IDENTIFYING HINTERLAND BORDERS?: AN INITIAL REPORT ON THE 2011 ARCHAEOLOGICAL INVESTIGATIONS AT SAK POL PAK, CAYO DISTRICT, BELIZE

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This paper presents the initial results of the Pacbitun Regional Archaeological Project’s (PRAP) 2011 investigations in Pacbitun’s periphery. Our investigations throughout the region have documented a complex settlement pattern that spans a range from isolated residential clusters to medium-sized centers. The presence of these centers challenge the traditional understandings of Pacbitun as an isolated center on the south rim of the Belize valley to one with a highly populated, multifaceted local interaction network. PRAP’s research this season focused on the hilltop site of Sac Pol Pac, the largest of Pacbitun’s hinterland centers. Our study of this site was designed to obtain a better understanding of the relationship between it and Pacbitun. We situate our understandings of both of these places into their broader geographical contexts to inform our understandings of them. Specifically, the location of Sac Pol Pac on top of a geographically unique hill that contains several caves and rock shelters and a stream flowing into its base rather than on the flat plateau below suggests that ideological factors may have played a significant role in its establishment. We offer several initial observations about this site, discuss the sociopolitical relations between it and Pacbitun, summarize the research done at the site to date, and offer avenues for future research.

Introduction
This report discusses the Pacbitun Regional Archaeological Project’s (PRAP) 2011 archaeological investigations at the site of Sak Pol Pak, offers an initial interpretation of it, and suggests several avenues for future research there. The site is located on a hilltop at the foot of the Maya Mountains approximately three kms to the southwest of Pacbitun in the Cayo District, Belize (Figure 1). Our research there is part of a larger settlement survey in Pacbitun’s hinterlands. Two main goals guide this larger survey. The first is to begin to understand the various local and regional communities that comprised and interacted with Pacbitun. The second is to begin to calculate settlement density throughout the region. Finally, we wanted to address questions related to the settling of Sak Pol Pak. In particular, when was it settled, and why?

We chose to investigate Sak Pol Pak for several reasons. The site is dominated by a pyramid that rivals in size to those found at Pacbitun, though its epicenter is much smaller (Figure 2). Secondly, it is secluded from everything around it by its positioning atop a steep-sided, isolated hill. This architectural complex and isolation suggest that this was a significant settlement within Pacbitun’s political sphere of influence. Nonetheless, what made it stand out also made it problematic because models for habitation that consider proximity to vital resources, particularly water (e.g. Vogt 1969) and farmable land (e.g. Fedick 1994, 1995; Fedick and Ford 1990), are unable to account for why the Maya would have chosen to settle there. We developed a landscape archaeology model that treats the world as an active agent in decision-making processes to address these issues with Sak Pol Pak. Our model draws heavily on cave archaeological research done throughout Mesoamerica (Brady 1997; Brady and Ashmore 1999; Heyden 1973, 1975), hieroglyphic and iconographic studies (Stuart 1987, 2005; Stuart and Houston 1994; Stuart and Vogt 2005), and ethnographic data of contemporary Maya groups (Adams and Brady 2005; Hernando-Gonzalo 1999; Vogt 1969; Wilson 1993, 1995), all of which demonstrate the significance of landscape features to the Maya, especially mountains, caves, and water. This approach allows us to address the need for Maya archaeologists to consider the role of the landscape in conditioning ancient settlement decisions as suggested by Ashmore (2003:12).

A Landscape Approach to Maya Settlement Distribution
A discussion of previous archaeological studies in the Belize Valley and the Pacbitun region is necessary to understand the uniqueness of the site, to contextualize our research design,
Figure 1. Map of the Belize Valley.

Figure 2.: Map of Sak Pol Pak with PRAP unit locations indicated (adapted from Conlon 1999).
Figure 3. Map of Pacbitun’s epicenter (adapted from Healy et al. 2007).

and highlight its utility for projects elsewhere in the Maya lowlands. Archaeological investigations in the Valley began in earnest with Willey’s (1965) settlement survey in the region focusing on Barton Ramie. Belize was seen as little more than a gateway to the central Peten, Guatemala with little of archaeological interest prior to their work (Chase and Garber 2004). One of the most significant results of their project was the recognition that the Valley was much more densely populated than previous models had suspected. Nearly 50 years of subsequent research since has demonstrated that most of the major centers were settled during the Middle Preclassic period and were abandoned during the Postclassic period. These investigations have also demonstrated that the condition of the local terrain and soil fertility largely dictated Prehispanic settlement. Flat, fertile lands along the Belize River and its tributaries were the most preferred. The resulting pattern best resembles a central-place model of habitation. The majority of sites are spaced equidistant from each other surrounded by smaller settlement clusters. This pattern suggests that economic logic dictated settlement. In other words, people seem to have settled areas that provided easy and direct access to good, farmable lands while being spaced far enough apart that regular conflict could be avoided (Fedick 1994, 1995; Fedick and Ford 1990; Ford 1990, 1996).

