

Cenote Xbis: The House of Rain

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Abstract

This article reports on a *sacbe* discovered by the Gran Acuífero Maya in the cave/cenote of Xbis, Hochtún, Yucatán, Mexico. The *sacbe* is the first reported example of a ritual roadway constructed in a Maya cave. The current study details how the construction incorporated elements of the natural cavescape to create Xbis as a significant sacred landmark. The *sacbe* led to a large pool of water and was constructed into the pool, allowing passage to a large speleothem column without entering the water. Ethnographic data suggests that such cave formations may have been the physical representation of a deity and were the focus of ritual. In addition, water droplets falling from thousands of active stalactites created the effect that it is always raining in the cave. It is proposed that the cave was appropriated and elaborated by elites for ritual because it proclaimed their control over the forces of nature.

Keywords

Maya, Cenote, *Sacbe*, Speleothem, Cave, Ritual

1. Introduction

During its systematic survey of caves and cenotes in villages mentioned in the inquisitional records, the Gran Acuífero Maya (GAM) directed by Guillermo de Anda discovered a small cave leading to the aquifer in the *cabecera* of Hochtún in 2007 (**Figure 1**). Anda mapped and explored the cave with students from the Universidad Autónoma de Yucatán and filed a short report (Anda, 2007) (**Figure 2**). GAM revisited the site in June of 2022 to collect additional information. Cenote Xbis is located within a developed portion of the town, so no evidence of prehispanic architecture is apparent surrounding the cenote entrance.

The cave entrance is a small cavity, approximately 1.5 m in diameter, with a 2 m vertical drop to the cave floor (**Figure 3**). For the first 50 m, the ceiling is too low to permit visitors to walk upright. Beyond this point, one enters the dark zone of the cave. An alignment of stones is visible, which rapidly becomes a



Figure 1. Map of the Yucatán peninsula showing the location of Hochtún.

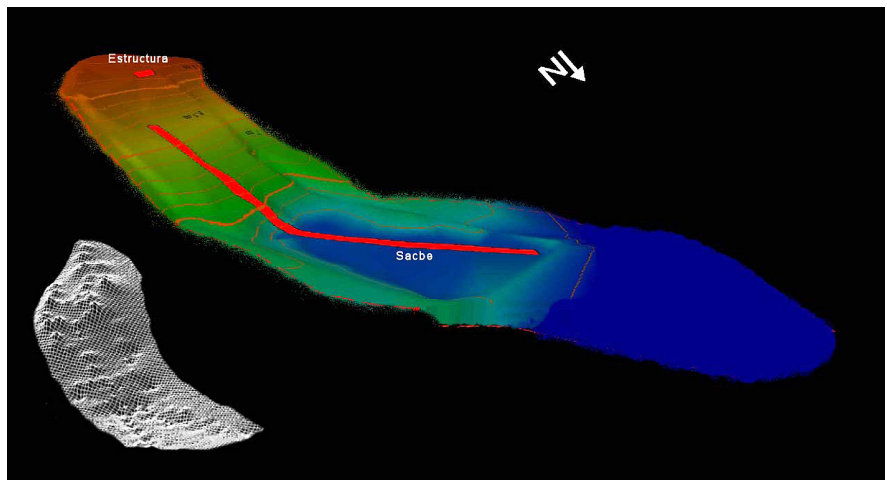


Figure 2. Map of Cenote Xbis (Gran Acuífero Maya).



Figure 3. Photograph of the entrance to Cenote Xbis (Vanessa Karkkainen).

pathway defined by two rows of aligned stones. This in turn becomes a *sacbe* running down the center of the passage, heading northwest toward the back of the cave (Figure 4). The rear half of the cave is covered with a pool of water.



(a)



(b)

Figure 4. (a) View of the Xbis *sacbe*, (b) with a profile of the construction (Vanessa Karkkainen).

As one enters the dark zone, additional evidence of utilization is noted. The ceiling is studded with thousands of small stalactites, many of which are still active (**Figure 5**). The formations have been blackened, most likely by smoke from the burning of copal incense. Fire blackening is frequently preserved in caves with active formations when the copal soot is covered by a thin layer of calcite. Virtually, all the stalactites have been broken but the detached pieces are missing for the most part from the floor of the cave. There is abundant evidence of re-growth of the formations on the stumps of broken stalactites. This is important because it indicates that some time has elapsed since the original breakage and, therefore, is not the result of modern vandalism since the opening of the cave to tourism.



Figure 5. Broken and smoke blackened stalactites on the ceiling of Xbis (Vanessa Karkainen).

