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Proyecto Santa Bárbara, Yucatán, México



Research Year: 2001 Culture: Maya Chronology: Late Classic Location: Yucatán, México Site: Santa Barbara

Table of Contents

Abstract Resumen Introduction Survey of the Site Center Surface Collections and Initial Ceramic Analysis Documentation of Stone Sculpture Summary and Ongoing Analysis Acknowledgements List of Figures Sources Cited

Abstract

Fieldwork for Proyecto Santa Bárbara was successfully completed in June 2001. Twelve vaulted groups were recorded in the survey of the site center. These groups exhibited a mix of Early Puuc and Puuc Mosaic style architecture. All vaulted architecture was found to be looted. The program of intensive surface collecting was highly successful. Extensive surface scatters of ceramics were encountered at most architectural groups. Sufficient ceramic material was recovered for the study of ceramic production and distribution. Analysis of the material will resume in September 2001. Finally, all of the stone monuments were recorded. In addition to two hieroglyphic capitals found at the church in Paraíso, a third hieroglyphic capital was recovered during the survey. Although analysis of this material is still ongoing, one eighth-century *katun* date has been deciphered.

Resumen

El trabajo de campo para el Proyecto Santa Bárbara finalizó con éxito en junio 2001. Durante el estudio del centro de este sitio se lograron registrar doce grupos abovedados. Estos grupos mostraron una mezcla de estilos arquitectónicos del Puuc Temprano y del Mosaico Puuc. La totalidad de la arquitectura abovedada mostraba signos de saqueo. El programa de recolección intensiva en superficie resultó muy fructífero. En casi todos los grupos arquitectónicos se hallaron abundantes cerámicas dispersas. Se recuperó suficiente material cerámico para estudiar la producción y distribución de la cerámica. El análisis de los materiales se reanudará en septiembre 2001. Para finalizar, todos los monumentos de piedra quedaron registrados. Además de dos capiteles jeroglíficos que se encontraron en la iglesia de Paraíso, en el transcurso de este estudio se recuperó un tercer capitel. Si bien el análisis de este material todavía está en curso, ya se ha podido decifrar una fecha de *katun* del siglo ocho.

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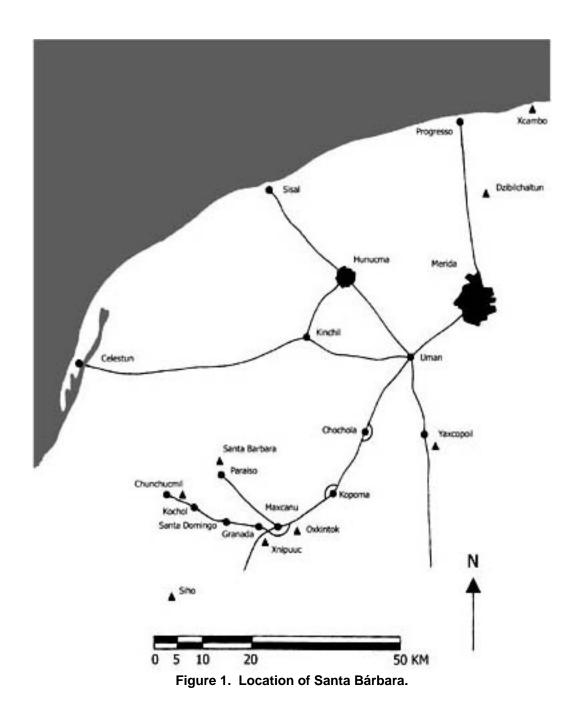
Introduction

Santa Bárbara, labeled 15Qf(9)12 in the Atlas Arqueológico del Estado de Yucatán (Garza T. and Kurjack, 1980), is a Rank 3 order site situated in the northwestern coastal plain of Yucatán (Figure 1). Archaeological investigations of the site were initiated in late April 2001 with the intention of exploring the relationship between ceramic production and distribution systems and shifting political relationships among sites in the northwestern Puuc region. Fieldwork during the 2001 season consisted of documentation of stone monuments, mapping of the site center, and extensive surface collections. With the help of members of the Pakbeh Regional Economy Project (PREP) and workmen from the pueblo of Paraíso, all three goals were completed by the beginning of June.

The site of Santa Bárbara, located in the ejido of Paraíso, is situated in the dry northwestern coastal plain of Yucatán. This area of the peninsula is characterized by a pitted *karst* plain with a shallow water table (see Wilson, 1980). The maximum rainy season occurs from July through August (85 to 90 percent of the annual rainfall occurs from May to September) while the hottest and driest months occur in March and April (Back and Hanshaw, 1976). Given the fact that this area of the peninsula receives less rainfall than other regions and that the soils are extremely thin, the northwestern coastal plain is not considered to have been very productive for ancient agriculture (Beach, 1998; Vlcek *et al.*, 1978). In fact, although *milpa* agriculture is still practiced on the site, recent attempts at coconut and citrus farming over the past 20 years have failed.

Characterized by Puuc-style architecture and a large number of carved stone monuments, Santa Bárbara caught the attention of looters working in the Maxcanú region during the late 1960s and 1970s. Today every vaulted structure exhibits evidence of looting and virtually no carved monuments remained at the site at the time the site was recorded by archaeologists. Fortunately, many carved monuments were protected from looting activity by the people of Paraíso, who call the site Ka Kap and the abandoned ranch near the site Santa Bárbara. Interviews with several individuals in the pueblo revealed that many of the monuments had been brought to the church in Paraíso during the first decades of the 20th century. The exact year of this activity and the reason behind it could not be ascertained. Yet, monuments including carved columns, hieroglyphic Capitals, and decorative elements from Puuc-style façades were cemented into the church. During the more recent looting activity, three more monuments and several Puuc-style facade elements were brought from the site and cemented into the church. These included two carved columns and one carved stela or doorjamb. Reports from workmen indicate that several people in the town were paid by the looters to help with the excavations. Others, concerned about the looting, contacted governmental officials and received permission to bring the remaining monuments to the church. Although it is unknown how many monuments were taken from the site by the looters, reports suggest that there were many. Interestingly, a carved column was located at the hacienda in Kochol by PREP members in 1998. It is similar in style to two crudely carved columns of captives in Paraíso. Although the pueblo of Kochol is

situated on the site of Chunchucmil (approximately 15 km southwest of Santa Bárbara), local informants from both communities indicate that it originated from Santa Bárbara.