Pacbitun has often been considered unique among these other sites because of its location on the southern rim of the Valley well above the alluvial plain of the Belize River, and directly adjacent to the Mountain Pine Ridge. No other known large site is situated at such a unique geographic setting. This location provided easy access to differing ecozones and resources such as slate unavailable in the Valley below (Healy et al. 1995). The site itself is oriented east to west along three major plazas, A, B, C, with another two, D and E, located to the north of the main site axis (Figure 3). While the site, and its agricultural sustaining area, likely covered a
territory of at least nine km$^2$, the epicenter covers only about 0.5 km$^2$. This “downtown” zone is marked by over 40 masonry constructions, some as much as 12 m tall, including temple-pyramids, palace-like range structures, a ball court, five plazas, three causeways, and a number of smaller courtyard groups. The remains of 20 stelae and altars have also been recovered in the epicenter. Ceramic data suggest that the site thrived for close to 2000 years being first settled in the Middle Preclassic period (ca. 800 BC) and abandoned by the beginning of the tenth century (ca. AD 900).

Previous archaeological investigations in Pacbitun’s hinterlands used a settlement survey method. Such an approach attempts to understand the layout of buildings in relation to each other (Willey 1953:1). Healy’s (1990) work in the site’s periphery consisted of the mapping and systematic excavation along four-one km long transects fanning out from the site’s epicenter. His project and more recently, the work by PRAP over the past few seasons have recorded numerous settlement clusters and walled, hilltop temples dotting the region, several of which are connected by a series of ancient causeways (Spenard 2011; Weber 2011). Nonetheless, Healy’s (1990) transects have been the only large-scale systematic archaeological investigations performed in the periphery to date. PRAP’s research at Sak Pol Pak and reconnaissance throughout Pacbitun’s periphery demonstrates that the region was densely settled as far away as six kms west from its epicenter, nearing the unstudied site of Guacamayo. As we expand our scope elsewhere, we expect that settlement will remain dense throughout the region.

Sak Pol Pak was named by the residents of the nearby town of San Antonio after a young, white-haired individual who owned the land upon which the site sits and the large, white cliff face that can be seen approximately half-way up the mountain (Figure 4). “Sak Pol Pak” translates to “White Head’s Cliff.” A large cave opening is located at the northwestern base of the hill into which flows a perennial stream. Several rock shelters and other shallow caves are reported to exist in the cliff face, though we have yet to relocate them.

The only archaeological investigation performed at this site prior to our work was a two-day mapping and looter trench cleaning expedition in the mid-1990s by Jim Conlon then of the Belize Valley Preclassic Maya Project (Conlon 1999). Conlon (1999) recorded the site as “Pol Sak Pak,” but we argue in favor of changing the name to “Sak Pol Pak” as the latter phrase is properly arranged in Yukatek Mayan. Conlon (1999) documented three interconnected courtyards, with 14 structures, two of which he determined to be nonresidential. He designated the largest courtyard Plaza A, and it contains the two nonresidential buildings, an 11 m tall pyramid located to the southern side of the plaza, and a round temple structure to the north of it (Figure 2).

In order to contextualize our research at Sak Pol Pak, we first need to discuss the theoretical framework that shaped it. We will only touch briefly on our first goal of the season, which was to understand the various local and regional communities that comprised and interacted with Pacbitun. This is an ongoing, multi-year component of the project that will investigate the other hilltop plazuela groups that have been identified in the region. We have noted that clusters of house mounds frequently surround these groups, a pattern that Smith (2010) has recently defined as districts and neighborhoods in the Maya area. When studying these groups we will be looking for patterns between them that are indicative of shared practices that indicate community
The three main lines of evidence that we will use to address this question are architectural plans, like those developed at Tikal by Becker (1971, 1982, 1983, 2003a, 2003b), patterns in ceramic decoration and production like those identified in the K’axob region by Bartlett and McAnany (2000), and the presence of the causeway system that connects various areas of the periphery and Pacbitun’s site center (Weber 2011; Weber et al. 2011). Becker (1971, 1982) identifies several types of plaza plans around Tikal that he argues were indicative of different local communities. These plans varied by the arrangement and content of structures. Bartlett and McAnany (2000) recognized that the communities around K’axob distinguished themselves from each other through characteristics such as forms, decoration, shape, size, and the placement of features such as handles, spouts, etc. As we currently only have a sample size of one from the hinterlands, we are unable to say anything more at this time about the local communities surrounding Pacbitun except to note that we have observed them up to six kms distant from the site core.

