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## SMALL CAVES AND SACRED GEOGRAPHY: A CASE STUDY FROM THE PREHISPANIC MAYA SITE OF MAAX NA, BELIZE

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*Contemporary research on prehispanic Maya landscapes has focused on caves as core features of the cultural geography. Investigations within a number of large caves have suggested that they served as the loci for important rituals, legitimized inhabitants' claims to their territory, and helped establish the authority of a site's ruling elite. The ubiquity and centrality of caves in the Maya worldview raises questions about what happened in regions where large caves did not naturally form. Recent investigations at the site of Maax Na in northern Belize suggest that small caves, despite their diminutive size, still functioned to establish legitimacy and uphold power. The results serve to demonstrate the pervasive power of key ideological concepts in shaping the cultural landscape and indicate the need to take these into account in documenting landmarks at Maya sites, as even the less imposing ones may have been important to their inhabitants.*

*Investigaciones contemporáneas del paisaje prehispánico maya se han enfocado sobre las cuevas como aspectos centrales de la geografía cultural. Exploraciones en varias cuevas grandes sugirieron que éstas sirvieron como lugares para rituales importantes, legitimaron el derecho de sus habitantes a su territorio, y ayudaron a establecer la autoridad de los soberanos del sitio. La ubicuidad y la centralidad de las cuevas en la cosmovisión maya plantea el problema de qué pasó en regiones donde no se forman cuevas grandes naturalmente. Investigaciones recientes en el sitio de Maax Na en el norte de Belice sugieren que las cuevas pequeñas, a pesar de su tamaño diminuto, también funcionaron para establecer la legitimidad y mantener el poder. Los resultados demuestran el poder penetrante de conceptos ideológicos críticos en la construcción del paisaje cultural e indican la necesidad de tomar a éstos en cuenta cuando documentamos puntos prominentes de ese paisaje en los sitios mayas, porque aún los menos imponentes podrían ser importantes para sus habitantes.*

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The entire Maya lowlands of Guatemala, Mexico, and Belize rests on a limestone base, a type of bedrock known for its ability to form and support caves. These features, long known to investigators, have recently assumed a new prominence as key elements of the prehispanic Maya cultural landscape. Research focusing on the place of caves in the Maya worldview has emphasized the central role they played, not only

as entrances to the sacred, animate *Earth*, the source of life and fertility (Brady and Prufer 2005b), and as the settings for a variety of rituals (Brady 1989, 1996; McNatt 1996; Prufer and Brady 2005), but also as places that validated a group's claim to territory and legitimized rulers' authority over that area (García-Zambrano 1994). A number of projects now routinely feature cave explorations as part of their site and regional investigations.

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Most of this research, however, has taken place in the large and extensive caves that exist in the western and southern regions of Belize and Guatemala. Given the apparent importance of caves to the Maya, serious questions arise about how they coped in areas that either were devoid of caves, such as the southern Maya highlands, or had only small caves, such as northern Belize, the target of our investigations. A lack of cave rituals in these areas would belie the centrality of caves in Maya beliefs. The contention here is that there was no such absence. Caves were so vital to the Maya that they created or modified spaces to incorporate these features and all they symbolized into both their conceptualized and constructed (Knapp and Ashmore 1999) landscapes, even in “cave-poor” areas.

Already, investigations in the non-karstic parts of the highlands have shown that the Maya compensated for the lack of caves by creating artificial ones (Brady 2004; Brady and Veni 1992; Hermes Cifuentes 1993; Ishihara-Brito and Guerra 2012). They seem to have met the same ends by using small caves in other areas, such as northern Belize and the adjacent northeastern Petén, where the local limestone is too soft to support the development of large voids. In these areas continual ceiling collapse creates only a few caves that are small and often transient in their existence. Research at the northern Belizean site of Maax Na suggests that these small spaces were adapted for use by the Maya and served the same purposes as their larger counterparts to the south. These conclusions have specific implications for the conduct of research in parts of the Maya area where, lacking large and spectacular caves, archaeologists have tended to ignore subterranean features and the role they played in local settlement patterns. In doing so, they miss an important dimension of prehispanic Maya life. More generally speaking, the results underscore the enduring power of core beliefs in sculpting cultural geography. They suggest that archaeologists in all areas need to pay close attention to identifying the key cultural concepts that shaped the landscape within which daily living took place.

### **The Role of Caves in the Maya Landscape**

In recent years there has been a surge of interest in the importance of worldview for understanding cultural landscapes. Whereas before landscape was

viewed as a mere backdrop to human events, today it is seen to play a more active role in the way that people construct their realities (Arnold 1999; Ashmore and Knapp 1999; Knapp and Ashmore 1999). No longer just a provider of the resources essential for daily life, landscape helps frame and is itself framed by a people’s worldview. Archaeologically, this means that researchers no longer look at just settlement patterns, or the way people distributed themselves on the landscape (Willey 1953:1), but at how different features of the landscape were integrated into the social and religious life of prehistoric peoples, as well as into their economies (Knapp and Ashmore 1999).

Nowhere have landscape studies had a greater impact than in the Maya area, where the idea of a differentiated countryside was slow to take root. The obvious differences between the highland and lowland areas of prehispanic Maya habitation were taken for granted. However, for years the dominant priest–peasant paradigm (Becker 1979) and a view of the rainforest as redundant in resources prevented archaeologists from discriminating the more subtle variability that existed within the lowland area of major Maya occupation (Potter and King 1995). With the discovery that Maya settlements were denser than thought and the rainforest more diverse, Maya landscape studies were able to come into their own. Within the last 20 years investigations ranging from the patterned layout of ceremonial site cores to the ritual use of natural features have indicated that ideology was as strong an influence as topography on how the Maya used and modified their environment (Ashmore 1991; Ashmore and Sabloff 2002; Houk 1996; Lucero and Fash 2006; Prufer 2002). Of particular importance has been the discovery of the key role caves played in the construction and manipulation of cultural landscape (Smith and Schreiber 2006:19). The existence of caves with vestiges of ritual activity has long been known in the Maya area (see Brady 1989, 1996; Brady and Prufer 2005a; McNatt 1996 for histories of cave research), but these were viewed as isolated features, separate and distinct from sites. Recent research, building on archaeological, ethnohistoric, and ethnographic studies of cave use, suggests that, on the contrary, caves were an integral part of Maya sites and a crucial component of their cultural landscape.

