A JAUNT THROUGH THE CONSTRUCTED WILDERNESS: THE NOHOCH TUNICH RITUAL BEDROCK OUTCROP AND LATE CLASSIC PERIOD URBANISM AT PACBITUN, CAYO DISTRICT, BELIZE

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Ethnographic and ethnohistoric accounts from throughout Mesoamerica demonstrate indigenous perceptions of urbanism emphasized geographic landmarks – caves, rockshelters, mountains – as features of prime importance for community organization. Through regular ritual performances, such landmarks became socially and symbolically significant locations of the urban landscape, acting as boundary markers, community origin places, and the homes of various gods and ancestors. Yet, archaeological discussions of Maya urbanism regularly focus on the profane – built environments of site cores, agricultural and economic relationships between settlements, and land management. In this paper, I suggest discussions of Maya urbanism must include ritually-charged landmarks located within and around settlements, and pre-Hispanic strategies for their incorporation into urban designs. As an example, I discuss the Nohoch Tunich Bedrock Outcrop Complex (NTC), a hilltop bedrock outcrop located near Pacbitun. The NTC is replete with a variety of karst features – rockshelters, small caves, boulders, etc. – all heavily, yet subtly modified during the Late Classic period with crude architectural constructions, likely designed to enhance the “naturalness” of the outcrop. Drawing on analogies from the Late Postclassic period Aztec urban designs in central Mexico, I propose the NTC, a purposefully constructed “wilderness” place, was designed as a pleasure garden for the Pacbitun Maya.

Introduction

In this paper, I review common archaeological approaches to cities for demonstrating how symbolically charged ritual landmarks have commonly been overlooked as urban components. Yet, pre-Hispanic Mesoamerican conceptions of urbanism indicates the built environment was inextricably interwoven with the symbolically charged landscape surrounding it. Thus, I propose for achieving a clearer understanding of Mesoamerican urbanism, archaeologists must consider the landscape and ritual landmarks surrounding settlements. To that end, I discuss the relationship between the urban core of Late Classic period Pacbitun, Cayo District, Belize and the Nohoch Tunich Bedrock Complex (NTC), a geologically complex, hilltop outcrop 1.5km from downtown Pacbitun (Figures 1 and 2). Specifically, I discuss how this seemingly natural place was extensively, yet subtly modified following a wilderness aesthetic of beautiful unruliness. Comparisons with similar ritual landmarks documented from the Late Postclassic period in central Mexico, particularly those commissioned by Aztec lords, suggest these modifications were intended to transform the outcrop into a pleasure garden, an urban feature heretofore unrecognized in the Maya region.

Figure 1. Map of Belize Valley showing locations of Pacbitun and the NTC (drafted by J. Spenard).

Archaeological Approaches to Cities and Urbanism

Hirth (2008) notes archaeologists working in Mesoamerica regularly study cities and urbanism from two perspectives. One is functional, whereby archaeologists hierarchically rank settlements within a region, determining which are dominant, which are subordinate, which are the core settlements, and which belong to the periphery (Hirth 2008:276). A primary deficiency of this approach is its inability to provide a clear-cut definition of any settlement type, whether it be a hamlet, village, town, or city; instead, each site is defined on a case-by-case basis in relation to their

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interactions with others. Hirth (2008) also defines the typological perspective, which is among the longest lasting approaches to urbanism in archaeology, and the most commonly employed by archaeologists worldwide. Under this approach, the archaeologist defines a set of criteria for defining a city against which they compare the archaeological site under study. V. Gordon Childe (1950) was the first to approach archaeological cities this way in his seminal paper, *The Urban Revolution*, in which he presented a suite of traits shared among the world’s first cities, several of which have since been rejected. More recently, Houk (2015) uses a variety of this typological approach, identifying the various components of large-scale public architecture and urban features, or what is commonly called the “built environment” of site cores (Hirth 2008:277). Among the architectural components and urban features common to Maya cities Houk (2015) discusses are plazas and courtyards, causeway networks, temple pyramids, range buildings,
palaces, acropoli, ball courts, stone monuments, quarries, reservoirs, and water management features.