We modeled our research using an archaeological landscape framework to address our goal of when and why the Sak Pol Pak was settled. Such an approach considers the natural and cultural setting in which a site is located. We were particularly interested in what potential role the mountain and any caves, and springs played in choosing that particular location for settlement. Accessing the site is no small feat. The first half of the hill consists of a relatively gentle slope followed by a sharp incline of approximately 20-30 degrees. The archaeological community frequently understands such locations as defensive outposts but the presence of the 11 m tall pyramid and round temple suggests an alternative ceremonial function or functions for the center. Several interrelated possibilities arose.

The first possibility is that the site was chosen for settlement because it reflected the ideational landscape of mountains, caves, and water, as mentioned above. This arrangement of features is a foundational aspect of ancient Maya geographic understandings (Brady and Ashmore 1999), but ethnographic evidence suggests a deeper symbolic relationship between them. A glance around the region that the Maya inhabited will reveal the connection between these places. All three frequently occur in conjunction throughout the Maya world. The Popol Vuh, the 16th century Quiche Maya creation story recorded in the Guatemalan highlands, names this group of features as the first to appear when the gods created the world (Tedlock 1996). The translated text reads, “for the forming of the earth they said “Earth.”…Then the mountains were separated from the water, all at once, great mountains came forth…And the earth was formed first, the mountain-plain. The channels of water were separated; their branches wound their ways among the mountains.” Though caves are not explicitly mentioned in this opening text, they are implied through the mentioning of the mountains because they are conceptually indivisible aspects of them. Miller and Taube (1997) note that the ocean is thought to be the primordial waters from which the earth rose and now floats on and the subterranean waters found in caves and cenotes, as well as surface freshwater are believed to be from this same source. Finally, caves were understood to be the habitation place of Chahk, the rain god, further demonstrating the connection between caves, mountains, and water.

The specific phrasing used in the Popol Vuh of the mountain-plain appears among other Maya groups in the ethnohistoric past and present. For example, a 1565 Guatemalan land title dispute document called the Titulo del Barrio de Santa Ana frequently mentions a series of mountain tops and rivers followed by the phrase, “these are our mountains these are our valleys” (Sapper 1906). A similar phrase, tz’uultaq’a, or mountain-valley, appears among the Qeqchi Maya of the Alta Verapaz and southern Peten Guatemala today. But the tz’uultaq’a are understood as more than just mountains. They are animate beings that act like people. They hold council meetings, frequently walk around, and are subject to the full range of human emotion including love, jealousy, and envy. For example, a story about the mountain, Xucaneb, involves his daughter’s theft by a local mountain that was in love with her, and a bribe paid to her first suitor to get her back as advised by a council of other tz’uultaq’a (Danien 2005). These beings are more than devious trickster’s,
they are also the foundation of community identity. Each Qeqchi community will recognize up to 13 of these mountains as significant landmarks, but one always stands out as belonging specifically to them (Adams and Brady 2005; Hernando-Gonzalo 1999; Wilson 1993, 1995).

Communities identifying with particular mountains and their caves have a deep history in greater Mesoamerica. For example, the Nauhatul term, *altepetl* translates to water-mountain, but also means community. Further, logographs for town names throughout Postclassic period Mexico consist of a hill, often times with water flowing from a stylized cave beneath them. The connection between communities and mountains is also seen archaeologically. For example, many scholars have noted the similarity in shape between the Pyramid of the Sun at Teotihuacan to the mountains behind it. Further, a large, artificial cave was found directly beneath the pyramid terminating approximately beneath its center (Heyden 1973, 1975). Brady (1997) has noted that caves and springs played a primary role in determining settlement configuration in the Petexbatun region. Specifically, a distinctive pattern between caves and administrative and ritual architecture was noted (Brady 1997; Brady et al 1997). In fact, all of the major public structures appear to have been associated with caves in some way including the Bat Palace, el Duende pyramid, and the Main Plaza. This pattern is repeated at several other sites in the Petexbatun region including Las Pacayas, and Aguateca, and has been recorded elsewhere in the Cancuen region in the Alta Verapaz, specifically at the site of Raxruja Viejo where settlement is dispersed between cave-filled hills (O’Mansky 2003; Woodfill et al. 2002). Raxruja’s main plaza is delineated by a series of range structures and platforms extending from the hills. Altars are set up on these platforms, suggesting that the hills were being treated the same way as pyramids in other lowland Maya sites.

