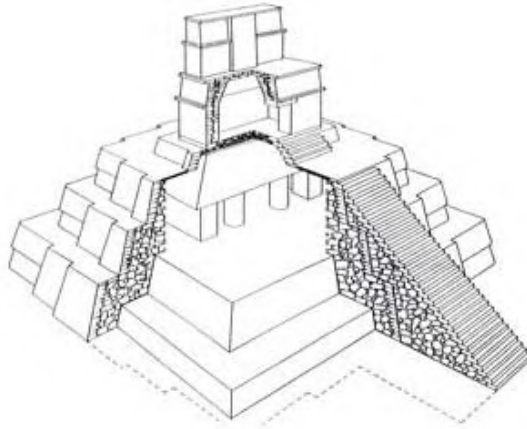


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The Piedras Negras Project: Preliminary Report of the 2000 Field Season

In the Land of the Turtle Lords: Archaeological Investigations at Piedras Negras, Guatemala

Stephen Houston, Héctor Escobedo, Mark Child, Charles Golden, Richard Terry, and David Webster



Research Year: 2000

Culture: Maya

Chronology: Early Classic to Late Classic

Location: Usumacinta River, Guatemala

Site: Piedras Negras

Table of Contents

[Abstract](#)

[Resumen](#)

[Operations in 2000](#)

[Results in 2000](#)

[Acropolis and West Group Court Sector](#)

[Residential Excavations](#)

[Later Years at Piedras Negras](#)

[Miscellaneous Studies and Reconnaissance](#)

[Conclusion and Prospects](#)

[Acknowledgments](#)

[List of Figures](#)

[Sources Cited](#)

Abstract

Over the last four seasons, the Piedras Negras Project has dedicated itself to understanding urbanism in the cockpit karst country along the middle reaches of the Usumacinta River. Questions about cultural and historical developments through time and over space have been clarified by earlier work, both by the Project and by the investigations of the University of Pennsylvania (Satterthwaite, 1943; see also Houston et al., 1998; 1999; 2000). The 2000 field season completed work in the Acropolis, or royal palace of the city, enlarged considerably our knowledge of the beginnings of Piedras Negras, and harvested fresh and deeper information about its artifacts and people. By custom, the kings of the city were known by the regnal name of "Turtle," and this paper reports of momentous matters in the place they built, cherished, and lost.

Resumen

Durante las últimas cuatro temporadas, el Proyecto Piedras Negras ha estado dedicado a entender el urbanismo en el corazón del territorio cárstico a lo largo del trecho medio del Río Usumacinta. Las cuestiones sobre los desarrollos culturales e históricos a través del tiempo y el espacio ya han sido aclaradas en trabajos anteriores, tanto del Proyecto como de las investigaciones de la Universidad de Pensilvania (Satterthwaite, 1943; véase también Houston et al., 1998; 1999; 2000). En la temporada de campo 2000 se completó el trabajo en la Acrópolis, o palacio real de la ciudad, se acrecentaron considerablemente nuestros conocimientos sobre los comienzos de Piedras Negras, y se recogió información nueva y más profunda sobre sus artefactos y pobladores. Por costumbre, a los reyes de la ciudad se los conocía con el nombre real de "Tortuga", y en este artículo se informa sobre las cuestiones trascendentales relacionadas con el lugar que construyeron, atesoraron, y perdieron.

Operations in 2000

By late March camp construction began at Piedras Negras, with an enlarged lab and more orderly storage for sherds. Operations soon opened in R-5 and R-3 in the South Group, where the project focused on the presumed Early Classic remains at Piedras Negras. This area had been touched relatively little by the University Museum project, although a 3.5 m. deep trench had been driven into R-3. Partly with the idea of cleaning and backfilling this gaping pit, which still retained metal wire from Museum revetments, Mark and Jessica Child excavated the trench down to the original limits of the Pennsylvania operations and slightly beyond, into Preclassic levels (Operation 55). The profiles proved to be extremely unstable, so the Childs reinforced them with bagged silt. At the end of the season, the trench was refilled to the original surface of the pyramid. In the meantime Escobedo and Marcelo Zamora completed work on the basal platform and adjacent plaza of Pyramid R-5 (Operation 47). Repeated attempts to pierce the core of the pyramid were made impossible by the loose, poorly consolidated rubble of

the structure. By late April, Escobedo and Zamora moved to a well-preserved Early Classic building, R-2 (Operation 56), which held several column altars that seem to have been flung there during Terminal Classic times. None of these columns had cist foundations, suggesting that they originated in another part of the site. This building was shown stratigraphically to postdate Pyramid R-3, and to rest on a large Early Classic extension of the R-32 platform. Unfortunately, the surface of R-2 had been cleared by the University Museum, which seems not to have preserved records of these excavations, nor of those in R-3. J. Alden Mason was probably responsible for these operations, since his notes are not otherwise commendable for their thoroughness. Escobedo and Zamora finished the season by limited clearing and testing of Pyramid R-16 (Operation 58), shown to be of Early Classic date, with sherds of this period atop its basal platform. A final test in O-12 attempted to retrieve remains linked to the enigmatic Ruler 6, whose stela now lies in front of this building.

In late April Mark and Jessica Child moved to R-8, an extension of R-7 that merited excavation because of its unusual shape (Operation 59). The chances were great that the irregular outline of this mound concealed earlier structures. Clearance began on top and near its stairway, which faced the alley to the west of the R-11 ballcourt. An L-shaped excavation led to the uncovering of R-8-Sub 1, an Early Classic structure with excellent if variable preservation. On May 23rd, three days before the projected close of excavations, a richly appointed, probably royal tomb was found oriented along its long-axis, towards the rear of the structure, directly on bedrock. With the assistance of fans, generators, and 16-hour workdays, this tomb was recorded and cleared within a five-day period. Simultaneously, workers pitted into R-14 (Operation 60), finding an Early Classic deposit and cleaned the front of the R-8 stairway oriented to the South Group Court.

By mid-April operations were in full force throughout the site. Charles Golden and Fabiola Quiroa concentrated exclusively on a residential terrace behind the Acropolis (Operations 46 and 54). In 1999 this area was found to produce deep stratigraphy, and the expectation of functional insights into an undisturbed residential component of the Acropolis. Quiroa devoted her attentions initially to J-27, evidently the summit of a long, ruined stairway leading to the Northwest Group Court. However, the building clearly differed from other temples, being little more than a crudely fashioned platform of Yaxche date with superficial deposits of Chacalhaaz materials, perhaps tossed from the residential area above. The buildings above (Operation 46), excavated by Golden, later with the assistance of Quiroa, absorbed the entire field season because of the complexity of the deposits. Nearby, Houston and Ernesto Arredondo commenced a broad approach to the few areas in the remainder of the Acropolis that were not covered by debris left by the University Museum or by standing buildings.

In early April Arredondo directed himself to Platform J-1, particularly the base of Pyramid J-4 (Operation 48). Later, he opened simultaneous operations throughout the Acropolis, with the aim of determining the constructional history of standing buildings on the palace. These tests targeted Court 1 (clearance of part of J-6 in preparation for consolidation efforts in a destabilized wall, along with final explorations of Platform J-5), Court 2 (Structures J-9, J-11, J-12, J-13, and what appeared to be a hitherto

undetected, late structures between Pyramid J-4 and Structure J-12), and points above (J-21, J-22, and J-23). Megan O'Neil undertook detailed documentation of all standing masonry in the Acropolis, and later assisted Zachary Hruby's invaluable contributions to project photography. Heather Hurst, too, took measurements and began perspective drawings of buildings throughout the site. James Fitzsimmons and Lillian Garrido complemented these efforts with thorough tests and trenches throughout the West Group Plaza and its surrounding structures. Fitzsimmons dealt with Structures O-14, O-16, O-17, K-1, K-3, and K-7, Garrido with the subterranean mysteries of the probable Early Classic palace under the Plaza. Garrido ended the season by further explorations in S-5, following through on tests made in the beginning of the season by Sarah Jackson, who began her work in the patio dominated by S-11 (Operation 15), a presumed elite, sub-royal residence, and direct the remaining forty-five days of the season in Structures C-10 and C-12.

From mid-April excavations picked up from earlier seasons in Operation 33, under the supervision of Zachary Nelson, who gradually extended this operation into test-pitting in the unexcavated portion of the "U-sector." Simultaneously, Amy Kovak began an ambitious program of stripping in RS-28, among the more monumental structures in the periphery of Piedras Negras. After Webster's arrival in late April, he completed excavations in RS-27, assisted by Mark Child, who excavated a probable sweatbath nearby, and by early May had moved to RS-24, the most distant site excavated thoroughly by the Pennsylvania State team. These excavations were done in concert with soil tests by Jacob Parnell and Fabián Fernández. Parnell tested for phosphate throughout the Arroyo sector of settlement, mapped last year by Nelson (Nelson, 1999), as well as in residential areas explored by James Fitzsimmons around N-3, following up on unusually high concentrations of phosphorus and heavy metals detected in previous seasons of soil testing. Alejandro Guillot augmented our large number of test pits with others in the Z-sector (Operation 53), near the northern trail leading into Piedras Negras. He completed his work by comprehensive test-pitting in the difficult second-growth that covered the Arroyo sector. Finally, Rachel Cane mapped in the Acropolis while Timothy Murtha surveyed the area of the suburban excavations.

By contract the Project was obliged to invest over 20% of its budget in consolidation and restoration. These terms have precise meanings in Guatemala, "consolidation" being a reinforcement of standing masonry, "restoration" the thorough repointing and repair of such walls, benches, cornices, and floors. "Reconstruction" carries a more pejorative connotation, as it involves the speculative and often fanciful mending of entire buildings, a measure not countenanced in Guatemala. The project rigorously avoided reconstruction, focusing only on standing masonry and the consolidation of walls destabilized by the University Museum team in the 1930s or by looters in the last three decades. Efforts were directed to two locations, the P-7 sweatbath, the scene of restoration in the 1998 field season, and selected points in the Acropolis. A team of 20 masons needed first to address the perilous state of the north, front wall of P-7, which had begun to lean ominously after the 1999 field season.

