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Joel Skidmore  
Editor  
joel@mesoweb.com

Marc Zender  
Associate Editor  
marc@mesoweb.com

The PARI Journal  
202 Edgewood Avenue  
San Francisco, CA 94117  
415-664-8889  
journal@mesoweb.com

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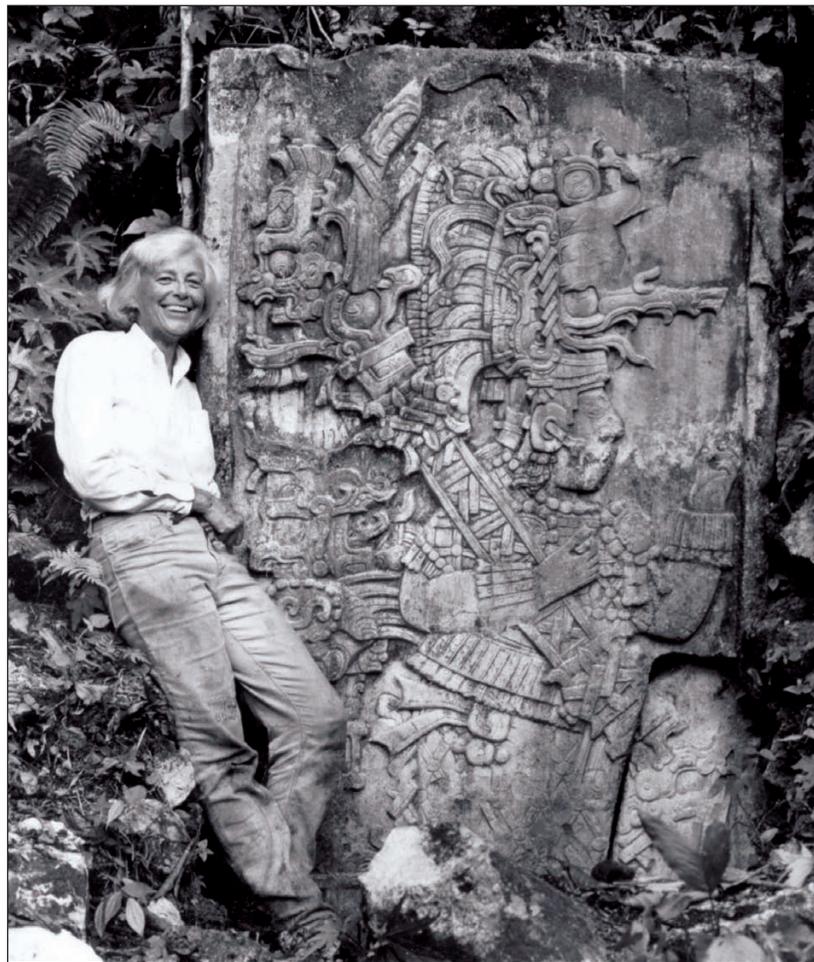
## In Memoriam: Merle Greene Robertson

### MARC ZENDER

*Peabody Museum, Harvard University*

### JOEL SKIDMORE

*Precolumbia Mesoweb Press*



The renowned Mayanist Merle Greene Robertson passed away in San Francisco on Friday, April 22, 2011. Artist, art historian, photographer, and Mayanist, Merle was widely known for her extensive contributions to the investigation and preservation of the art, iconography, and writing of Maya civilization.

Merle was born in Miles City, Montana,

on August 30, 1913, a small town she once memorably described as "a little cattle crossing in the road" (Barnhart 2003:1). She moved to Great Falls when she was eight, a place which held her "fondest memories of childhood ... the Missouri River, Giant Springs, the sand hills, high mountains, mountain goats, and those great blue Montana skies, those wide-



open spaces” (Robertson 2006:25). Merle’s descriptions of her childhood environment in interviews and her autobiography *Never in Fear* (2006) are invariably painterly, mingling broad strokes of color with intimate descriptions of the natural surroundings, and she regularly associated these with her own development as an artist. As Peter Mathews (2006:13) wrote in his foreword to Merle’s autobiography:

Two aspects of [Merle’s] youth in Montana were to have a large influence over the direction of her life. One was an interest in Native American culture. Merle’s family spent their vacations beside a mountain lake at the edge of Glacier National Park. Merle frequently went with her father to visit his friends, Blackfoot Indian chiefs, and it was here that she learned Indian sign language. The other influence was the great artist Charles M. Russell, who lived in Great Falls. The young Merle spent many an afternoon on his front porch observing and learning about painting.

In her second year of high school, Merle’s family relocated to Seattle, where she later began university

studies. Given the twin loves of her childhood, it is perhaps hardly to be wondered at that Merle took a degree in art. “Later,” as Peter Mathews (2006:13) recounts, “she went to the Instituto Allende in San Miguel de Allende, Mexico. Here for three summers she studied watercolors, oils, photography, and mural painting from Mexico’s top mural instructor, earning her MFA from the University of Guanajuato.”

Merle’s artistic background and practical experiences living and working in Mexico were critical preparation for her life’s work as a Mayanist, which began in the summer of 1961 when she joined the University of Pennsylvania Museum project at Tikal, Guatemala.

[Merle] spent three summers making architectural drawings of the Central Acropolis, and also started recording monuments by means of rubbings. This technique had been used before in the Maya area, principally by John H. Denison Jr. at Chichen Itza and sites in the central part of the Yucatan peninsula. However, Merle Greene brought the technique to an art form, and also showed how useful the rubbings could be as a means of documentation of Maya relief sculpture. (Mathews 2006:13)

Merle would eventually make “about four thousand” rubbings (Barnhart 2003:4) during the course of a distinguished career spanning some five decades (Doyle 2000). These are now all critically important documents, many of them preserving details of the carved surfaces of monuments which have since deteriorated through erosion or been destroyed by the increasingly damaging depredations of looters. Today, more than 2,000 of Merle’s rubbings are housed in the Merle Greene Robertson Collection of the Rare Book and Manuscript Department of Tulane University’s Latin American Library in New Orleans (Hernández and Dressing 2011). Since 1993, Merle’s entire collection of rubbings has been available to scholars and amateurs on CD, and they can also be viewed online at Mesoweb ([www.mesoweb.com/rubbings](http://www.mesoweb.com/rubbings)). Merle’s work in preserving Guatemala’s Maya cultural heritage through these rubbings was acknowledged by the Museo Popol Vuh in 2004, when Merle was awarded the Orden del Pop (Museo Popol Vuh 2004).

As Peter Mathews (2006:15) has noted:

[O]ne could be forgiven for thinking that part-time exploring and “rubbing” would be quite enough to fill a life, but we’re only just beginning to recount Merle’s accomplishments. Her first love of the jungle was at Tikal, and in Mexico it has always been Palenque. During the 1970s she worked tirelessly, documenting the sculpture of Palenque. ... The result of Merle’s Palenque work is brilliantly documented in the sumptuous series *The Sculpture of Palenque*, published by Princeton University Press [Robertson 1983-1991]. In this study, ... Merle has shown in great detail ... exactly how the beautiful stucco

sculptures were built up, layer by layer, by the Palenque artists. She has investigated the paints that were used to color the sculptures, searching out pigment sources in the Palenque region and painstakingly experimenting to reproduce the exact colors used by the Palenque artists. In the process, she was able to document the entire method of making beautiful stucco sculptures for which Palenque is so famous.