The site was first recorded by archaeologists during the Atlas survey of the 1970s (Garza T. and Kurjack, 1980). Ian Graham (personal communication, 2000) and Eric von Euw subsequently visited the church in Paraíso during the mid-1970s to draw the carved stone monuments from the site. These drawings were never published, but

remain on file at the Peabody Museum at Harvard University. Karl Mayer (1981, 1982, 1999) visited the site several times during the 1970s, 1980s, and 1990s to document the carved monuments. This work resulted in the publication of photographs of several of the carved monuments in the church, the façade of Str. S2W1-1-sub-1, and fragmentary mural paintings from the interior room of Str. S2W1-1-sub-1. The murals were discovered during Mayer's (1999) 1978 visit to the site, but were totally eroded by 1998. From the published photos, it is not possible to discern the pictorial elements of the murals.

The current project is the first systematic study of Santa Bárbara and had its genesis during the summer of 2000. While working at the site of Chunchucmil during the 2000 field season, several members of PREP performed reconnaissance at Santa Bárbara. The site center was virtually clear of vegetation making surface features easily visible.

Extensive surface scatters of ceramic material were noted during two visits to the site. Given our experience at Chunchucmil where very little ceramic material is found in surface contexts, we found the presence of this material unusual. In addition to the clear visibility of surface contexts, three factors appear to be responsible for the difference of surface scatters between the two sites. First, ceramics at Santa Bárbara may be of better manufacture and/or have undergone less weathering than most ceramic material at Chunchucmil. Chunchucmil reached its apex during the Early Classic (Ardren, 2000; Stanton, 2000a). While many ceramics in the northern lowlands were well made during this time, ceramic manufacturing technology shifted during the latter portion of the Early Classic or beginning of the Late Classic (see Ball, 1979; Bey, Peraza L. and Ringle, 1992; Boucher, 1992; Dunning and Kowalski, 1994:67; Gifford, 1976:328; Robles C., 1998; Smyth, 1998). Innovations in paste composition and firing techniques revolutionized ceramic production and well-made slatewares dominated Late and Terminal Classic ceramic assemblages. Work at Chunchucmil during the 2001 field season indicated that the few areas where large surface scatters of ceramic material occur near Late/Terminal Classic platforms where slateware assemblages dominate. It appears that the combination of a later production date and better manufacturing techniques help to preserve Late/Terminal Classic assemblages over Early Classic assemblages such as those found at Chunchucmil and Tzemé. Second, gopher activity at Santa Bárbara may be responsible for greater movement of buried ceramics to surface contexts. While the soils at Santa Bárbara are very thin, they appear to be slightly deeper than those found at Chunchucmil, located closer to the coast. Gophers appear to favor this slight difference in mircoenvironments and are found in larger numbers at Santa Bárbara. Third, looting activity brought many well-preserved ceramics to the surface. The looters targeted well-constructed Puuc-style vaulted structures. The typical pattern once a vaulted room had been located was to excavate one to two meter diameter holes every few meters. Informants from Paraíso who had worked with the looters indicated that the main objective was to excavate below floors to find burials. During this process, floor deposits, usually in fragmentary condition were deposited randomly across the surface of the structure. Occasionally, the looters would break and discard a vessel recovered in a burial. Several fragmentary, but complete, vessels were recovered in such contexts.

Although research at Chunchucmil is focused on exploring the regional economy of this area of the peninsula, studies of ceramic production and distribution over a wide area of the site have been hampered by the lack of surface ceramics and the need to perform large horizontal excavations. Based on previous work by Stanton, several models of ceramic production and distribution had been constructed (Stanton, 2000b; Stanton et al., in press), but were difficult to test at Chunchucmil as data had been recovered in a limited number of contexts. It was hypothesized that ceramic production and distribution systems at sites could be differentially impacted by changes in sociopolitical relations among factions at a site or between sites. Santa Bárbara provided an ideal environment to test these models. First, given the presence of large amounts of ceramic material in surface contexts throughout the site center, Santa Bárbara afforded the opportunity to gather large amounts of ceramic data in a short period of time. Second, surface indications strongly suggested that Santa Bárbara was primarily occupied during the Late/Terminal Classic, a time of great sociopolitical change in western Yucatán and beyond. Our research at Chunchucmil suggests massive changes in settlement patterns and material culture at the transition from the Early Classic to the Late Classic. Domestic groups surrounded by albarrada walls appear to have been abandoned at this time and were replaced by large platforms with Puuc-style architecture and Cehpech ceramics. Chunchucmil may have even experienced a population loss at this time, although it is difficult to ascertain such figures. In the Puuc Hills to the west and southwest, large centers such as Uxmal and Kabah experienced unprecedented growth. Some scholars have even proposed that Uxmal was the capital of a regional Puuc state based on its immense size, architecture, textual history, and iconography (Dunning and Kowalski, 1994; Schele and Freidel, 1990). Given the Puuc-style influence at Santa Bárbara and the massive settlement and material cultural changes at Chunchucmil, a very large city located only 15 km to the southwest, Santa Bárbara provided an ideal environment to study the impact of sociopolitical turbulence on ceramic economies (see also Foias and Bishop, 1997). Third, epigraphy and iconography at Santa Bárbara could provide clues to the nature of elite interaction between sites. Although searches for the ancient meanings of style are difficult (e.g., Carr, 1995; Conkey and Hastorf, 1990), iconographic similarities and differences among monuments of the same or different sites may yield clues to regional 'propaganda.' More importantly, epigraphic texts in the Maya lowlands are known to sometimes contain data regarding intra and intersite relationships among elite individuals (Schele and Mathews, 1991). As Santa Bárbara is rich in these materials, as are contemporary Puuc sites to the west and southwest including Oxkintok, Yaxcopoil, Uxmal, and Kabáh, the possibility of comparing the ceramic data with this kind of evidence for sociopolitical interaction was favorable.

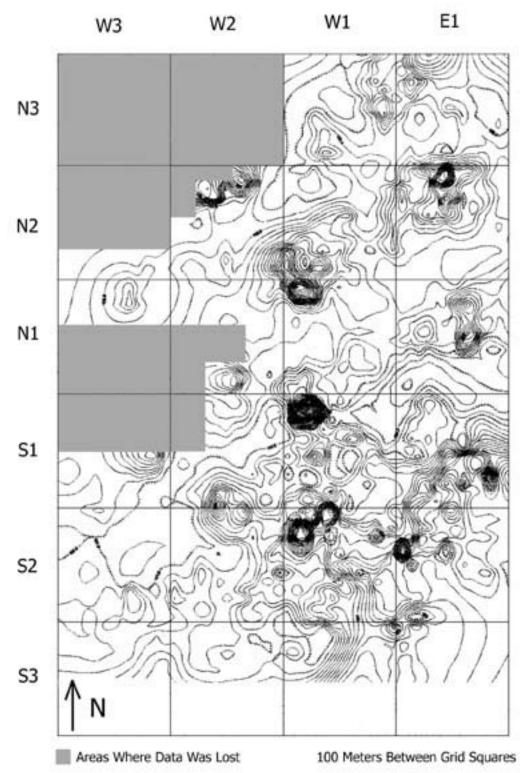
Survey of the Site Center

An area of .22 km² (400 by 550 meters) of the site center was mapped with a total station. Additional reconnaissance revealed that all major architectural groups except the N4E2-1 Group were located in this small area. All surface features were mapped, including wells, standing walls, *metates*, modern *albarradas*, *tranvia* lines, and plain

columns. The survey progressed rapidly as the site was virtually clear of vegetation. Unfortunately, two blocks of survey data were lost. These areas can be noted in the topographic map (Figure 2). Therefore, detailed sketch maps of these areas were used to reconstruct the location of structures in the Maler-style maps.