Prehispanically, caves were central to the

Amerindian concern with a sacred, animate *Earth* (Brady 1989, 1996; Brady and Prufer 2005; Prufer 2002; Prufer and Brady 2005). They were thought to be both sacred and dangerous places (Sharer and Traxler 2006:731), a part of the *Earth* itself (Brady and Prufer 2005b). They linked it and all its generative forces to the human world, and served as significant loci for rituals directed to the *Earth* and these forces (Brady 1989, 1996; Brady and Prufer 2005b; Prufer 2002; Prufer and Brady 2005). Among contemporary Maya groups, they are seen as the dwelling places of the most important indigenous deities that control rain and crop fertility. Caves, thus, host numerous rituals associated with the agricultural cycle. They are additionally the setting for rituals to cure illness, in part because they are also the places where the witchcraft that causes illness often takes place (Hanks 1984:134; Uke 1970). Finally, caves are foci for individual devotion that are approached in myriad rites of passage and life crises (Adams and Brady 2005:307; Heyden 1976, 2005).

On a more profound level, caves are intimately woven into Maya cosmology. They are often tied to the creation of the universe as the place where the sun and moon were created or emerged (Brady 2005:f-9; Duby and Blom 1969:292; Garza 2009:49; Millon 1981:232–233; Villa Rojas 1945:156). Because all of the great acts of creation are thought to take place at the cosmic center, the presence of a cave becomes the material manifestation of the belief that one's settlement occupies that place. Furthermore, settling in relation to such a sacred landmark fosters the belief that the location was supernaturally ordained.

These beliefs, documented in the ethnographic record, are still common and permeate other aspects of Maya life. LaFarge (1947:64, 162) found that residents of Santa Eulalia considered themselves to reside at the center of the cosmos because of the cave of Yalan Na'. This location, however, carried with it additional sociopolitical attributes that neatly illustrate the role of sacred landmarks in the development of hierarchical relationships. Indeed, LaFarge (1947:162) found evidence that the community's claim of centrality did in fact appear to be accepted within the region, thereby giving Santa Eulalia an elevated status. Within the town, control over access to the community's sacred landmarks, notably Yalan Na', was restricted to the

*alcaldes rezadores*, who had great personal power. As a reflection of that power and the importance of their position, the community supported them during their service by providing for their material needs (Brady and Garza 2009). Many of these aspects of the *alcalde rezador* position appear to have considerable time depth as they were already recorded at the beginning of the eighteenth century (Schwartzkopf 2009).

The ethnographic data neatly complement ethnohistoric research that documents the fact that caves were important in validating not only settlers' claims to territory but also in legitimizing rulers' authority over that area (García-Zambrano 1994; Vogt and Stuart 2005). In addition to stars and planets, humans were also created within the earth and groups often identify a specific cave as their place of emergence (Guiteras Holmes 1952:103). The link with a cave of emergence gives legitimacy to the group's claim to the land on which they live, because the implication is that the group has resided there since the time of creation (Garza 2009:49). Such a link thereby reinforces the elite's control over that territory. Thus, the cave is a multivocalic symbol that speaks to the community at large but also carries different messages that address the specific concerns of various segments of the society.

Archaeologically, the materialization of this process of validation has been observed in the appropriation of caves by specific sites and their incorporation into the layout of the settlement. The clearest examples are cases of important surface architecture being built directly over caves (Anderson 1962; Brady 1997; Brown 2005; Carter 1935:58; Digby 1958; García Cruz 1991; Halperin 2005; Joyce 1929; Joyce et al. 1928; Lothrop 1924:109–110; Lundell 1934:177; Mason 1927:278; Morales López 1987:77–78; Morales López and Sumner-Faust 1986:17–22; Patton 1987; Prufer and Kindon 2005; Pugh 2001, 2005; Sanders 1955:191–192; Seler 1901; Terrones González 1990:90–91; Thompson 1938). At other sites, caves are adjacent to the main ritual areas, sometimes connected to them by causeways (e.g., Actun Nak Beh; Halperin 2005). Significantly, many archaeological sites in the Maya highlands have been found to contain artificial caves (Brady 2004; Brady and Veni 1992; Ishihara-Buto and Guerra 2012). At the site of La Lagunita a cave, excavated during the Late Preclassic, ran from the

foot of one of the principal pyramids to terminate in the center of the main plaza. At Uatlán, three caves were excavated into the side of the *barranca*, with the longest one terminating under the Central Plaza (Brady 1991; Brady and Veni 1992). Hermes Cifuentes (1993) has even reported an artificial cave from the southern lowlands where natural caves occur. This pattern appears to have great longevity. Recently, Brady (2012) has identified a pattern of architectural cave construction in the Maya Lowlands dating to as early as the close of the Middle Preclassic (Brady 2012). Outside of the Maya area, well-known examples of artificial caves connected with architecture include the cave beneath the Pyramid of the Sun at Teotihuacan and the Observatorio at Xochicalco.

Artificial caves are significant because there can be no doubt that the cave and architecture were being intentionally linked. Such cases underscore the importance of the use of caves to imbue landscape with specialized meaning. Where the cave and architecture command prominent public space within the site's central core one must suspect that the intended message is one which validates and legitimizes the local ruling elite who had appropriated that space. The fact that considerable effort went into creating caves where none existed also suggests that archaeologists need to look more closely at how the Maya accommodated their beliefs about caves in karstic environments that did not support the formation of large voids. Recent cave research at the site of Maax Na in northern Belize offers some insights into this issue.

At Maax Na a number of small caves and rock shelters were recorded during the initial mapping of the site (King and Shaw 2003) and subsequent fieldwork revealed additional caves (Shaw 2001). Although only a cursory investigation of these features was carried out, the caves' strategic location immediately around the core civic and ceremonial areas indicates that they played a key role in strategic decisions about the placement and development of the site. Their apparent importance to site planners was further emphasized by the discovery that the bulk of the Maax Na settlement was located west of the site center, closer to prime agricultural areas. This supports the possibility that the placement of the center may have been tied to the location of the caves (King and Shaw 2003:71–73).

One cave in particular drew investigative attention. Located directly under a structure along the east side of the main ceremonial plaza, Spider Cave appeared to replicate the cave-architecture relationships noted elsewhere in Mesoamerica (Brady 1997, 2005). The cave also borders the south side of the main entryway into the North Plaza. Initially, only a small surface sample of ceramic sherds was collected from inside Spider Cave, dating from the Late Preclassic through the Late Classic. Other ceramics could be seen embedded in the cave floor and what looked like construction fill was visible at the very back of the feature. Such evidence indicated that the cave was actively used by the Maya of Maax Na over a long period of time, possibly even predating site construction. To clarify the nature of the relationship between this subterranean feature and the built environment above it, a short, 10-day field season involving the Maax Na Archaeology Project's staff combined with a crew of cave archaeologists investigated both the cave interior and the overlying structure. The results suggest that the imprint of the underground is visible in the Maya area even in regions where caves are small and rare.