Merle's rubbings, photographs, paintings, and drawings of Palenque's architecture and sculpture represent a lasting resource. In 1993, the Mexican government acknowledged Merle's remarkable contributions to the study of Palenque with the decoration of the Order of the Aztec Eagle (Mathews 2006:17).

Of equally lasting importance to the study of Palenque specifically, but also to Maya studies in general, have been Merle's series of Palenque Round Table conferences. Begun in December, 1973, and convening for eight meetings, the last held in June, 1993, the Mesas Redondas de Palenque produced ten volumes of conference proceedings edited by Merle and others, each documenting numerous breakthroughs in Maya studies. These critical meetings have since been continued by the Instituto Nacional de Antropología e Historia, Mexico, with Merle in the capacity of Honorary President (Mathews 2006:16).

In 1982, Merle founded the Pre-Columbian Art Research Institute, a non-profit organization which has conducted important research in Mesoamerican art, iconography, and epigraphy. PARI has published numerous scholarly monographs and the quarterly *PARI Journal* and has sponsored the archaeological investigations of the Cross Group Project at Palenque.

Merle's contributions to the study of the Maya will never be forgotten, so important is her legacy of documentation of primary materials in the form of drawings, paintings, photographs, and rubbings. But she will be sorely missed by her family, friends, colleagues, students, and legions of admirers. *K'a'ayi usik sakik'aal*.

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# Recent Investigations in the Salto de Agua Region: Sites, Territories, and Frontiers to the West of Palenque<sup>1</sup>

JOSHUA A. BALCELLS GONZÁLEZ  
JORGE E. GAMA CASTRO  
ESTEBAN MIRÓN MARVÁN

Fifteen years of regional investigations have led to the conclusion that the ancient kingdom of Palenque should not be viewed as an isolated and self-sufficient civic-ceremonial core, but rather a territorial dominion that negotiated complex relationships with the surrounding populations in the definition of territory, frontiers, and routes of communication (Liendo Stuardo 1999, 2001, 2002, 2007; Silva de la Mora 2008). Recent investigations suggest that from the Late Preclassic until the end of the Classic period, the inhabitants of the Palenque–Salto de Agua region, which borders the Palenque kingdom on the west, controlled the most important routes of passage from Palenque to the Tulija river and from the Sierra del Lacandon to the coastal plains of Tabasco. Centers with civic-ceremonial functions, control points, and river landings were maintained to keep watch on the east bank of the rivers Tulija and Michol, these being the most important communication routes for the exchange of goods and ideas, as well as most likely comprising the western frontier of Palenque’s domain. By the application of systematic surface reconnaissance and stratigraphic test-pitting we have at last begun to understand one of the least-known regions in the northwestern Maya lowlands (Bassie-Sweet et al. 2002; Blom and La Farge 1926; Hernández 1984; Rands 1967). This article presents supportive evidence in the form of our own preliminary findings from the region, coupled with a general overview of the study area, including population distribution, territorial characteristics, and reconnaissance of micro-regions. We conclude with a proposal that the western frontier of Palenque’s dominion was marked by the Tulija River.

## The research project

The study area comprises some 120 km<sup>2</sup>, bounded on the north by the Michol River, on the south by the Sierra Norte de Chiapas and the Corozo Valley, on the east by Santa Isabel, and on the west by the Tulija River (Figure 1). The 60 sites that have been registered so far vary from isolated platforms, patio-oriented groups, informally oriented platforms, and sites with civic-ceremonial functions. Among this last category are Ampliación Cerro Norte, El Retiro, Miraflores, Cástulo Pérez, and San Miguel. We have also registered caves with evidence of ritual activity, areas with agricultural terracing, and a quartz and silex quarry, as well as areas

prepared for transit between sites or toward the river valley of the Tulija. In this context, it has been important to identify control platforms in the entries and exits to valleys and along the Michol River, throwing in relief the important role of the Palenque–Salto de Agua region as an area of constant transit of people, resources, and information. We have also classified the study area into geomorphological units, and investigated the use and degradation of soils in order to reconstruct habitation patterns in relation to ecological context. We are currently finishing an analysis whose results are expected to contribute to the reconstruction of settlement patterns; additionally, this work should improve our understanding of the territorial relations between the civic-ceremonial nucleus and the sustainment area of Palenque and the populations to the west.

## The Palenque–Salto de Agua region

The landscape of the region can be classified into five great geomorphological units: upland terrain, foothills, valley, plain with low hills, and fluvial terraces. Based on this classification, we have a point of departure for reconstruction of the population distributions and the territories in relation to the environment. In this regard, the most complex sites in terms of architectural forms (plazas, temple structures, L-shaped platforms, stepped substructures, and ballcourts) correspond to the civic-ceremonial centers and groups of platforms distributed in areas of upland terrain and foothills. Valley entrances and exits were occupied by control platforms characterized by megalithic limestone architecture (Figure 2). Plains and low hills accommodated patio-oriented groups, informal groups, and/or isolated platforms. River banks supported platform groups, as well as the remains of canals and elevated fields

<sup>1</sup> Our investigations were carried out with funding from CONACYT and the Instituto de Investigaciones Antropológicas de UNAM. In addition to acknowledging the tremendous support and encouragement of Rodrigo Liendo Stuardo, we thank the following individuals for their kind assistance and collaboration: Ernesto Vargas Pacheco, Carolina Jasso Castañeda, Emily McClung de Tapia, Gerardo Jiménez, Javier López Mejía, Luis Torres, and Blanca Arce Lorenzo. In every corner of the west to which our researches have brought us, we have always been well received by the kindly Ch’ol people. We especially dedicate this article to Merle Greene Robertson and Alfonso Morales Cleveland.



Figure 1. General location of the study area in the Palenque region. The modern community of Salto de Agua is located at the confluence of the Michol and the Tulija rivers.



Figure 2. Site N2W4-614. Platform with megalithic architecture at the entrance to the Corozo Valley.

associated with the Michol and landings associated with the Tulija (Figures 3–4).

In the uplands another interesting pattern can be deduced from the relationship of platform groups to agricultural terraces. This makes sense given that the most productive soils in both Prehispanic and modern times are leptosols and rendzinas, located in the uplands and on hillsides (Figure 5). While the *World Reference Base for Soil Resources* (FAO 2006) emphasizes the scant productivity of leptosols, it should be noted that this only takes into account current methods of industrialized agricultural production and ignores the fact that numerous societies in Mesoamerica and other parts of the world have achieved advanced modes of settlement and sustainability that should not be compared with the pressures and effects of the current market economy (Ibáñez 2010). In the region, leptosols are rich in organic matter, nutrients, and calcium carbonate, especially those on hillsides that were adapted for terraces; these areas were suited for the cultivation and management of fine wood and fruit trees, as well as various grains and legumes basic to the Prehispanic and modern diet such as maize, beans, squash, and chiles.

The remainder of the geomorphological units present less agriculturally productive soils, such as vertisols, fluvisols, and arenosols. Fluvisols are distributed along the Michol, Agua Blanca, Miraflores, and Tulija rivers. These entail soils built up in alluvial deposits where constant sedimentation in the flood season brings rich nutrients to the soil; as a result, the agricultural potential is elevated. The use of canals in areas of fluvisols during periodic inundations made it possible to recover (through drainage) fresh sediments rich in organic matter for agricultural use. Both in the immediate sustainment area of Palenque and the Salto de Agua region areas with fluvisols show archaeological evidence of canals and raised fields for cultivation (Liendo Stuardo 2007). However, it is important to mention that in the study area the frequency of this evidence decreases in comparison to the Palenque sustainment area, and there seems to have been a preference for locating agricultural fields on terraces in areas of leptosols.