In addition to disturbance by looters, Santa Bárbara was used by historic populations who modified the landscape. Metal artifacts such as pots and bowls were located at several loci including large vaulted groups. An historic *tranvia* extends from N1W2-4, past N1W1-3 and across S1E1-1 and S1E1-3. All of these structures were impacted by this construction. Additionally, *albarrada* walls were constructed during the use of the site as a ranch. These walls made use of stones from ancient architecture. Column drums, veneer stones, and *metates* are often found in these walls. Although Santa Bárbara is not characterized by an extensive albarrada system such as the Early Classic *albarrada* system identified at Chunchucmil (Magnoni, 1995), several short segments of what appear to be ancient *albarrada* construction defined at Chunchucmil and may indicate that *albarrada* use did not cease after the Early Classic in western Yucatán.

Several general architectural forms were recorded during the survey; vaulted groups, large platforms, small platforms, large rectangular foundation braces, small rectangular foundation braces, circular foundation braces, and bedrock outcrops modified with retaining walls. Structures were given coordinate designations with sequential numbers. The site was gridded into 100 x 100 meter blocks. Each structure was given the grid coordinate with a number (e.g., Str. N1W1-14). Basal platforms, as well as superstructures were given structure numbers.





Vaulted Groups

Vaulted groups consist of coherent arrangements of architecture including at least one vaulted masonry structure. Twelve vaulted groups were recorded at Santa Bárbara. These include a variety of architectural forms. Three of these groups compose a central core area of the site, while the other nine are spaced at distances of approximately 75 to 125 meters from each other. Most of these groups occur to the north of the core area. All vaulted structures were found to be looted. Much of this activity exposed walls and floors.

The core area is composed of three vaulted groups, the S1W1-6, S2W1-1, and S1E1-4 groups, that share a common raised plaza area designated Str. S2W1-7. In addition to these three coherent groups, two other vaulted structures, Str. S2W1-8 and Str. S2E1-2, bound the southern edge of the S2W1-7 platform. Surface features suggest that Str. S2W1-8 is a ten room masonry vaulted structure. The rooms appear to be arranged in two rows of five. The northern row opens north towards the plaza and the southern row appears to be composed of interior rooms opening into the northern row. Extant architecture indicated a mix of Early and Late Puuc-style core veneer walls. Boot-style vault stones were encountered in the surface collapse. Although Andrews (1979) argued that these stones are indicative of the Terminal Classic, evidence suggests that they may have been used during the Late Classic as well. Several mosaic façade fragments were noted including two 'X' symbols and elements of a jaguar or Chak mask. A very large plain column altar was located along the centerline of the front of the structure. Str. S2E1-2 was found to be heavily disturbed, but it appears to have faced the plaza.

Architecturally, the S1W1-6 Group appears to be the oldest at the site. The group includes seven vaulted structures arranged in a roughly circular pattern around a central altar-like structure. Low curved platforms occur between some areas of the structures ensuring that the group is completely enclosed. Similar groups have been noted at other Puuc-style sites including Labná, Yaxuná (Toscano H. *et al.*, 2000), and Chac II. Exposed architecture revealed Early Puuc style construction, including preserved corbel vaults. A single column drum was found in association with Str. S1W1-8. On the eastern side of the group, the lone causeway, Sacbe 1, extends to the S1E1-4 Group. The juncture of this causeway and the group consists of a ramp. On the western side of the group is a complex of low platforms and heavily disturbed low mounds. These structures are associated with the group. Additionally, Str. S1W1-1, the largest mound at the site (approximately 11 meters), appears to be associated with the circular group. A small looter's excavation at the apex of the mound revealed segments of the back wall of a room. This wall was constructed in an Early Puuc style. The alignment of this wall suggests that the structure faced directly into the round group.

The S2W1-1 Group bounds the southwestern corner of the S2W1-7 platform. This group is composed of four vaulted structures arranged around a central patio. Additionally, Str. S1W1-4, located to the northeast of the group and two foundation brace structures to the west of Str. S2W1-1 appear to be associated with it. The largest structure is located on the southern side. Looting activity exposed the remains of

vaulted rooms on every side of this structure. Additionally, a substructure, Str. S2W1-1sub-1 was partially exposed. The exposed area of this substructure reveals a wellpreserved roof comb and the front façade and room on the northern side. It is within this room that Mayer (1999) discovered the fragmented mural paintings. The façade of the substructure is in a simple Early Puuc style. During the subsequent modifications of the building, it appears as though this façade was used as the back wall of a new northern vaulted room. If so, access to the substructure would have remained open suggesting its continued importance to the occupants of the group. Both Str. S2W1-1 and Str. S2W1-2 appear to be 'palace' or range structures. Column drums were recorded on the southern side of Str. S1W1-3.

The S1E1-4 Group is located at the eastern end of Sacbe 1. This group consists of numerous small vaulted structures arranged on a very large, roughly rectangular platform. Str. S1E1-10 is the largest structure at the group, but is only comprised of four rooms. A central altar-like structure containing a column drum is located in the central platform area. A large, plain column was also located at Str. S2E1-4. The style of the exposed architecture is Late Puuc. In fact, several mosaic façade pieces were noted during the survey. These included several circle and line elements (Figure 3) and columnettes.

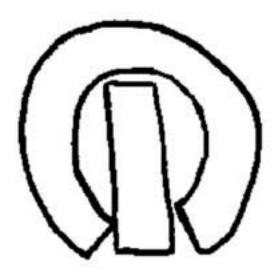


Figure 3. Sketch of Façade Element.

Only one group is located to the south of the core group. The S2W1-10 Group is located directly to the south of Str. S2W1-8 and is composed of a three room vaulted structure and several rectangular foundation braces on a large platform. It was difficult to assess the style of the cut masonry. One small rectangular foundation brace, Str. S2W1-13, was found to have very nice cut stones. Although it is possible that this structure, too

small to be used for sleeping, was constructed from robbed stones, several similar structures were located at other platforms across the site.