Masons soon determined the cause: rubble under the wall had been poorly compressed, an instability exacerbated by great weight and height of the building

facade. After marking each stone, the masons dismantled and rebuilt the wall on a level footing. Probing around the side walls soon revealed the distressing fact that virtually all of the mortar had decomposed to the consistency of powder. Worse, tree roots had penetrated the full height of the northwestern wall. The decision was made then and there to concentrate all restoration efforts on P-7. By the end of the field season most internal and external walls had been repointed with mortar, loose sections dismantled and reconstituted, tree roots entirely removed, cornices brought back to their original reversed-Z, sloping outlines, and three benches returned to their former height (two of these benches, those in the front vestibule, had the character of thrones, with freestanding front supports; those in the back room were entirely solid, intended, one presumes, for reclining). To facilitate visits by tourists, a central portion of the front stairway was fully consolidated and loose fill heaped to the sides to prevent erosion. Finally, holes in masonry were patched in the Acropolis, particularly in Structure J-6. Some of these cavities came from looting, although the largest resulted from Pennsylvania excavations, which, in searching for earlier remains, had undermined the northern interior wall of J-6.

By May 20, the rains arrived early, making further work difficult or even impossible. Hardships in removing the massive Panel 15 meant that Arredondo and Inspector Gustavo Amarra had to stay past June 3, at which time all excavations had been completely backfilled and most staff transported away from Piedras Negras. This situation remained thus until Escobedo arranged, with the kind help of numerous friends but especially the American Embassy, the airlift of the panel to safety in Guatemala City. The monument is now on display in the National Museum, in a special frame devised by the Institute of Anthropology and staff at the Museum.

Results in 2000

Earlier seasons had uncovered remains of Preclassic ceramics, including Middle Preclassic sherds (Hol period) from about 400 B.C. (Forsyth and Hruby, 1997). Soundings in the South Group Court, particularly in deep pits near Pyramid R-5, found further deposits of this period. As in prior years, these levels were seen to press against bedrock. A surprising finding was the assignment to this period of a public building under R-3 (see below). Despite extreme care with stratigraphy, the dating of Hol ceramics continues to perplex us, as virtually all appear to be mixed with Late Preclassic deposits, although some purer deposits may, with further study, be perceived in Operation 47. Radiocarbon dates from these levels should help resolve this issue. At least two of the four sides of the South Group were delimited by the Middle Preclassic and Late Preclassic (Abal) periods. Excavations under the front basal platform of Pyramid R-5 found a well-preserved wall (ca. 25 cm. high) that faced the plaza. Below lay one of the more enigmatic deposits at Piedras Negras, a 2 m.-thick capping of almost pure plaster or sascab, which may have resulted from large-scale plaster production (Escobedo and Zamora, 1999:225).

In parts the overlay was of discontinuous consistency, purest in the axis of R-5, but veined with dark brown clay near the Preclassic platform. A smattering of Early Classic sherds in the latter area suggested either a transitional date between the Late Preclassic and Early Classic periods or a limited amount of mixing. (A sherd under R-3 did display an Early Classic form with Flor Cream finish [Donald Forsyth, personal communication, 2000]). Attempts were made to penetrate this level and commence a tunnel on bedrock into the core of R-5, but, as ever, the loose fill of Piedras Negras frustrated this excavation into the core of the pyramid. A vertical pit some meters in, near the base of the R-5 stairway, encountered the same obstacle. It is important to remember that R-5 was nonetheless largely of Yaxche date, with diagnostic sherds inside a buried stucco floor, 3.70 m. from the summit level of humus. A cache under a cylinder altar was recovered close to the presumed base of Stela 36. A panel from its summit (Panel 4) makes it clear that buried within is the tomb of Ruler 1, Yo'nalahk the First, but doubtless Early Classic constructions as well. R-5 was more than likely a building that changed function through time.

The R-32 platform on the southwestern side of the South Group Court began its life as an outcropping of bedrock, shaved by the Maya during the Middle Preclassic into a level plane and then sheathed with masonry. A relatively modest expansion in Naba or Early Classic times resulted in the placement of a monolithic staircase looking across to Structure R-7. Buried under R-3, a pyramid of Early Classic date, were two levels of Preclassic structure, one about 1 m. in height (Middle Preclassic), the later another 2 m., for 3 m. in total (Late Preclassic, [Figure 1](#)). The lowermost riser of a Late Preclassic staircase remained, covered with a thick coat of mud-plaster. These buildings, along with that under R-5, are the first Preclassic structures found in the Middle reaches of the Usumacinta. There is a clear break with the Early Classic pyramid that covered both Preclassic levels. This pyramid in turn antedated the R-2 platform that rested on an extension of the largely Preclassic R-32 terrace. Unique at Piedras Negras, R-2 exhibited elaborate cornices, recessed panels on the sides, and front stairway with balustrades. The total aesthetic effect is utterly distinct from other structures at Piedras Negras, and strongly suggests Mexican influence. Through time, this building was augmented with a second-stage front stairway, and added length to the back.

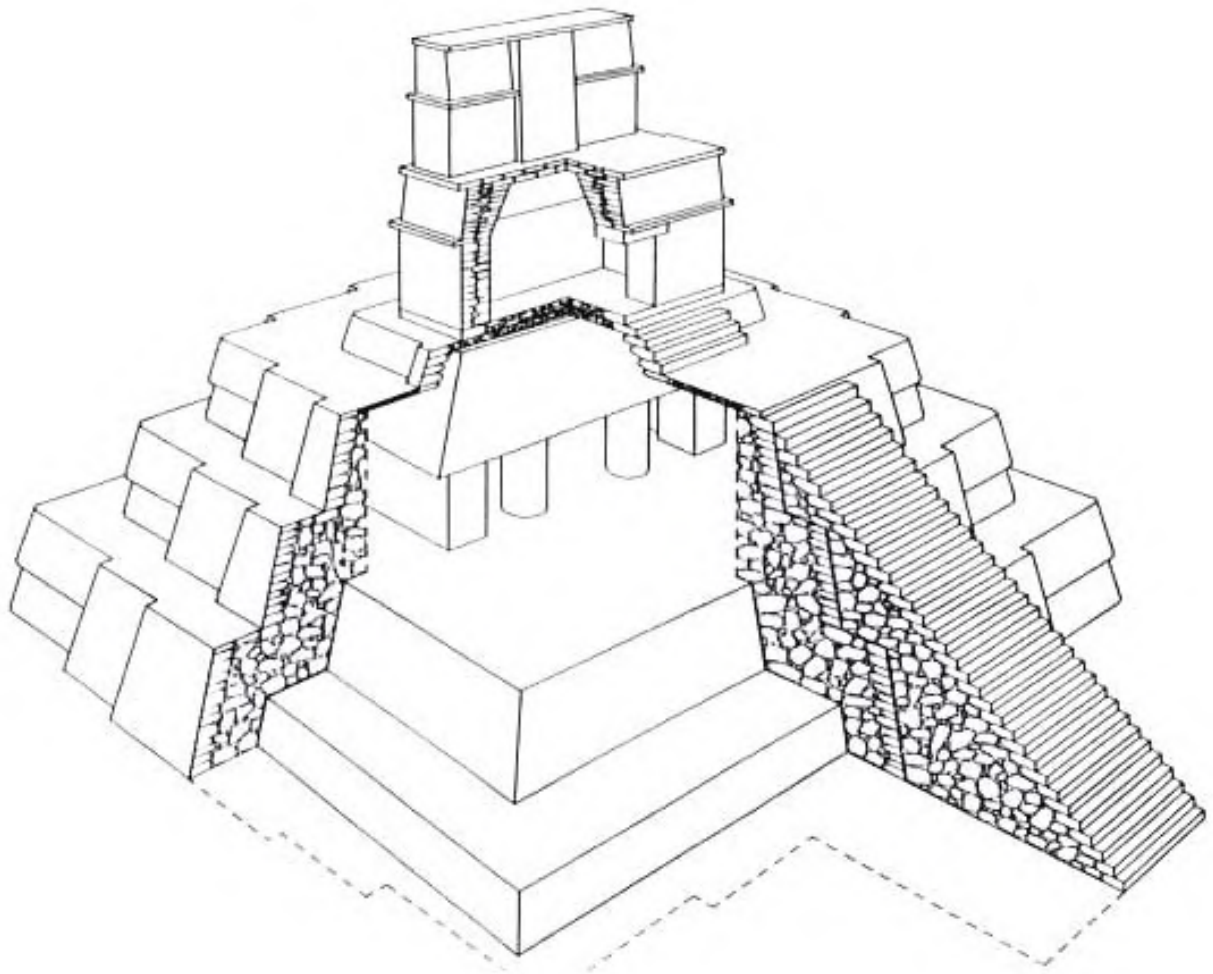


Figure 1. Preclassic to Early Classic in Structure R-3. (Drawing: Mark Child).

Excavations in the R-13 sweatbath had confirmed its Early Classic date, the first in this series of structures, uniquely abundant at Piedras Negras (Child, 1997). Explorations in R-8 demonstrated again that much of this area was Early Classic. The surface of R-8 exhibited an unclear layout consisting apparently of columns and a bench against a back wall; all were so poorly preserved and footed that it seemed uncertain whether they were not merely the preparations for an unfinished building. This Late Classic structure had an antecedent in two walls defining a small corridor that led to the front of the building. At some point this corridor must have slumped, leading the Maya to pave it in part with slabs usually used at Piedras Negras in outdoor patios, as in front of Pyramid O-13 (Escobedo and Alvarado, 1998:7). An indurated and calcined level under this deposit, elsewhere a sign of floors atop Early Classic layers, enclosed a structure with apron-molding in two terraces. Clearly, the building, R-8-sub, had been truncated to create the Late Classic floors, with better preservation in its northwestern corner and only indifferent survival in the corners closest to the eventual outline of R-8. The stairway of R-8-sub 1 had evidently been destroyed to accommodate subsequent layers

of fill, yet it seems likely that its orientation was not radically different from the poorly made or unfinished Late Classic structure above.

