THE TAÍNO USE OF CAVES: A REVIEW

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For the Taíno of the West Indies, caves were important loci of activity, both spiritual and mundane. In this paper I define and explore some of the multivariate and overlapping uses of caves by the Taíno with references to some of their contemporaries and predecessors. This paper represents a starting point for a long-overdue synthesis of cave use in the Greater Antilles and is intended as a foundation for research to follow.

As Lovén pointed out nearly three-quarters of a century ago, caves have always played an important role in the lives and ideology of the Taínos. In 1935 he stated that, with the exception of Ciboney caves on Cuba and perhaps on the south shore of the Samaná Bay, Hispaniola,

> "Wherever there are caves in the Antilles, or the Bahamas that have been inhabited in ancient times, there are grounds enough for the supposition that the inhabitants were Arawaks" (Lovén 1935:120).

We now know that the picture is much more complicated than this, with caves being used by each successive and co-mingling culture group north of the Lesser Antilles since at least the Archaic period and for a wide variety of purposes. In light of this knowledge, it is interesting to note that there have been few attempts to form a general synthesis of this material. This paper represents a beginning for such a synthesis, drawing heavily from the relatively few published sources available. It should be noted that much of the data concerning Taíno cave use exists as largely inaccessible grey literature and awaits incorporation; many early reports of caves are anecdotal at best, providing neither the name nor the specific location of caves discussed.

Geographical Setting: Cave Bearing Strata in the West Indies

The West Indian archipelago forms a sweeping arc from Trinidad off the north coast of Venezuela to Cuba off the tip of the Yucatán peninsula and the Bahamas approaching the Florida panhandle. The various islands of the Caribbean are arranged in a close and largely inter-visible chain surrounded by warm ocean waters. (Figure 1).