To the west of the S2W1-1 Group lies the S2W2-1 Group, composed of two small vaulted structures on a large platform. Str. S2W2-2 exhibited Late Puuc style veneer stones, but no evidence of a mosaic façade. Capital 3 was located on the northern side of Str. S2W2-2.

The N1W2-1 Group consists of a six room vaulted structure situated on a complex platform with numerous foundation brace walls. Although stones used to construct most of these foundation braces and the platform retaining walls are large roughly cut boulders, Str. N1W2-2 was constructed with Late Style Puuc veneer stones.

The N1E1-1 Group consists of two vaulted structures, a large low platform, and several foundation braces on a large basal platform. Late Puuc style veneer and boot-shaped vault stones were noted. Str. N1E1-5 is characterized by very large stone architecture and a large number of *metates* (N=6). The basal platform of the group is very irregular and appears to have been constructed in several stages.

The N2W1-3 Group also consists of several vaulted structures and foundation braces arranged on top of a large basal platform. Like the S2W1-1 Group, the N2W1-3 Group consists of four vaulted structures arranged around a central patio and the largest structure is on the southern side. This structure, Str. N1W1-1 is a palace-type structure as well. The style of the exposed architecture is all Late Puuc style, although no mosaic façade elements were noted. Thirteen *metates* were associated with the group. Additionally, a column fragment was discovered in the central patio area.

The N2E1-8 Group is a large and complex group composed of numerous structures situated on top of two large connected platforms, Str. N2E1-1 and Str. N2E1-8. While the N2E1-1 platform is quite large, it exhibits little surface evidence of superstructures. Two heavily disturbed superstructures were noted in the southwestern corner of the platform. Str. N2E1-3 exhibits evidence that it had masonry vaults and well cut veneer stones were noted in the surface collapse. A large circular altar is located to the east of this structure. A few foundation braces were noted in the northern portion of the platform suggesting that perishable structures once existed. The architectural situation at the N2E1-8 platform is more complex. The focal building is Str. N2E1-10, a tall conical mound. Looting at this structure exposed two small parallel tombs on the southern side of the building. Measuring less than a meter in height, these tombs extend north/south and are characterized by corbel vaults. Although the tombs were empty, reports from workers indicate that each tomb contained one body and numerous ceramic vessels. Similarly constructed tombs have been found at Oxkintok (personal observation, 2001). To the east and west of Str. N2E1-10 are attached vaulted structures. Str. N2E1-14 is one of the more complex vaulted structures at Santa Bárbara. This structure is composed of three rows of rooms. Two rows face west across the patio and one faces east towards the back side of the platform. A large column with raised bands is located in front of the structure along its western side and an altar-like structure exists in the central patio area. The walls of Str. N2E1-14 exhibit a mix of Puuc architectural styles

and the front row of rooms contains an interior basal plinth at the level of the stucco floor. Architectural evidence suggests that this group was occupied and modified for a longer time than many others.

The N2W2-1 Group consists of three vaulted structures and several foundation brace structures arranged around a central patio. Although heavily disturbed, the southern structure, Str. N2W2-3, exhibits evidence that it was a multi-room vaulted structure. Yet, it is difficult to discern its plan. In contrast, Str. N2W2-2 is a well-preserved vaulted structure composed of two long rooms. The walls of the structure are comprised of well cut veneer stones. A column drum is located in the center of the patio. Interestingly, a large number of *metates* were located at this group. Including the three *metates* near Str. N2W2-8, a small platform located just to the south of Str. N2W2-3, 18 *metates* are associated with the group.

The N3W1-1 Group is a low platform with several disturbed superstructures. Although several of the buildings may have been vaulted, only Str. N3E1-1 exhibits surface evidence that it was once vaulted. A large plain column is located in the patio in front of this structure.

The N4E2-1 Group was not mapped with the total station as it was located just outside of the grid. Yet, we located the group using a pace and compass method and made a rough Maler-style sketch map. This group is centered around a large five room palace structure, Str. N4E2-2. Several Puuc Mosaic façade elements were recorded in the collapse including a *kin* sign and a skeletal face flanked by simple decorative elements. One large stone was found to have a carving of a human face in a niche (Figure 4). While the entire composition was not noted, this piece may represent a figure emerging from the mouth of a cave, a common theme in elite shamanic art.

Large Platforms

Large platforms consist of low platforms having at least one side with a length of 20 m or more and no vaulted architecture. Although ten large platforms (N1W2-4, N3W3-1, N3W3-7, N3W3-14, N3W2-1, N2W3-1, N2W1-1, N1W1-13, S1E1-1, and S1W3-1) were encountered in the mapped area, reconnaissance indicated that more platforms occur to the west of the mapped area. Large platforms exhibit evidence that they were loci of domestic habitation and production. They are similar in construction to the contemporary platforms that dominate Late/Terminal Classic occupation at Chunchucmil (see Dahlin and Ardren, 1999; Stanton, 2000c). They often have three to five metates associated with them.



Figure 4. Face in Niche.

Small Platforms

Small platforms are low platforms having sides of less than 20 meters and no vaulted architecture. Numerous small platforms were recorded during the survey. Several indicated evidence for perishable superstructures and a few were associated with *metates*.

Large Rectangular Foundation Braces

In contrast to other contemporary sites across the peninsula, these foundation braces are rare at Santa Bárbara. In fact, only Str. S2W3-2 is such a structure. Consisting of a multi-room foundation brace placed on the ambient ground surface, this structure is composed of roughly worked large stones.

Small Rectangular Foundation Braces

These structures are similar to the large rectangular foundation braces except for the fact that they are small one-room buildings. All of the walls are only one course high and one course wide. The construction of the foundation braces varies from structure to structure. Some are composed of well worked stones such as Str. S2W1-13. Although it is possible that such structures used robbed veneer stones for their construction, as mentioned previously, their consistent association with platforms makes this hypothesis questionable. Regardless, the dimensions of these structures are always small. Excavations of a similar structure located on top of a *metate* platform at Chunchucmil did not reveal data indicating a use for this type of structure (Stanton, 2000c), although its form suggests a storage bin. Other foundation braces in this category are composed of roughly worked stones. Such structures are occasionally found on top of platforms, but are also located in isolated areas.

Circular Foundation Braces

Circular foundation braces are one course circular walls ranging in diameter from two to three meters. The stones composing the walls are always large and roughly cut. These structures appear to be associated with modified bedrock outcrops, small rectangular foundation braces, and small platforms. They are usually located in lower areas. Their distribution suggests that they are ancillary structures for domestic groups, although their use is unclear.