### Maax Na

The site of Maax Na in northern Belize is one of a group of large Maya centers in the recently defined Three Rivers Region (Scarborough et al. 2003; Valdez 1995). It was first discovered by the Programme for Belize Archaeological Project, directed by Fred Valdez, Jr., in 1995. Research at Maax Na by Shaw and King (King and Shaw 2003, 2006, 2007; Shaw et al. 2005) began in 1996 and has continued through several short seasons, investigating the settlement and testing to document the chronology and function of the site center. Maax Na is located in the La Lucha Uplands (Figure 1), the highest part of the escarpment that forms the eastern edge of the Petén Karst Plateau, overlooking the Belizean floodplain (Dunning et al. 2003:15). This escarpment is composed of back-reef or lagoonal Lower Eocene limestones and dolostones that were later uplifted (King et al. 2004). On a microgeographic level, the site is situated in rough terrain, characterized by sharp microvariations in topography and a highly friable and weathered limestone, which a recent analysis using scanning

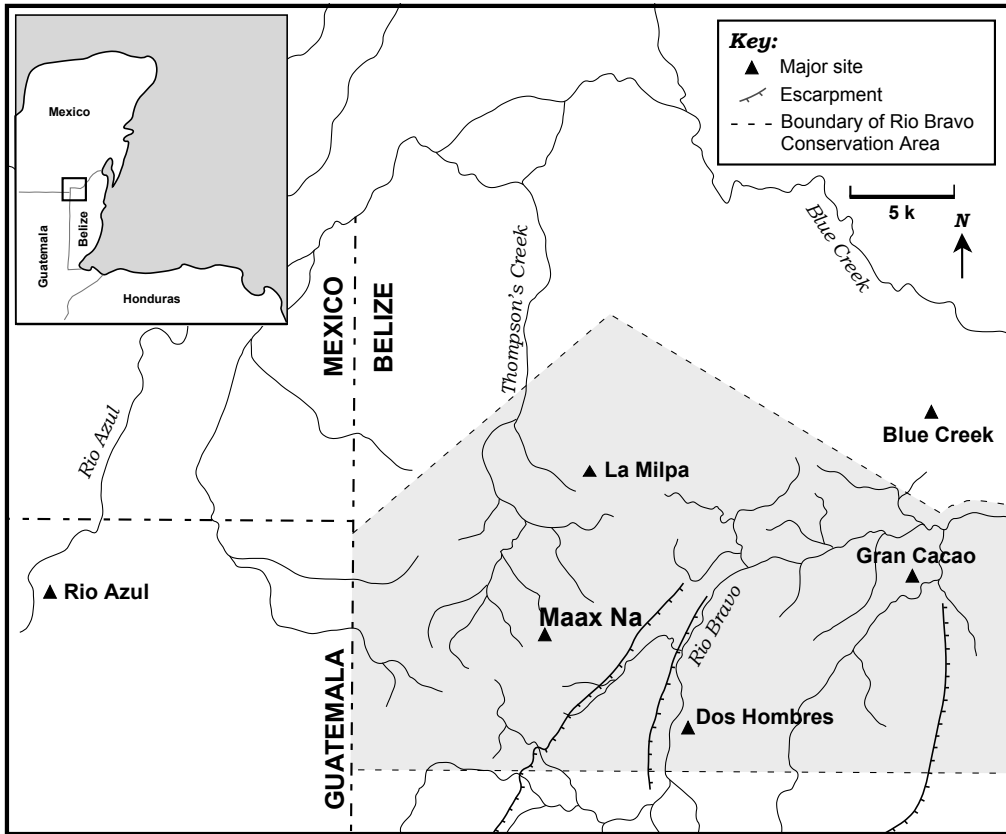


Figure 1. Location of Maax Na within the Three Rivers Region of Northern Belize.

electron microscopy (SEM) has classified as dolomitic. Like the nearby site of La Milpa (Hammond 1991; Hammond and Tourtellot 2004), only 7 km distant, Maax Na had access to the vast resources of neighboring upland wetlands, which were early foci for intensive agriculture (Dunning et al. 2002, 2003; Kunen 2001, 2004). Prominent among these is the La Lucha Bajo, to the north and west of the ceremonial core, around which the bulk of the Maax Na settlement is concentrated. Because only a few, small mounds and groups can be found east of the core, it seems that proximity to agricultural land is what dictated the location of residential households. Curiously, as noted, the center of the site was not situated close to the main area of habitation, although there are places nearer the La Lucha Bajo where it could have been established. The decision to place it at the very eastern edge of settlement argues that other factors influenced its location. The presence of Spider Cave right in the

heart of the ceremonial area may explain this placement.

Maax Na's center consists of three major plazas, linked by causeways or other features and surrounded by elite residential areas (Figure 2). Like other sites in the Belizean part of the Three Rivers Region, Maax Na's initial growth appears to date to the Early Classic, although there are indications that the site, like the region, was initially settled earlier, in the Late Preclassic. The bulk of the major architecture, however, was initiated in the Early Classic and the site seems to have grown rapidly at that time, unlike other centers in the area, such as La Milpa (Hammond and Tourtellot 2004) and Dos Hombres (Houk 2003). Maax Na is also dissimilar in that, although construction continued into the Late Classic, it did not do so on the scale seen at other sites. In fact, Maax Na may have been abandoned early in the eighth century, as there is limited indication of Terminal Classic use or growth.