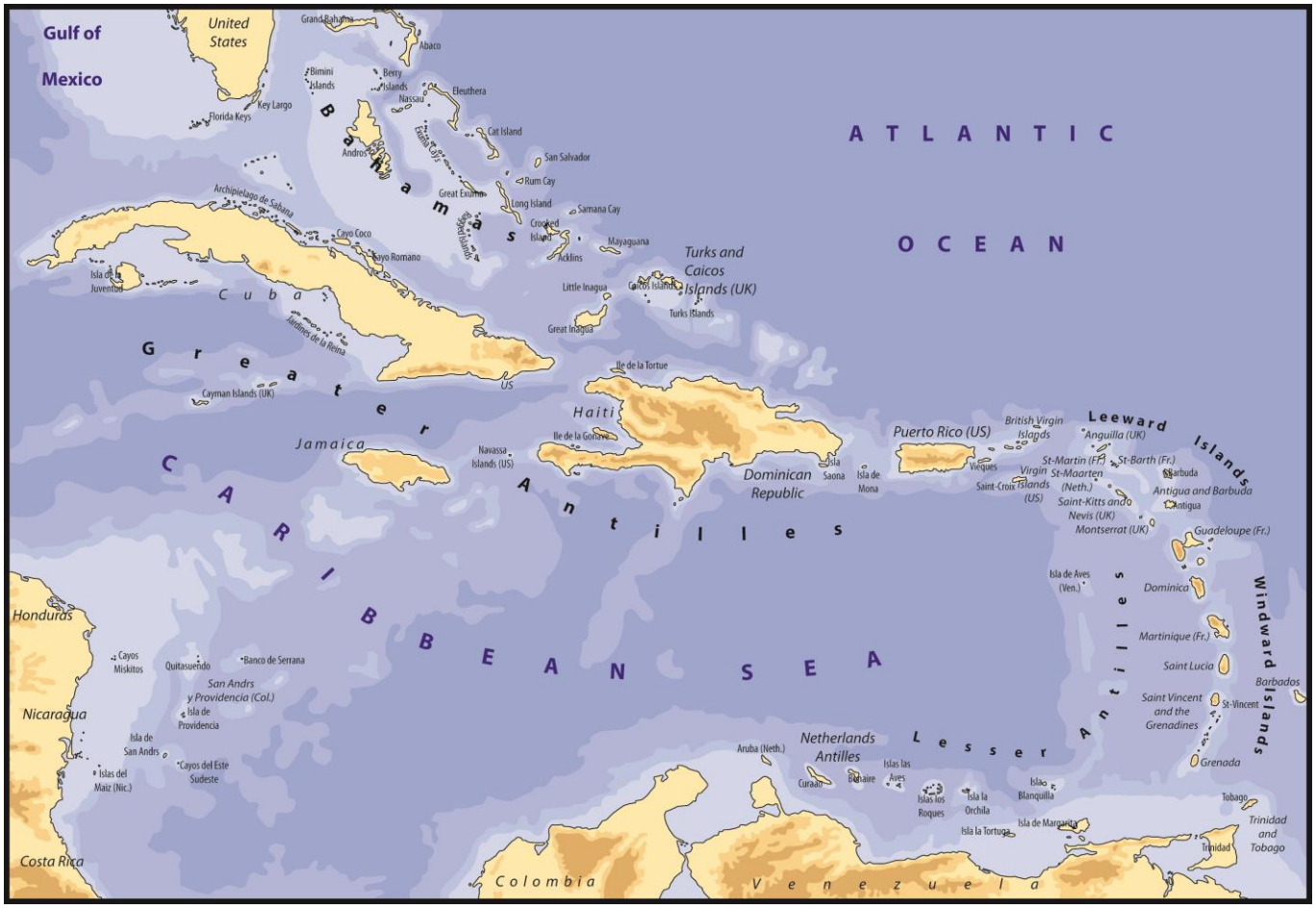

Figure 1. General Map of the Caribbean (drafted by S.G. Morton).

The islands can be generally divided into separate sub-regions based on their size, geological history, proximity to the mainland, and other features. In this paper, it is the geological division that is of primary concern. In particular I am interested in the karst landscapes of the Greater Antilles though cave-bearing strata are present in many parts of the chain.

The proto-Antilles formed during the Cretaceous period in the gap between the diverging North and South American tectonic plates (Hedges 2001; Williams 1989). The Greater Antilles (Cuba, Jamaica, Hispaniola, and Puerto Rico) are geologically the oldest and geographically the largest of the islands in the Caribbean chain; they lie along the northern margin of the Caribbean plate that moved eastward and eventually collided with the Bahamas platform. The islands as they appear today formed by the mid-Cenozoic period (Newsom and Wing 2004:10-11). The cave-bearing mountain systems of Guatemala and Belize extend across to the eastern province of Cuba and the northern cordillera of Hispaniola (Wilson 2007:10). A southern cordillera extends from Honduras and Nicaragua to become the backbone of Jamaica and the bulk of Hispaniola's Cordillera Central (Wilson 2007:10). The arc of the Lesser Antilles is composed of two geologically distinct formations: an outer, discontinuous arc of coral limestone islands, developed on ancient volcanic bases, and a younger arc of

active volcanic islands (Watts 1987). The limestone arc includes the islands of Barbados, Marie Galante, La Désirade, Barbudas, St. Barthelemy, St. Martin, Anguilla, and Sombrero. The islands of Guadeloupe and Antigua have both limestone and volcanic portions (Newsom and Wing 2004:77). The Bahamas is geologically the most recent chain in the Caribbean. The small, low islands in this group are currently emerging from the sea on the back of a slowly rising block of crystalline limestone known as the Bahamian Foreland (Watts 1987).

A very large part of the Taíno heartland, focussed on the islands of the Greater Antilles, is well provided with caves. Caves in these islands typically form according to two natural processes. The first, by far the most common, occurred as underground streams in the course of many centuries eroded caverns, the roofs of which finally collapsed, forming either sinks or natural wells, such as the well-studied cave known as the *Manantial de la Aleta* (Beeker et al. 2002; Conrad et al. 2001) in the East National Park of the Dominican Republic. Usually, the collapse is not directly over the water and provides access to the chamber below via a sloping pile of debris and passage, as in *Cueva de Chicho* (Beeker et al. 2002), also in the Dominican Republic. Longer caves often provide access at the point where the stream emerges on the surface. The second natural process is the erosion of hollows (usually no more than shallow rock shelters) by ocean waves in coastal regions. The continuing uplift of certain lands has had the result that a number of these caves can be found high above the present water level and a considerable distance inland (De Booy 1915). It is also worth noting that, as in the northern Yucatán, the limestone is in places highly jointed allowing communication between the sea and a number of caves inland that have been observed to heave with the tide (in the Caicos islands, see De Booy 1912).