Bedrock Outcrops Modified with Retaining Walls

Although the landscape of western Yucatán is relatively flat, small bedrock outcrops do occur. At many sites, such outcrops are often modified for architectural construction and activity areas. At Santa Bárbara, numerous, but not all, bedrock outcrops were modified. Modifications are usually identified by the presence of large boulder retaining walls and the presence of fill, usually chich. In some cases it is possible to discern areas where the outcrop was quarried, but this is often difficult due to the weathering of the bedrock. Artifact distributions usually occur in low levels around these areas. The artifacts tend to be less well preserved than those from other surface contexts at the site.

Surface Collections and Initial Ceramic Analysis

Surface collections were undertaken at all vaulted groups, all large platforms, and at a sample of other features. Two methodologies were used. In some cases, artifacts were collected over entire features including structures and off-mound surface scatters. In other cases, 3 x 3 m grids were laid across an area. Artifacts were collected from each

grid square. These methodologies were based on differential distributions of artifacts on the surface, goals for analysis, and time and resource constraints in the field.

Although sufficient numbers of ceramics were recovered, very few other artifact classes were encountered. Only two pieces of gray obsidian, one gray chert flake, one gray chert projectile point, and one marine shell fragment were recovered. Given the extensive surface scatters at the site and our intensive search for artifacts, this paucity of non-ceramic artifacts likely reflects low percentages of such artifacts at Santa Bárbara.

During the Spring 2001 field season, very few ceramic lots were analyzed. Intensive ceramic analysis will begin in September 2001. Preliminary information from four lots indicates an emphasis on Late to Terminal Classic types. Some late Early Classic to early Late Classic types such as Maxcanú Buff were recovered, but no types dating exclusively to the Early Classic have yet to be identified. No material dating to the Preclassic or Postclassic has been identified. A quick survey of several lots and observations made in the field indicate that common types include, Muna Slate, Sacalum Trickle, Yokat Striated, Oxkutzcab Applique, Teabo Red, Maxcanú Buff, Fine Orange, Fine Gray, and Ticul Thin Slate. Several broken serving vessels such as *cazuelas* and *bowls* were recovered in looter's debris. Contexts suggest that they were encountered in burials and subsequently broken by looters.

Documentation of Stone Sculpture

Documentation of the stone monuments at the church at Paraíso commenced in February 2001. Ian Graham generously provided drawings by Eric von Euw of some of the monuments, but others remained undocumented. I redrew several of the monuments using von Euw's drawings and made drawings of all the undocumented monuments.

Column 7

Column 7 (Figure 5) is carved in a semi in-the-round style that resembles some Late Classic sculpture from Oxkintok and Yaxcopoil (Proskouriakoff, 1950) and the carved column located at the *hacienda* in Kochol. A single frontal figure is represented on a thick column. Although the provenience of the Santa Bárbara sculpture is not known, such columns often flank doorways of vaulted structures. This potbelly figure wears a rather plain two-tiered headdress and a beaded necklace with a pendant in the shape of a hand. Inverted Tau-shaped elements are also discerned at the lower extent of the potbelly. Decorative elements exist on the large right ear of the figure. Although such elements may have existed on the left ear, this portion of the figure has eroded. Unlike the rest of the figure, the placement of the ears is not symmetrical. On the face, deep incisions define the eyes, nose, and mouth. Two teeth protrude from the roughly oval mouth and the eyes are deeply carved into the face of the figure. The three circles and

bar located on the forehead are reminiscent of tattooing or scarification. Although the right hand of the sculpture is broken, the left arm and hand clearly extend towards the back of the column. This suggests that the figure represents a bound captive, despite the fact that no evidence of restraints can be discerned. The bottom of the column was broken and it was impossible to evaluate whether the figure was carved with legs.

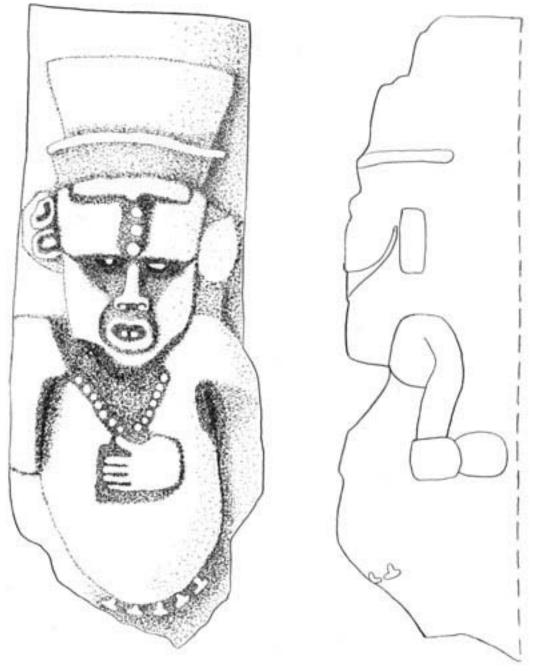


Figure 5. Santa Bárbara Column 7. Drawn by Travis Stanton.

Column 8 (Figure 6). Although Column 8 is more eroded than Column 7, it appears to be a similar frontal figure carved in the same semi in-the-round style. The partially preserved headdress of the figure demonstrates that it is composed of three large beads flanked by supports and surmounted by a row of feathers. Similar to Column 7, the ears of this figure are very large, but are highly eroded. The eyes are also deeply recessed and accompanied by two protruding brows. Two unusual large circular features can be discerned on the lower cheeks. These may represent some form of body modification, but this area of the face is highly eroded. If the mouth was represented, it too has not preserved. Unfortunately, both arms are broken. Although the position of the body suggests that this figure may represent another bound captive, this hypothesis is difficult to assess. The carving in the groin area may represent a small loincloth. Below the waist, both feet are broken, although a single band can be discerned in the area of the left knee. As pairs of stylistically similar columns are often found to flank doorways and Columns 7 and 8 are the only two carved in this style, they may represent a cohesive pair from the same building.

Column 2

Although Columns 2 (Figure 7) and 1 represent frontal figures carved in a semi in-theround style on large columns, they are stylistically different than Columns 7 and 8. The figures on Monuments 3 and 4 are much more complex, hold objects in their hands, and exhibit some Puuc Mosaic or possibly Epiclassic stylistic traits. Again, since Columns 1 and 2 are the only two figures carved in this style, they may represent a cohesive pair from the same building. The headdress of the Column 2 figure is centered around a skull. On either side of this skull are two symbols that resemble glyphic elements. They may merely be decorative elements, but may contain information on a date or name. Surmounting these elements are features that resemble rabbit ears. A very similar sculpture in the Palacio Canton museum in Mérida has these same features. This sculpture has a provenience of the Umán region. The face of the Column 2 figure is characterized by decorative elements. The forehead exhibits several raised circles and the nose and eyes area is characterized by circular features reminiscent of facial features on figures at the Codz Poop at Kabáh. Again, these modifications may represent tattooing. The pupils are recessed as if they had been inlaid. Today, glass inlays are present, but this is a product of modern activity. The mouth is open as if speaking. Large stylistic ear elements flank the face. Below the neck, the figure wears a large necklace and a kilt-like garment decorated with triangular elements common on Puuc Mosaic facades. The figure holds two objects as well. In the left hand is a large staff. In the right hand is a maraca-like object. Although the exact nature of this object is

not known, it has also been noted in the right hands of the Umán region figure and of a very similar figure housed in the I.N.A.H. museum in Hecelchakan.