In the case of vertisols, these offer banks of clay with potential for ceramic production, while the arenosols in front of the Sierra Norte are rich in quartz and offer possibilities for ceramic temper. Arenosols can also be used for cement when combined with lime.

Another interesting pattern is found in the foothills, where one frequently finds isolated platforms or dispersed groups of platforms in association with banks of clay, quartz, or siliceous.

The distribution of these sites on a digital elevation model following the AMOEBA clustering method reveals an interesting pattern (Figure 6). It is evident that at the point of maximum occupation during the Late Classic, the population was in general rather dispersed in the uplands in formal and informal architectural groups, while the points of greatest concentration were around

El Retiro. That site and Miraflores were the two most important civic-ceremonial centers in the region (Figure 7). The importance to the ancient inhabitants of visual control of the course of the Michol river is also evident. Downstream of its tributaries, the Agua Blanca and the Miraflores, the Michol is navigable until it discharges into the Tulija. In this context, Las Colmenas and Cástulo Pérez are sites whose complexity and architectural orientation evince the importance of visual control of the fluvial routes of communication. And it is important to mention the concentration of population around San Miguel, a civic-ceremonial site associated with the junction of the rivers Michol and Tulija, as well as two landings constructed on the east bank of the latter (Figures 8).

In general terms, we suggest that the populations in the west are best understood within a context of spatial integration with El Retiro and Miraflores as the nodal points. Departing from the civic-ceremonial nucleus of both sites, the distribution of structures shows continuity within an overall context of dispersion. This is to say that between the two sites there are no empty spaces marking their limits; the entire zone was occupied by areas of agricultural terraces and dispersed formal and informal architectural groups until one reached the densely constructed nucleus of both sites. Moreover, surface reconnaissance recorded an area of approximately 10 km<sup>2</sup> between Santa Isabel and Ampliación Cerro Norte in which the occupation was nil or extremely low. Ampliación Cerro Norte represents the settlement at which the evidence of occupation begins to increase, becoming continuous from the foot of the uplands below Miraflores to the juncture of the Michol and Tulija. It seems that the territory between Santa Isabel and Ampliación Cerro Norte was a type of internal frontier or point of transition from the dominion of Palenque and its sustaining area to the populations of the west.

In chronological terms, the preliminary analysis of pottery from surface collections and excavations suggests that one of the earliest sites of the region (along with Miraflores) was El Retiro, whose foundation dates back to the Late Preclassic. There is also evidence of occupation during the Early Classic, though the site seems to have reached its peak occupation during the Late Classic (in the Murcielagos and Balunte phases), and this may have extended into the Terminal Classic after the decline of Palenque (Huipale). The architecture of El Retiro Building 1 (oriented eastwards towards Palenque), shows strong ties to the architectural tradition of Palenque's Otolum period; the building's stucco finish, as well as the proportions of its walls, windows, and doorways, all seem to reference those of Palenque's Temple of the Foliated Cross (Figure 10). Housing platforms associated with the central plaza of El Retiro, Las Colmenas, Modesto Garcia (N2W4-611), and the upland terraced areas, show high occupation during the Murcielagos and Balunte phases. It may be that all of the sites on the ridges of the Sierra Norte date to this period,



Figure 3. Patio-oriented group associated with channels and raised fields on the banks of the Michol River.



Figure 4. Vestiges of landings on the east bank of the Tulija River.

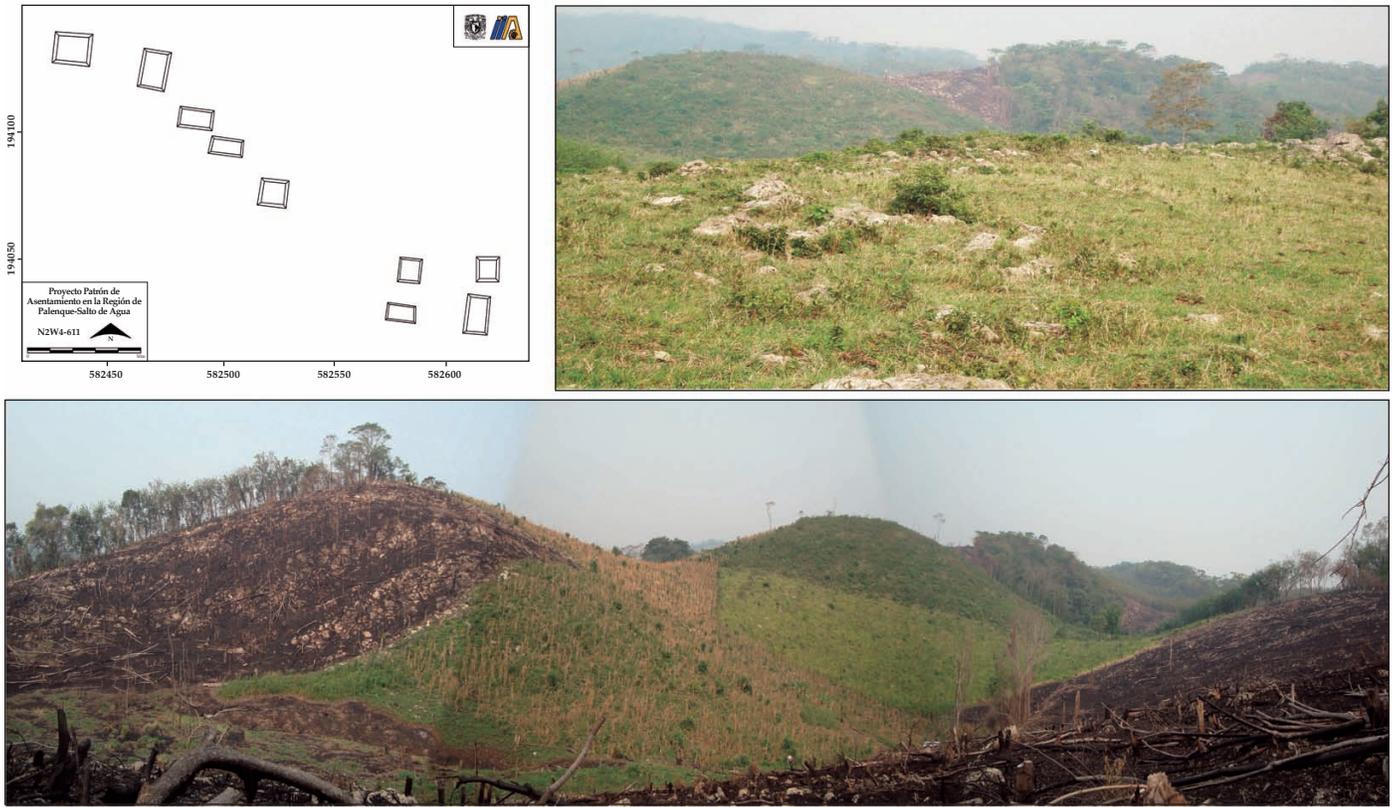


Figure 5. Platform groups associated with agricultural terraces.