The Taíno Use of Caves

The peoples of the Greater Antilles have been spelunkers for at least the last several millennia with pre-ceramic deposits being found at such sites as the *María de la Cruz* cave in Puerto Rico and at various sites in Cuba (Alegría et al. 1955; Rouse and Alegría 1990), though the use of caves was by no means ubiquitous (Jiménez Lambertus et al. 1980). Since the time of first European contact in the Caribbean, persons, both native and other, have frequented the caves. Consequently, considerable destruction has been wrought in these delicate archaeological contexts, with the result that more recent pre-Columbian use, including that of the Taíno may be obscured (Fewkes 1970 [1907]; Haeberlin 1917; Rouse and Alegía 1990). Modern cave exploration in the Caribbean dates from the first decades of the twentieth century with Fewkes' (1903, 1970 [1907]) and Haeberlin's (1917) surveys in the Greater Antilles, particularly Jamaica and mainland Hispaniola, De Booy's (1915) survey of Saona island, and Aitken's (1918) survey of burial caves in Puerto Rico. De Booy also conducted extensive surveys in the neighbouring Lucayan islands of the Bahamas and Caicos (1912, 1913). A number of significant, if sporadic, works have been completed since this time (e.g. Beeker et al. 2002; La Rosa Corzo 2003; Luna Calderon 1982; Núñez Jiménez 1963; Rouse and Alegría 1990; Stevens-Arroyo 1988; Veloz Maggiolo et al. 1977).

The chief uses of caves by the Taíno can be classified as the following, both mundane and spiritual:

1. Sources of drinking water.
2. Places of habitation/refuge, an important function in the early colonial period.

3. Storage of culturally significant artefacts.
4. Galleries for pictographs/petroglyphs, likely in connection with religious rites.
5. Burials: Primary;
6. Burials: Secondary, potentially associated with ancestor worship; and
7. Other ritual/religious uses, including zemiism. Finally,
8. Other uses.

The above list is presented in no particular order save that necessary to facilitate discussion. The relative importance placed on each use is not assumed, however, it is noted at the outset that caves appear to have been highly significant ritual locations for the Taínos, their neighbours, and their predecessors. It is acknowledged at the outset that many caves likely served a variety of purposes, both coeval and consecutive, and that none of the categories here defined are exclusive. In content this list is similar to that developed by Sir J. Eric S. Thompson half a century ago for the Maya Area (Thompson 1959, 1975); the Maya Area also serves as the primary source for limited cross-cultural comparison in this paper.[1]

Sources of Drinking Water. A number of caves appear to have served the rather mundane, if essential, purpose of providing drinking water; all of these so identified have been reported on Hispaniola. The overwhelming presence of *potizas*, or water bottles, found at the *Cueva de Chicho* and other fresh water-bearing caverns in the *Padre Nuestro* complex, a few kilometres east of the coastal town of *Bayahibe* (Beeker et al. 2002), have been suggested to demonstrate just such a purpose. Also in the Dominican Republic, at *Macao*, De Booy (1915) reports the presence of a large quantity of *potizas* in two caves associated with an underground lake, presumably serving a similar purpose. In rural areas of the Yucatán peninsula, where caves are used to the present as a daily source of water, Thompson notes that they are typified by eased access (2005 [1975]:xix-xv; see also for Chiapas, Mexico, Vogt 1969:145-148), whether as afforded by nature via a convenient slope, or through human artifice[2]. *Cueva de Chicho* and the caves at *Macao*, both in the Dominican Republic, certainly satisfy this characteristic though neither affords the direct links between caves as an essential source of drinking water and human habitation like De Booy's discoveries on Saona Island. Here, off the south-eastern coast of the Dominican Republic, evidence of extensive habitation was identified near a small bluff one kilometre inland from the eastern coast. The find is significant, as the eastern portion of the island is not known to provide bodies of potable water. However, potsherds, chiefly fragments of cooking vessels, were found by De Booy (1915:82-83) in several caves at the foot of this bluff, which, he interprets as having served in the collection of drinking water from dripping stalactites. If this proves to have been the case, then it is a potential pattern of use that has been largely ignored by other speleoarchaeologists working in the Caribbean.

The use of caves for the collection of drinking water may not have always been an ideal arrangement, but rather, one of necessity. The caves reported by De Booy at *Macao* contained water that was particularly foul to the taste due to high mineral content (De Booy 1915:87-88). Nonetheless, the presence of *potizas* and traces of ephemeral habitation suggest that the water was indeed consumed, potentially by travellers or those inhabiting a temporary camp (no significant surface materials were reported). In fact, De Booy's party were driven to drink it themselves when their rainwater ran short as no other sources were locally available

> "The water tasted so foul that the mules could not be convinced to drink, even after several days of thirst" (De Booy 1915:88).