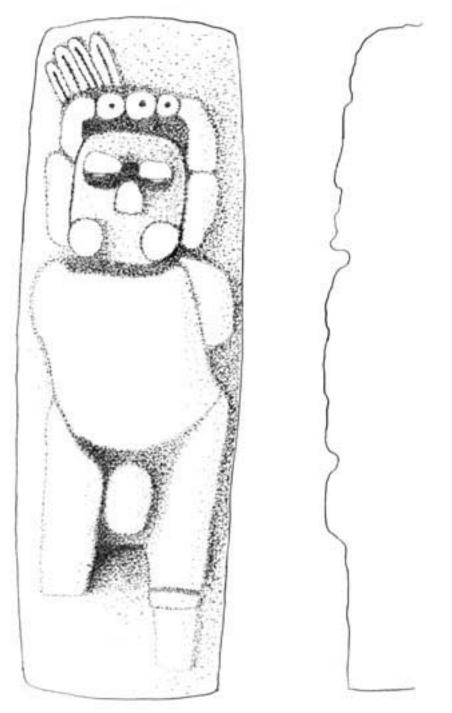


Figure 6. Santa Bárbara Column 8. Drawn by Travis Stanton.

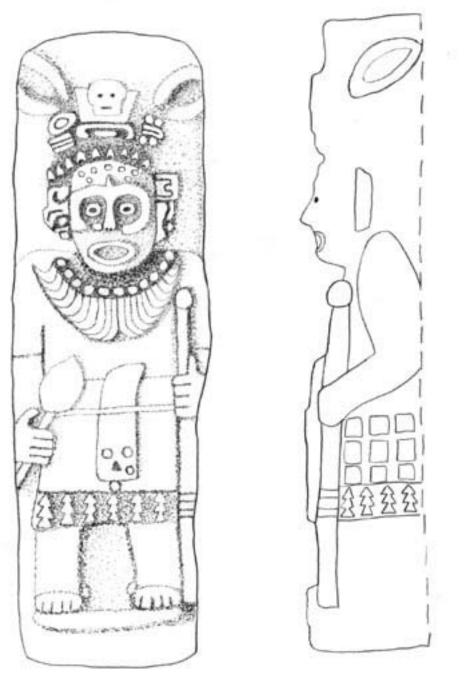


Figure 7. Santa Bárbara Column 2. Drawn by Travis Stanton.

Similar in general style to Column 2, the Column 1 figure exhibits different attire (Figure 8). The headdress is large, but simple. Although the ear elements are large and stylized, they are of a different design than Column 2. On the face of Column 1, similar circular elements are suggested in the noses and eyes area. As with Column 2, the eves are inlaid with glass. On the forehead, a lone vertical modification is exhibited. Unlike Column 2 the mouth is closed. Below the neck, a similar necklace is noted, although a large pendant appears to hang below it. This pendant is recessed in the center suggesting that it may have once held an inlay. It is possible that the pendant represents a mirror, a common element on elite Mesoamerican figures (Taube, 1992). The figure also wears a garment around the waist, although it appears to differ in form from the kilt-like garment on Column 2. Two elements adorn the Column 1 garment. The first of these appears to be a plaque on the upper portion of the garment. The second is a representation of the jester god. This figure is characterized by the trefoil headdress representing maize agriculture and fertility (Schele, 1995). Although the Column 2 figure may have once held two objects, unfortunately the right hand is broken. Therefore, only the object in the left hand is preserved. This is a cross-like object of unknown meaning. Below the waist, the legs are characterized by what appear to be straps. Although these straps may be part of the footwear of the figure, no evidence of footwear can be discerned. In fact, the toes and ankle are represented suggesting that the feet are bare, or that open sandals are represented.

Column 4

Column 4 (Figure 9) is the first of a series of three carved relief columns representing dancing figures. These figures have a set of similar elements; dancing poses, Chak mask headdresses with heavy plumage, long beaded necklaces with bird head pendants, sound scrolls entering the ears, similar armbands and anklets, elaborate waist ornaments, and beaded shoulder garments. The figure on Column 4 dances on top of three circular elements, possibly relating to the three stone hearth place (see Freidel *et al.*, 1993). A large tassel emanates from the figure's face. An additional leg band is located just above the knee on the right leg. On the waist ornament is a small anthropomorphic head.

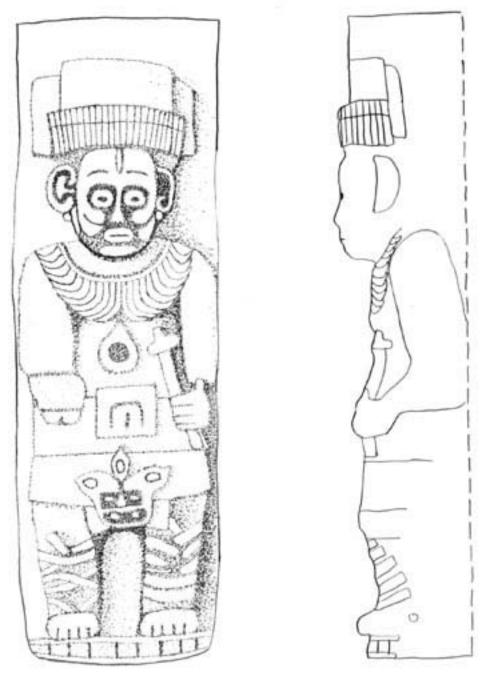


Figure 8. Santa Bárbara Column 1. Drawn by Travis Stanton.



Figure 9. Santa Bárbara Column 4. Drawn by Eric von Euw.

Column 3 (Figure 10) is the second of the three dancing relief figures. This figure also displays a tassel emanating from the nose. On the waist ornament, two anthropomorphic heads can be discerned. The head on the front of the ornament displays a large human face and a feathered headdress. The head on the opposite side of the ornament is much smaller. It is difficult to ascertain whether this head represents a human or possibly a monkey. In all other aspects this figure is similar to Columns 4 and 5.