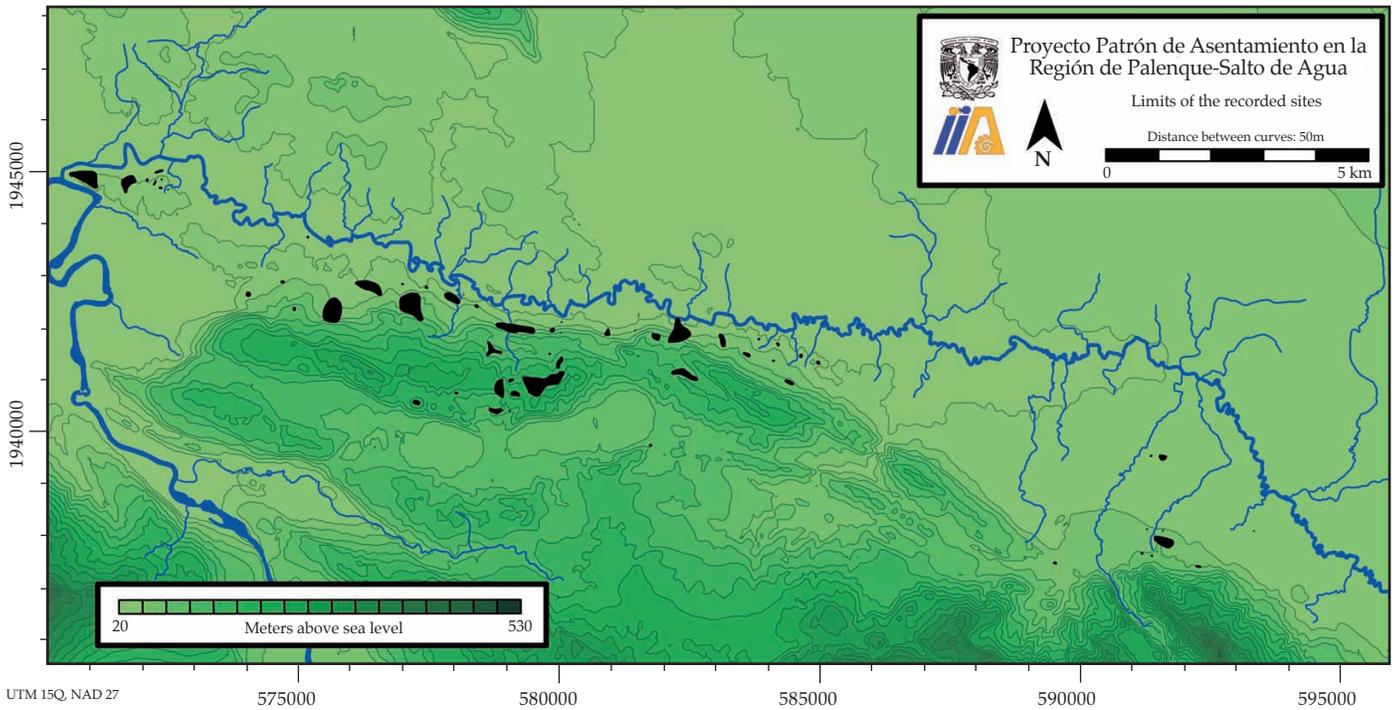


Figure 6. Distribution of sites based on the AMOEBA clustering method.

perhaps the point of maximum population in the central part of the Palenque region (Liendo 2007).

### Concluding remarks

The dispersed population of the uplands and foothills outside the civic-ceremonial centers suggests relaxed forms of spatial organization, but at the same time suggests that there was some requirement that these areas (and these areas alone) should be occupied and the valleys, plains and riverbank left unoccupied, the latter areas with relatively low occupancy rates corresponding to sites with earthen rather than stone architecture. In this sense, there appears to have been some relaxation of spatial demands in comparison to the immediate sustaining area of Palenque, where the population seems to have been obligated to reside either within or quite close to the nucleus of the civic-ceremonial center (Liendo 2007), implying distinct forms of settlement and spatial organization. The proximity of the Tulija River apparently influenced the populations of the western periphery to develop linear settlement patterns on the southern and northern foothills of the Sierra Norte, allowing some measure of visual control over the Corozo Valley and the Michol, the only points of access from Palenque to the Tulija (and vice versa). For these reasons, we believe that the important geographical position of the western populations allowed them to maintain a somewhat less hegemonic relationship with Palenque, unlike sites closer to its sustaining area or hinterland (Liendo 2007).

El Retiro maintained close ties with Palenque from at least the Late Preclassic period (Otolum phase) until the Late Classic (Murcielagos and Balunte phases), and these ties are reflected in the presence of diagnostic ceramic forms and similar architectural styles. In terms of a hierarchy of sites from this region, it is clear that El Retiro, Miraflores, Las Colmenas, Ampliación Cerro Norte, and San Miguel are all sites that, because of the complexity of their structures and the presence of ball courts and large open plazas, signal civic-ceremonial activities that permeated the region, denoting hierarchy between the settlements of the study area and representing nodal points of communication. We believe that from Early Classic time onward, Palenque actively negotiated safe transport to and from the Tulija River, and at the same time worked towards defining and delimiting its western frontier.

The homogeneity observed in the forms, decoration, and ceramic pastes recovered both from surface collections and stratigraphic excavations suggests that there was a system of ceramic exchange that was less than heterogenous in character but nonetheless well negotiated, cutting across different nodes of communication and territorial boundaries. At the macroscopic level, and despite that their pastes reveal the possibility of local manufacture, ceramic forms with but a few small variations replicated and made reference to

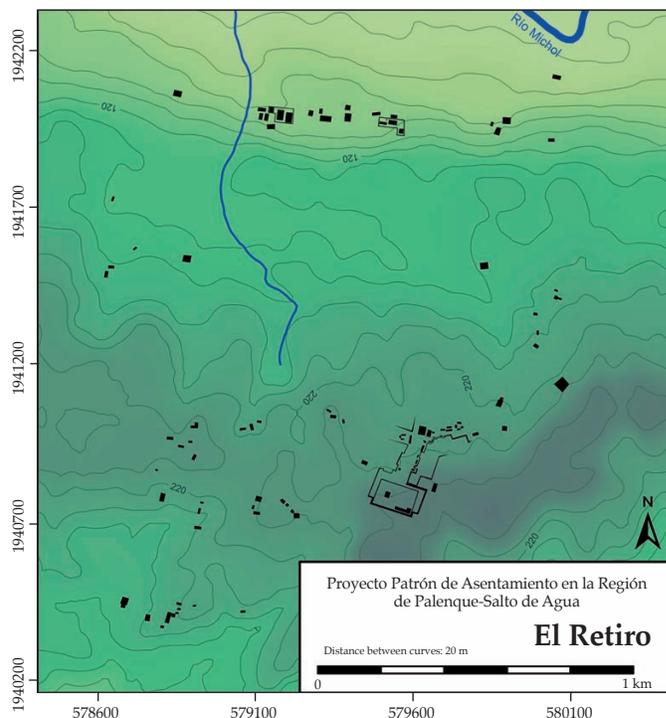


Figure 7. Map of El Retiro.

the Palenque sphere. This echoes the architectural styles of El Retiro and Miraflores, which we have already seen make their own references to Palenque. However, the near absence of architectural groups oriented around patios, the frequent linear settlement patterns observed on ridgelines, the use of agricultural terraces and little use of raised fields, the riverbank specialized in lithic production, the architectural integration and use of megalithic blocks and/or outcrops, and the presence of piers and other elements allow us to speak of substantial differences in settlement patterns from Palenque's immediate sustaining area, where the aforementioned features are absent and where the surrounding environment varies somewhat from that of our study area.