Some 80 m from the entrance of the cave to the west of the pathway is the foundation of a pre-Hispanic platform measuring 3.48×5.56 meters and 20 cm high (Figure 6). On the western wall is an incised rock art image of a crocodilian figure just below the cave ceiling. The image utilizes the three-dimensionality of the cave wall, especially a line of speleothems used to indicate the caiman's line of teeth (Figure 7).

The *sacbe* is a well-constructed feature, utilizing worked and shaped stones to form the alignments that define the edges of the walkway. At some points, it is more than half a meter high and up to three meters wide. The *sacbe* runs to the northwest until it reaches a large speleothem column (Figure 8) after which it turns sharply westward and heads straight to a second speleothem column where it terminates. It should be noted that the *sacbe* extends into the water before reaching the second column (Figure 9).

Where the *sacbe* reaches deeper waters, there are several elements that make this feature interesting. First, there are two large blocks of worked stone that lead westward and, second, a number of intentionally cut stalagmites have been flattened on their upper surface creating a series of "steps" that continue in a westerly direction. This is interesting in that the steps, like the *sacbe* itself, appear to be modifications designed to cross over the water without actually entering the water. A similar feature was noted in the Cueva de Sangre at Dos Pilas. The cave features a long muddy trench that fills with water after rain. The passage can be navigated by walking along the shoulder of the trench. In several places, the shoulder ends on one side of the trench but picks up on the other. In each case, blocks of stone have been placed in the trench to allow the trench to be crossed without stepping in the water. This may be archaeological evidence for a belief that entering the water was forbidden or dangerous.



Figure 6. Profile view of the platform (Gran Aquífero Maya).



Figure 7. Rock art image of the crocodilian figure (Vanessa Karkkainen).



Figure 8. The first large speleothem column with the *sacbe* at its base (Vanessa Karkkainen).



Figure 9. The termination of the *sacbe* at the second column surrounded by water (Gran Acuífero Maya).

As one follows the underwater “steps”, the water becomes deeper until it reaches a depth of perhaps nine meters. A submerged passage approximately 85 meters long was found by Anda in the cave wall in 2007, which connects with a second cave. The floor of the submerged passage rises until it gives way to another dry cave. No architecture or constructed features were noted in this cenote. It is possible to walk through this dry cave for about 50 meters, until it enters another pool of water with a flooded passage that continues in a westerly direction until it meets a third dry cave. In this cave, there is a restriction that for lack of time was not explored.

2. A Consideration of the Xbis Cavescape

It is unfortunate that no evidence of ancient surface architecture surrounding the cave is present which would allow us to better contextualize the feature’s role in community ritual prior to the arrival of the Spanish. As we have noted, the cave is connected via underwater passages to several other caves although the Maya may not have been aware of this. Nevertheless, there were other caves in the immediate area that contained pools of water and could have been the focus of elaboration. The elaborate *sacbe* documented in this cave when compared to the lack of significant construction or modification in the other two caves argues that Cenote Xbis was of substantial importance. The fact that the cave has remained in local use for centuries and more recently was opened to tourism has contributed to the fact that we also have no artifact assemblage to inform our interpretation. We had hoped to find a deposit of offerings at the termination of the *sacbe* that had been thrown into the water in a similar fashion to that noted at the Sacred Cenote at Chichén Itzá. However, the shallowness of the water and its clarity made any such deposit particularly vulnerable.

Nevertheless, by employing a landscape approach that utilizes indigenous Maya

perspectives on physical features of the Xbis cavescape, we can present a rich and meaningful tapestry that explains why the site was elaborated and how it functioned prehistorically. The relatively small entrance and low crawl before emerging into the larger inner chamber appears to be consistent with idealized Maya concepts of ritual space. The entrance to the Cueva de Sangre at Dos Pilas, for instance, was reduced in size architecturally to force people to crawl through a low, narrow passage to enter the cave. At Naj Tunich, a small chamber enclosed behind a masonry wall could only be entered through a doorway so low that it forced people to pass on hands and knees (Brady, 1989).

Another factor that favored the elaboration of Xbis is the form of the cave itself. It consists of a single, large chamber, which, when compared to the built environment, is literally cavernous. The size connotes grandeur and power. The chamber itself is visitor friendly, with a level floor that descends gently to the water. Additionally, the chamber is very open which provides unobstructed views of rituals for large numbers of people. The *sacbe* was laid out to take advantage of this feature.