Column 5 (Figure 11) is the third of the three dancing relief figures. It is similar to Columns 3 and 4 except for the following characteristics. Although the waist ornament displays a large anthropomorphic face on its front side, the face is very stylized. Furthermore, the figure lacks a nose tassel.



Figure 10. Santa Bárbara Column 3. Drawn by Eric von Euw.



Figure 11. Santa Bárbara Column 5. Drawn by Eric von Euw.

Monument 1

Given that this monument is cemented into the church, it is unclear if Monument 1 (Figure 12) is a small stela, a doorjamb, or a lintel. The relief carving on the monument is unusual. It depicts a figure with a body in frontal view and head turned to the right in profile view. Such a composition is reminiscent of earlier carved sculpture and the monument may date to a period prior to the carving of the columns already described. The figure wears an unusual headdress with feathers projecting from the front and a simple belt and loincloth adorned with feathers. No evidence of footwear can be discerned and the ankles of the figure are represented. The figure is depicted in an unusual stance with its feet projecting outward, right hand raised, and left hand on its hip. Similar figures are not known from the general region. On the side of the monument, two glyphs occur. Although the glyphs appear to indicate a date, Krochock has not yet been able to decipher it.

Column 6

Column 6 (Figure 13) exhibits a relief carving of a figure with a body in frontal view and a head in profile. The composition of this relief carving is unique at Santa Bárbara. Although many of the elements that occur in the carving can be identified on other monuments, these elements are carved in a very disjointed style. For instance, while the headdress appears to represent a Chak mask, the elements are drawn out across the top of the carved area. Although the body of this figure is similar to Monument 1, the style of the carving is more 'stiff' and shoulder garment is more similar to those depicted on Columns 3, 4, and 5. Additionally, a tubular pendant hangs from a beaded necklace around the figure's neck. This pendant is likely a jade bead like those recovered from an Early Classic burial at nearby Chunchucmil (Hutson, 2000). This carving is also unique at Santa Bárbara due to the presence of elements used to fill space around the figure.

Monument 2

Although it is difficult to ascertain the form of Monument 2 (Figure 14) due to the fact that it is cemented flush into the wall of the church, it could be a carved relief panel. The carving depicts a dancing figure with a body in frontal view and a head in profile. This figure dances on what appears to be a Cauac or Earth Monster with a cleft head. The headdress of the figure is rather simple and composed of feathers projecting from a simple band. In front of the face of the individual appear to be three feather elements. At first examination, these elements appeared to be the ends of feathers projecting from the headdress. Yet, a close examination of the carving did not yield any evidence that the area between these elements and the headdress had been damaged. Thus, the meaning of these elements remains unclear. Around the neck of the individual is a beaded necklace with a central perforated element. The figure's right hand is a cluster of

objects that appear to be tied together in a bunch. The shape of these objects suggests that they are maize, although it has been suggested that they could represent fish (Traci Ardren, personal communication, 2000). If they do represent maize, the carving could be interpreted as a fertility dance associated with maize agriculture.

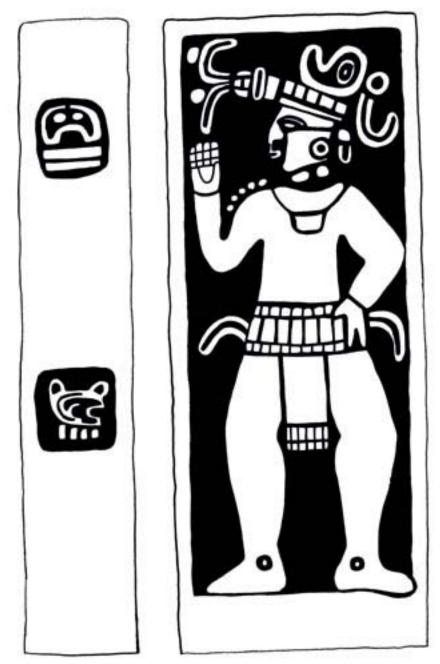


Figure 12. Santa Bárbara Monument 1. Drawn by Eric von Euw with corrections by Travis Stanton.



Figure 13. Santa Bárbara Column 6. Drawn by Travis Stanton.



Figure 14. Santa Bárbara Monument 2. Drawn by Travis Stanton.

Monument 3

Monument 3 (Figure 15) appears to be a hieroglyphic block, but it is cemented flush into the wall in front of the church and it is difficult to see. The composition of the monument is one glyph superimposing three glyphs. Although hieroglyphic writing occurs at Santa Bárbara, none of the four elements on this monument appear to be true hieroglyphs. Instead, they appear to be pseudoglyphs. Some of the elements mimic numbers, but the composition does not make coherent sense.

Capital 1

Both Capitals 1 (Figure 16) and 2 are cemented into the walls of the church. While hieroglyphs occur on the front and sides of these capitals, only the front texts are fully readable. The texts on the sides of the capitals run into the walls of the church. It is not known whether further texts occur on the back sides. The front text of Capital 1 reads: *huli* (he arrived or was born) followed by a personal name. The readable glyphs on the sides of the capital have not yet been deciphered, but they differ from the front text in that they are isolated glyphs rather than a complete text. They may refer to the individual named in the front text, but this is not clear at this time.

Capital 2

The front text of Capital 2 (Figure 17) appears to contain a reference to the carving of the lintel, but the full text is still under study by Krochock. The glyphs on the sides of the capital have not yet been deciphered, but, like the glyphs on the sides of Capital 1, they are isolated and not part of a full text.

Capital 3

Capital 3 (Figure 18) was recovered at Str. S2W2-2 during the survey. Reused as a *metate*, it is not known whether Capital 3 was originally from this locus or transported from another group. The remaining carving on the capital consisted of a single glyph and an enigmatic relief drawing. Although it is unclear what the relief drawing represents, the glyph is a *katun* date. Given the ceramic and architectural sequences at the site, this date likely falls in the eighth century.

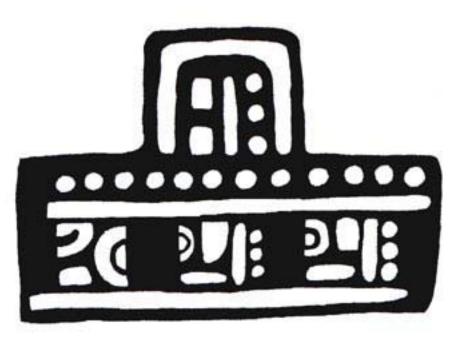


Figure 15. Santa Bárbara Monument 3. Drawn by Travis Stanton.

Sides of Capital



Figure 16. Santa Bárbara Capital 1. Drawn by Travis Stanton.