A sounding within R-8-sub 1 found, at a depth of 4.5 m., an Early Classic tomb (Burial 110) of such richness as to indicate its royal character. It was vaulted, measuring some 3.05 m. (length) by 1.04 m. (width) by 1.40 m. (height), with mud-plastered walls that had slowly melted over the years into two layers on the floor, one encrusted and shell-like, the higher of fine powder. Rodent bones and burrows showed that the crypt housed creatures other than deceased Maya in the intervening years. Cavities in four points near the capstone indicated the presence of decayed support beams, surely an unnecessary precaution in such a well-built crypt. Two niches existed at floor level on the north side of the tomb, a walled-up entrance to the east. Deposits within included the principal interment, now little more than four parts of long bones, a portion of a clavicle, four vertebrae, and a mandible. Crammed against its feet lay a far better preserved skeleton of a youth. This individual was unsexable because of a fragmentary pelvis, but was aged ca. 15-18 years, as adjudged from epiphyseal union and dental development (Andrew Scherer, personal communication, 2000). From the variable preservation of the two skeletons it seems reasonable to posit that the youth was added later, in an episode of tomb reentry. Pairs of jewelry and shells, jade ornaments and mosaics, carved turtle shell, and "egg-shell" pottery, among the finest made by the Classic Maya, were disposed around the principal body. The practice of mortuary sacrifices, of which the youth may be one, is distinctive at Piedras Negras to royal burials, as in Burials 5 and 13. Regrettably, no texts survived from the tomb. The main individual was, despite its poor preservation, tentatively identified by Andrew Scherer as a male (> 35 years old, based on antemortem tooth loss patterns), and may have been one of the three-known Early Classic rulers of Piedras Negras. The discovery of a substantial Early Classic building (S-5) suggested a residential precinct from this approximate time in the neighborhood of the tomb.

Acropolis and West Group Court Sector

Work in the Acropolis continued systematically, by focusing on a wide variety of locations: (1) areas under and around the West Group Court; (2) several buildings in the presumed "servant's/courtier's sector" of the Acropolis; (3) the front terraces of the Acropolis (J-1); (4) Courts 1, 2, and (5) an area of dense construction on the northern slope of the Acropolis (Structures J-24 through J-27). The overall objective was to extract as much information as possible about all aspects of this hub of royal and urban life and Piedras Negras. Excavations in several buildings around the West Group court enhanced considerably our understanding of its history. In Yaxche times - i.e., the seventh century A.D. - a formal entrance stairway ca. 60 m. in length was raised to greet visitors passing up and down the K-2 stairway. This stairway corresponds to a time we call the Great Shift at Piedras Negras, when large portions of the epicenter were encased within immense volumes of fill and masonry walls. There are suggestions that these may have something to do with a widespread phenomenon in the western Maya Lowlands. At 9.13.0.0.0 or A.D. 692, the Cross Group was constructed at

Palenque, the panel complexes at Pomoná, and Altar 1 erected in the West Group Court (David Stuart, personal communication, 2000). It is difficult to believe that these actions were coordinated among the sites, but there may nonetheless have been a powerful religious, calendrical, or astronomical motivation to the near-simultaneous construction of these massive platforms and temples (Lounsbury, 1989). If some of the West Group Court has the same date, ca. A.D. 692, then its elevation accords both with the Yaxche ceramics from these contexts and the early reign of Yo'nalahk the Second. The Group would then represent a striking assertion of royal puissance just after Ruler 2's death, and the momentous alliances and coming-of-age rituals taking place at the beginning of Ruler 3's reign.

An opportunity to enlarge this formal entrance to the West Group Court and, evidently, to memorialize a member of the royal family came when a crypted burial was constructed within a new building, K-3. The positioning of this structure to the right of the K-2 stairway necessitated, for reasons of symmetry, another building of comparable size, K-1. K-3 and K-1 both have the appearance of being guardhouses, with vaulted, heavily stuccoed roofs and ceilings, 2-m walls, and commanding views of the East Group plaza below. K-3 was modified several times, initially because the crypt had collapsed, during which time a dish with incised base fell sideways into the crypt from a shattered niche. Later, masons made additions to diminish access to the two rooms defined by a central wall within the building. The burial, Burial 82, is among the richest ever found at Piedras Negras: it contained a young adult male, 38 perforated jade beads or disks, most of high quality, a jade imitation of a stingray spine, a Cha:k, or Rain God scepter, and a stingray spine incised with hieroglyphs ([Figure 2](#)). The scepter and spine were highly revealing: such scepters, made of the Jaguar ulna, are restricted thus far only to royal tombs at the site (Burial 5 and Burial 13), and the spine explicitly states that the owner was a youth named "Night-time Turtle" (?-ya a-ku, cf. a spelling on a vessel from Tikal Burial 196), and also someone who used a title, *K'in Ajaw*, frequently employed by members of the royal family of Piedras Negras. The glyphs strongly hint that this was the final resting place of a prince (**ch'o-ko/K'IN-ni-AJAW**) of the royal house, and that it was thought necessary to memorialize him with a more exalted and carefully monitored entrance to the general precinct of the royal palace. However, the bones appear equivocal in this regard: the individual was between 15 and 18 years of age, and this, together with a number of other features, make it impossible at present to sex the skeleton with any great assurance (Andrew Scherer, personal communication, 2000). Nonetheless, the age is consistent with the *ch'ok*, "youth," statement.

Other buildings investigated nearby confirmed the Yaxche date of most structures around the West Group Plaza. A colonnaded building, O-18, was found to contain an eroded panel, once richly replete with hieroglyphs but now reduced to little more than an eroded glyph band around what may have been a palace scene. This and an earlier building underneath were, like K-1 through K-3, Yaxche in date. A wall beneath its front stairway seemed to have restricted traffic by delimiting an enclosed area measuring approximately 50 x 50 meters; the wall stops abruptly as it reaches the arroyo that passes eventually to the river bank. A U-shaped building, K-7, shown incorrectly on the Pennsylvania map as a rectangular mound, proved to be Yaxche, as did a building

under O-17. This last proved to be surprising, as it is one of the few unfinished buildings known at the site. Chacalhaaz masons incorporated what appear to be altar fragments but failed to finish the facade. Stripping excavations in the so-called "servants" "courtiers," or "N-O" sector (Fitzsimmons, 1999; Fitzsimmons and Muñoz, 1999), a barrio physically contiguous with the Acropolis sector and perhaps linked to it functionally, yielded more remains of the Yaxche period, along with burials under each room of its superstructure. The question remains whether some of the functions of this sector were absorbed by the J-24 sector on a northern terrace of the Acropolis; clearly, the area around J-24 was already discharging such duties (see below).



Figure 2. Stingray spine engraved with hieroglyphs, Burial 82. (Drawing: Stephen Houston).

As in previous seasons, slot trenches and pits under the southwestern portion of the West Group Court exposed an elaborate series of platforms, patios, water drains, and revetment walls of Early Classic date (Garrido, 1998; 1999). At least two phases were securely attested, the earliest on bedrock. The sequence of destruction is relatively clear: buildings of wattle-and-daub (*bajareque*) were burnt and crushed, often pushed into patios but, on the southwestern edge of this Early complex, left as compressed mass on well-plastered platforms. Later - the amount of elapsed time is uncertain - the tops of the higher platforms were truncated and their fill shoveled into the patios to create and level the West Group Court. To judge from the rubble, the platforms were at least 50 cm to 1 m. above their current ruined height. The *bajareque* buildings would have added at least another 3 meters to that level.

Historically, the *bajareque* raises many issues, since burnt layers of this date occur under J-1, Court 1, and Court 3 (Houston and Arredondo Leiva, 1999:250). The question before us is determining what might have led to these destructive episodes. Are they merely attempts to flatten buildings so that floors can be made above them? Or is the destruction the result of conflict, followed by clean up and, indeed, obliterations of those buildings by later architectural designs? In Court 3, the burning has a slightly different quality, in that other layers were superimposed as the deposits burned; moreover, these deposits contain an unusually high number of exotics, including pieces of pottery, figurines, and jade flung with some violence over the deposit (Golden, 1998:35-36). A similar deposit of slightly later date occurs in the Northwest Group Plaza (Wells, 1998a): it yielded a high proportion of exotics, including a glyphically incised bone. Both differed from other *bajareque* deposits in J-1, Court 1, and the West Group Plaza, which produced relatively small quantities of pottery and few exotics (i.e., jade or other infrequent finds).

The timing of the late Naba deposits (ca. A.D. 500-550) raises a possible correlation with events recorded retroactively on Stela 12, one of the latest sculptures – if not the latest monument – at Piedras Negras ([Figure 3](#)). The sides of the stela are eroded to such an extent that pivotal information is missing. However, enough remains to determine that the principal antagonists of Piedras Negras were the rulers and warriors of Pomoná. Pomoná is not well published (although see López Varela [n.d.]), but it appears to have had a dispersed settlement pattern, with several hill-top centers in the Tabasco plain that were under the control of the same dynasty. Pomoná was a natural enemy of Piedras Negras: it controlled a different ecological zone to the north and formed a bottleneck through which Piedras Negras would naturally choke as it pushed into lands to the north. In addition, a stela at Panhale, a site that also uses the Pomoná emblem, lies on a hilly zone near the Boca del Cerro, where the Usumacinta flows out of karstic topography into the plains of Tabasco. Most of these sites are intervisible, being placed on low prominences. Pomoná itself looks easily to the canyon of the Boca.