It is clear that formally, in terms of architectural design and settlement patterns, there is a hierarchy of sites in this region. Taking into account the labor invested and the quality of the raw material employed in construction, there were evidently great differences in relative rank among hilltop centers and those located in the foothills, on the plains, or on the river. However, from the perspective of heterarchical organization (Crumley 2003:141), we might suggest that the range and variety of resources in the vicinity greatly diminished the risk of settlement of these territories so close to large centers, while the western population dispersal allowed the maximum amount of local community control over resources, perhaps leading to the spatial relations and settlement patterns observed here. The Palenque-Salto de Agua region offers a variety of resources distributed

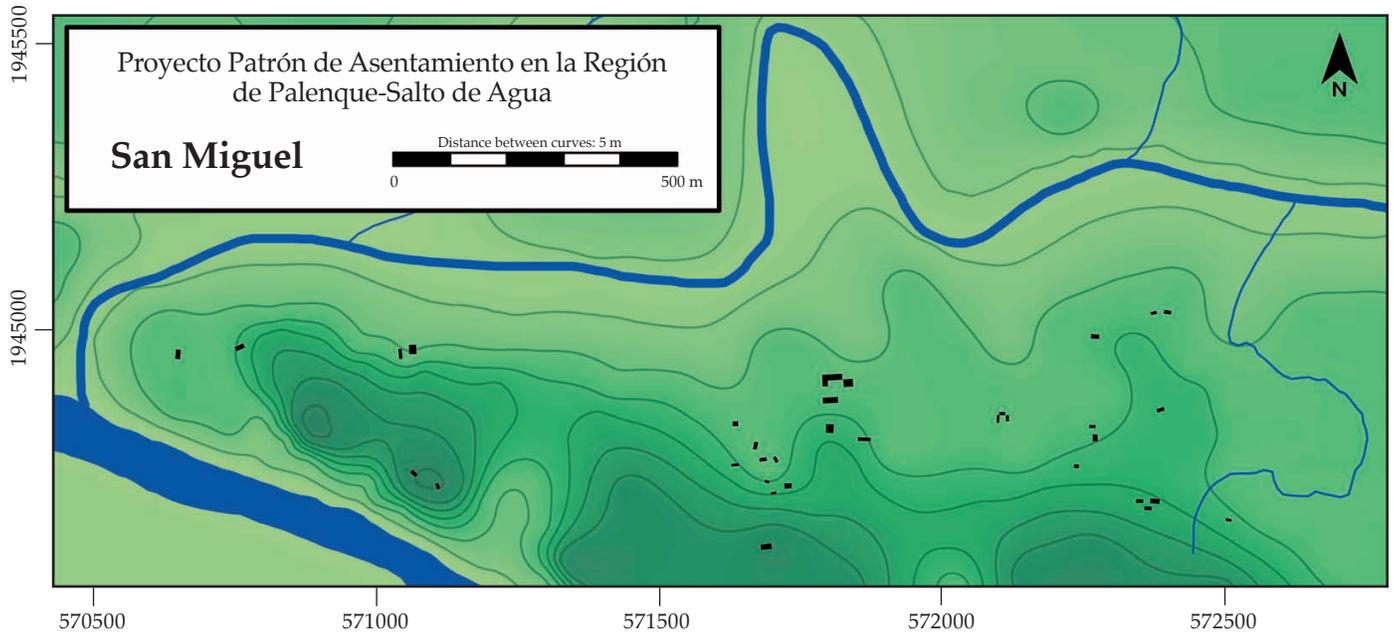


Figure 8. The site of San Miguel at the junction of the Tulija and Michol Rivers.

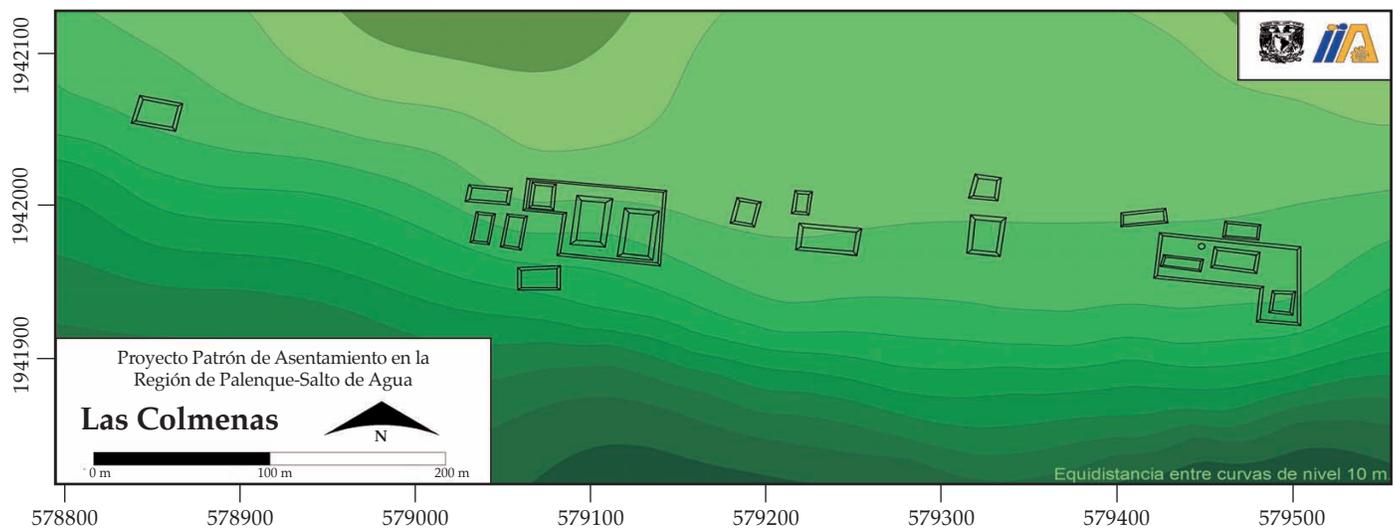


Figure 9. Map of Las Colmenas.

into five geomorphological units, and although the hilltop settlements evidence the highest population densities as well as the most complex civic-ceremonial constructions, it is nonetheless the case that dispersed populations characterize all of the settlements. Therefore we can talk about hierarchical behavior and relationships that coexisted alongside others of a more heterarchical nature.

As we have shown, there is great potential for the study of population dynamics in the western periphery, which permitted the establishment of territories in relation to routes of travel, and the varying use of environmental resources. It is for this reason that we need to complete our analysis and plan additional research which might

allow us to chronologically situate all of the region's sites and activity areas. Extensive excavations will be needed to establish site functions and assist recovery of data on soil types, including macro- and micro-debris that would allow us to develop more specific interpretations of paleosols, paleo-environments, degradation of soils, and the ancient ranges of flora and fauna. In this regard, we would like to highlight that following our comparison of the identified soil groups and their relation to archaeological evidence, we can confirm that the region's ancient inhabitants preferred to settle and exploit uplands and foothills over other geomorphological types. Less complex settlements, including isolated and low-lying platforms, were



Figure 10. Structure 1 of El Retiro.

distributed on terraces and flood plains and associated, to a somewhat lesser extent, with canals and fields. For these reasons, it would be interesting to carry out research that will allow us to obtain patterns on the specific uses of anthrosols and technosols.