Sides of Capital

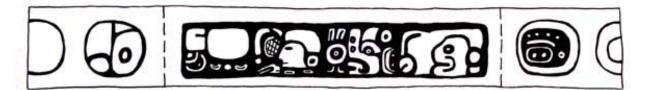


Figure 17. Santa Bárbara Capital 2. Drawn by Travis Stanton.

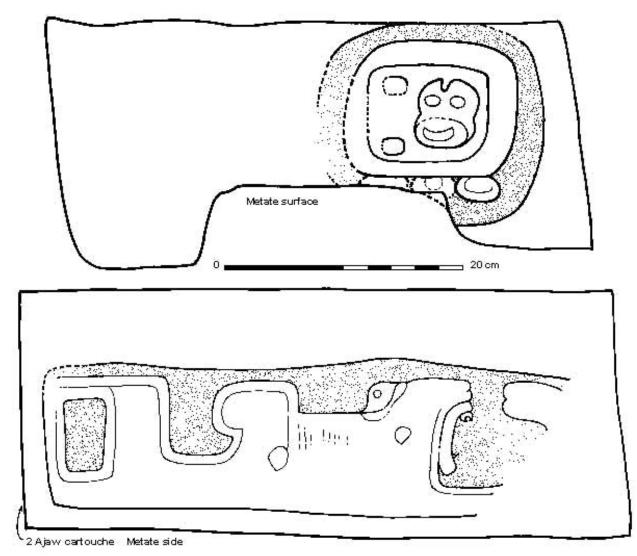


Figure 18. Santa Bárbara Capital 3. Drawn by Markus Erbel.



Figure 19. Possible Ballcourt Marker.

Possible Ballcourt Marker

Although the sculpture (Figure 19) is cemented into a wall of the church, its size and shape are consistent with a ballcourt marker. The problem with this designation is that no ballcourt was located at Santa Bárbara. Smith (1999) notes a similar situation at lchmul de Morley where a carved panel of a ballcourt scene was found, but where no ballcourt was located. Yet, a ballcourt panel is not part of the ballgame while a ballcourt marker is. It is possible that this sculpture was tenoned into the façade of a building. Puuc Mosaic façades are known at Santa Bárbara. Furthermore, they are known to contain wide variety of decorative elements at sites such as Uxmal and Kabáh (Gendrop, 1983; Pollock, 1980). Unfortunately, it is impossible to discern whether the back of the sculpture is tenoned or not. The relief carving on the sculpture displays a *pop* symbol. These symbols are indicative of rulership and are often associated with council houses (Fash *et al.*, 1992).

Summary and Ongoing Analysis

Preliminary analysis suggests that Santa Bárbara was an important regional center during the eighth and possibly ninth centuries. Ceramic, architectural, iconographic, and hieroglyphic data indicate that it was occupied during the same period as other midsized sites exhibiting extensive epigraphic and iconographic material in the western portion of the peninsula. Data from sites such as Santa Bárbara and Xcalumkin

(Becquelin and Michelet, 1992; Forsyth, 1982; Grube, 1994) may indicate that smaller regional centers prevailed prior to the Puuc and Chenes florescence in the late ninth and early tenth centuries, although hieroglyphic data at Xcalumkin indicate the presence of sajals, subsidiary elite often found at secondary centers (Grube, 1994). Architectural and iconographic data at Santa Bárbara suggest that it participated in an interaction network with other regional sites in western Yucatán and northern Campeche. The S1W1-1 Group, an Early Puuc style architectural complex, suggests ties with sites such as Chac II and Labná. Although at this time there is little indication as to nature of this interaction, it is unlikely that a regional state such the one proposed from tenth century Uxmal was in existence (see Dunning and Kowalski, 1994; Schele and Freidel, 1990). In fact, the depopulation of Chunchucmil and the massive social changes discerned in monumental zone of nearby Oxkintok (see Rivera D., 1987; 1989; 1990; 1991; 1992; 1995; 1997; 1998; Vidal L., 1999) suggest a decentralization of populations during the eighth century. Furthermore, monumental construction may have decreased or ceased at Chunchucmil. The presence of monumental art and public hieroglyphic writing at Santa Bárbara in the absence of such features at Chunchucmil may suggest a transfer of regional elite power to Santa Bárbara during the Late Classic.

During the late ninth and early tenth centuries populations appear to coalesce at sites located in the Puuc Hills (Stanton *et al.*, in press). At this time, Epiclassic cult influence enters into the Puuc Mosaic iconography at sites such as Uxmal (Ringle *et al.*, 1998). Santa Bárbara appears to participate in these social transformations. Some of the monumental art exhibits Epiclassic traits and Puuc Mosaic façade decorations are constructed. Although these social transformations were likely influenced by large sites such as Uxmal, the nature of the relationships among these sites is unclear at this time. Hopefully, further analysis of the iconography and epigraphy will provide further clues.

Analyses of the iconography, epigraphy, and ceramics are ongoing. Modal analysis of the ceramics in Mérida should be completed by October 2001. The data from this analysis will be used to compare how types and modes are distributed across the site core. Samples will be taken for chemical and spectrographic analyses. These results will be compared to current Late Classic databases and ceramics from Chunchucmil to test current models of how ceramic economies can articulate with sociopolitical interaction. Ruth Krochock is currently analyzing the epigraphic data. Hopefully, this study will yield more results concerning the nature of regional politics before the end of 2001.

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List of Figures

- Figure 1. Location of Santa Bárbara.
- Figure 2. Topographic Map of Santa Bárbara.
- Figure 3. Sketch of Façade Element.
- Figure 4. Face in Niche.
- Figure 5. Santa Bárbara Column 7. Drawn by Travis Stanton.
- Figure 6. Santa Bárbara Column 8. Drawn by Travis Stanton.
- Figure 7. Santa Bárbara Column 2. Drawn by Travis Stanton.
- Figure 8. Santa Bárbara Column 1. Drawn by Travis Stanton.
- Figure 9. Santa Bárbara Column 4. Drawn by Eric von Euw.
- Figure 10. Santa Bárbara Column 3. Drawn by Eric von Euw.
- Figure 11. Santa Bárbara Column 5. Drawn by Eric von Euw.

<u>Figure 12</u>. Santa Bárbara Monument 1. Drawn by Eric von Euw with corrections by Travis Stanton.

Figure 13. Santa Bárbara Column 6. Drawn by Travis Stanton.

- Figure 14. Santa Bárbara Monument 2. Drawn by Travis Stanton.
- Figure 15. Santa Bárbara Monument 3. Drawn by Travis Stanton.
- Figure 16. Santa Bárbara Capital 1. Drawn by Travis Stanton.
- Figure 17. Santa Bárbara Capital 2. Drawn by Travis Stanton.
- Figure 18. Santa Bárbara Capital 3. Drawn by Markus Erbel.
- Figure 19. Possible Ballcourt Marker.

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