The impressive sinkhole known as the *Manantial de la Aleta*, also in the Dominican Republic, while interpreted as primarily a ritual locus (Beeker et al. 2002), may have served similarly in the collection of water. Accessed via several small openings, and inaccessible to foot traffic, the water table sits approximately 16m below the present ground surface. It has been suggested that Bartolome de las Casas (1967:I:24, see Beeker et al. 2002:9) visited the well when travelling through this part of Hispaniola; he accessed the water using a clay pot on a cord. Others may have used the cave in a similar fashion. The investigations by Conrad et al. (2001) at the site recovered, among other more exotic items, a gourd vessel tied with cord.

Places of Habitation/Refuge. It seems that in historic times there is ample, if extraordinary, evidence that people lived in caves. In Cuba, Núñez Jiménez recounts the story of a man:

> *"La gruta se llama La Cueva de Isla, porque en ella habió largo tiempo un extraño personaje llamado Antonio Isla, que durante un cuarto de siglo vivió rodeado de enigmáticos símbolos prehistóricos que adornan las paredes y el techo de la espelunca"* (Núñez Jiménez 1963:227).

Similarly, Mela Cave, Puerto Rico, had been used until relatively recently as a pig pen (Rouse and Alegría 1990:34).

There is evidence for long-term habitation in caves elsewhere in the Caribbean as well, including the findings of raised beds and heavily used utilitarian vessels (see De Booy 1912; Fewkes 1915). De Booy (1912) interprets a small cave on Juba Point in the Caicos Islands, as a long-term habitation site based on the presence of ash, ceramics, lithics, and faunal remains (i.e. a nearly complete domestic assemblage). Indeed, where suitable wood for the construction of houses is lacking, as in the Bahamas, open, well ventilated, and well-drained caves may have served for sufficient habitation (Lovén 1935:121). Even so, of these sites De Booy (1912:87) writes,

> "I am inclined to believe that these caves were used primarily as places of worship and secondarily as shelters during hurricanes, and that it was not until the persecution of the Spaniards commenced that the Lucayans began to employ them as permanent abodes."

While there is likewise considerable (if anecdotal) evidence for the pre-Taíno use of rock shelters as habitation sites in Cuba (Alegría et al. 1955:113), along the north coast of Puerto Rico (Fewkes 1970 [1907]:87-89), and at the well-excavated sites of *María de la Cruz* (Alegría et al. 1955:115; Rouse and Alegría 1990) and Mela Cave (Rouse and Alegría 1990:34), Puerto Rico, there is little evidence to suggest that Taínos lived in caves for extended periods of time. In fact, secondary testimonials collected by early chroniclers from Taíno informants suggest that such behaviour may have been tantamount to base savagery. Oviedo (1959:83; see also Mártir de Anlería [Peter Martyr] 1964-1965:366) relates that in the province of *Guacayarima* there dwelt a people:

> *"Estos vivían en cavernas o espeluncas soterrañas e fechas en las peñas e montes. No sembraban ni labraban la tierra para cosa alguna, e con solamente las fructas e hierbas e raíces que la Natura, de su proprio e natural oicio producía, se mantenían y eran contentos, sin sentir nescesidad por otros manjares; ni pensaban en edificar otras casas, ni haber otras habitacines más de aquellas cuevas donde se acogían.... Aquesta gente fué la más salvaje que hasta agora se ha visto en las Indias."*

The pejorative tone of this statement is hard to miss.

For the Taíno, temporary habitation is a more likely interpretation. At the *Cueva de las Golondrinas*, near *Manati*, Puerto Rico, Fewkes (1970 [1907]:87-89) suggests that collections of ash and ceramic (and the conspicuous lack of human remains) indicate that the cave served a temporary domestic function. The fact that it lies in close association with a convenient landing place in a sheltered cove could have made this an appropriate camping spot. Unfortunately, this site remains as of yet poorly dated, as do many early-reported cave sites.

