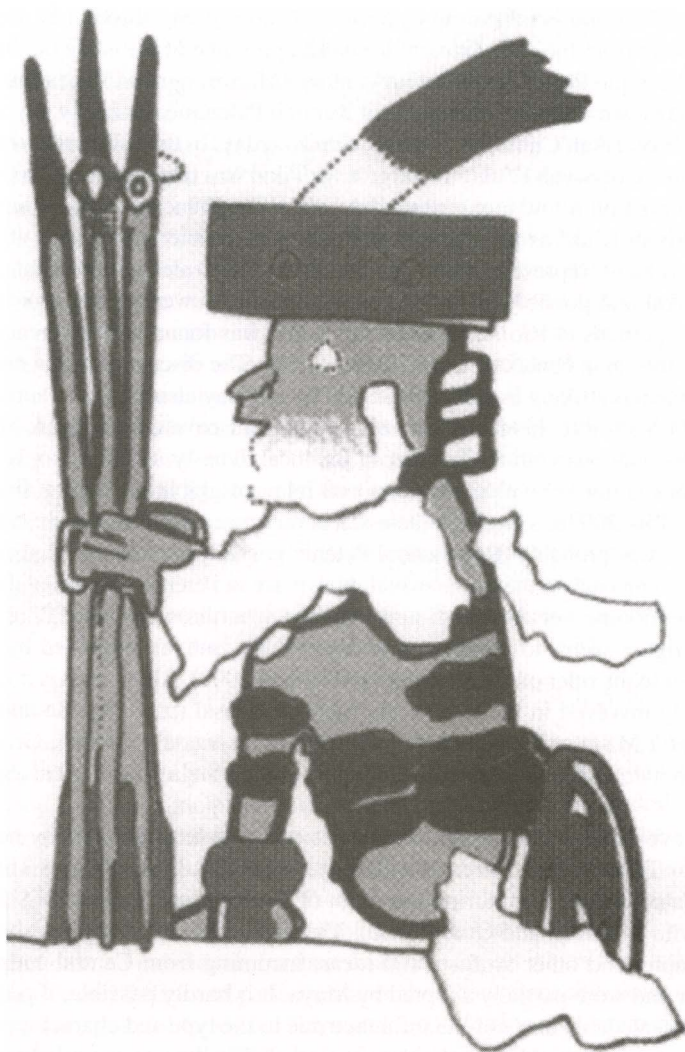


Fig. 17. Mural from La Sufricaya (after Estrada Belli 2002a).

chitecture of *talud-tablero* had already been known in Tikal in phase Manik 1 and 2 (Laporte 2003; 1985; 1987), multiple occurrences of ceramics, green obsidian and monumental art, which in their style, iconography or shape point to links with Teotihuacán culture, were in phase Manik 3A. Significant events took place at Tikal and Uaxactún in A.D. 378, which not only influenced the geopolitical situation in Petén, but also probably resulted in the wide influx of artifacts and ideas from Teotihuacán, adopted in a number of ways by the ancient Maya. The arrival of groups of Teotihuacáños, or people influenced by their culture and identifying with them, should also be taken into account. It may be the case that a representative of one of such groups was Siyah K'ak'. He played a major part in events when he

showed up in Tikal and Uaxactún in January 378, after going through El Perú eight days earlier on his way from the west (Stuart 2000). The presence of his name on the Late Classic panel in the Palenque Palace dated to 7th century (Martin, Grube 2000; Martin 2003) suggests that it may even be earlier that he went through Palenque. Probably as a result of these events the ruler of Tikal, Chak Tok Ich'aak, died that day. In the following year (379 A.D.), with the patronage of Siyah K'ak', the reign over Tikal was taken over by Yax Nuun Ayiin I, who is represented on a few monuments dressed in Teotihuacán outfit. After these events, the name of Siyah K'ak' as an overlord also appeared on the monuments at a few sites in Petén and it probably represented his installations of new rulers, subordinate to his power. Apart from Tikal and possibly Uaxactún, such installations were carried out in Bejucal (ca. 381 A.D.) and perhaps in Río Azul, where his name was found with reference to year 393, most likely in the same context (Martin, Grube 2000). The discovery of his name on Stela 6 from La Sufricaya is striking as well (Grube 2003), and may also suggest a similar context for his position. Furthermore, his name has recently been discovered in Copán, Honduras, with reference to his relations with the founder of the local dynasty, K'inich Yax K'uk' Mo'. The type of relations is not known, as the supposed relevant glyph has not yet been deciphered (Sharer 2003a, 156; 2003b, 330). Nonetheless, it is very meaningful and interesting that K'inich Yax K'uk' Mo' was probably from Central Petén¹², possibly even from Tikal or Uaxactún¹³.