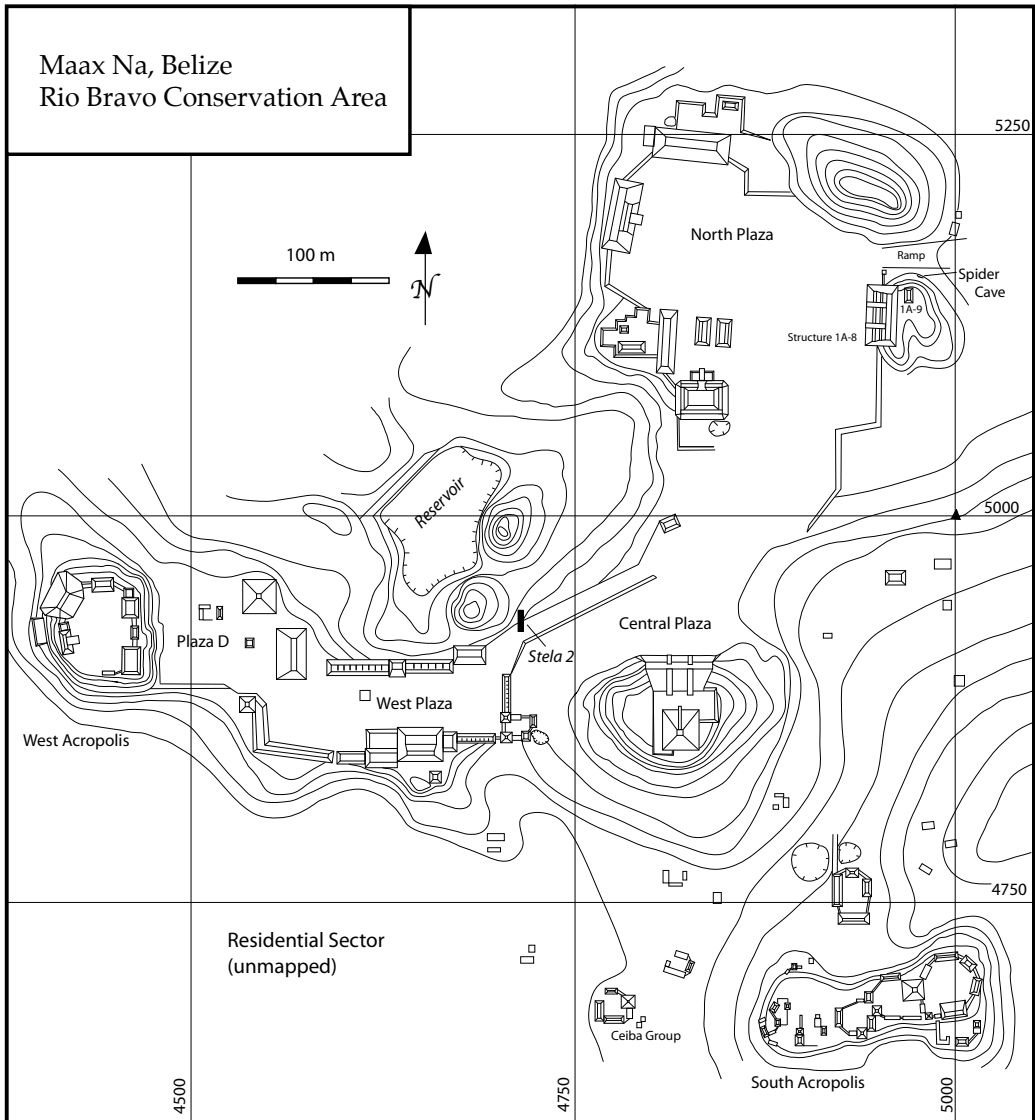


Figure 2. The Maax Na site core.

Perhaps the most striking feature of Maax Na, especially in comparison with the other regional centers, is the open and expansive layout of its main ceremonial plaza. The North Plaza (Plaza A, Figure 2) is exceptionally broad, covering some 23,730 m<sup>2</sup> of open space. Test excavations indicate that substantial fill was brought in (over 1 m in the west) to build up the plaza beginning in the Early Classic. Not all the structures may have been built at that time, or at least their position may have been modified over time, because two different structural alignments prevail. The southern structures, includ-

ing the East Building (1A-8, Figure 2), are oriented slightly differently from the two northernmost structures. Excavation in both the plaza and associated structures has exposed a complicated sequence of remodeling episodes, but current data suggest that the southern end of the plaza is the earliest.

Our joint surface–subsurface investigations focused on the East Building (1A-8), a large range structure, and its companion, a much smaller structure (1A-9) that shares the same bedrock outcrop and overlies Spider Cave (Figure 3). From their location on the eastern edge of the North Plaza this

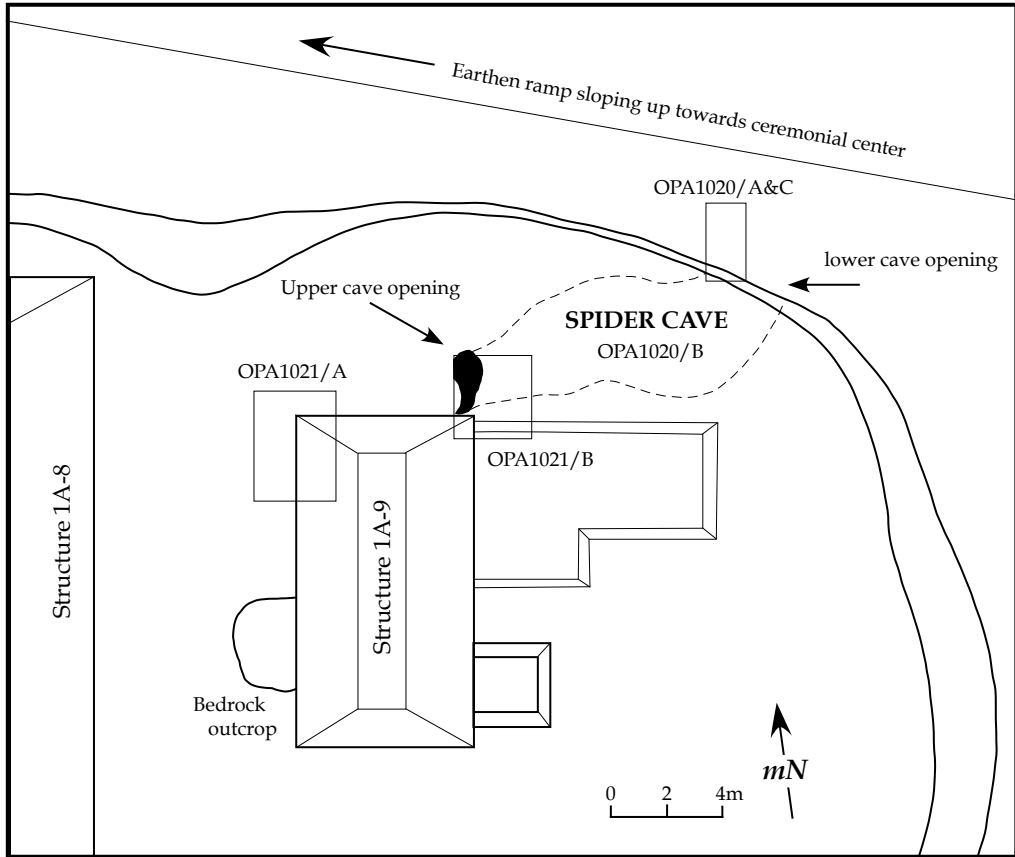


Figure 3. Plan map of the shrine (1A-9) and surface excavations. Spider Cave is below to the north.

pair of structures and the associated cave would have dominated the eastern entry into that plaza. This primary site entryway, with the cave-architecture feature on the south side and a prominent hill on the north, is a powerful representation of the cave-mountain symbolism that is prevalent in Maya architecture (Vogt and Stuart 2005). As noted elsewhere (King and Shaw 2003), the cave and hill features at this entrance to the main ceremonial plaza may be what distinguished Maax Na from its neighbors, attracting both initial settlers and later visitors.