**Figure 5.** East profile of Sak Pol Pak Plaza A excavation units 1, 2, and 7.
Ethnohistoric documents created during Spanish colonization provide information on the foundation of communities and their structure. García-Zambrano (1994) summarized the unpublished Town and Land Titles documents housed in the National Archives in Mexico City that were collected from several Mesoamerican groups under the rule of King Charles V. The documents described the rituals that were performed when founding a town. A high level of similarity exists among the various groups represented in these documents, suggesting that these practices were pan-Mesoamerican. Cosmovision played the dominant role in deciding on a new area of land to settle. A spot that resembled the first moments of creation was especially sought out. This ideal pattern consists of four corner mountains framing an aquatic universe with a fifth in the middle. The central mountain was the most important because it would become the axis mundi, origin place, or center of the settlement. Ideally, it had to contain caves and springs, though if it did not, artificial ones were commonly excavated. This cave became the mythological origin place for the people of the settlement, and proof of their ownership of the land. A horseshoe-shaped layout of the hills called a rinconada was most preferred because its edges marked the transition between the wild and tame spaces.

The foundation rituals began after the location was chosen using the above criteria. They typically constituted a counterclockwise-moving procession beginning and ending on the center mountain. The first action is the sighting of opposite corners of the territory that creates an “X” over the central point. Next, the borderlands were measured with a rope, and permanently established by the setting of stone markers called mojoneras. The procession returned to the central mountain after the four sides were established, and boughs were burned. Finally, arrows were shot to the four corners, creating a quadripartite space.

This landscape framework suggested to us several possibilities to address our second research goal, which was when and why was Sak Pol Pak settled? Specifically, did the caves, springs, and uniqueness of the hill play a role in determining the settlement of this site, or could this place have been chosen because it was a directional boundary shrine of Pacbitun?

Sak Pol Pak 2011 Excavation Results

Plaza A

The excavation goals of Plaza A were to establish a chronology for the site, and gain a better understanding of its constructional sequences (Figure 2). We began by identifying what we believed to be the central axis of Str. A-1 using Conlon’s (1999) tape-and-compass map. We determined the central point of Str. A-1 by measuring the width of its southern base. Next this point was compared to the structure’s platform and its orientation by line-of-sight to Str. A-4. Based on these calculations a 2 m x 2 m unit, Unit 1, was placed in front of the calculated central access point to the structure’s platform (Figure 5).

Unit 1 was excavated through two cultural levels to bedrock at 58 cm below ground level in the middle of the unit. The bedrock sloped off to the north and south of the unit and measured as deep as 130 cm. No evidence of a plaza floor remained and the degree of preservation for the ceramics recovered left many of the sherds unclassifiable. Some of the diagnostic sherds located close to bedrock were identified as Sierra Red found in the Barton Creek ceramic sequence (300 – 100 BC) (Gifford 1976:85). However, because of the lack of a plaster floor no definitive evidence exists that they were recovered from a sealed context.

Since bedrock was reached so quickly we decided to expand the unit south towards the temple in effort to recover artifacts from a sealed context. This again revealed no signs of a plaster floor or the beginning of the stair case so an additional unit, Unit 7, a 1m x 2 m was opened and excavated through four cultural levels. This new unit revealed the corner of a two-course basal stair (with one facing stone being well-preserved), and two charcoal samples that were collected at 106 cm below ground level. Five ceramic sherds were recovered from Level 4, which is believed to be the only level in a sealed context. We believe that the context is sealed because of how close it is to the temple, and the presence of a hard packed, dark brown (7.5YR 3/4) soil the artifacts were recovered.
from. Two sherds were identified as Fowler Orange-red: Spring Camp Variety found in the Hermitage ceramic sequence (AD 250 – 600) implying that construction at Sak Pol Pak began as early as the Early Classic (AD 250 – 600) (Gifford 1976:155). Some Late Preclassic (300 BC – AD 1) and Protoclassic (AD 1 – 250) sherds were identified in the lower levels but none were recovered in a sealed context. These data suggest that the site, or the location prior to construction, may have been used during this time. Artifact assemblages recovered from all of these units were fairly homogeneous consisting of small, highly eroded ceramics, slate including one broken carved pendant, low quantities of lithics, and three marine shell beads.