While these features discussed by Houk (2015) are undoubtedly urban components, attempting to understand Maya cities only in terms of components of the built environment familiar to Western thought decontextualizes them from the surrounding landscape, and the ritual landmarks found there. Doing so thus overlooks any possibility that geographic features may have been considered vital components of urban design in Maya thought.

I define ritual landmarks as mountains, caves, rockshelters, and other cave-like karst features. These are places on the landscape the Maya believed were homes of, or portals to, animate Earth forces and other supernatural beings to who they performed rituals; features referred to as ch’een in Classic period hieroglyphic texts (Tokovinine 2013; Vogt and Stuart 2005:157-163). Not only are pre-Hispanic Maya cities commonly divorced from such places in the archaeological literature, these ritual landmarks are often perceived and discussed as far from city centers when acknowledged, and thus unimportant in any capacity for understanding Maya urbanism. For example, generalizing about southern Lowland Preclassic period cityscapes, Ringle (1999:202) notes, “Central to the process of experiencing or propitiating the forces dwelling in these remote natural spots [mountaintops, caves, and cenotes] was the journey. Such pilgrimages mark a transition from the protective sphere of culture to the very edges of the world” (emphasis added).

Yet, ritual landmarks were active aspects of pre-Hispanic urban experience throughout the Maya area and broader Mesoamerica. For example, the Olmec site of San Lorenzo, the Formative period Mexican sites of Chalcatzingo and Monte Alban, and Classic period Maya cities such as Pacbitun, Raxruja Viejo, Tikal, Xunantunich, and Yaxchilan are directly affiliated with mountains or located on artificially leveled hilltops (Ashmore 1998; Blanton and Kowalewski 1981; Coe and Diehl 1980; Grove 1987; Healy 1990; LeCount and Yaeger 2010; Puleston 1983; Spenard 2006; Tate 1992; Woodfill et al. 2002). Elite components of sites in the southern Peten and highland regions of Guatemala, and Classic period Central Mexico, in particular, Teotihuacan, are closely affiliated with caves, and other cave-like features (Brady 1997; Brady and Ashmore 1999; Brady et al. 1997; Heyden 1975). Moreover, early colonial records documenting indigenous rituals of community foundation from throughout Mesoamerica discuss the primary importance of mountains and caves for founding new settlements. These records tell that settlers searched for a vacant plot of land with five cave-filled mountains, one at the center, and the other four at the cardinal directions. The central cave-mountain complex became the symbolic heart of the community and the settlement was constructed on and around it (Garcia-Zambrano 1994, 2007, 2012). The need for such a landscape arrangement when establishing settlements was so prevalent in pre-Hispanic Mesoamerica that artificial caves were often excavated into the hills surrounding the site of the new town, when the local geology was prohibitive to natural cave formation processes (Brady and Veni 1992; Manzanilla 2000; Manzanilla et al. 1994; Woodfill 2014). As with previously existing caverns, artificial caves are closely affiliated with public architecture, and the layouts of the plazas and other buildings above frequently align with the excavated passages below indicating the influence of these landmarks on settlement patterns (Brady 1997; Heyden 1975; Woodfill et al. 2002).

Before continuing, it is worth mentioning the current study also demonstrates the need for caution when distinguishing between the so-called built and “natural” environments in Mesoamerican archaeology, and thus the need to consider the entire surrounding landscape in discussions of urbanism (e.g. Ashmore 2015). As will become clear below, and counter to the common assumption that caves and other cave-like features are natural places the Maya only brought artifacts to or performed rituals in, most caverns throughout the Maya area have been modified with architectural constructions. Thus, what appears at first glance to be unaltered spaces beyond the “built environment” may, in fact, be the result of human agency. For example, crude terraced areas in open chambers
used as spaces of large public performances are commonly encountered in large caves (Brady 1989; Ferguson 2000; Halperin and Spenard 2015; Moyes 2012:96; Prufer 2002). Just outside the entrance of Actun Lak cave, downhill from the NTC, the Pacbitun Maya constructed a 3m tall elevated platform with a staircase leading 90m downhill to the entrance of another large cavern below, all dry laid and using uncut stone (Spenard 2014; Weber et al. 2012). Several of the caves in the Sibun region, and in the southern Maya Mountains, Belize were modified with constructions for facilitating traffic flow through them, and to indicate a prescribed set of rules for moving through them (Kenward 2005:254; Peterson 2006:263; Prufer 2002:604-613). Throughout Quintana Roo, caves contain multiple terraces, walls, and a pyramidal structure, and a solar observatory platform (Rissolo 2005; Slater 2014).