However, going back to the events which took place in Petén at the turn of 4th century, it is also worth mentioning yet another figure, namely Spearthrower Owl, father of Yax Nuun Ayiin I. This figure seems to be superior to Siyah K'ak' and, as suggested by D. Stuart, the name may refer to the ruler of Teotihuacán itself (Stuart 2000). Although it is not clear whether he was actively involved in the events, the ruler of Maasal (probably the ancient name for Naachtun) and a Maya noble considered themselves his vassals (Martin, Grube 2000). His name was also mentioned on stela from El Zapote and on Stela 1 from Tikal (Schele, Fahsen, Grube 1992).

All these events show that central Petén was at that time dominated by newcomers and by the ruler of Tikal who had been installed by them. The domination of Tikal over Petén seems to have continued also during the reign of Siyah Chan K'awiil II (411-456), son of Yax Nuun Ayiin I (Martin and Grube 2000). The distinctive *talud-tablero* style in architecture, iconography and other artifacts and ideas, incoming from Central Mexico definitely spread further and were partially adopted by Maya. It is hardly possible, if possible at all, to determine the scale and nature of the influence due to the type and character of the findings. It is also uncertain at which point the domination of Teotihuacanos ended and how long it lasted. The relations between central and east Petén are unclear. Stela 11 from Yaxha suggests that the site could have been visited by Teotihuacanos as well (possibly also under the command of Siyah K'ak', who seems to have been the major figure in Petén at that time).

¹² As suggested by the analysis of skeletal remains of K'inich Yax K'uk' Mo' and some artifacts from his tomb (Sharer 2003a; 2003b; 2004).

¹³ A person named K'uk' Mo' was mentioned with reference to years 403 and 406 A.D. in an inscription on the back of a sculpture from Tikal called 'Hombre de Tikal', as a figure sharing fame with Tikal Yax Nuun Ayiin – the character of such events is not known (Martin, Grube 2000). Additionally, a figure called Mah Kina Mo' (K'inich Mo', probably the same), was mentioned in a text on the mural in Structure B-XIII in Uaxactún, dated back to the years A.D. 396-445, which also shows major influence of Teotihuacán culture. Another figure mentioned there is Siyah Chan K'awiil II (Schele and Freidel 1990, 449). It points out not only strong links of K'inich Yax K'uk' Mo' to Petén, Tikal and Uaxactún, but also his direct relations with Siyah K'ak' and Yax Nuun Ayiin.

The style of the stela shows that the visit could have taken place shortly after the events in Tikal. The discoveries described in this article are dated on the basis of ceramics to the second half of Early Classic (phase Tzakol 3), which is quite lengthy. The murals from La Sufricaya and the function of Structure 1 as a royal palace have recently been dated to ca. A.D. 400-450 (Estrada Belli 2003). The murals probably represent the arrival of Teotihuacanos to La Sufricaya, and possibly also a ceremony of accession of a ruler to the throne under the supervision of Siyah K'ak'. Although it is difficult to say when the arrival to La Sufricaya took place, it seems to be another stage of New Order introduced in central Petén at the end of 4th century by Siyah K'ak'. Considering the date inscribed on Stela 6 from La Sufricaya, this event took place between 377 and 396 A.D. (Grube 2003, 703).

In the light of the events around Nakum at that time, it seems that the appearance of Teotihuacán contacts in that site also reflects the events which took place several dozens of kilometers to the west, in the central part of Petén. However, it is difficult to establish on the basis of the discoveries made so far whether these events were influenced by the people from Teotihuacán, or they resulted from the influence and spread of the new, attractive style. Nevertheless, the expeditions by Siyah K'ak' to various parts of Petén could have reached Nakum as well. Apart from its relevance to the activity of Siyah K'ak', the occurrence of green obsidian in the context of *talud-tablero* structures suggests strong links to Teotihuacán culture and considerable interest in it by the inhabitants of Nakum. We believe that the future excavations at Nakum and at other sites will help us better understand this period, which was very important for Nakum and the development of the Maya culture.

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