We emphasize that the geographical location of our study area includes the essential passage from Palenque to the Tulija River, via the Corozo Valley and Michol River, and also includes one of the most important access routes from the lowlands and coast to the highlands in the entire northwestern Maya area. For these reasons, it is increasingly important that we begin to understand the dynamics of population, settlement, and exploitation of geographic advantage experienced by the ancient inhabitants of the Palenque–Salto de Agua region, as well as their relationship to the development of the Palenque domain and to the other dominions of the west and of the highlands.

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# The San Bartolo Regional Archaeological Project: Results of the First Field Season 2002<sup>1</sup>

WILLIAM A. SATURNO

Before I begin my talk, I'd like to thank all of the institutions that have helped us in our first field season. The discovery of murals at San Bartolo has turned this ancient city into a monument of national importance for Guatemala (Figure 1). The site's preservation (and its looting as well) are both due in large part to a remote and isolated location in the dense and humid tropical rain forest. As a result, prior to the present project no intensive archaeological investigations have been conducted in the zone, to the detriment of our understanding of the geopolitical role played by its many sites.

## Previous investigations

Before March, 2001, the ruins of San Bartolo were practically unknown to archaeologists, despite the fact that a large number of its structures had suffered a decade or more of looting. The site lies in an extensive region of uninhabited jungle in the northeastern Peten district of Guatemala, some eight kilometers north of Xultun, a very large but little known Classic Maya site (Figure 1). In March of 2001, the murals of San Bartolo were discovered in the course of investigations by the Corpus of Maya Hieroglyphic Inscriptions Project. San Bartolo now ranks as one of the most important sites in Guatemala and the Maya area. The discovery of the paintings was fortuitous, in that the author had traveled to the Peten in order to visit other ruins where previously undocumented carved stone monuments had been reported. These ruins were said to be in the vicinity of Dos Lagunas and Naachtun, sites that lie to the north near the Mexican border.

In the wake of the paintings' discovery, in May and June of 2001, a more extensive reconnaissance of the ruins was undertaken and, more importantly, an evaluation of the murals and their state of preservation. Access to the site was also improved, and a team of watchmen was put under contract to remain in the vicinity year-round.

## Description of the site

The archaeological site of San Bartolo covers about one square kilometer of tropical forest and appears to be surrounded on all sides by *bajos* (seasonally

inundated swamps). The site consists of two principle architectural groups (Figure 2). The largest is associated with the Pirámide de las Ventanas (the Pyramid of the Windows—so called for the masonry windows of its final construction phase). The group includes an important palace structure as well as a ballcourt. The pyramid looks southwards, possibly towards the large site of Xultun. During our survey a number of mounds were found, totaling 103 to date. Unfortunately the majority of these structures have been looted. Our project has so far recorded 211 illicit excavations.

Other features mapped included a causeway oriented north and south, connecting the Ventanas group with an area of *bajos*, and a quarry to the south of the site. The section of causeway mapped so far is 200 meters long. Among the public works projects carried out by the Maya and recorded so far are artificial *aguadas* (reservoirs), features that provided the city with water for its survival. The entire Ventanas group sits on a great platform that is clearly visible from the east of the complex.

## Ventanas pyramid

The looters' excavations in the main pyramid of the Ventanas complex show at least three different levels previous to the final construction. The highest tunnel goes straight through the pyramid, revealing four construction stages with very well preserved stairways. The last construction stage also has stucco-covered stairways in a good state of preservation. At the base of the pyramid in the rear is another looters' tunnel revealing eight construction phases, the earliest dating to the Mamom ceramic phase of the Middle Preclassic (700–300 BC), with a flint construction fill.

Records were made of each of the discovered

<sup>1</sup> This article is a translation of William A. Saturno, 2003, Proyecto Arqueológico Regional San Bartolo: Resultados de la primera temporada de campo 2002, in *XVI Simposio de Investigaciones Arqueológicas en Guatemala, 2002*, edited by Juan Pedro Laporte, Bárbara Arroyo, Héctor L. Escobedo, Héctor E. Mejía, v. 1, pp. 319–323; Guatemala: Ministerio de Cultura y Deportes; Instituto de Antropología e Historia; Asociación Tikal.

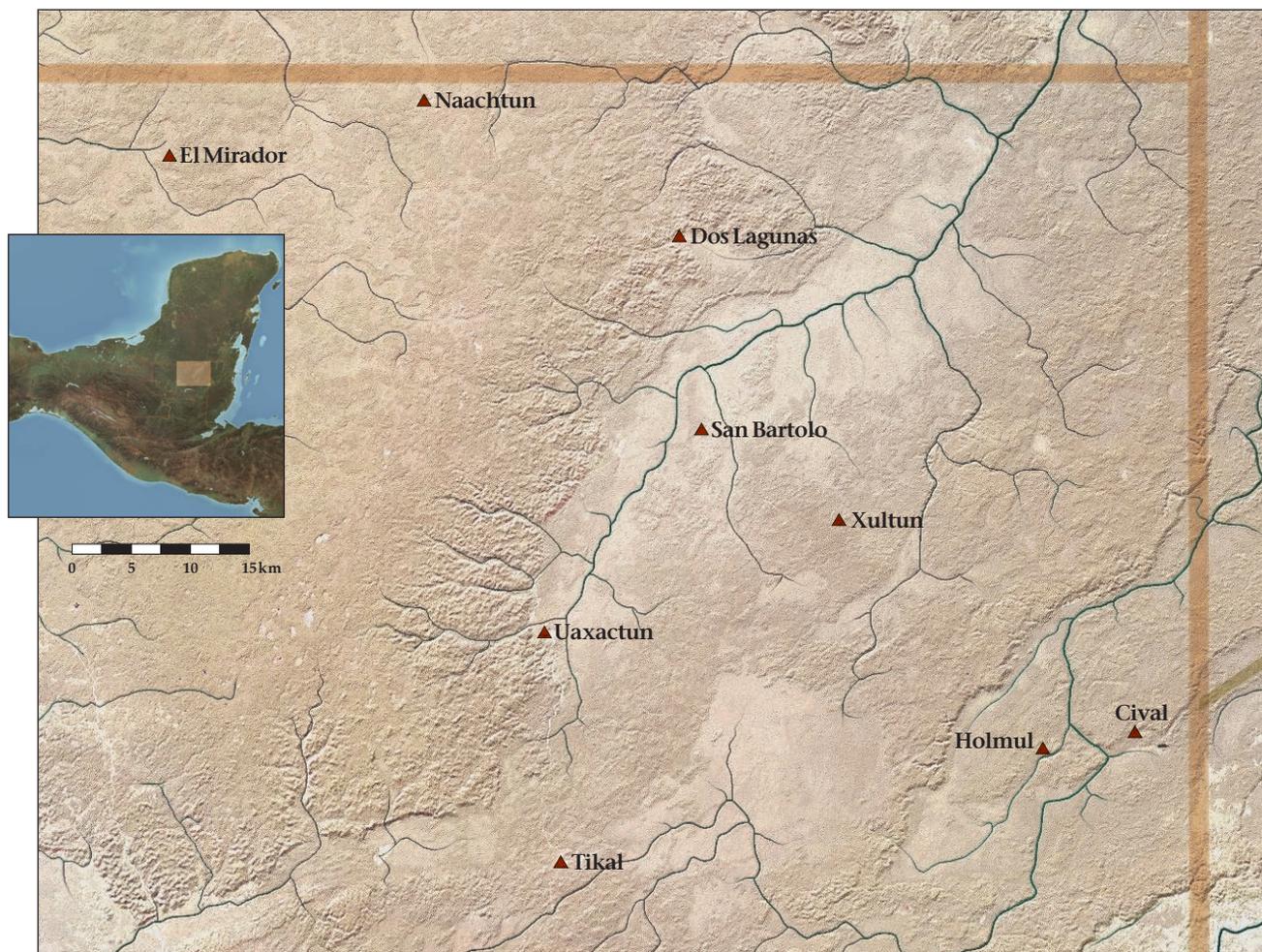


Figure 1. Sites mentioned in the text (map courtesy of Precolumbia Mesoweb Press).

construction stages in order to obtain a chronological sequence for the building. A test pit was also sunk in front of the pyramid, encountering a substructure that represents an earlier version of the platform supporting the architectural complex. Materials recovered during this excavation also date to the Mamom phase.