The East Building itself is a massive range structure that faces into the North Plaza. This structure appears to have two outset staircases, with two platforms breaking the slope of the stairways. Corbel-vaulted rooms, now partially collapsed, are visible on top of the structure. A looter's trench on the back side caused the collapse of one of these rooms, and profiling of the trench revealed at least six different construction phases. The two earliest floors

are fragmentary and it is unclear what kind of structure may have been associated with them. The next three floors are directly linked to the construction and remodeling of the range structure. A decorated polychrome sherd found directly on top of the middle of these three floors indicates a *terminus post quem* of Early Classic (A.D. 250–600) for that construction phase. The very last episode of construction involved only the refurbishing of an exterior platform or floor to the east of the room that likely dates to the Late Classic.

The companion structure to the East Building appears to be a small shrine (1A-9) directly associated with Spider Cave located beneath it (Figure 3). This building had an extensive platform adjacent to the east, the direction in which it may have faced. Excavation of the northwest corner revealed that the structure was built directly on top of the pitted bedrock and underwent at least two distinct phases of construction/remodeling as represented



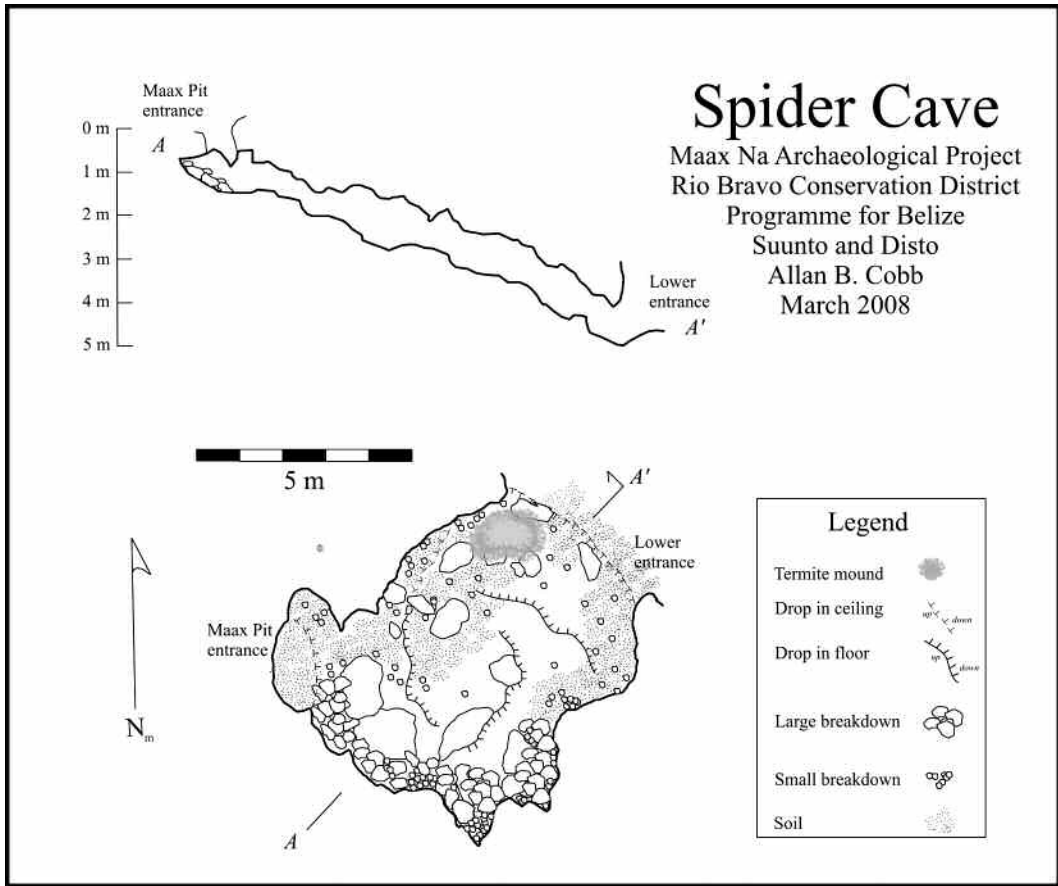


Figure 4. Plan map and profile of Spider Cave. Operation 1020/B excavated the shallow soils shown by the stippling.

by two retaining walls standing on bedrock. Ceramic analysis suggests a date of Early Classic for the initial construction. The outermost or later wall was composed of small, well-made and carefully laid marl blocks. Associated with this wall is a large boulder or remnant of bedrock that protrudes from the west side of the structure and faces the East Building. It appears to have been shaped, although erosion makes the form difficult to interpret with certainty.

Most significant for the purposes of the project was the discovery of a second opening to Spider Cave under the rubble fall immediately next to the platform at the northeast corner of the shrine. A 2.5 x 2.5 m unit placed here enabled the coordination of the surface investigations with the excavations in the cave occurring at the same time. The finding of this opening is discussed below in the context of the cave.

### Spider Cave

Spider Cave is a relatively small cavern, 8 m long x 7.5 m wide, located on the north side of Structure 1A-9 (Figure 4). At the time of discovery, the only known entrance was a 6-m-wide fissure at the base of the hill in which the cave is located (Figure 5). This opening was low enough to make entry into the cave a rather arduous squeeze between the low ceiling and blocks of stone that had been cemented into the floor with travertine. Because this area has not seen significant deposition of soil since the site was abandoned, it is clear that entry would have been just as difficult in prehistoric times.

A trench 2.5 m x 1.5 m was excavated in front of the cave entrance intersecting the cave drip line, along the western side of the fissure. A heavy concentration of unslipped and monochrome slipped



**Figure 5.** View of Spider Cave from the north showing the narrow lower (fissure) entrance and the relationship of the cave to the overlying shrine (1A-9), where the crew is uncovering the blocked upper entrance.

sherds was recovered, most belonging to jar forms. Many showed heavy fire blackening on the interior surface, which Brady and Peterson (2008) have argued is associated with the burning of copal incense. Although the sherds have not yet been analyzed for copal residue, it is tempting to see a link between past activities here and the presence of a large copal tree directly overlooking the excavation.