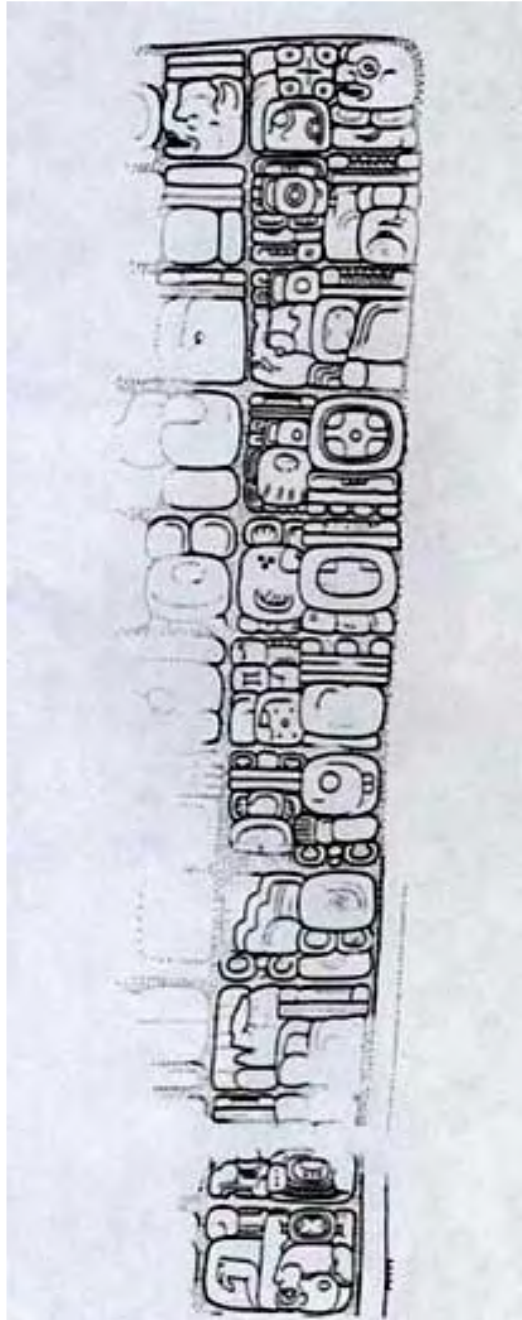


Figure 3. Stela 12, left side. (Drawing: David Stuart, Corpus of Maya Hieroglyphic Inscriptions Project).

A closer look at the right side of Piedras Negras Stela 12 shows that some 11 katuns and 17 (?) tuns before the date of war against Pomoná something was "offered at Pomoná" (*t'ab'ay pak'b'u*), a pattern similar to tributary events documented at Naranjo and shown iconographically on a panel at Palenque (Stuart, 1998a:fig. 31, 412-413). Although the Stela 12 is fragmentary, it seems clear that a ruler of Piedras Negras submitted to Pomoná. The ruler is otherwise unattested, and comes from the "lost

years" of history at Piedras Negras, when no known stela are being erected. As for the ruler who presides over these events (as shown by a yichnal statement), his name seems to have been *Kuch? K'in Bahlam*, "the Jaguar who Supports the Sun": this name often involves a glyph meaning "support" (if still uncertain in precise reading) but in this instance shows the jaguar literally holding the sun sign aloft (Simon Martin, personal communication, 2000). The name is documented at Pomoná, although for the Late Classic period. Nonetheless, it would not be strange to find it in use at an earlier time, as happens frequently at Piedras Negras and other sites. Historical texts from Pomoná tell us explicitly of notations referring to this general period, in katun records of 9.0.0.0.0, 9.4.0.0.0, and 9.6.0.0.0. Interestingly, the locations connected with these calendrical events shifts from place to place, including a placename, *Pipha'*, that may refer to this portion of the Usumacinta. This is consistent with what may be a diffuse pattern of royal settlement in the plains below the Boca del Cerro.

In such light the burnt bajareque at Piedras Negras takes on new meaning. A common trope in Mesoamerican art connects conquest with burnt temples and other buildings. We speculate that some of the deposits at Piedras Negras, with the possible exception of enigmatic ritual levels in Court 3, coincide well with a defeat and subsequent tribute-giving just after 9.6.0.0.0, or A.D. 554. This would thus become the *terminus post quem* for the Balche period, which lasted only a generation or two. Piedras Negras was attacked and parts of its royal palace destroyed, to be tidied up at a later date, probably not fully until Yaxche times, when Ruler 3 left his hand on the Acropolis zone. Stela 12 can thus be seen as a monument of vengeance, in which an earlier humiliation or embarrassment was remembered with tenacity and chagrin, and later rectified near the end of the kingly line at Piedras Negras. The implications for studies of Maya warfare are potentially important. As Freidel and his colleagues have noted at Yaxuná, Yucatán, warfare of a penetrating destruction may not only have played a role in the Late Classic or Terminal Classic periods. Rather, such destructive events may have taken place throughout the Classic and Preclassic periods (Freidel, *et al.*, 1998). The difference is largely that, in earlier phases, destructive episodes were cleaned up by survivors. Such was not true at places like Dos Pilas (Houston, 1987; Demarest *et al.*, 1997) or Aguateca (Inomata and Stiver, 1998).

Until now, the Acropolis has not supplied much evidence of food or craft production. Holley reported a great concentration of burnt vessels and other artifacts on the floor of J-12, but these had been cleared out in the 1930s (1983:204). This season, J-24, on the northern side of the Acropolis hill, was found to have begun as an Early Classic level and a Balche rubbish dump, presumably connected with a building in the center of the patio. By Yaxche times the first version of J-24 came into existence. Its construction was of high-quality, with thick plaster and cleanly cut masonry, a pattern continued in its second major stage. This building seemed to have faced away from a courtyard that served as the probable landing stage for a monumental staircase leading up to Structure J-23, the highest point on the Acropolis summit, and down below to J-27, and thence by another stairway to the Northwest Group Court and the river. J-27 served as a stopping point on this passage, with a few burials that may have belonged to residents of the group above. (It may even be possible that J-27 was the summit of an unfinished period, since unusual finds, including an obsidian eccentric, were found on its summit.)

A dramatic change took place, however, as Yaxche gave way to Chacalhaaz, and the J-24 sector had its courtyard filled in with a 4+-roomed building of poor quality and higher quantities of debris. At this juncture the J-24 sector may have tended to the needs of the royal inhabitants of the Acropolis, perhaps in succession to cooking or servant's facilities in the N/O sector to the west of the West Group Plaza. J-24 itself may have proved untenable as a residence: built close to a sheer edge of the Acropolis, this building began to crumble after it had been modified with additional rooms, benches, and the interment of an axial burial. The cruder buildings to the other side may have been reassuringly far from the precipice.

Other excavations in the Acropolis underlined its full development in Yaxche times, with some earlier finds that buttress interpretations from past seasons. In J-23, a narrow trench exposed a sub-structure that seemed to have a single-room's width, a feature evidently present under J-11 as well. Quantities of modeled stucco with volutes, beads, and cross-hatched areas occurred on the southern, inner floor of J-23, the facade having fallen backwards, spilling the stuccoed decorations on the floor. The northwestern, interior room of J-21, had a bench with inverted, trapezoidal backrest; a nearly identical feature, transformed by the Maya from a cantilevered "presentation" throne to a solid sleeping bench, was found and restored in J-11 during the 1999 field season. A probe in its northeastern corner showed the proximity of bedrock along with Yaxche ceramics. An unusually thick wall visible in the University Museum plan of the Acropolis attracted our attention. Rather than a massive partition, this proved to be a collapsed room of narrow width, clearly added at a late date. A silled "window" one meter from the well-plastered floor allowed ingress, and a stone projection on the other side ready exit. A human mandible was recovered on the floor, in the southeastern corner of the chamber. Another pit in J-22, on the same terrace as J-21, did not pierce to bedrock, because of heavy fill, but it did reveal a well-plastered floor with Yaxche ceramics. Investigations in Court 2 displayed similar superimpositions. In its eastern room, J-13 contained an earlier version of the same, with a doorway on the same orientation and with equivalent dimensions. Here as in J-23 the Maya appear to have enlarged a one-corridor building, or an extremely cramped two-corridor structure, into a more spacious one with two parallel chambers. J-12, too, had secure evidence of earlier floors, more restricted floor space, all atop what may be an Early Classic revetment wall, perhaps in support of a yet-earlier version of J-12.

Of these excavations the deepest and most revealing by far were those under J-11, the scene of restoration efforts by masons in 1999. Cramped by University Museum fill and standing walls, the Project focused on the northern middle room, the one space within the structure of sufficient size to permit deep excavations. At a depth of over 3 m. was an Early Classic terrace, just above bedrock. This may have been the earliest version of a structure under J-11, indicating, with the sloping wall under J-12, that the form and orientation of Court 2 was essentially of Early Classic design. Indeed, most of the finer masonry in the visible buildings of the Acropolis is probably robbed from preexisting structures. Several Early Classic levels followed, all sealed by a Late Classic floor without, however, any intervening Balche deposits. On this were built two layers of supporting wall for a narrower antecedent of J-11. These were evidently sealed in early Chacalhaaz times (ca. A.D. 750), and the final version of J-11 configured. Even to the

end, this building was adjusted in layout by sealing off doorways and erecting flimsy, masonry partitions. The fact that the Acropolis followed prior forms and layouts was also attested in excavations within Platform J-5. Portions of a stairway had been uncovered in 1999, but this season demonstrated that J-8 had a well-plastered precursor. Burial 5, with Burial 13 the richest tomb discovered at Piedras Negras, was built to the side of this stairway. Clearance of its interior revealed a number of objects missed by the University Museum (a hematite disk, parts of a hematite mosaic mirror, and fragments of shell) and, under the tomb floor, Early Classic ceramics crowded against bedrock.