**Mesoamerican Perspectives of Urbanism**

There is merit to contextualizing Maya cities within their surrounding landscapes for understanding pre-Hispanic urbanism, as doing so reflects a Mesoamerican perspective of urbanism. Specifically, languages throughout pre-Hispanic Mesoamerica often lacked distinct terms for settlements based on size, such as hamlets, villages, towns, and cities as found in Western discourse, but instead they classified settlements of all sizes as components of altepetl in the case of Central Mexico, or cognates of the term kaah in Mayan languages (Hanks 1990:306; Hirth 2008; Lockhart 1992; Marcus 2000[1983]; Stone 1995:16). These terms and their cognates, referred to a ruler’s household, all the people ruled regardless of where they lived, and all the land of the ruler including that used for agricultural and ritual purposes. In other words, for the people of pre-Hispanic Mesoamerica, the built environment, community and the land together defined urbanness; they were inextricably interwoven in thought and practice.

Hieroglyphic names and iconographic toponyms further demonstrate the elemental role geographic landmarks played in pre-Hispanic Mesoamerican conceptions of urbanism. For example, the term altepetl translates literally to water-mountain, depicted iconographically as a hill with a cave at its feet, oftentimes spewing water. Topping the hill is a variable symbol signifying the community’s name (Lockhart 1992:14). For the Maya, major ritual landmarks associated with settlements often provided the impetus for the site’s toponym (Stuart and Houston 1994). Among the best-known examples of this practice is the place name of the Late Classic period site of Aguateca, situated on either side of a large chasm (Stuart and Houston 1994). The hieroglyphic toponym of this site is an earth sign with a large crack running down it. Investigations in the chasm demonstrated it was a major focus of ritual for the Aguateca community (Ishihara-Brito 2008). The Classic period toponym for Palenque, Lakamha, translates to “large waters,” or “wide waters,” a likely reference to the Otolum River flowing through the center of the site (Stuart 2005:90). Not only did this river give the site its name, texts describe the spring (ch’een) from which it flowed as the place the world and first gods were created (Stuart 2005:90). Nevertheless, of all known place names mentioned in Classic period Maya texts, most refer to ch’een of some sort, indicating ritual landmarks were regarded as the primary source of community identity and urbanness (Vogt and Stuart 2005:162).

The central importance of landmarks for community identity is still prevalent among the Maya today. For example, for the Tzotzil of Zinacantan, Chiapas, a small hill near the center of the community is considered the “naval of the world,” and the community itself is surrounded by several mountains, believed to be the physical embodiments of gods (Vogt 1969:157, 375). Processions to these mountains are made annually, functioning to encircle the community and reinforce its boundaries (Vogt 1969:391). Among the Q’eqchi’ of Guatemala, each community has one or several primary mountains around which its identity is formed, although there are 13 primary mountains shared by all communities (Adams and Brady 2005:304-305; Wilson 1995). Similar to the Tzotzil of Zinacantan, Q’eqchi’ Maya of Guatemala believe that most of the hills and mountains surrounding them are sentient, and they make ritual pilgrimage circuits to them for
integrating local communities (Adams and Brady 2005:311).

**Description of the Nohoch Tunich Bedrock Complex**

Located 1.5km from Pacbitun’s site core, the NTC is a geologically structurally complex limestone bedrock outcrop composed of boulders, rockshelters, bedrock faces, and an array of other diminutive karst features, all covering an area of approximately 50,000m², most of which the Pacbitun Maya altered with subtle, yet extensive architectural modifications (Figure 2). I propose these modifications were designed specifically to enhance the essence of the place by employing an intentionally crude aesthetic mimicking Maya perceptions of “nature,” as the forest – unruly, unkempt, but beautiful and paradisiacal – diametrically opposed to the measured and straight space of the town or lived space (Hanks 1990:306-308; Stone 1995; Taube 2004). By architecture, I mean here coarse masonry constructions added to various components of the NTC. I employ this broad definition for ease of discussion while recognizing the modifications served distinct purposes. Moreover, while the spaces they created undoubtedly had their own unique functions, I treat them here as a cohesive unit for contextualizing them in a larger framework. In other words, I understand the NTC as a unique, socially significant place on the Late Classic Pacbitun landscape, rather than a series of small, isolated ritual places.