After the initial squeeze at the northern entrance to the cave, the ceiling rises to between 1 m and 1.5 m, which allows a person to crawl or squat but not to stand. The floor rises in two general levels as one moves from north to south. Ceiling collapse in the central part of the cave also tends to divide the chamber into an eastern and a western corridor. Excavation lots were defined using these natural boundaries and a systematic surface collection was conducted. In certain areas, pockets of loosely compacted, fine-grained, powdery soil, 15–30 cm deep, were encountered. Excavation yielded cultural material but no evidence of stratigraphy within the deposits.

Recovery efforts in the cave produced a dense concentration of ceramics (1,015 sherds) from a range of slipped and unslipped vessel forms, including jars, bowls, plates, and censers. Some but not all sherds were burned, unlike the sherds at the entrance. Also found within the cave were two obsidian blades, some biface fragments, a shell ornament, and several speleothems that did not originate there. The distribution of artifacts showed a break between the materials inside the cave and those outside that corresponds to the entrance passage, where little material was recovered. It also showed that, while the entire inside chamber was used, the western corridor saw considerably more activity than the eastern corridor. The reason for this pattern became evident with the discovery of a blocked entrance at the end of that western passage.

At the south end of the western corridor, excavators encountered a raised shelf, choked with large stone blocks and soil. They removed some of this matrix to inspect the shelf more closely. It was clear that this area must be close to the surface near struc-



**Figure 6.** Carlos Quetzal waits for Daniel García, working in the cave, to pass him a bucket through the newly revealed upper or second entrance to the cave.

ture 1A-9, so they struck rocks in the blockage with a metal bar in the hope that the sound could be heard on the surface and the spot located. In actuality, the cave excavators were so close to the surface that workmen digging the structure above observed the soil jump with each impact. The overlying soil and rock were removed from the surface to expose a second entrance to the cave (Figure 6). This opening proved to be substantially larger than the fissure at the base of the hill. Both the ample size of the entrance and its location abutting the northeast corner of the shrine structure (1A-9; Figure 3) suggest that it served as the principal access into Spider Cave. The bedrock around the section of the entrance that was visible, measuring ca. 1.75 m n-s x 1.00 m e-w, showed signs of chipping all along the exposed edge, indicating that the Maya may have enlarged a preexisting natural opening. It was not possible to determine the full extent of the modification, because a large dead tree poised precariously over the western edge prevented further

excavation of the upper entrance. It is possible, though, that this feature was completely artificial. Most interesting was the fact that this opening was deliberately blocked in antiquity with large blocks of stone and fill containing sherds from a variety of vessels, broken chert bifaces, animal bone, and bits of charcoal.

### Discussion

Before attempting to interpret the significance of Spider Cave for the site of Maax Na and the Three Rivers Region, it is important to address what many readers may consider the cave's most distinctive characteristic, its small size. At Dos Pilas, the elite tended to appropriate the largest caves, a number of which were over a kilometer in length (Brady 1997). Naj Tunich, located in eastern Guatemala and perhaps the preeminent Maya cave, also has an enormous entrance chamber and over three kilometers of passages, many of which are over 10 m

in diameter (Brady 1989). The monumental size and grandeur of these caverns can easily be equated with power.

Spider Cave clearly was not appropriated by the founders of Maax Na for its grandeur. However, in assessing its significance, there are several points to consider. To begin with, such an opening still represents a transition point, no matter its size. Spider Cave did not have to be large to be viewed by the Maya as a place of connection between an animate *Earth* and the realm of humans. In addition, it is important to remember Rissolo's (2003:132) admonition that caves should not be evaluated in terms of absolute size but, rather, in relation to other caves at the site or in the region. The other caves that have been identified to date at Maax Na and other sites in northern Belize are smaller. At Maax Na, they are more like rockshelters in that they lack dark zones. The rare development of caves in this part of northern Belize has precluded comprehensive cave surveys, so we have little data with which to compare Spider Cave. Nevertheless, on the basis of our familiarity with the geology of the area and discussions with other archaeologists working there, we suspect that Spider Cave will remain one of the larger caves found. It thus takes on a special significance in regional terms.

In addition, evidence from cave studies suggests that the Maya considered small caves to carry a meaning equivalent to larger ones. Their significance can be seen in their appropriation by elites, even in areas where larger caves existed. At the site of Cahal Uitz Na in central Belize, an area rich in caves, the relatively small cave of Actun Nak Beh is connected to the main plaza by a 240-m-long causeway (Halperin 2005). The location of the cave within the settlement boundaries seems to have been the primary reason for its inclusion in the site design over larger caves farther from the site center. This same pattern is documented again in the Petexbatun region, where extensive modifications were made to the Cueva de los Quetzales, which runs through the small hill supporting the site of Las Pacayas (Brady 1997:608; Brady and Rodas 1995). These examples indicate that small size did not prevent the caves from having symbolic significance to the entire polity. An even more telling example comes from the Bat Palace complex at Dos Pilas, also in the Petexbatun area. The whole complex is built on top of the Cueva de los Murciéla-

gos, which is the outlet for an entire underground drainage system (Brady 1997:606–608). Excavation within the architectural complex discovered a small cave that was ritually sealed when a small shrine structure was built over the entrance (Demarest et al. 2003). It appears that even a small cave opening such as this was considered too sacred and too important not to be marked architecturally.

The low ceiling and lack of interior space in Spider Cave are also not good reasons for dismissing the cave as potentially significant. Within the large tunnel system of Naj Tunich, rituals appear to have been preferentially performed in small alcoves, often with ceilings so low that participants were forced to kneel or squat (Brady 1989:402–404). Structure 1 at Naj Tunich, for example, a walled off alcove, has a doorway so low that it forced those using the interior space to enter on hands and knees (Brady 1989:131). Patel (2005) reviews several small, low caves on Cozumel Island that had shrines built into them and suspects that they were integrated into a ritual pilgrimage circuit devoted to Ix Chel. Restricted ritual space has also been noted as a characteristic of the small shrine structures located along the east coast of the Yucatan (Freidel and Sabloff 1984:49). These architectural examples are noteworthy because it is clear that the Maya consciously created very restricted ritual spaces.