### Ballcourt

A relatively small ballcourt is located on the east side of the Main Plaza. A test pit in the playing alley encountered various construction stages dating to the Mamom and Chicanel phases, the latter diagnostic of the Late Preclassic (300 BC – AD 300).

### Monuments

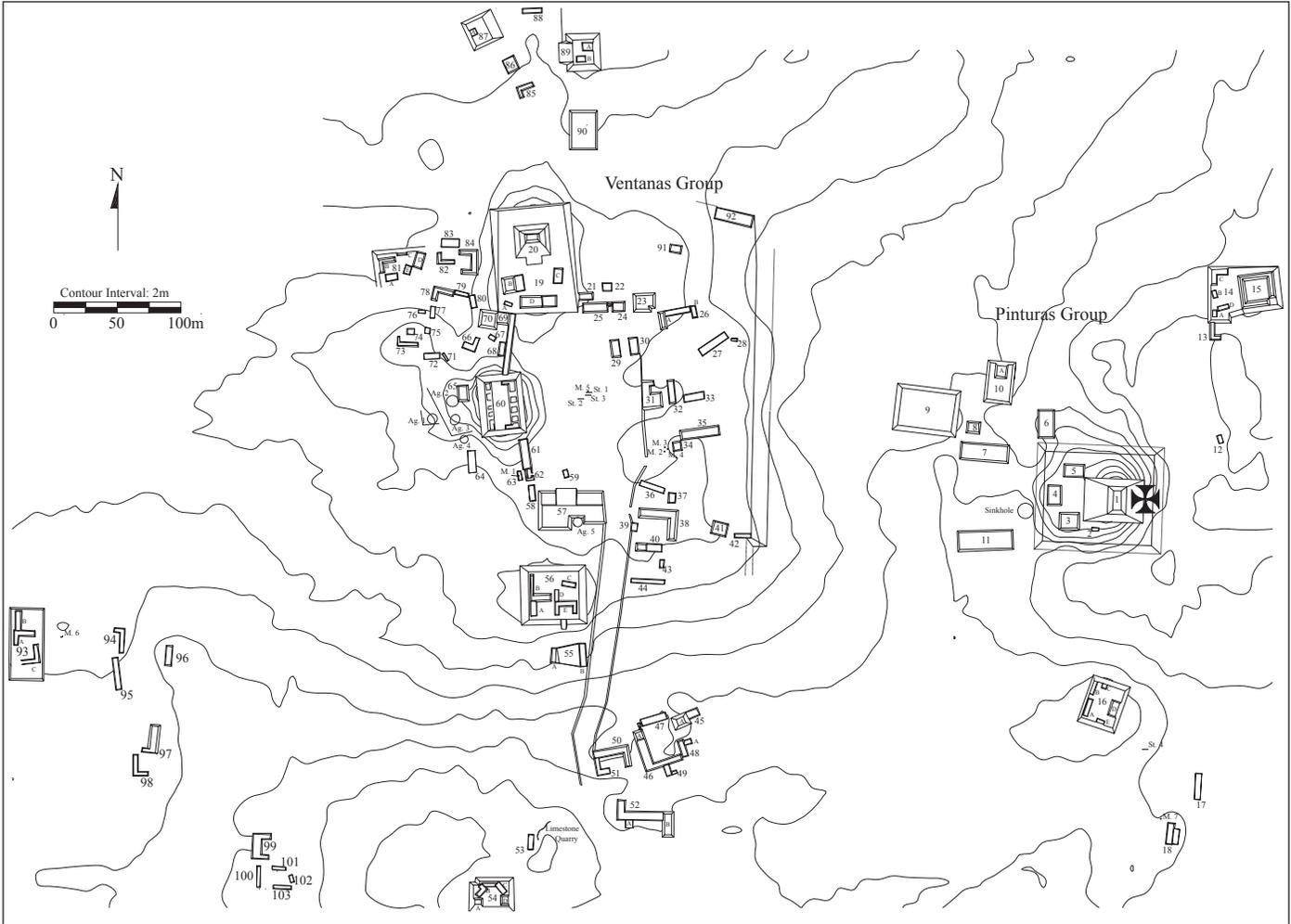
Reconnaissance and mapping have also revealed the presence of carved monuments. Four fragmented stelae in a poor state of preservation were encountered in the center of the Main Plaza. Stela 3 is the best preserved,

with some carving that appears to be glyphic. The ceramics associated with these monuments are highly eroded but could date to the Late Classic (AD 600–900). This indicates that the ancient inhabitants returned to this city, which had apparently been abandoned towards the end of the Preclassic. It is important to note that with the exception of Structure 63 all of the material recovered in excavations at the site dates to the Preclassic.

Other monuments found were four sculptures of the type known as “*barrigones*,” fat anthropomorphic figures carved in the round. These were found in a very poor state of preservation, making it difficult to specify the sculptural motifs.

### Structure 63

A looters’ trench revealed the presence of another carved monument, which was designated Monument 1. This was found in Structure 63, located to the south of the palace on the Main Plaza. This monument was associated with a ceramic deposit containing a great



**Figure 2.** Map of the San Bartolo archaeological site showing the location of the Ventanas Group and the Pinturas Group, the building complex in which the murals were found.

variety of vessels dating to the Late Classic.

**Pinturas pyramid**

The *Pirámide de las Pinturas* (Pyramid of the Paintings) is located about 500 meters east of the Ventanas complex, faces west towards it. This larger structure, about 26 m in height, is perforated by four looters’ excavations, two in the front wall and two in the rear. The ones in the east-facing rear wall penetrate deeper into the structure. In fact, the principal looters’ excavation consists of a tunnel that starts at the base of the pyramid and continues westward, revealing in the process a minimum of six previous construction phases. This main tunnel branches occasionally into secondary excavations at right angles toward the north and south. After excavating the fill, the looters encountered the intact rear wall of the terrace of the pyramid’s final phase and went straight through it.

After seven meters of excavation of densely

compacted fill, the looters arrived at the terrace of another structure (Pinturas Sub-1), striking the building at its northeast corner and proceeding to remove the western wall of the structure up to a height of almost 1.6 m from the tunnel floor (approximately 1.2 m from the interior floor of Sub-1, the profile of which is visible).

It is important to note that all of these constructions, from the oldest up to the ultimate construction phase, were founded directly on bedrock. As was also the case with Ventanas, each one of the construction phases was documented and materials were obtained dating to the Chicanel phase, with an admixture of Mamon phase sherds in the earliest substructures.