Many classes of architectural modifications are present in the NTC, including simple alignments, terraces, surface and buried deposits, and a small seasonal dam. Simple alignments are single-course frames made from uncut stone, arranged below unusual parts of bedrock faces (Figure 3). Terraces are multicourse, above ground constructions with a variety of functions. Some were designed to passively prohibit and restrict access to cave components of the outcrop, while others functioned as retaining walls, and delimiters of
interior and exterior spaces beneath a collapsed natural karst bridge (Figure 4). Surface deposits are clusters of unmodified rock manuports placed on floors and ledges (Figure 5). Such modifications were ubiquitous in the NTC, and were made with imported slate, river cobbles, small limestone boulders, and other rocks.

As mentioned earlier, even seemingly unmodified spaces within the outcrop could be the product of human agency. This leads to the next category of architectural modification, buried structured deposits, left unmarked on the surface in any discernible way, even though creating them required excavating deep pits then refilling them by carefully layering different materials. For example, in Actun Naj Che, one of the largest rockshelters in the NTC, the Maya buried a north-south running cobble wall, approximately 0.3m below the surface deep, on top of which they placed a granite mano. Twenty centimeters beneath the wall was another, arranged east-west (Figure 6). The largest buried deposit yet encountered in the NTC was placed in the Nohoch Tunich rockshelter, the namesake feature of the NTC. This deposit was buried in a pit measuring over 5m long and 2m wide, excavated to bedrock 1.5m below the surface. After excavating the pit, the Maya placed thousands of jute snail shells and chert flakes onto the exposed bedrock, which they subsequently burned. Next, the burned shell-and-flake cache was capped with flat limestone boulders, and then the remainder of the pit was refilled with the originally excavated matrix, mixed with ceramic sherds. The result in both the Naj Che and Nohoch Tunich rockshelter was completely artificial, yet seemingly “natural” floors (Figure 7).

The small dam, which I was unable to photograph due to equipment failure, is at the base of a small, seasonally active drainage extending down from the NTC. It is approximately 2.5m² and was constructed from uncut boulders, similar to the other architectural constructions documented in the NTC. The feature was choked with vegetal debris during my investigations, but it would have created a small, shallow pool, and a tiny waterfall when maintained during the rainy season.
Figure 6. Series of buried overlapping walls in Actun Naj Che rockshelter in NTC. Note mano (circled) had been placed on top of north-south running wall (photos by J. Spenard).

Figure 7. Actun Naj Che showing PRAP members in constructed, yet seemingly “natural” area of rockshelter (photo by C.L. Kieffer).

Discussion

As described above, much of the appearance of the NTC was largely the result of human endeavors, yet the construction materials used and the execution of the modifications themselves were crude. I propose here that this crudeness was purposeful; the design was intended to conform to a wilderness aesthetic that conceived of nature as unruly and dangerous, but that also considered it to be the source of beauty and eternal paradise, symbolized by the concept of Flower Mountain (Stone 1995; Taube 2004). I propose the Pacbitun Maya intended to accentuate these characteristics of the NTC with the modifications they made to it. But, more than simply modifying it according to this wilderness aesthetic, I propose doing so was an effort to transform the NTC into a cultivated pleasure park or garden, similar to those later commissioned by the Aztec throughout the Basin of Mexico, albeit on a much less grandiose scale.

Much has been written during the early period of Spanish colonization of Central Mexico about the Aztec royal court, and recent research has demonstrated a significant overlap with the functions and characteristics of Classic period Maya royal courts recorded in hieroglyphic texts and depicted in iconography (Evans 2001). Thus, the ethnohistoric material from Aztec Mexico can provide a basis for understanding and interpreting the archaeological remains of the Maya.