The front of the Acropolis, especially Platform J-1, witnessed deeper and more extensive pits than in the previous season. Pyramid J-4 rested atop an Early Classic revetment that curved inwards on its northeastern edge. This platform was extended outwards in the Yaxche period and its front line extended to near its current corner. When J-4 was built, its adjacent floor reached out to the edge of this platform. When the second floor was laid down, it appeared to coincide with stone cists that received Stelae 6 through 7. All of these developments can be assigned confidently to the reign of Ruler 3, who may well have the mastermind or guiding force behind much of the elaborate construction in the Acropolis and the West Group Court.

The most momentous epigraphic find of the season and, indeed, from the four-year span of our project was the discovery of Panel 15 at the front base of J-4 ([Figure 4](#)). The panel lay face and top down, at an 25 degree angle to the stairway. At first, its size (144 cm x 128 cm x 30 cm) and great weight (ca. 3,000 lbs.) suggested that the piece was a fragment from the celebrated series of stelae in front of J-4. But the beveled edges of the sculpture soon pointed to another interpretation: that the project had found, for the first time in 65 years, a well-preserved example of sculptural and glyphic art at Piedras Negras. A winch, pulley, and rope arrangement - along with the force of 25 laborers and archaeologists - allowed the panel to be turned. Later the panel was maneuvered into a sturdy box, which in mid-June was inched, with enormous effort, to the area of the N-1 sweatbath, where a United States Army Chinook helicopter lifted the box to the former guerrilla milpa in the Northwest Group court. The panel was then hoisted into the craft, flown to Guatemala City (a two-hour flight), and formally transferred to the care of the National Museum.

The panel had clearly slipped to its find spot from a point somewhere above, on the upper reaches of the J-4 stairway. The ruined condition of the stairway makes the original context of the panel almost impossible to determine, but it is likely to have been near the top, perhaps on axis and mortared into the front base of the summit temple. The erosion on the panel indicates that the sculpture had been exposed for more than a century, with more pronounced damage to the upper right corner. A plausible scenario is that the panel was in position up to the time of the Collapse. At this time someone appears to have deliberately hacked at the face of the principal figure - a common occurrence in Classic art - and flaked selected glyphs in the unprotected part of the panel. (The lower left area, now the most legible, may have been protected by being covered by debris.) The sculpture then flipped over - or was pushed - and its weight carried it with some force to the base of the stairway. The impact crushed and splintered the upper right corner. It is interesting that the ritual of throwing captives down stairways

was well-attested among the Classic Maya (Miller and Houston, 1987), and one wonders if the act of dislodging the panel symbolically replicated this treatment of human sacrifices.

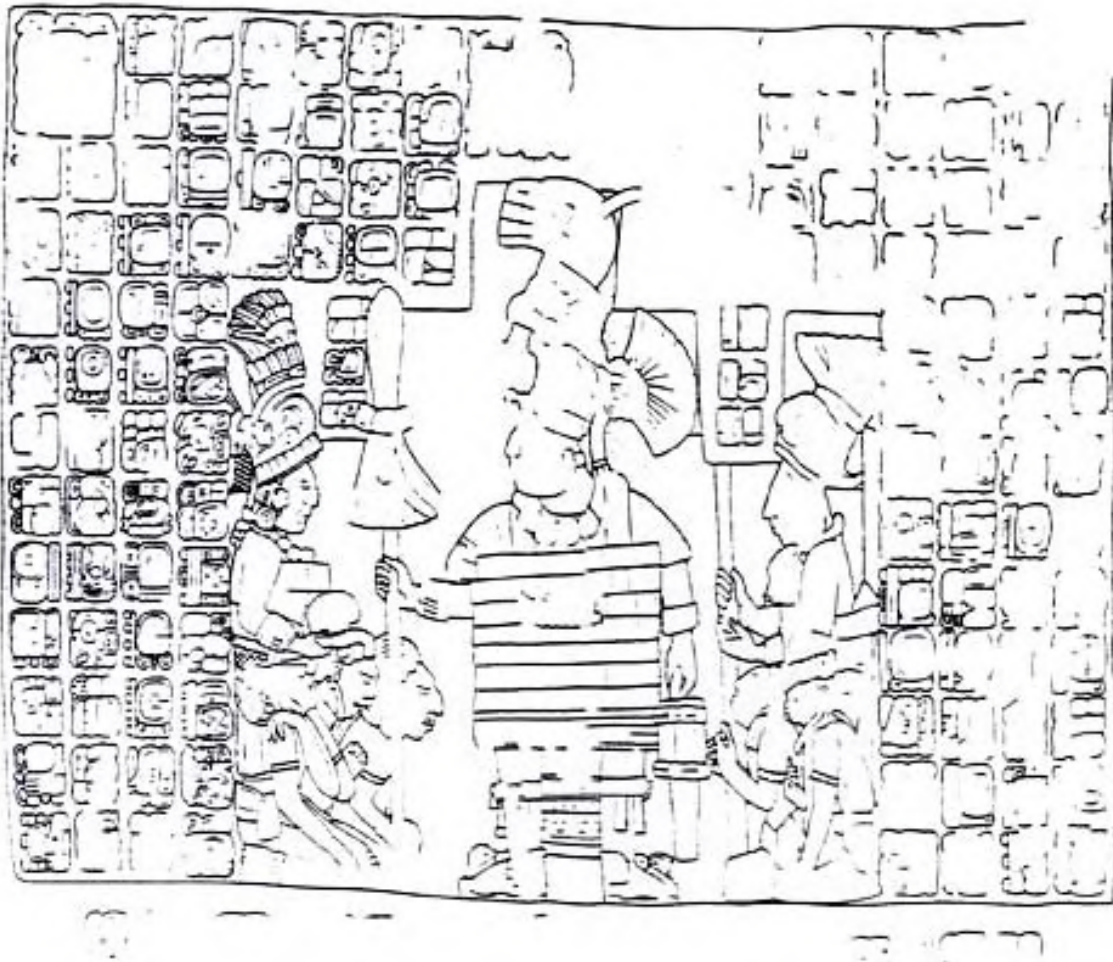


Figure 4. Panel 15. (Drawing: Stephen Houston).

Excavations around the panel revealed that the J-4 pyramid consisted of at least two phases. The initial phase had a narrow staircase and may have corresponded to a hypothetical earlier period of the pyramid, much like the two lower levels of Pyramid R-16, as noted this season by Escobedo and Zamora. The poorly consolidated fill of the J-4 summit made it impossible to dig more deeply, but a retention wall in fill implied the existence of another structure some meters down (Escobedo, 1997). Minimally, then, the bulk of J-4 had two phases, probably correlating with each of its two stairways. The two plaster floors in front of the J-4 stairway exactly match these two constructions. Both in turn lie atop an earlier terrace with finely plastered floor that passes under the bulk of the pyramid. At least the *terminus post quem* of the outer skin of J-4 is clear.

Probing of the J-7 platform in Court 1 of the Acropolis showed that Yaxche floors passed under the latest surface of J-4, indicating that there were buildings and platforms of this date under the pyramid (PN 34A-6; Houston and Urquizú, 1998:247-248). Because of safety concerns, the tunnel that revealed this information could not be extended more than a meter into J-4. Nonetheless, the ceramics from the tunnel indicated a secure Yaxche date for the fill of J-4, including sherds of Saxche Polychrome and Santa Rosa Polychrome.

The panel contains a central image of eight figures and a text with approximately 150 glyph blocks. The incised glyphs below the scene and principal inscription are insufficiently preserved to make a precise accounting, but the number of blocks accords with a general upward trajectory of glyph blocks at panels at Piedras Negras: Panel 12 (April 19, 518): 67 blocks; Panel 4 (Oct. 8, 658): 96 blocks; Panel 2 (July 25, 667): 129 blocks; Panel 15 (Dec. 31, 706); Panel 3 (March 24, 782): 175 blocks. The Julian-equivalent dates of Panel 15 are as follows. Note the formulaic use of a temporal phrase, **u-ti-ya/i-PAS**, *ut-i:y i-pas*, probably something like "it happened, then (or now) the dawn or new day."

Glyph Blocks	Long Count	Calendar Round	Initial Series	Julian Date
A1-B9	9. 9.13. 4. 1	6 Imix 19 Sotz'	IS, G9, 23D, C, X, B, 10A	May 22, 626
D3-D4	+ 13. 1. 8			
C6-D6	(9.10. 6. 5. 9)	8 Muluk 2 Sip		Apr. 12, 639
C9-C10	+ 9. 1.17			
C11-D11	(9.10.15. 7. 6)	9 Kimi 14 Wo		Apr. 1, 648
E2-E3	+ 16.16. 7			
E4-F4	(9.11.12.5.13)	12 Ben 1 Muwan		Nov. 30, 664
H3-G4	+ 4. 2. 1			
I1-O2	*9.11.16. 7.14	11 *Ix 2 Pax	IS, *G, D, C, X, B, 9A	Dec. 20, 668
P9	+ 3.12			
P10-Q10	(9.11.16.11.6)	5 Kimi 9 Pohp		Mar. 2, 669
R6-R7	+ 1. ?. ?. ?			

R8-S8	(9.13. ?. ?. ?)			?, 706
R12	+ ?. ?			
S12-S13	(9.13.)15. 0. 0	13 Ahau 18 Pax		Dec. 27, 706

The majority of the text concerns the conflicts of Ruler 2, Itsamk'anahk the Second, although it begins with a statement of his date of birth, illustrious parentage (Yo'nalahk the First and his queen), and accession at the tender age of twelve. As is the usual practice at Piedras Negras, his personal epithet occurs first, the regnal name second. The principal element is Cha:k, the storm god, prefixed by (and sometimes conflated with) what appears to be a beaked creature, perhaps a turtle. This same name occurs later with the main lieutenant of Ruler 7 (Throne 1:D1). A two k'atun ajaw notation at D2 shows for the first time that his father died before he turned 40, leaving a son in the care of regents. This is seldom a happy or stable condition for a kingdom. At the age of 21, Itsamk'anahk embarked on what may have been his first conflict, which resulted in the capture of a lord from an unknown site (C13). This event does not seem to have been directly performed by him, since the statement of agency is a general one (**YEHT?-te**, "his companion"?). The same holds true for other capture or *chuhkaj* events on the panel. Most show Itsamk'anahk's participation, but of an indirect sort, since they employ the **u-KAB-ji-ya** expressions that denote broad supervision. (Most likely, a capture event followed by an **u-B'A:K**, "his captive," statement points to direct involvement in the capture.)