Finally, ethnography suggests that in indigenous beliefs about caves, size is a far more negotiable and less limited dimension than it is for Westerners. Immensity is often imputed by the Maya to very modest caves. This is nowhere better illustrated than in John Lloyd Stephens's discovery that the Cueva de Maxcanú was actually a set of architectural passages within the famous Satunsat structure at Oxkintok in the Puuc area. Stephens noted:

La Cueva de Maxcanú, or the Cave of Maxcanú, has in that region a marvelous and mystical reputation. It is called by the Indians "Satun Sat," which means in Spanish *El Laberinto* or *El Perdedero*, the Labyrinth, or place in which one may be lost. ... Several persons had penetrated to some distance with a string held outside, but had turned back, and the universal belief was that it contained passages without number and without end [1962 (1843):139].

Such beliefs about caves are so common and widespread in Mesoamerica that it is difficult to believe that they are not part of an ancient complex spanning the entire cultural area.

Western scientists have also failed to appreciate the dynamic quality of caves in the contemporary Mesoamerican cultural landscape. Caves are not static entities, but possess a character and life of their own. Large passages may only be accessible on certain days or particular times, midnight being one of the best (Scott 2009). In addition, tunnels are often closed to those lacking the ability to “see” or simply on the whim of the cave itself. From the point of view of local people these factors could account for archaeologists being unable to find the 35-km-long passage that supposedly connected the seven caves of Acatzingo Viejo, a site near the modern town of Acatzingo, Puebla, to the volcano of La Malinche in Central Mexico (Aguilar et al. 2005:77). Clearly, the cave did not want to be found at the time and/or possibly by outsiders. Thus, it would not be surprising if Spider Cave had been conceptualized by the ancient inhabitants of Maax Na as having been far larger than it actually is.

Spider Cave also possesses features that would have made it important regardless of size. As noted in the earlier description of the cave, the floor in the lower section of the cavern is covered with travertine. This indicates that water was running over it in some quantity at least on a seasonal basis. A hill with water flowing from its base is a fundamental sacred motif in all of Mesoamerica and one to which the earliest settlers in the area would have responded. In fact, the cave has yielded Preclassic ceramics that predate the Early Classic construction of public architecture at the site. This temporal pattern has been noted elsewhere where cave surveys were conducted in conjunction with surface archaeological projects. In the Petexbatun (Brady 1997), in the Yalahau (Rissolo et al. 2005), and in the Sibun (Peterson 2006:63) regions, archaeologists have found similar patterns of cave use antedating large-scale settlement. It seems likely, then, that Spider Cave was already established as a sacred landmark when Maax Na was built and that its location may have dictated the placement and layout of the ceremonial center.

At the same time, the construction above the cave suggests it was appropriated early on to legit-

imize rulership at the developing site. As noted previously, it is not certain whether the upper entrance was a wholly constructed feature or an enlargement of a smaller natural opening. Regardless, the size and elaboration of the opening make it clear that this was the principal entrance. In fact, it now seems questionable whether the fissure at the base of the hill was regularly used to enter the cave after the upper entrance was opened. The layout of the shrine adjacent to this upper entrance strongly suggests it was built as the public expression of a formalized social hierarchy, that is, as a means for the site’s elite to display their control over the cave and all it symbolized. The fact that differential access to important space was so frequently and continuously used in the Maya area to display status differences supports this proposition. Not only is this observation commonplace in archaeological sites but it is also documented in the ethnographic record. In Santa Eulalia, after all, only the *alcaldes rezadores* had access to certain important places, including the cave of Yalan Na’ (LaFarge 1947).

The distribution of artifacts within Spider Cave also supports this view. Indeed, two different activity areas were associated with it, as distinguished by their physical separation and distinctive materials: the first was in the cave itself and the other in front of the fissure. Because the upper entrance was located on top of the hill and next to the shrine, direct access to this portal could be easily restricted. Only important individuals might have entered there, while the rest of the population left offerings outside the cave in front of the fissure, along the main walkway into Maax Na’s ceremonial space. A parallel to the situation at Maax Na can be found in the dual entrances Halperin (2005) documents for Actun Nak Beh. There, she argues that the larger entrance to the cave, Entrance 1, a high and deep overhang that could accommodate many people, was the locus for public ceremonies. More restricted, private ceremonies, however, were probably conducted via the much smaller and more restricted Entrance 2. She suggests the elite were in control of ceremonies in both locations and used them to help legitimize their rule. The same may have been true at Maax Na.

Although Spider Cave’s history of usage prior to the development of public architecture and its direct association with surface structures place it firmly within a general pattern for cave use well

documented at other Maya sites, it has strikingly specific similarities with the Murciélagos compound described by Demarest et al. (2003) at Dos Pilas. Both architectural complexes appropriated natural hills with water flowing from their bases. Both complexes are also associated with the elite, although they seemed to have served different functions. At Dos Pilas, a palace complex overlies the cave; at Maax Na the main structure appears to be a temple. At both sites, though, shrine structures were built at the entrances to their respective caves. Demarest et al. (2003) have argued persuasively that the placement of a structure over the cave at Dos Pilas served as a legitimizing act. It is interesting to note that this act was not associated with the largest cave in the region—another indication that size was not the only criterion the Maya used in determining the importance of caves. The authors state,

The final symbolic flourish of the Murciélagos compound was its relationship to the cave system and the enshrinement of that entrance to the underworld. Aligning architecture to the caves and incorporating a cave entry into the palace completed the process of identifying the ruler and the dynasty as the sacred center and axis of the universe of Dos Pilas [Demarest et al. 2003:144].

The same argument could be extrapolated to Maax Na and its rulers or at least to the group of elite associated with the use of the temple and shrine.

The construction of the Murciélagos compound over the cave carries other associations as well because, after several days of rain, water is expelled from the cave with such force that the roar can be heard half a kilometer away. Brady and Ashmore note that,

Because the king was responsible for crop productivity and quality, identifying his palace with this dramatic water source seems hardly coincidental and, in fact, a conscious political strategy, re-expressed every year. The landscape itself thus loudly proclaimed the king's control over water, and presumably over rain-making and fertility. Interestingly, and not coincidentally, that is exactly the claim made in the first millennium BC by a non-Maya king on Chalcatzingo's "El Rey" panel, where wind

issues from the mouth of a cave portal, on whose wall a ruler is shown seated in a cave mouth, and next to which ancient artificial channeling concentrates the mountain's rain-water run-off into a seasonal torrent [1999:129–130].

Although the quantity of water exiting Spider Cave may never have been as dramatic as at Dos Pilas, the very act of its flowing would surely have carried the same message from those in power.