The pursuit of beauty and pleasure was a major concern among the Aztec, and recent research has demonstrated this was also a central concern for the pre-Hispanic Maya (Evans 2001; Houston 2014; Taube and Taube 2009). Gardening and landscape design were highly sought occupations for Aztec nobles and were favored pastimes for kings. As such, recreational and contemplative pleasure palaces and parks, generally referred to in Nahuatl as xochitla, or “flower place,” were constructed throughout the Basin of Mexico (Evans 2004:46). That the Maya held similar appreciations of nature is evidenced in courtly scenes on polychrome vessels, such as on a vessel from Dos Pilas, Guatemala, on which
Figure 8. Polychrome vase from Dos Pilas showing individuals on left smelling and holding flower bouquets (www.mayavase.com K1599 © Justin Kerr).

Figure 9. Sample of the various ritual karst features found in the NTC (photos by J. Spenard).
several lords are depicted sniffing wrapped flower bouquets, likely harvested from nearby gardens (Figure 8). Moreover, archaeobotanical research demonstrates Maya cities were replete with cultivated vegetation, with orchards of fruit-bearing trees, shrubs, herbs, root crops, and other plants growing throughout the urban landscape (Fedick 2010).

Unfortunately, most Aztec pleasure parks were destroyed by Spanish colonial endeavors and little material evidence of their past splendor remains. Nevertheless, both native chroniclers and the Spanish wrote about them extensively, and their accounts tell of beautiful, awe-inspiring tracks of land both within the cities and in their hinterlands, designed specifically to appreciate and accentuate the natural world. A common pattern emerging from these Colonial period accounts is the lords chose settings for their pleasure parks specifically for their natural beauty and the ritual landmarks they contained, with cave-life features particularly favored. These places were then enhanced with masonry constructions, water features, rock art, and exotic plants and animals, and modified to appreciate better their natural essence (Evans 2000:206; Nuttall 1925:456). For example, the mountaintop royal retreat, Tetzcotzingo, was modified with an elaborate water system of channels, pools encircling the entire mountain. It also held a royal palace, a botanical garden, a rockshelter, and several carved boulder monuments designed by the king of Texcoco, Nezahualcoyotl, to be a microcosm of the universe (Townsend 1979:757). Moreover, it was the primary rain and water shrine for the Texcoco polity (Schaafsma and Taube 2006:242). Located on the mainland lakeshore, southwest of Tenochtitlan, Chapultepec (Grasshopper Hill) is another Aztec pleasure garden. This park has a spring emerging from a cave, which was the primary source of freshwater for the inhabitants of Tenochtitlan in the early 15th century (Duran 1994:66-67). In addition to being the king of Texcoco, Nezahualcoyotl was also a famed landscape architect, and he improved that construction as part of a larger engineering effort, also designing a royal retreat on Chapultepec in the mid-15th century (Umberger 1996:253). Like Tetzcotzingo, another royal retreat included a botanic garden populated with ornamental and medicinal plants imported from throughout the empire, but it was also a water shrine, commemorative park for Montezuma I, and significant ritual location for healers and midwives (Duran 1994; Nicholson 1961:380; Sahagún 1981:14; Umberger 1996:253).

Conclusion
Returning to the NTC, we see a picturesque and striking location, with an abundance of ritually charged, modified landmarks and a constructed water feature (Figure 9). While it remains unclear how these spaces were used individually, the unruly condition of the materials used to create them suggests they were designed to enhance the natural beauty of the outcrop. Moreover, their concentration on a hilltop, coupled with the proximity to Pacbitun 1.5km away, suggests this extensively modified outcropping was a pleasure garden for the inhabitants of that site, similar in concept, but much less elaborate than those built by the later Aztecs of central Mexico.

To conclude, I discussed at the start of this paper that archaeologists studying Maya cities have often overlooked ritual landmarks as urban components, and proposed that to get a more complete understanding of Maya urbanism, one that is more in line with an emic perspective, we must begin to consider such ritually and symbolically-charged features in our studies. I have attempted to do this with my ritual landscape work at Pacbitun, and in doing so have identified a heretofore previously unrecognized urban feature in the Maya area – a pleasure garden – located within the constructed wilderness of that city.

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