After this first conflict, the panel turns to much later battles that are more closely spaced in time. The obvious peak of this stream of events is the second Initial Series, in itself a rare occurrence in Maya inscriptions, although known from a few other sites such as Uxul. In a sense, the temporal connections in such notations are two-fold, being linked to the event-line and to the so-called "creation" millennia before. This double-emphasis probably served as a kind of "exclamation point" or "underlining," in which all chronological particulars of the date were examined and noted. The event appears to be the well-known mediopassive verb connected with "Venus war." A number of decipherments have been proposed for this verb, although Houston believes this simply be a logographic variant of the *jub'uy*, "fall," expression. The next event, after a long, heavily eroded section of the text, is another "capture," which cross-ties with a *chuhkaj* recorded on Stela 37:C6-D6.

The remainder of the text is exceedingly difficult to decipher. A long Distance Number at R8-S8 involves 1 katun, but the other notations are opaque, and may be rendered here with greater certainty than is warranted by the carving. Another approach to this problematic passage is to work backwards from the final date, which appears, though in ruined stated, to be the Period Ending 9.13.15.0.0. A brief Distance Number of under one tun counts back to the final, non-Period Ending event on the monument. The brevity of this Distance Number and the length of the Distance Number at R8-S8 indicate that the event must postdate the death of Ruler 2 at 9.12.14.10.14, Nov. 16, 686. More to the point, it must have been close a katun after his death, suggesting a mortuary ritual on his anniversary. Such a ritual is recorded on the sides of Stela 1 on the 1 katun

anniversary of his burial, 9.13.14.11.1, Aug. 10, 706 (Fitzsimmons, 1998). The form of the verb, suspiciously similar in outline to that of the *el-na:h*, or incensario expression, was used in the area of Piedras Negras to record episodes of tomb reentry. Very likely this is what is being recorded near the end of the Panel 15 text. Moreover, enough remains of this inscription to see that the event was supervised by his son, Ruler 3. Evidently, the pattern of stelae in front of Pyramid J-4 is much like the series in front of R-5. The stelae pertain not to the person buried within these buildings, but to their offspring, who commemorate their own successes and dynastic records in close proximity to an ancestral shrine of immediate, genealogical relevance to them. As for the size of the panel, it probably reflects the height of the J-4 pyramid and the need to project the image as far as possible to the assembled multitude in the plaza below. Here, indeed, was a Pre-Columbian billboard of ambitious scale.

Regrettably, very little can be extracted of who Itsamk'anahk's enemies might have been - the text is eroded in all the wrong places. The indirect nature of his involvement in the captures suggests that we are dealing with proxies, warriors engaged in skirmishes on behalf of the king, perhaps in border zones around the kingdom. A similar pattern is recorded on the much later Stela 12. Coincidentally, the iconography on that monument, thought by many to be unusually innovative, clearly finds its origin in scenes such that on Panel 15. In essence, the disposition of figures differs little from Stela 12: the central personage of the king grasps a feathered spear and is flanked by two standing lieutenants, the one to the right grasping a plain staff. Captives appear below in various attitudes of despair and entreaty. From an art historical perspective the emotive and highly individualized presentation of limbs and faces is intriguing, for it suggests that it is in depictions of captives that the Maya began to experiment with more plastic expressions of the human body.

Residential Excavations

Explorations in C-10 and C-12 proclaimed again the singular nature of this group, which in 1999 had been shown to contain the burial of a high-ranking lord from Yaxche times, a veritable cemetery in its patio, which also concealed caches and an Early Classic burial and revetment wall (Guillot Vassaux *et al.*, 1999). In a central pit C-12 yielded Chacalhaaz, Yaxche, and Balche deposits. Stripping on its southern side exposed a formal stairway with wide risers, and, from the outset of excavations, unusual deposits, including an eccentric form what seems to have been a disturbed cache. The cleared, eastern top of the mound contained two rooms, one with a niched bench. In the Chacalhaaz period, this room was filled and incensarios and other vessels placed on the floor of this and an adjacent room, with some pronounced preference for room corners and the cardinal orientations of the bench. The adjacent room included an inverted Hutzijan Polychrome plate, unfortunately disturbed by tree roots. After filling, the room with the bench was fronted with an almost identical niche with inset, rectangular altar. On and near the surface were found an unusual series of molded and modeled animal and bird heads. Their function is entirely certain, as some are too

heavy to have been used as lids. Others are relatively thin-walled, and may have formed part of marionette-like figures with perishable bodies.

On the northern side of the mound a back room had a narrow entrance to the front and contained a bench; the central chamber of C-10 appeared to pass directly through the building and a stairway behind. A burial on its front axis lay in front of this back room, and was surfaced with fill and slabs. Here as in C-12, termination deposits resulted in the filling of these rooms with one of the strongest and most varied samples of Chacalhaaz ceramics, particularly another inverted bowl on its axis and, near the central doorway, a carved bone with name-tag ([Figure 5](#); **u-?-ku/BA:K-ki**, also found at Aguateca and, in its first elements, on the so-called "Squier jade" at the American Museum of Natural History and on an object from Dzibilchaltún). The similarity of this bone to others found recently at Aguateca, a site of comparable date, make it uncertain whether it was produced locally. The overriding impression one gets of the "C-Group" is that it is like none other at Piedras Negras, with an unusual ritual and sub-royal focus. In future work virtually all of this mound group should be stripped and penetrated, particularly the near-symmetrical rooms that appear to either side of the mortuary structure, C-13.

More modest operations included the complete stripping of U-5 and U-6. The intent was to achieve an understanding over a large continuous area of a single residential cluster, especially one situated near monumental architecture (the South Group Court) and the arroyo that undoubtedly first attracted settlement to Piedras Negras (Wells, 1998b; 1999). In both buildings, the orientation was generally towards the arroyo. Preservation of standing architecture was poor, but, with patience, wall lines and internal divisions appeared, along with an abundance of burials and midden deposits, including two grinding stones on the front terrace of U-5 (others were, as is usual at Piedras Negras, incorporated into building fill when broken). The Chacalhaaz ceramics displayed an unusual variety of types, including well-preserved examples of fine gray or Telchac Composite. The number of burials hint at the total sum of interments in the "U-sector" of settlement. Excavations in previous seasons recovered nine bodies from Structure U-16 and four from Structures U-17 and U-8. U-5 produced three interments, as well as two cisted chambers that were not touched this season for want of time; U-6 yielded another six. The burials in Structures U-5 and U-6 all had the same orientation, head due north. One remaining group was only test-pitted (Structure U-19, and the patio defined by U-7 and U-18), but a reasonable estimate would calculate, given the complete stripping in this area, a predicted total of at least sixty interments in the U sector. Structure U-5 had at least three phases, the earliest Yaxche (including some of its burials), subsequent ones Chacalhaaz; U-6 had two periods of major construction, the latest consisting of raised benches or even celled and filled rooms. Both buildings exhibited clear evidence of craft production, involving the reduction of chert and obsidian.



Figure 5. Text incised on bone, C-10. (Drawing: Stephen Houston).

The suburban excavations focused on three groups. The first (RS 27) had been excavated in part during the previous field season. Its larger mound was trenched and stripped, showing a burial and an extension to the north. Among the most interesting finds was a probable sweatbath nestled within a deep rock overhang to the east, some 20 m. away from RS 27. Its floor showed signs of burning, well-preserved and burnished plaster, and the remains of a narrow entrance way. One can imagine that water could have been collected from drips in the overhang; cooling may have been possible in a deep cave fissure a short distance away. A cache of imported shells

suspended for use as jewelry was also found outside this building, with some pieces nesting within others. The presence of this sweatbath possibly indicates a special function for RS 27 and hints at the functional complexity of this semi-urban landscape. A small structure in the corozal (area with cohune palm) to the southeast (RS 24) proved to be a single-episode, Chacalhaaz building. Thick accumulations of sherds had built up in trash deposits on the southern part of the platform, and also in clay lenses that collected gradually along its western side. The position of the mound athwart a major trail to the southeast may be relevant to its placement in this poorly drained area. A large group with monumental walls and architecture (RS 28) served as the major focus of the suburban explorations ([Figure 6](#)). A large building with ruined bench was cut into bedrock and faced with a 2 m. wall of large blocks and a large stairway similar to those in royal contexts in the core of Piedras Negras. The lack of ceramics in this building suggested a "first settler" effect, in that other structures around the plaza contained ceramics, perhaps scraped from preexisting settlement. The building facing this larger structure was evidently placed later, and its western side filled with large numbers of metates and other kinds of rubble; a crypted burial of Chacalhaaz date lay within. The proximity of this group to a formal arrangement known as "Yax Nit" (Webster *et al.*, 1998), doubtless a southward extension of the epicenter, points to its connection with monumental building programs in the core.