Caves may long have served the purpose of temporary refuge from hurricanes or war, but their sporadic use in this regard would make their detection in the archaeological record difficult. In the early colonial period the frequency of such use likely increased. Las Casas confirms this arrangement, noting that the Taíno would seek refuge in caves from Spanish persecution/reprisal. He notes that at one point, the cacique Cotubanamá, leader of a 'rebellion' in *Higüey*, Hispaniola, fled to Saona Island. There, "Cotubanamá lived in a large cave in the middle of the island with his wife and children…" (Las Casas 1971:123). This defensive habit may have led to some of the stories of true troglodytes that still permeate the public vision of the native Caribbean islanders.

Storage of Culturally Significant Artefacts. It is likely that caves were sometimes used as places of storage for items of particular cultural significance, either habitually or in times of stress. It seems that some caves were

specifically prepared for this function through the excavation of niches or preparation of platforms (Fewkes 1970 [1907]:87-89). Zemís, spirits in material form, have been found in caves, but they may not all have been worshiped there (a subject that I will return to below). Rouse suggests that some zemís may have been hidden in caves to save them from destruction by the Spaniards, who considered them heathen idols (Rouse 1992:13). Elsewhere in the Caribbean, a similar pattern has been noted: In the Bahamas, De Booy (1913) reports the discovery of wooden artefacts, including a *duho* (literally, a seat of authority) and a paddle, that appear, based on the restricted access to the cave in question, to have been intentionally hidden. A similar paddle was found by Harrington, hidden in a cave near Monte Cristo, Cuba (Lovén 1935:131). Fewkes notes that a fine figurative stool was recovered from a cave by a hunter in Puerto Rico (Fewkes 1970 [1907]:157). If the intention was to reclaim these objects when it was safe to do so, then their discovery by archaeologists and other explorers serves as a particularly poignant statement on the devastation wrought by European contact.

Galleries for Pictographs/Petroglyphs. Acanvas and gallery for pictographs and petroglyphs is one of the most prevalent uses of caves and has long been noted in such contexts across the Taíno area – for example, in the *Cueva de Chicho*, *Cuevas las Guacaras de Comedero Arriba*, and José María Cave on Hispaniola (see Beeker et al. 2002; Conrad et al. 1997; López Belando 1997, cited in Beeker et al 2002; Pagan Perdomo and García Arévalo 1980), in *Cueva de las Golondrinas* and *El Consejo* in Puerto Rico (Fewkes 1970 [1907]; Rouse 1961), in *El Guafe* and *La Patana* in Cuba (Moure and de la Calle 1996), and as far away as a cave at Buccament Bay, St. Vincent (see Kirby 1963). While cave art is notoriously difficult to date, the possible depiction of a Spanish ship in the José María Cave (López Belando 1997, cited in Beeker et al. 2002) makes post-contact Taíno attribution likely in at least some cases. It is important to note at the outset that the presence of pictographs on the walls of caves such *Cueva de Chicho* (Beeker et al. 2002) does not detract from its mundane usage.

In addition to two-dimensional carving on cave walls, the practice of carving speleothems in the round has been noted by a number of scholars (Fewkes 1970 [1907]:155-156; Frassetto 1960; Haeberlin 1917; Lovén 1935:128; Moure and de la Calle 1996). It has been suggested that carved speleothems may, in fact, be zemís (Frassetto 1960:381), representing an intermediary stage between pictographs and full-round, portable sculpture. Similarly, Moure and de la Calle (1996:47) note that a painted picture on the wall of a cave named *Cerro de Tuabaqüey*, in Cuba, has the characteristic slit eyes of Taíno ceramic *adornos* and may be another representation of a zemí.

Before leaving this section it should be noted that a general division of space might be suggested based on the preferred locations of pictographs and petroglyphs within the cave environment. It has been observed that petroglyphs are typically found in areas with considerable natural light (e.g., in the *Cueva de Chicho*, *Cueva de Berna*, *Cueva Peñon Gordo*, and *Cueva de la Seiba*; see Beeker et al. 2002:4; Haeberlin 1917:222), while pictographs are usually situated within the twilight zone of caves (Fewkes 1970 [1907]:155-156; Roe et al. 1997). This association is generally supported by archaeological evidence that suggests that the twilight zones nearer entryways may have been preferred locations for many Taíno activities, both religious and secular. A number of authors note the complete absence of archaeological materials beyond the entry chambers of caves (eg. Aitken 1918:298; Lovén 1935; *cf.* Haeberlin 1917).