3. Importance of Speleothems at Xbis

As incredible as it now seems, little or no attention was paid to cave formations (speleothems) in archaeological investigations of caves until relatively recently (Brady et al., 1997). At Xbis, the cave simply cannot be properly appreciated without a close consideration of speleothems. As already noted, the *sacbe* makes an abrupt change in direction as it wraps around the first speleothem column and then runs straight to the second column where it terminates. It is readily apparent when in the cave that the *sacbe* was constructed to incorporate these two features of the natural cave architecture.

The importance of speleothems is deeply rooted in Maya cosmology. The formations are seen as coagulated water and so are sacred. As part of the Earth, they are also alive and sentient. For the Maya, all living things are either male or female and only properly function when combined with the opposite sex (Tarn & Prechtel, 1986: p. 173). This is explicit with speleothems where an informant compared stalactites to the female breast and stalagmites to the male penis. The joining of the two formations in a column was compared to sexual intercourse and so represents the essence of fertility, a major concern of Maya religion (Brady et al., 2005).

Additionally, we know from accounts of Maya cave rituals that speleothems play an important role. When Huastec visitors entered a cave, they first addressed the largest stalagmite and offered incense and liquor to it before repeating the same process at smaller formations (Alcorn, 1984: p. 237). A Q'eqchi Maya informant said that the Earth Lord resided in the largest formation at Naj Tunich and their ceremony was conducted in front of it (Brady et al., 2005). The Maya *X'men* Romualdo Hoil immediately identified a niche in the huge speleothem column at Balankanche as the "seat of the Balam" (Andrews IV, 1971: p. 260).

Thus, it seems safe to assume that the two columns at Xbis were seen as the seat or residence of deities, or even as the deities themselves and, therefore, focuses of adoration.

The importance of Xbis does not stop there. The pool of water that fills the back of the cave would have been seen as a wonderful thing. It conforms to the Maya belief that water comes from the Earth, not the sky. Rain is formed when Chaac scoops water out of the cenote (Earth) and sprinkles it over the land. Although the breaking and fire blackening of the stalactites on the ceiling has been mentioned, another aspect of the formations is absolutely central to the creation of the character, meaning and importance of Xbis. There are literally thousands of active stalactites on the ceiling so in the quiet cave one hears the constant impact of large falling water droplets striking the wet mud or the water in the pool. The Maya who are very attuned to such things would certainly have picked up on the fact that it is always raining in Xbis. Although many caves have stalactites, the phenomenon created by the large number of very active formations would have marked Xbis as an unusual, special place.

4. Discussion

From the description above, it is clear that the workmanship suggests that the *sacbe* is an elite feature and it is well-accepted that these were used in ritual processions. The *sacbe* itself is unique in that no similar construction has been reported from a cave in the Maya area. At Xbis, the *sacbe* provided the setting for the ruler or important individual to lead a procession through a cave where it is eternally raining. It is not unlikely the procession would have paused to offer prayer, incense, and liquor to the first column before continuing on over the water to the second column which may have been the personification of the rain deity. The ruler may have been the lone individual on this highly visible stage completely surrounded by water.

We would argue that a scene such as this at Xbis presents a message similar to the El Rey panel at Chalcatzingo which depicts a ruler seated in a cave holding a box containing clouds (Brady & Ashmore, 1999) (Figure 10). Wind, the precursor of rain, is depicted as rushing from the cave and clouds and rain are shown falling from above. The scene is interpreted as legitimizing kingship through the ruler's control over the forces of nature, specifically rain. An analogous statement was made by the rulers of Dos Pilas who built their palace directly above the Cueva de Murciélago. After heavy rains, water is expelled from the cave with such force that the roar can be heard more than a half kilometer away. While Moyes and colleagues (2009) have argued for the development of a drought cult surrounding caves during the Late Classic, the Preclassic date for the El Rey panel suggests that rulers' control over the forces of nature may always have been part of the discourse on royal legitimacy in Mesoamerica. Xbis provides a particularly clear case of how landscape was appropriated, modified, and utilized to make such a statement.



Figure 10. Drawing of the El Rey panel at Chalcatzingo depicting a ruler seated in a cave (Brady & Ashmore, 1999).

5. Conclusion

This article explores the significance of a previously unreported type of feature, a *sacbe* inside of a cave leading to a large subterranean pool of water. Our analysis focuses on Maya concepts surrounding water and associated features such as stalactites and columns to develop the idea that this cave contained a complex of characteristics that marked it as a site of incredible significance. While no traces of prehispanic architecture surrounding the cave remain, the construction of the *sacbe* itself justifies the connection with elite ritual. We have argued that the cave was appropriated and elaborated by the elite to proclaim that as owners of the house of rain, they could control the forces of nature.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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