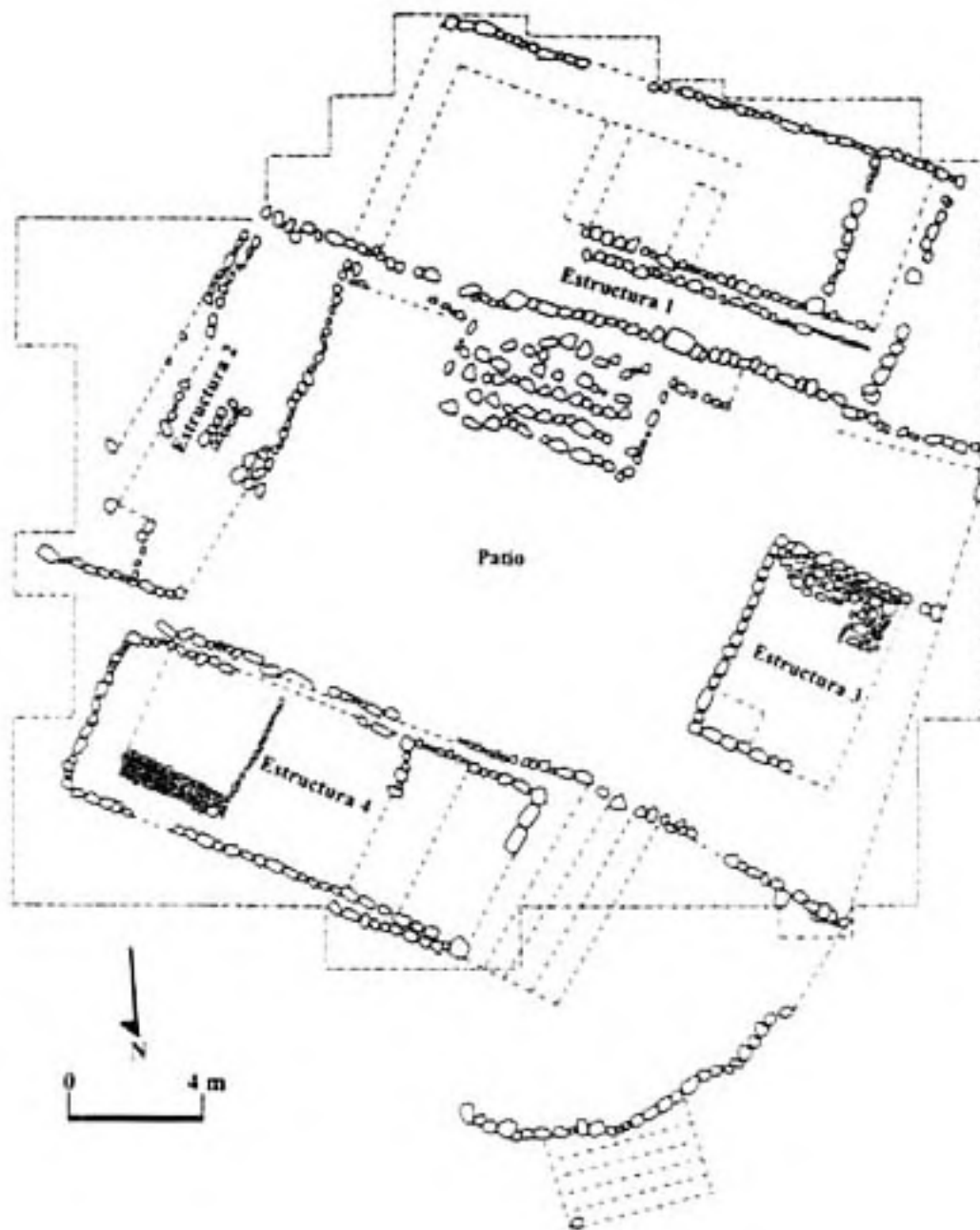


Figure 6. Plan of RS 28. (Drawing: Amy Kovak).

A concerted effort at completing test-pitting within Piedras Negras placed the suburban and residential excavations in greater perspective. Tests ranged from high, terraced groups in the Z-sector, which overlooks the Northwest Group Court, to deep pitting in and around the arroyo that passes through the southern part of Piedras Negras. Past mapping had pinpointed this latter area as the densest focus of modest settlement in the city. The pits revealed high concentrations of burials, including sub-adults and a

neonate interred with a stingray spine. The age distribution resembles that at Tikal, where vulnerable children died and were buried reverently. A gap in skeletal distribution (provided the sample size suffices) came afterwards because those hardy enough to survive infancy tended to endure to adulthood (Andrew Scherer, personal communication, 2000). An apparent balance between male and female skeletons suggests the presence of family groupings. A 5 m.+ pit showed the great depth of silt in this flooded area of the Piedras Negras, although sherds tapered off only a meter from the surface. This would suggest that the current level of the arroyo differs only slightly from that of the Classic period.

Later Years at Piedras Negras

The latest phases at Piedras Negras can now be seen to take place against a backdrop of dynastic turbulence and, following that the apparent and highly destructive war with Yaxchilán (Houston *et al.*, 1998), leading to catastrophic and irrecoverable collapse at Piedras Negras (Houston *et al.*, n.d.). New evidence establishes that dynastic "hiccups" and uncertainties obtained in the final three reigns at the city. Up until Ruler 4, the dynasty profited from what seems to have been an unbroken descent from father to son. One suspects a principle of primogeniture, since Ruler 2's minority and time of regency would suggest strict application of this rule of inheritance.

After Ruler 4's death something changed. Consider that all subsequent rulers appear to have been born during his reign. For example, Ruler 6 was probably under 20 years old on 9.15.18.3.13 (July 27, 749), implying birth after 9.14.18.3.13 (Nov. 9, 729), shortly after Ruler 4's succession. Stela 23 clarifies this point by making explicit Ruler 6's filial connection to Ruler 4. Similarly, Ruler 7 was born on 9.15.18.16.7 (April 7, 750), and Ruler 5, acceding at 9.16.6.17.1 (March 10, 758), is likely to have come on the scene after Ruler 4's birth on 9.13.9.14.15 (Nov. 18, 701). Parentage statements from the last three reigns are notably sparse (n = 2, both partly effaced). But there are ample and symbolically freighted connections between Ruler 4 and at least two of the last three kings. Ruler 7 famously reentered Ruler 4's tomb in front of O-13 and refurbished that building as an act of ostentatious piety (Escobedo and Alvarado, 1998). On Stela 23, Ruler 6 went to some length to describe the death and memorial rites of his father. Thus, one of these later kings was certainly Ruler 4's son, and a strong circumstantial argument can be developed that the other two were as well. This means that, after Ruler 4, the pattern of inheritance changed from filial to fraternal succession, in violation of a pattern firmly fixed and followed during the first four reigns of the dynasty.

An historical aside is necessary at this juncture. There is now solid information that a "Ruler 6" did in fact exist at Piedras Negras, despite justifiable doubts about small portions of Proskouriakoff's original sequence (Simon Martin, personal communication, 2000; cf. Houston, 1983). He is mentioned on Stela 23, Throne 1, and a small fragment of text supposedly from El Porvenir, but more likely scavenged by loggers from Piedras Negras itself. His name was *Ha' K'in Xo:k*, and, with him, the steady alternation of royal names at the site, used assiduously from Ruler 1 through Ruler 5, came to an end,

although Ruler 7's name was recycled from an Early Classic ruler. More strikingly, there are hints that he abdicated so that Ruler 7 could come to the throne (Simon Martin, personal communication, 2000): Throne 1 records an enigmatic event (an antipassive construction) that took place at night, on March 24, 750 (9.17.9.5.11). On this date the passage also indicates that: **ya-ka-ta-IJ/a-AJAW-le/?-TU:N-ni**, *y-akta-(ij) ajawel ? tu:n*, "his dropping of/he dropped the kingship (at) the Jaguar Paw Stone." The Jaguar Paw Stone may allude to the area of Altar 4, which represents precisely this combination of elements, a gigantic jaguar paw atop vitalized stones (David Stuart, personal communication, 1997); nonetheless, that particular stone was surely carved later, during the reign of Ruler 7. More to the point, Throne 1 probably refers to abdication by Ruler 6 in favor of Ruler 7. The final passage is problematic: **u-ku-chu-(~chu-ku?)-wa/i-ki-tsi/T'AB'-yi/LAM-NA:H**, *u kuchuw (u chukuw) ikits t'ab'ay lamna:h*. In local dialect—*ikits* replaces the more common *ikats*—this reads "he carries (seizes?) the burden or office, it gets offered at the Lam Na:h," presumably a structure with large stairway. A similar connection exists at Tamarindito between stairways, *ikats*, and the same transitive verb, either *u kuchuw* or *u chukuw*. It may be that public declarations and solemnities of this sort required such locations, where emblems and bundles of office could be offered. Months before the accession of Ruler 7 a ritual object (**?-b'a-hi**, *?-b'a:h*, "celt image") arrived at the site under his supervision, perhaps as a necessary prelude to his assumption of power.

In sum, the final years of Piedras Negras differ historically from the beginnings of the Late Classic. At first, the dynasty gloried in direct, father-to-son succession. After Ruler 4 and more precisely Ruler 5, fraternal succession took over. The fact that Rulers 5, 6, and 7 do not mention one another, aside from the unhappy event of abdication, intimates that their relations were not entirely cordial. The violence of an abdication, an aberration in a system of rule predicated on sacred kingship, whispers of the collapse and of internecine instability before the demographic implosion of the city. Between Ruler 6 and the last known ruler of Piedras Negras there existed an interregnum of over a year (close to a solar-year anniversary), suggesting troubled times for the kingdom.

Excavations in and around J-24 and other parts of Piedras Negras now suggest that what we term Late Chacalhaaz ceramics postdate the war with Yaxchilán, which took place between A.D. 795 and 808 (Stuart, 1998b). Early Chacalhaaz ceramics seem to be characterized by the presence of Fine Gray ceramics, especially Telchac Composite (René Muñoz, personal communication, 2000). The burned Structure J-12, presumably coincident with the Yaxchilán war, contained many examples of fine-gray; the midden atop the ruined J-17 sweatbath did not, nor did the final layers above early Chacalhaaz buildings in the patio of Structure J-24. These data indicate that life in the palace continued, if squalidly, after its partial destruction. They also show that Chacalhaaz ceramics embraced a period of about a hundred-years' duration, in force by ca. A.D. 730 and proceeding up to roughly A.D. 830. Its later phases showed some minor changes in rim profiles (René Muñoz, personal communication, 2000), and, intriguingly, the absence of Chablekal Fine Grey, a prominent and moderately common trade ware at the site, implying some disruption in patterns of inter-site commerce along the Usumacinta basin.