The murals of San Bartolo were found to be in a good state of preservation despite their antiquity. However, the surface was cracked and in danger of spalling, such that intervention was necessary in order to ensure their conservation. To that end, a team of conservators was enlisted to undertake multi-spectral photography and

cleaning of the surface of the painting, as well as physical and chemical analyses of the pigments and stucco. In addition, a regimen was instituted for monitoring the microclimate of the pyramid to observe the patterns of change in humidity and heat in the chamber and fill. To stabilize the paintings, a solution was injected to unify the fragments with the weakest adhesion and prevent their spalling. Temporary bracing of the mural was effected in order to forestall its collapse. And in order to prevent the loss or destruction of any detached fragment, an extremely fine fabric with a sponge core was installed as a retaining cover.

The preservation and conservation of San Bartolo is not centered solely on the paintings, however. Work was also undertaken on the substructures of the Ventanas and Pinturas pyramids, including:

1. Filling of the upper chamber of the Ventanas pyramid in order to prevent the filtration of water into the interior;
2. Covering the stuccoed stairways with fine soil and bags of sand to prevent their deterioration;
3. Protection of the floor and talud of Sub-1 of the Pinturas pyramid with fine soil and bags of sand to avert damage to the painted stucco and to prevent any fragment from detaching.

One of the objectives of this season was to determine the dimensions of the Sub-1 murals building in order to plan the conservation of the structure and better estimate the size of its murals. To this end, and to avoid uncovering any preserved mural prematurely, a tunnel was excavated along the front exterior. The intention was to verify the continuation of the eastern wall from north to south. It was determined that the building is 11 m in length, with a talud painted in red over a stucco floor painted pink. The surviving entrance to the structure on this side is defined by a step covered in stucco and painted red. (Jamb scars were located for two other entrances.) Before the conclusion of the field season we managed to locate the southeast corner of the building. One noteworthy find in this section was a graffito, albeit one of indeterminate design.

It was possible to define the remains of one door jamb and a burned area in the interior of the building where an incensario was probably positioned. Additionally the south wall of the structure was encountered. Regrettably the wall between the looters' tunnel and the southeast corner of the Sub-1 was destroyed by the Maya in antiquity in order to construct a new building that constituted the ultimate construction phase. However, fragments of mural from this wall were recovered and found to be painted with volutes and bands of red, as well as the lower extremities of a figure kneeling in



Figure 3. Glyph recovered from Sub-1 fill.

profile and painted in red, yellow, and black. Fragments of the face and left wing of a stylized bird were also recovered, with another fragment of its feet depicted in black, yellow, and red.

The most interesting fragment so far recovered is a glyph from what must have been a longer inscription painted in an early style (Figure 3).

## Conclusions

San Bartolo is a small city when compared to other early sites; in its entirety it would fit within the Danta complex at El Mirador. But like the larger centers from its time and region, the site apparently has all the trappings of a civilization. This calls for a reconsideration of the chronological stages of social, political, and cultural evolution as previously understood for the Maya Lowlands. San Bartolo figures as an example of the many cities which flourished in its era, displaying all the characteristics of a vital settlement interacting with a range of other polities at greater and smaller scale. It is for this reason that we intend to continue the investigations at San Bartolo over the longer term, in order to test our hypotheses and shed light on the many imponderables. I would like to thank the team of archaeologists who are working on this project, as well as the workmen, guards, and technical personnel, the Instituto de Antropología e Historia de Guatemala, and each and every one of the individuals who bring to bear their experience and support in the accomplishment of this work.



Neg. No. 10313, Courtesy of the Museum of New Mexico.

## Morley's Diary, 1932

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### Editor's note

*A leading archaeologist of his time, Sylvanus Griswold Morley was an Associate of the Carnegie Institution of Washington, the foremost organization excavating archaeological sites in Mexico, Guatemala, and Honduras in the early part of the twentieth century. This diary continues his account of the Carnegie Institution's expedition to Calakmul begun on April 3, 1932. Morley's professional companions were his wife Frances, Karl Ruppert, John Bolles, and Gustav Strömsvik.*

### April 27 - Wednesday (cont)

I got this book out to bring this chronicle up to date. John, Gustav, and Karl read and slept. Frances had her hammock put up and I was greatly relieved to see her too fall asleep almost for two hours.

We had lunch at 1:00 and then sat around in the heat. And what a heat. Gustav predicts a storm and it looks like what Proc would call a weather breeder – a blazing hot day with no signs of any sort of relief. I will suspend these writings for a while to see what transpires.

At 3:15 the platforms arrived with the Estacionario with whom I went into Executive Session at once in Don Refugio's office. He charged me 63 pesos plata or \$189.00 pesos for the three we used. At the present rate of exchange \$63.00 U. S. currency, which was not bad considering that the distance from La Gloria to Kanasayab is 76 kilometers during which three different sets of mules are used.

Karl, John, and Gustav with about a third of the impedimenta were loaded on to the first platform; Frances, Tarsisio, and I with a second third on the second platform, and Arturo, Demetrio and the monkey with the remaining baggage on the last platform.

After taking leave of the Estacionario, of Don Refugio and his most obliging Señora, we climbed on to the platforms and left La Gloria without a single regret at 4:30 P. M.

Although we had called attention to the fact a few

minutes before when it happened, three of the Buenfils platforms heavily laden with chicle set off on the track just ahead of us. I protested at this, telling Roman they would surely delay us as they were more than twice as heavily laden as we are, but he said there was a switch down the line, where we could pass them. So there was 5 leagues ahead! But we did not reach it until 8 o'clock.

Both the Estacionario at Juarez and Don Refugio had assured me that the journey from La Gloria to Kanasayab was a question of 10 hours.

We went very slowly the first 20 kilometers, i.e. to Yahaltun where the mules were changed for the first time, first because we were behind the chicle platforms of Buenfils which traveled more slowly because of their very heavy load and second because the second platform ahead of us, i.e. the last of the Buenfils trio was continually running off the track averaging a derailment every kilometer. We did not get to Yahaltun therefore until 8 when we should have been there at 7:30.

At Yahaltun the telephone line to Champoton begins. While the mules were being changed, and while Fanny was getting our supper together, I took a flash and went up to a house perhaps 200 yards away where the telephone line came in. Don Refugio Campos had given me a list of the boats at Champoton.

The telephone operator at Yahaltun was most kind. He tried to get Señor Sanchez at San Dimas and failing that talked with Don Nicolas Gonzalez at Champoton. The latter promised to have a smaller boat for us at Kanasayab and a larger one at Champoton. We were still under the illusion that we would be able to reach Campeche in time to make the train up tomorrow.

Frances had supper ready on our platform – a tin of sardines, a tin of baked beans, a tin of pears and some toasterettes. The famished dogs of the place literally almost leaped on the platform at the smell of food and Fanny could hardly keep them down. Our change of mules here proved quite fractious not to say mettlesome if such a word may be applied at all to a mule. Indeed they nearly succeeded in turning over our platform before they finally were forced ahead along the rails.

Frances and I had been sitting up but the branches hung so low that at Yahaltun we rearranged our blankets and pillows so that we could recline, really lie down. Sleep was fitful, since the platforms are so narrow that two side by side are in real danger of falling off if they do not cling to each other. Sleep we did however, which shows how tired we were.

We reached Yacasai about eleven and here there was another change of mules. We looked for Frances' lavender passion flower but it was too dark to see much in spite of the illumination made by the driver's petroleum flare, and we did not see it.

We slept again in bits and very literal starts and thus Wednesday, the 27th, passed into Thursday, the 28th, somewhere between Yacasai and San Dimas. Altogether, however, in comparison to travel by the White trucks travel on the platforms is Pullman luxury.