Burials: Primary. Another common use of caves by the Taíno was as a sepulchre for the dead. Archaeologically, it is one of the most common uses and has been noted in caves across the Caribbean (e.g. Fewkes 1970 [1907]; Lovén 1935; Luna Calderón 1982, cited in Beeker et al. 2002:4). The use of caves for the purpose of primary burial seems well attested in the Archaic period (see various examples in Puerto Rico and Cuba, Aitken 1918; La Rosa Corzo 2003). Of primary or secondary deposition in the Taíno period, however, it seems the latter was by far the most common. Nonetheless, primary burials have been noted in several caves likely dating to the Taíno period; all in Jamaica (Fewkes 1970 [1907]). Sir Hans Sloane (1725, cited in Fewkes 1970 [1907]:41) says:

> "I have seen in the woods many of their bones in caves, which people think were of such as had voluntarily inclosed or immuned themselves, in order to be starved to death."

Further, according to Fewkes, Sloane refers to a man who saw, in the year 1677, "a cave in which lay human bones, all in order, also pots and urns wherein were bones of men and children." We may cast doubt on Sloane's first statement concerning voluntary interment, though his description of only few accompanying grave goods is accurate (Lovén 1935:551). This makes any investigation as to the identity or status of those interred difficult. Were these important people? Did they serve a specific occupational or spiritual role? If placed in veneration, were they individuals or generalized spirits/ancestors? It is interesting to note that human remains found in identical contexts in Mesoamerica are almost invariably referred to as the object of human sacrifice (McNatt 1996).

Burials: Secondary. Scattered bones discovered on or near the surface at Antonio's Cueva, Puerto Rico by Aitken, Mason and Boas (Aitken 1918:296) may suggest a preference for secondary burial in the most recent periods (or, admittedly, disturbed primary burials). While the few lithics and ceramics occurring similarly scattered on the surface were not, at the time, identifiable to time period or culture group, the close association between this cave and a nearby ball court with a similar ceramic assemblage (Aitken 1918:307) may suggest an association of this top-most level of deposition with complex Taíno populations. A similar deposition was noted by Haeberlin (1917) in the *Cueva de la Seiba*. In Puerto Rico, the Dominican Republic, and Jamaica, secondary interments were often placed in ceramic vessels (an archaeologically recovered example comes from near *Montego*, see Lovén 1935:123, 552-553). In other cases, secondary burials are elaborately arranged and associated with considerable quantities of material culture: At *Boca del Plurial*, Cuba, skulls were placed in a row on a bed of mixed ash and food stuffs (animal bones, nuts, fruits, etc.) and with other disarticulated human bones below (Lovén 1935:553). Similarly, in *Carboneras*, the Speleological Society of Cuba discovered a grotto with three skulls formed in a triangle and with a fourth in the centre, all separate of their respective skeletons (Núñez Jiménez 1963:226). In Halberstadt Cave, in Jamaica, a canoe was found placed over a row of skulls (Lovén 1935:131).

As suggested above, the interment of the dead in caves may be intimately related to practices of ancestor worship; caves having been interpreted as intimately associated with the spirits of ancestors (Roe 1997; Siegel 1997; Stevens-Arroyo 1988:59-62). Like

many ancient peoples, the Taínos seem to have followed what Eliade (1964) terms a shamanistic model of the cosmos: a three-tiered universe with the upper and lower worlds inhabited primarily by supernatural beings and with the middle world being that of humans. The three levels of the cosmos were conceived of as being connected by an *axis mundi* (Siegel 1997:108). Pané notes that the final resting place of the dead was known as *Coaybay* (Pané 1999:17-18); while he does not make the explicit association between *Coaybay* and the underworld, a number of scholars *have* done so (Beeker et al. 2002; Siegel 1997:108; Stevens-Arroyo 1988:165-185), identifying caves as passages to the underworld and the home of the ancestors. Further insight into secondary deposition of Taíno remains is provided by Beeker et al. (2002:3), based on their interpretation of Pané (1999:18-19): Spirits had to eat; in order to do so, the spirits of the dead may have been thought to turn themselves into bats and emerge from the underworld. Citing Montané, Lovén suggests that the foodstuffs placed in *Boca del Plurial*, may have been intended to be consumed by hungry ancestors. Zemís, too, need to be fed and where they rest in caves, we may expect to find the remnants of this behaviour. (Stevens-Arroyo 1988:56-58).