Units 6 and 8 were the other two units excavated in Plaza A. Unit 6 is located inside of a looter’s trench dug into Str. A-4, a round feature which may be an altar (Conlon 1999:36). The looter’s trench was cleaned revealing a small quantity of non-diagnostic sherds, and a small slate fragment (Conlon 1999). The unit ended before sterile was reached. Our excavations reached bedrock though we recovered fragments of plastic near the bottom suggesting that the looting had reached a similar depth. Unit 8 was placed in the northeast corner of Str. A-1 to retrieve more evidence of the site’s construction history and was halted after two levels ending at the top of huge dry stone core fill.

Residential Zones

Conlon (1999) identifies the residential zones as including one unrestricted plaza, Plaza B, and a restricted plaza, Plaza C, both lying to the east of Plaza A, and oriented north-south. To gain a better understanding of the everyday lives of the Maya at this site, three units, Units 3, 4, and 5 (Figure 2), were placed behind the eastern side of the Plazas B and C. This location was chosen because it offers the best opportunity to locate residential middens, the contents of which can help inform about such practices.

Unit 3 consists of four levels and yielded mostly highly eroded ceramics and high quantities of slate including one slab measuring 70 x 31 x 13 cm. One obsidian blade fragment and a half of a mano were recovered beneath the slab, after which we reached bedrock. One Mount Maloney Black: Mount Maloney Variety (Gifford: 1976:143) rim sherd and one Belize Red (Gifford 1976:255) body sherd were recovered from Level 4, representing the only diagnostic ceramics recovered from the unit.

Unit 4 consists of two levels. It produced highly eroded pottery, two mano fragments, and possibly the spiral end of one pear whelk (Busycon spiratum) shell. Cut limestone blocks were also recorded in the north wall. Their configuration suggests that they may have served as a stairway.

Unit 5 was the shallowest unit of the three residential excavation units. It reached bedrock at 10 cm below surface. Few artifacts were recorded though a nearly complete metate was recovered, suggesting that food was being produced at the site and that it was regularly occupied.

Discussion and Conclusion

Overall, our initial investigations in the residential areas and into Plaza A of Sak Pol Pak indicate that this site was an average minor center. Nonetheless, what makes it unique is the presence of the pyramid, the height of which rivals that of the one at Pacbitun, and the round structure opposite of it. Similar round structures have been dated to the Terminal Classic period in other areas of the Maya world. To gain a better understanding of the significance of this settlement, future investigations will need to focus on these structures. The community foundation rituals discussed by Garcia-Zambrano (1994) incorporate the creation of stone piles that act as temporary boundary markers that are eventually replaced by stelae. Though none were recovered during our excavations a possible altar was noted in the profile wall of the Plaza A units suggesting that a stelae may also be present. If so, was Sak Pol Pak was one of the directional boundaries of Pacbitun? Furthermore, what was the function of Str. A-1? Was it the Late Classic period boundary marker, or did it have some other function? Other questions to be addressed by future research include, who were the Maya inhabiting this site? Conlon (1999:32) estimates a population of 50 based on the number of domestic structures. Were they caretakers of a scared location and their retainers, or were they
the commoners and elite that typically composed populations of other ancient Maya sites? Time did not allow for a fuller investigation of the caves and springs at the foot of the hill this season, and will therefore be a focus of investigations in coming seasons.

Acknowledgements Research at Sak Pol Pak would not have been possible without the help, support, and dedication of many people and agencies. We would particularly like to thank the Department of Geography and Anthropology at Kennesaw State University, University of California College of Humanities, Arts, and Social Sciences, and the Alphawood foundation for their financial support. We also extend our thanks to all of our workers and students who made the daily trek including Ademar, Abdel, Delmar, Antonio, Javier, Zayal, Jesse Burnette, Lindy Crapps, Mike Lawrence, George Micheletti, Craig Quertermous, Kathryn Ragan, and Stephanie Henry, and particularly Spencer Reece for keeping morale up. Ideas about community and landscape were developed during several conversations with Karl Taube and Wendy Ashmore.

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