The Piedras Negras project has recovered little evidence of further occupation, although the University Museum excavations found somewhat more. Our finds include a scattering of Fine Orange and Pabellon Molded-Carved, and, in a notable find this season, two inverted, stacked vessels of unidentified type found atop rubble within the P-7 sweatbath ([Figure 7](#)). These had been "killed" by having their tripod supports hacked off, and a small perishable object covered with green stucco placed on top of the vessels. This cache, clearly offertory, demonstrates that a major building at the site was in ruins by Kumche times, ca. A.D. 850-900. Thereafter, apart from the infrequent placement by Lacandón pilgrims of incensarios, Piedras Negras enters a long slumber until modern times.

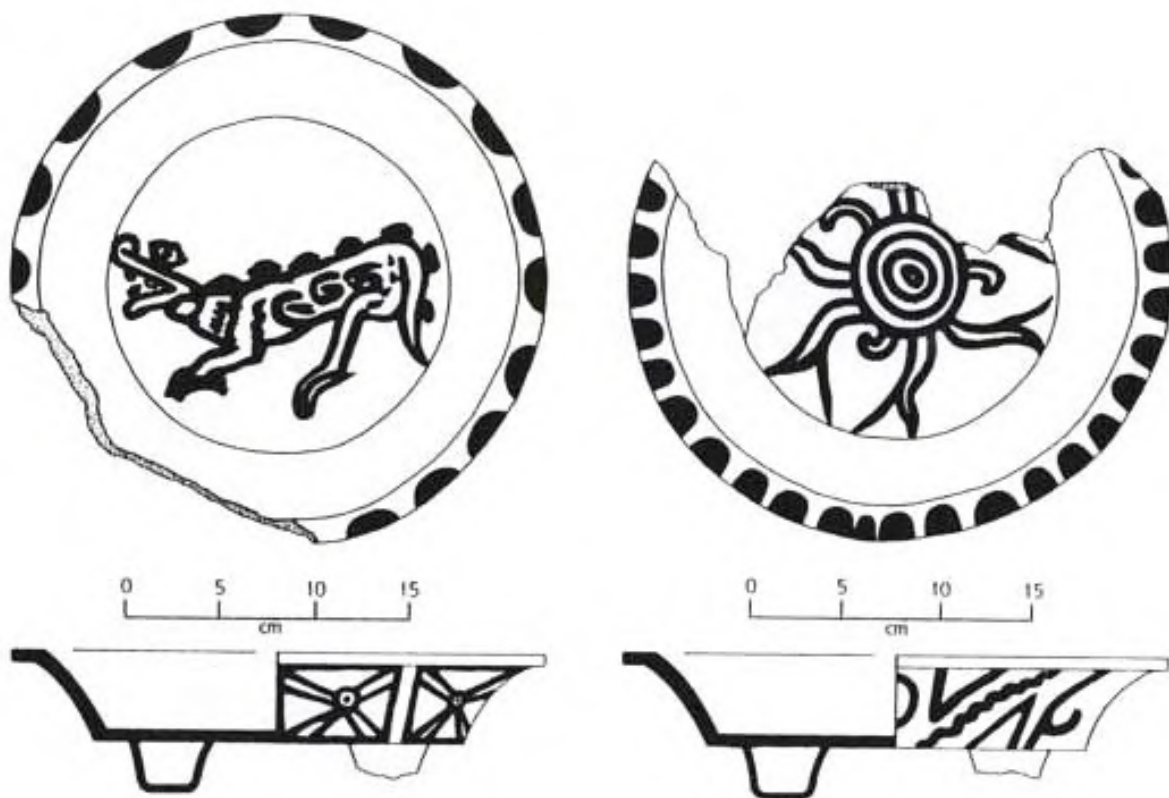


Figure 7. Plates from the Kumche period, atop collapse of P-7 sweatbath. (Drawing: Mark Child).

Miscellaneous Studies and Reconnaissance

Osteological work continued apace, addressing the 37 burials in the 2000 field season and the 71 found in previous seasons. As a sample the stature estimates ($n=4$ from prior analyses, excluding this year) indicate unusual height, approximately 10 cm. above the Classic Maya average (Scherer and Yoder, 2000). This differential in height is less likely to be genetic than a result of adequate diet and reduced environmental pressures

during adolescence, which, nonetheless, existed alongside a high degree of stress during childhood as marked by a high rate of enamel defects. The skeletal sample demonstrates a comparatively high rate of caries and anemia, similar to the patterns in the Petexbatún but unlike those in Belize. Pending further isotopic analyses, this would tentatively suggest a high-maize diet. Another striking attribute is the possibility of manioc consumption. About 30% of the individuals show lingual wear on the maxillary teeth, a pattern of attrition consistent with pulling sweet manioc across the teeth during ingestion. Accordingly, further work will search for manioc phytoliths in dental calculus.

Soil and environmental studies supplemented research in previous seasons, with routine use as a prospection device in all residential areas of the site. The soil landscape was studied through time by means of pits placed at regular intervals across and along the valley investigated intensively by members of the suburban excavation team. One pit showed decisive evidence of a buried soil horizon or agricultural surface not far from Brecha Sur 25 (Operation 26A). Pits up the sides of the valley unveiled thin soil unsuited to intensive cultivation. The beginnings of a vegetation sample was retrieved from over 50 species of flowering plants, to be compared with material floated by Jensen from most middens at the site. The soils team accompanied by Golden and Alejandro Guillot also traveled to the area of the Arroyo Macabilero, just across from the major subsidiary center of El Cayo (Aliphath, 1994). Earlier reconnaissance by Edwin Shook and the University Museum project had found near-megalithic terracing, although the locations noted by these explorers proved to be misleading. Several hills near the river were so-terraced, from which tests retrieved Early and Late Classic materials. Each hill appeared to be occupied by one patio group, with terracing extending up to the hill-tops probably for agricultural purposes. Interestingly, where a hill faced the Usumacinta river, the patio group tended to be as far from the water as possible. Where the hill bordered on the secluded Macabilero, the patio group was as close to the stream itself as possible given the topography. While this is not a representative sample of settlement in the area it may hint at the desire to be protected from possible threats coming down the Usumacinta in a region central to conflicts between Piedras Negras and Yaxchilán. One lake proved to have an island with a single mound that may have been separated from the mainland by the Maya themselves. Pits further inland, in a seasonally inundated savannah, suggested seasonal discharge and stratigraphic "banding" that might be useful to future analysts of the ancient environment in this ecologically distinct zone. Forceful streams flowed even in the height of the dry season. The Macabilero was as crystal clear as streams such as the Arroyo Pucte, a tributary of the Pasión River visited by Houston in 1988. The occurrence of abandoned guerrilla camps in the area underscored the continued attractiveness of this setting.

Conclusion and Prospects

Excavations in 2000, the most ambitious to date, resulted in a collection of evidence that, with earlier seasons, crowned the most abundant information on Precolumbian urbanism in the Usumacinta basin and perhaps in the western Maya Lowlands. Data came from all periods, in both extensive and intensive excavations, stripping and test

pitting. Historical information lent a rich texture to this work, embroidering it with the alliances and antagonisms of the Turtle dynasty of Piedras Negras.

Future projects will need to build on these results with even more attention to suburban, residential, and rural zones. These form the majority of settlement at the site but still, despite our best efforts, a minority of the excavations. An undated memorandum from the late 1940s by Linton Satterthwaite, the leader of the University Museum expedition (Shook Archive, Universidad del Valle), urged a return to Piedras Negras to focus on precisely these features. Regrettably, that initiative was neither approved nor funded. The laurels of being a settlement pattern pioneer in the Maya Lowlands went instead to Gordon Willey, who introduced the approach in Belize several years later, partly with Satterthwaite's advice and encouragement (Willey *et al.*, 1965:vii, xi, 15).

With renewed excavations the osteological sample at Piedras Negras could be tripled, given reasonable estimates based on the Brigham Young/del Valle project. Complete mapping could extend beyond the brechas cut in 1997 and 1998 to embrace the full constellation of settlement, from suburban zone to the negligible constructions more than one hour's walk from the epicenter. Concentrated sectors of settlement exist in the valley leading to Corregidora Ortíz in México, and these, with the Macabilero to the south and the northern limits of the Yaxchilán kingdom around La Pasadita, merit the closest attention. An ecological survey, combined with radar survey, ground reconnaissance, and test-excavation to introduce a temporal dimension, could produce a fine-grained, mosaic perspective on adaptations to varied micro-environments in the region. This would aid immeasurably in the difficult work of the Parque Nacional, which seeks to inventory, protect, and develop its cultural treasures. Within Piedras Negras, the Northwest Group Court piqued our interest because of its unusual deposits, and it too requires more investigation, as do selected parts of the South Group. Yet, the current project is well-satisfied with its efforts, now to be refined with additional labwork. May Piedras Negras and its kingdom yield additional insights to those tenacious enough to work in this taxing but rewarding zone.

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List of Figures

[Figure 1](#). Preclassic to Early Classic in Structure R-3. (Drawing: Mark Child).

[Figure 2](#). Stingray spine engraved with hieroglyphs, Burial 82. (Drawing: Stephen Houston).

[Figure 3](#). Stela 12, left side. (Drawing: David Stuart, Corpus of Maya Hieroglyphic Inscriptions Project).

[Figure 4](#). Panel 15. (Drawing: Stephen Houston).

[Figure 5](#). Text incised on bone, C-10. (Drawing: Stephen Houston).

[Figure 6](#). Plan of RS 28. (Drawing: Amy Kovak).

[Figure 7](#). Plates from the Kumche period, atop collapse of P-7 sweatbath. (Drawing: Mark Child).

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