Other Ritual/Religious Uses. Caves such as the *Manantial de la Aleta* sinkhole have been interpreted as serving, primarily, a ritual (though non-mortuary) purpose (Beeker et al. 2002:6). Artefacts recovered from this sinkhole include a wooden war club, or *manantial* (Conrad et al. 2001:3), wooden stools (*duhos*), elaborate vessels, a simple wooden vomiting spatula (Beeker et al. 2002:6, 10), and a crocodilian figure interpreted as a zemís (see Berman et al. 1999, 2000). Recent investigations of the surface in the vicinity of *La Aleta* have revealed a complex of four ceremonial plazas, or *bateyes*, only 75m from the nearest entrance (Atiles and Ortega 2001:37-38, 43-35; Conrad 2001; Conrad et al. 1997; Ortega 1978). As little evidence for habitation has yet been found, this site has been tentatively characterized as a vacant ceremonial centre (Ortega 1997:9). Radiocarbon assays of the wooden objects (a rare occurrence) suggest a calibrated date of use ranging from A.D. 1035 to A.D. 1420 (Conrad et al. 2001:14-15).

However, it is something of a false dichotomy to separate the use of caves as burial grounds from other ritualized/religious uses. As Lovén warns,

> "I believe it is best not to differentiate [too] strongly between burial caves and shrine caves. The zemiistic worship comprised not only the wooden and stone idols, but also the bones of the forefathers in the cotton zemís" (Lovén 1935:130).

As caves were a place for death, so too were they the origins of life. Besides those suggested above, there are other good reasons to interpret caves as highly significant ritual/religious locations. As known from the Catalan friar Ramon Pané, caves figure prominently in Taíno mythology. According to Pané (1999:5-6), people were born of two caves in *Cauta* Mountain, in what is now the Dominican Republic. While the Taíno came from *Cacibajagua* – meaning 'Cave of the

Jagua,' denoting an edible fruit used by the Taínos for colouring their bodies (Sauer 1966:56) and literally marking them as Taíno (Stevens-Arroyo 1988:138) – non-Taínos came from *Amayaúna* – meaning 'Cave Without Importance' (Stevens-Arroyo 1988; also see Arrom in Pané 1999:n.11).

Interestingly, the first Taínos continued to live in *Cacibajague* for some time before spreading out across the land (Pané 1999:5-6). While occupying this cave, a series of mythological events took place, most notably, the myth of *Mácocael*. According to Pané (1999:6):

> *"When they were living in those caves, these people stood watch at night, and they had entrusted this task to a man by the name of* Mácocael*. Because one day he was late in returning to the door, they say, the Sun carried him off. Because the Sun had carried away this man for his lack of vigilance, they closed the door against him. Thus it was that he was turned into stone near the door."*

This myth may have been a replicated theme in Taíno cave ritual. In a cave called *La Patana* in southeastern Cuba, the myth of *Mácocael* seems to have been illustrated. In one of the entrances to the cave, a human figure was depicted on a stalagmite, practically 'standing guard' over this entrance. On the sides, a complex pictographic group of anthropozoomorphic figures appears to march, giving the impression of being the people who emerged from the cave (Moure and de la Calle 1996). This myth may explain a pattern already noted above: Haeberlin (1917:222) describes a number of carved stalactites in the twilight entry chamber of the *Cueva de la Seiba*, all facing the entrance. Frassetto (1960:381) notes a similar pattern in Puerto Rico, and Moure and de la Calle (1996:47) situate the painted 'zemí' similarly in *Cerro de Tuabaqüey.* Perhaps all of these figures are intended to act as spiritual guards? Do they represent the spirits of the underworld staring out upon the middle world? Were all of these figures 'zemís'?

There is archaeological evidence to suggest that the identification of caves as places of human origin was a perpetual theme in cave ritual. In the *Manantial de la Aleta*, a bowl was recovered depicting a frog (Beeker et al. 2002:14-17), which has been suggested to be associated by the Taíno with themes of water, rain, agricultural productivity, and female fertility (Stevens-Arroyo 1988:157-167). Zemís were worshiped in homes and in caves throughout the western and eastern Taíno territory for similar purposes. Pané relates that in a Haitian cave called *Giououa*, two zemís were worshiped that were made of stone that would sweat with condensation and bring rain (Arrom 1989:37-35; cited in Rouse 1992:119). Arrom identifies these weeping zemís with *Boinayel*, Son of the Gray Serpent, who was the Taíno rain god. It is possible that the second statue represented *Márohu*, whom Arrom (1989:37-35, 39, cited in Rouse 1992:119) identifies as the deity of fair weather. The island of Hispaniola itself may have been conceived of as a giant living