The blockage of the principal entrance in antiquity with a fill containing artifacts and ceramic sherds from a variety of vessels also merits discussion. This material could well have come from activities associated with the temple and shrine complex above. The admixture of large blocks of stone barring the passage supports the interpretation that the opening was deliberately sealed, most likely in antiquity, and possibly even concealed then, too. From all appearances, this act served as a way to ritually "kill" or "close" the cave or at least seal off its power. It probably occurred when Maax Na was abandoned. Such blockages have been noted in other caves in the Maya region, particularly in the Petexbatun area, where Brady and Colas (2005) have recorded walls, rocks, sterile clay, and other materials deliberately placed at cave entrances. They have also produced epigraphic and archaeological evidence that connect such acts with warfare at places such as the Cueva de El Duende at Dos Pilas. Missing at Maax Na, however, are the other signs of violence associated with cave blockages in the cases the authors analyzed. Additional research needs to be conducted to clarify what happened at the end, when Spider Cave was no longer actively being used. At the very least, however, the discovery of this blocked entrance makes the relationship between the cave and the surface shrine clear and intimate. Given the context of other cave terminations, the blockage strongly suggests that Spider Cave was considered a feature of political importance.

## Conclusion

In sum, the preliminary evidence from investigations at Maax Na suggests that, despite the poor quality of the limestone that prevented the formation of large caves, the presence of subterranean features at the site was a matter of first importance

to the inhabitants. Such features in northern Belize, as elsewhere in the Maya area, were key components of the cultural landscape. They were the loci for important rituals and served to situate sites within a cosmological framework that legitimized space and the rulership of the elite who controlled that space. These findings suggest that it would behoove us to examine other sites in this region more closely for evidence of the role played by the subterranean geography.

However, the visibility of Spider Cave at Maax Na may also signal that it was particularly significant in the Three Rivers Region or even that part of northern Belize, perhaps as the largest cave in the area. Its location along the south wall of the main entryway to the ceremonial plaza would have made it noticeable to visitors and residents alike, from all walks of life. Public ritual could have taken place in front of the lower entrance, while more restricted activity occurred at the upper opening, next to the shrine. Spider Cave's quite obvious and dramatic association with flowing water would also have boosted its regional importance. Enhancing this effect would have been the smoke from offerings of copal burned in front of the fissure, as well as from within the cave. This is so much a part of Maya rituals that the K'iche' Maya refer to rituals as "burnings" (Cook 1986:139) and to the altar where rituals are performed as a "burning place" (*quemador*) (Bunzel 1952:431). The black smoke is often equated with the black clouds that bring rain. The smoke at Spider Cave would have traveled up the natural chimney of the upper entrance, thereby creating a "smoking mountain," a sacred theme to the Maya. The attraction of Spider Cave may thus have served to help define Maax Na's role in the Three Rivers Region and beyond, a point argued elsewhere (King and Shaw 2003). Certainly, the importance of Spider Cave to site function is reinforced by evidence that the cave was deliberately blocked when Maax Na was abandoned, thus perhaps "killing" the site. Ongoing investigations should help resolve this issue as well as define Maax Na's regional role in greater detail.

On a broader scale the discoveries at Maax Na reinforce an important theme in landscape archaeology, and that is the power of key concepts in shaping the culturally constructed and conceptualized (Knapp and Ashmore 1999) environment. However, the problem lies in securely identifying

those key concepts and making sure they apply everywhere. A crucial task for any archaeologist trying to understand cultural geography is distinguishing which specific cultural ideas are critical to the way land was viewed and used. Although this is not easy to do at a far temporal removal, general emic patterns can be discerned and explored, as many authors have shown (Arnold 1999; Ashmore and Knapp 1999). These need to be investigated and tested for repeatedly, however, under a variety of conditions.

In the Maya area caves and cave archaeology have assumed a rapidly growing importance in recent years, to the point that they occupy a substantial place in our views of Maya cosmology. The assumption has been, though, that their association with sacred rituals and legitimizing acts only applied in areas with large natural caves, where archaeologists looked for them. This focus has led to a somewhat contradictory perception of the role of caves in the Maya cultural landscape. On the one hand, they are viewed as quintessential sacred space, key to understanding Maya cosmology and land use. On the other hand, their apparently restricted distribution suggests they played a more specialized and less universal role. The result of this contradiction has been an unvoiced implication that sites with no associated caves were either less ritually focused or less important, or, alternatively, did not participate as fully in the Maya worldview—a culturally illogical stance. It is also one that flies in the face of the pervasiveness and persistence of cave-centered beliefs in the Maya world today. The data from Spider Cave help to dissolve this muddled perspective and clarify the crucial role that caves played prehispanically everywhere in the Maya area. Clearly, caves were of such cosmological significance that, even in regions where they were meager or nonexistent, people found a way to create sacred space, no matter how restricted.

The implications of this conclusion are substantial. For Maya archaeologists specifically, it suggests we need to take a closer look at any site or area that does not appear to have a connection to the subterranean—preferably through a cave, which was itself part of the animate and sacred *Earth* (Brady and Prufer 2005b). Apparently, the concept of an entrance into the *Earth* was so central to Maya beliefs that it was an integral part of site planning, rather than something only acted on

when the local geology permitted. This concept shaped both how the Maya used the natural landscape and how they moved through it. On a more general level, this conclusion also serves to remind archaeologists everywhere that contradictions in interpretations need to be explicitly resolved and generalizations tested if we are to come to better understandings of past cultural landscapes.

*Acknowledgments.* Before we thank those who made this research possible, we would like to salute one of our coauthors who is no longer with us: Leslie C. Shaw died unexpectedly while this article was under review. Her critical eye greatly improved the draft we submitted, which only required minor revisions for publication. We will miss her keen insights in the years to come. The Committee for Research and Exploration of the National Geographic Society and Bowdoin College provided funding for the 2008 exploration. The cave subproject was made possible by a generous grant from Lloyd Cotsen to California State University, Los Angeles. We are grateful to Dr. Fred Valdez of the University of Texas at Austin for providing logistical support and to Dr. Lauren Sullivan of the University of Massachusetts in Boston for her identification of the ceramics. Oscar García, Manager of Texas Camp, was, as usual, invaluable to our day-to-day lives in the field. Our excavations both inside the cave and at the shrine were expertly assisted by the efforts of Matthew Brennan, Darcie Flanigan, Adeline Lutts, and Christine Taylor as well as by our Belizean staff; Marcos Carpio, Daniel García, Pastor Magaña, Amir Magaña, and Carlos Quetzal. We also wish to extend our special thanks to Ann Scott who helped with the preliminary evaluation of the caves around Maax Na and for her comments on portions of our grant proposal. Finally, reviewers for the journal provided useful suggestions that improved our discussion. Any errors of interpretation or understanding, however, are our own.

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*Submitted: February 13, 2012; Accepted: October 15, 2012.*