beast of the female sex (Harris 1994:10-11cited in Keegan et al. 1998:233-234; see also Las Casas 1967:I:24). People were therefore literally born of the earth. The theme of fertility is carried forward with evidence from Roe et al. who note the presence of a 3-pointer (a zemí associated particularly with the growth of manioc) in the *Cueva de Mora*, near *Cornerío*, Puerto Rico (Roe et al. 1997:26). Indeed, the associations between cave contexts and zemiism run deep. The association also serves as a useful overarching model accounting for much of the material culture encountered in caves. If the discovery of a possible zemí at *La Aleta*, noted above, as well as the associated vomiting spatula (used in purification rituals prior to contacting zemís), aren't suggestive enough, Beeker et al. (2002:17) suggest that the rattle handle of a recovered ceramic vessel may have been used like the rattles in some vomiting spatulas to summon the zemís to rituals (see also García Arévalo and Chanlatte Baik 1978). Further, Beeker et al. (2002:11) suggest that a small wooden vessel recovered from the sinkhole may have been used in the *cohoba* ceremony (similarly used to summon and feed zemís; see Pané 1999:25-27). Indeed, zemiistic feasts could easily account for the build-up of ash and food remains in other caves (Lovén 1935:122).

Other Uses. Finally, caves appear to have seen very minor use for a variety of other purposes (I'm sure that others will similarly be found). The use of caves as sources of raw materials has been suggested by Allsworth-Jones et al. (1999:17). They note that a Taíno burial cave near Kingston, Jamaica appears to be the source of galena (a bluish, gray, or black mineral of metallic appearance, consisting of lead sulphide), a decorative material noted at other nearby sites such as Bellevue and Chancery Hall. In the Bahamas, where good building materials were scarce, seaside caves may have been used to house boats (Lovén 1935). Caves may also have served as an entirely conceptual entity. The cave as a concept was actively acquired by Taíno caciques as a symbol of authority: Peter Siegel (1997; cited in Keegan 2007:46) suggests that the central plaza in which the dead were buried during the Saladoid period represented the *axis mundi.* Yet in Taíno times the central plaza was no longer a cemetery; it was the location of the cacique's house. Thus the cacique appropriated the *axis mundi*, and his *bohío* (house) can be viewed as representing the cave from which the Taíno people emerged.

Concluding Thoughts

I will end this paper with some final thoughts and propose some avenues of inquiry for the future. Among the Taíno, the uses and meanings associated with caves appear highly varied and overlapping. There is much to learn by studying this variability: By clarifying the interactions of the spiritual and mundane, we may find an archaeological route to understanding the underlying structure of Taíno ideology. Similarly, we as of yet have little indication as to the status (social, political, economic, etc.) of those peoples using cave sites (Wilson 1990:22). It is possible that variation in cave use and its material signature may be related to such differences in status. A comparative study of human remains recovered from cave contexts may similarly aid greatly in this regard. Further, we have not yet adequately defined the physical qualities of the cave context that may have determined (or at least influenced) patterns of use, though we recognize that the distribution of material culture is not homogeneous (e.g. Roe et al. 1997). In all but a few instances, we have failed to articulate cave archaeology with surface archaeology (Who were the people using the caves? Where did they come from?). As such, we have denied ourselves the chance to look at wider

issues of territoriality and boundary maintenance, demonstrated in other regions to make use of such prominent and ritually focussed places. In many ways, cave archaeology in the Caribbean has the unenviable, though exciting, job of playing catch-up with surface archaeology. It is largely through the investigation of broad questions that cave archaeology can become an active contributor to the wider archaeological discourse. Finally, much of what is currently known or suspected of pre-historic Caribbean cave use is contained in grey literature throughout the West Indies; before we can plan the road ahead, we must understand that which came before.

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NOTES

1. While considerable value may be found in such comparisons, this falls well beyond the scope of this paper.
2. In 1843, John Lloyd Stephens described descending into the cave of Bolonchen, Yucatán, via a sizeable and permanent ladder (1843:98). So too, at Actun Chac, Yucatán, Mercer (1896:92) reported that where necessary, ladders are installed to ease access to critical water sources. In the Maya Area, this pattern contrasts sharply with ceremonial uses of caves that seem to value difficulty of access/remoteness.

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